The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

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IN THIS ISSUE

PLAN FOR OCTOBER 5 HEARING

The Broadcast Division of the Federal Communications Commission has outlined a general plan for the conducting of the allocation hearings to begin October 5.

The hearing will be held in the government auditorium located at Constitution Avenue between 12th and 13th Streets, between the Department of Labor building and the Interstate Commerce Commission building.

Judge Eugene O. Sykes, chairman of the Broadcast Division of the Commission, will first outline the scope and procedure for the hearing.

T. A. M. Craven, chief engineer of the Commission, will make a statement on broadcast allocation and engineering.

He will be followed by A. D. Ring, assistant chief engineer and Dr. L. P. Wheeler, of the Technical Information Section, both of whom will make statements concerning the procedure and the factual data on the allocation survey.

The General Electric Company has notified the Commission that it will be represented at the hearing by C. H. Land, director of broadcasts.

H. B. McCarty, president of the National Association of Educational Broadcasters, has also asked for time for his association.

USE OF RECORDS

For the information of members we wish to advise that a number of radio stations have received letters from their local musical unions requesting information as to the usage made by the stations of phonograph records and requesting that the station furnish the local with information.

We are informed that some stations are taking the position that the Musicians Union has no right to inquire into the use made of phonograph records by radio stations and that the stations are ignoring the communications.

RECOMMENDS POWER INCREASE FOR WJAC

Broadcasting station WJAC, Johnstown, Pa., applied to the Federal Communications Commission to increase its daytime power from 100 to 250 watts. The station operates on 1310 kilocycles with 100 watts power sharing time with WFBG.

Examiner Melvin H. Dalberg in Report No. I-290 recommended that the application be granted. He found that the station has "rendered a generally meritorious service and there appears to be a need for additional service in the area proposed to be served." The Examiner found further that granting of the application "would not cause objectionable interference to any established service, nor is there any question of interference involved with any pending application or applications."

WILKINSON APPEAL DISMISSED

The Court of Appeals of the District of Columbia has dismissed the appeal of the Wilkinson Broadcasting Company, Mason City, Iowa, against the Federal Communications Commission at the request of the appellant.

In this case the Wilkinson Company appealed against a decision of the Commission granting a construction permit for a new broadcasting station at Mason City to the Mason City Globe & Gazette Company. In making the grant the Wilkinson Company claimed that the Commission had ignored its rights.

NOTES FOR THE SALES STAFF

Further indications that the summer slump has been definitely beaten is to be found in July advertising volume. (See Total Broadcast Advertising, page 1588.)

The marked strength in regional network volume during the month should be of particular interest. (See Total Broadcast Advertising, page 1588.)

The strength of transcription volume in both the national and local fields is a continuing development of interest. (See Broadcast Advertising by Type of Rendition, page 1589.)

NIAGARA FALLS STATION RECOMMENDED

The Power City Broadcasting Corporation and the Niagara Falls Gazette Publishing Company, both filed applications with the Federal Communications Commission asking for construction permits for the erection of a new station at Niagara Falls, N. Y., and both asking identical facilities as follows: 630 kilocycles, 250 watts and daytime operation.

Examiner Melvin H. Dalberg in Report No. I-291 recommended that the application of the Power City Corporation be granted and that of the Gazette Publishing Company be denied. The Examiner states that there is "a distinction between the types of ownership and control of the facilities proposed." He then calls attention to the fact that the Gazette Company publishes a newspaper. He continues, "It is believed, however, that the applicant Power City Broadcasting Corporation stockholders * * * enjoy excellent local reputations and are representative of the population of the area in practically all of its activities, is better qualified as the licensee of the proposed station."

DENIAL RECOMMENDED FOR NEVADA STATION

Mrs. C. A. S. Heaton filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new station at Las Vegas, Nev., to use 1420 kilocycles, 100 watts and unlimited time on the air.

Examiner Robert L. Irwin in Report No. I-292 recommended that the application be denied. It was found by the Examiner that "this applicant is without adequate capital to make such service available to the area and the quality of the programs cannot be determined from the record."

RECOMMENDS INCREASED POWER FOR WHAZ

Broadcasting station WHAZ, operating on 1300 kilocycles, with 500 watts power and specified hours of operation has applied to the Federal Communications Commission to increase its power to 1000 watts.

Examiner Robert L. Irwin in Report No. I-293 recommended that the increased power be granted subject, "however, to conditions requiring that the antenna system be so changed or constructed as to comply with the regulations of the Commission, and requiring the painting and illuminating of the antenna towers for the protection of air traffic."

The Examiner states that the operation of the station with the proposed increased power would not cause increased interference with any other existing stations." He found also that "the ap-

plicant has shown a need for additional nighttime service in the area proposed to be served."

BROADCAST ADVERTISING DURING JULY

Analysis of Check with Census Data

In keeping with the announced intention to further check the accuracy of its own figures and to make possible their improvement where necessary, the NAB has just completed an additional study to determine the significance and reasons underlying the differences between its own and the Census apportionments of national and local non-network business.

The check in question constituted a comparison between the proportion of national and local volume represented in the non-network business reported to the Census by the identical group of stations comprising the NAB 1935 sample and the proportion as recorded for these stations by the NAB. The theory underlying the check was that if the proportion of national and local business showed a marked correspondence in the two cases, then it would be indicated that the NAB sample was of such a nature as to underemphasize the local volume, since comparable groups of stations had yielded generally similar results. If this did not occur, obviously further checks would be required.

The Bureau of the Census was requested to determine the proportion of national and local business in the non-network field reported to it by the NAB 1935 sample stations as a group. The comparison was then made.

Allowing for the fact that Census figures were collected at net and the NAB figures at gross, the results of the check showed a marked correspondence. Thus, the Census net sales for the group of stations in question in the non-network field were comprised 43.2% of national and regional business and 56.8% of local volume. NAB gross sales for the identical group were 46.5% national and regional and 53.5% local. Since discounts in the national field, on the whole, are larger than on local business, a given volume of national *net* business may be expected to yield a higher volume of gross than would the same volume of local net business. On this basis the difference of 3.3% between the proportion of the national business on the two sets of compilations becomes of no importance.

The result of the check therefore indicates that the NAB statistics have tended to underemphasize the volume of local business placed over stations and that consequently local volume has represented too small a proportion of total non-network volume. Increases must therefore be made primarily in local volume, since NAB and Census national volume previously has been shown to check closely when reduced to a comparable basis. Upward adjustment of local figures is readily possible and will be carried out as soon as publication of more detailed Census breakdowns furnish the base for revised procedure.

Highlights of the Month

Broadcast advertising during July amounted to $7,232,225, a decline of 9.4% as compared to the June level. For the second month in succession the seasonal decline was less than during the previous year, when the June-July drop amounted to 11.1%. Regional network volume rose 7.5% over June.

Gross time sales for the medium were 23.4% greater than during the corresponding month of last year, all portions of the broadcasting industry showing approximately the same rate of increase.

Local and regional stations continued to show the greatest relative growth over the corresponding period of the preceding year as far as non-network volume was concerned. Non-network gains were most pronounced in the South and mid-West during the month.

All forms of rendition declined as compared to June, with the exception of national announcement volume, which rose 15.3%. The most marked gains in the national field occurred in the transcription and announcement business. Gains were more uniform in the local field, with transcriptions and live talent leading.

Seasonal declines were experienced by practically all sponsoring groups. National network gasoline, food, confectionery, household equipment and tobacco advertising, however, rose above the June level. Regional network food, drug and household equipment volume rose likewise. National non-network radio and financial volume increased, as did local radio set advertising.

Numerous gains were experienced as compared to June of the previous year. All forms of food advertising increased, as did automotive volume. Regional network and national non-network drug and gasoline business gained markedly, as did local clothing volume. National network business experienced important gains in the beverage, confectionery, household equipment, soap and kitchen supply, financial and radio set fields.

Total Broadcast Advertising

Total broadcast advertising for the month of July is set forth in Table I.

TABLE I

TOTAL BROADCAST ADVERTISING

1936 Gross Time Sales

Class of Business	*June*	*July*	*Cumulative Jan.-July*
National networks...	$3,979,763	$3,832,320	$32,014,296
Regional networks...	105,860	113,705	758,178
National non-network	1,883,830	1,661,200	13,189,060
Local.....	1,948,280	1,625,000	12,072,870
Total.....	$7,917,733	$7,232,225	$58,034,404

Broadcast advertising during the month declined 9.4% from the June level. This was less than the July decrease of the preceding year, which amounted to 11.1%. National network business decreased the least as compared to June. Gross time sales for national networks remained at 96.3% of the preceding month's level. This makes the national network decline considerably less than during previous summers.

Regional network advertising ran counter to the usual seasonal trend and rose 7.5% as against June. National non-network advertising decreased 11.7% and local volume 16.5%.

All forms of radio advertising gained as against the corresponding month of last year. Gains were fairly uniform and were as follows: national networks, 20.9%; regional networks, 23.4%; national non-network business, 28.0%; local broadcast advertising, 26.6%.

Comparison with Other Media

Advertising volume for major media is set forth in Table II.

TABLE II

ADVERTISING BY MAJOR MEDIA

1936 Gross Time and Space Sales

Advertising Medium	*June*	*July*	*Cumulative Jan.-July*
Radio broadcasting...	$7,917,600	$7,232,225	$58,034,404
National magazines[1]..	12,323,954	8,907,011	83,663,895
National farm papers[1].	524,308	398,892	4,129,657
Newspapers[2].....	48,484,000	44,085,000	319,791,000
Total.....	$69,249,862	$60,623,128	$465,618,956

[1] Publishers' Information Bureau.
[2] Estimated.

National magazine advertising in July decreased 26.7% as compared to June but remained 10.1% above the level of the corresponding period of last year. National farm papers decreased 23.4% from the June level. Farm paper volume, however, was 14.3% above that of July 1935. Newspaper lineage declined 9.9% over the month but remained 12.6% above July 1935.

Non-network Advertising

Total non-network advertising decreased 14.4% as compared to the preceding month, though it registered a gain of 27.3% as compared with July of last year. Non-network advertising by power of station is found in Table III.

TABLE III

NON-NETWORK ADVERTISING BY POWER OF STATION

1936 Gross Time Sales

Power of Station	*June*	*July*	*Cumulative Jan.-July*
Over 1,000 watts.....	$1,543,110	$1,281,400	$11,145,740
250–1,000 watts.....	1,707,620	1,420,800	10,219,550
100 watts.....	581,380	584,000	3,896,640
Total.....	$3,832,110	$3,286,200	$25,261,930

Clear channel and regional station non-network volume declined 16.8% and 16.9% respectively from the June level. Local station business gained 5.0%. Local station advertising continued to show the greatest gains over last year, increasing 44.5%. Regional station advertising rose 39.6% and clear channel volume 10.4%.

Non-network advertising by major geographical districts is found in Table IV.

TABLE IV

NON-NETWORK BROADCAST ADVERTISING BY GEOGRAPHICAL DISTRICTS

	1936 Gross Time Sales		
Geographical District	*June*	*July*	*Cumulative Jan.-July*
New England–Middle Atlantic Area	$839,110	$595,300	$5,397,950
South Atlantic–South Central Area	729,060	727,500	5,032,070
North Central Area	1,473,420	1,286,800	9,963,730
Pacific and Mountain Area	790,520	676,600	4,868,180
Total	$3,832,110	$3,286,200	$25,261,930

Declines from the July level were experienced in all sections except the South, where non-network volume remained unchanged. New England-Middle Atlantic business dropped 27.6% while that in the Mid-West and Far West decreased 14.4%.

Compared to July of last year, all sections except the New England-Middle Atlantic Area registered gains. Non-network revenues in the aforementioned region declined 7.0%. Gains in other sections were as follows: South Atlantic-South Central States, 69.5%; North Central States, 38.7%; Mountain and Pacific States, 17.5%.

Non-network Advertising by Type of Rendition

With the exception of national announcement volume, which increased 15.3%, all forms of rendition declined as compared to June. In the national field, transcription business dropped 18.8% from the preceding month's level and live talent volume declined 15.6%. Local decreases were as follows: transcriptions, 17.4%; live talent, 19.4%; records, 13.4%; announcements, 12.5%.

All forms of rendition gained as compared to July 1935. Increases were as follows in the national field: transcriptions, 27.0%; live talent, 9.2%; announcements, 18.5%. The marked growth in transcriptions is a continuation of a trend noticeable in recent months, though the upswing in announcements is unique to July.

Gains in the local field have been more uniform during the month in question and were as follows: transcriptions, 37.1%; live talent, 31.3%; records, 23.0%; announcements, 21.3%.

Broadcast advertising by type of rendition is found in Table V.

TABLE V

NON-NETWORK ADVERTISING BY TYPE OF RENDITION

	National Non-network		*Local*		*1936 Gross Time Sales* *Total*		*Cumulative*
Type of Rendition	*June*	*July*	*June*	*July*	*June*	*July*	*Jan.-July*
Electrical transcriptions	$740,290	$601,100	$242,840	$201,300	$983,130	$802,400	$6,526,350
Live talent programs	827,160	697,840	971,490	782,160	1,798,650	1,480,000	12,123,770
Records	9,830	8,800	73,170	63,440	83,000	72,240	495,360
Announcements	306,550	353,460	660,780	578,100	967,330	931,560	6,116,450
Total	$1,883,830	$1,661,200	$1,948,280	$1,625,000	$3,832,110	$3,286,200	$25,261,930

Sponsor Trends in July

The usual seasonal declines occurred in June in the majority of product and service groups sponsoring radio advertising. There were some increases, however. Important gains over the preceding month in the national network field were as follows: gasoline and accessories, 5.1%; foodstuffs, 6.5%; confectionery, 30.8%; household equipment, 22.7%; tobacco, 7.1%.

Regional network drug advertising more than doubled the June figure, while household equipment volume rose 39.0% and food advertising gained 27.7%.

National non-network radio set and financial advertising increased 73.2% and 27.0% respectively. Local radio set volume gained 21.4%.

Comparison July 1935

Gains were fairly general as compared to July of the preceding year. Food advertising over all portions of the medium increased. National network, national non-network and local automotive advertising also gained. Regional network and national non-network gasoline and accessory advertising rose 42.0% and 111.0% respectively. Regional network and national non-network drug volume increased, the former by 38.7% and the latter by 57.2%. National non-network cosmetic business more than tripled that of the previous July. National network beverage advertising gained 76.5% while regional network volume increased materially. National network confectionery business more than doubled. Marked gains also occurred in the national network and national non-network household equipment volume. Local clothing advertising rose 23.1%, while financial advertising increased 46.6%.

Broadcast advertising by major types of sponsoring business is found in Table VI.

TABLE VI

RADIO BROADCAST ADVERTISING BY TYPE OF SPONSORING BUSINESS

(July 1936)

	Gross Time Sales				
Type of Sponsoring Business	*National Networks*	*Regional Network*	*National Non-network*	*Local*	*Total*
1a. Amusements	——	——	$13,600	$40,300	$53,900
1–2. Automobiles and accessories:					
1. Automobiles	$150,875	——	218,370	122,420	491,665
2. Accessories, gas and oils	340,607	$22,155	144,350	56,700	563,812
3. Clothing and apparel	5,126	——	28,440	172,750	206,316
4–5. Drugs and toilet goods:					
4. Drugs and pharmaceuticals	320,322	6,990	233,750	37,700	598,762
5. Toilet goods	662,039	4,120	101,900	20,520	788,579
6–8. Food products:					
6. Foodstuffs	859,802	34,865	323,020	219,330	1,437,017
7. Beverages	332,241	15,763	55,300	126,800	530,104
8. Confections	98,266	200	5,840	2,000	106,306
9–10. Household goods:					
9. Household equipment and furnishings	44,536	5,731	51,940	191,950	294,157
10. Soaps and kitchen supplies	308,121	2,776	154,780	10,500	476,177
11. Insurance and financial	35,869	514	21,280	62,330	120,533
12. Radios	103,905	——	16,760	14,700	135,365
13. Retail establishments	——	——	3,800	119,000	122,800
14. Tobacco products	420,844	5,210	76,940	4,000	506,994
15. Miscellaneous	149,767	15,381	211,130	424,000	800,278
Total	$3,832,320	$113,705	$1,661,220	$1,625,000	$7,232,225

Details as to trends in various important sponsoring fields are as follows:

1a. ***Amusements.*** National non-network business increased 8.8% over June, while local declined 20.3%. National non-network business 79.7% above July 1935, and local down 3.3%.

1. ***Automotive.*** Declines from June level as follows: national networks, 50.0%; national non-network, 5.7%; local 24.7%. Gains as compared to corresponding month of 1935 as follows: national networks, 14.5%; national non-network, 31.5%; local 54.0%.

2. ***Gasoline and accessories.*** National network business 5.1% above June. Declines in other fields as follows: regional networks, 8.3%; national non-network, 2.3%; local 36.5%. National network business 13.5% below July last year and local down 28.7%. Regional network business up 42.0% and national non-network 111.0%.

3. ***Clothing.*** Decreases from June level as follows: national networks, 80.0%; national non-network, 25.5%; local, 27.7%. Local volume 23.1% above July 1935. National network business down 66.6% and national non-network volume 9.0%.

4. ***Drugs and pharmaceuticals.*** Regional network business 245.0% above June level. Declines in other fields as follows: national networks, 0.6%; national non-network, 19.4%; local, 30.0%. National network business 4.4% under July 1935. Other gains as follows: regional networks, 38.7%; national non-network, 57.2%; local, 20.8%.

5. ***Toilet goods.*** National network business 10.9% below June. National non-network volume up 31.2% and local unchanged. National network volume 13.3% below July of last year. National non-network business more than tripled. Local up 5.4%.

6. ***Foodstuffs.*** National network business 6.5% above June. Regional network volume up 27.7%. National non-network advertising down 20.2% and local 22.6%. Gains as compared to July of last year as follows: national networks, 18.4%; regional networks, 52.2%; national non-network, 23.6%; local 25.0%.

7. ***Beverages.*** Declines from previous month as follows: national networks, 6.5%; national non-networks, 6.0%; local, 16.1%. Regional network business unchanged. National network volume 76.5% above July of last year. Regional network business up from $1984 to $15,763. Local business up 27.1%. National non-network down 25.6%.

8. ***Confectionery.*** National network business up 30.8% as compared to June. National non-network business down 10.8%, and local 64.4%. National network business 219.5% above last July. National non-network down 80.0% and local 57.9%.

9. ***Household equipment.*** National network advertising 22.7% above June and regional network volume up 39.0%. National non-network down 19.1% and local 12.2%. Gains over July of 1935 as follows: national networks, from $2875 to $44,536 during month under review; national non-network, 79.9%; local, 23.1%. Regional network business down 7.0%.

10. ***Soaps and kitchen supplies.*** National network business 7.8% below June and national non-network down 17.8%. Regional network business up 16.0%, and local 19.5%. Compared to the corresponding month of 1935 national network business up 71.6%, regional network volume 9.0% and local advertising up from $3725 to $10,000. National non-network down 3.9%.

11. ***Insurance and financial.*** National network business 8.1% below June. Regional network business unchanged. National non-network volume up 27.0% and local down 25.7%. Gains over 1935 as follows: national networks, 21.2%; national non-network, 14.2%; local, 46.6%.

12. ***Radios.*** National network volume unchanged from June. National non-network business up 73.2% and local 21.4%. National network business 69.1% above last July. National non-network business grown from $1205 to $16,760. Local up 8.5%.

13. ***Department and general stores.*** National non-network business 35.7% above June and local down 28.2%. Compared to last July, national non-network volume up 15.4% and local up 6.2%.

14. ***Tobacco products.*** National network business 7.1% greater than in June. Regional network volume down 51.6%, national non-network 2.1% and local 62.7%. Compared to July 1935 national networks down 4.8% and regional networks 77.3%. National non-network up 70.4%. Local down 25.2%.

15. ***Miscellaneous.*** National networks 18.8% below June and national non-network down 7.1%. Regional networks up 7.1% and local 8.0%. Gains compared to July 1935 as follows: national networks, 181.0%; regional networks, 27.8%; national non-network, 27.8%; local, 55.3%.

Retail Broadcast Advertising

Broadcast advertising by various kinds of retail establishments is found in Table VII.

TABLE VII

RETAIL BROADCAST ADVERTISING OVER INDIVIDUAL STATIONS

Type of Sponsoring Business	*1936 Gross Time Sales June*	*July*
Automobiles and accessories:		
Automobile agencies and used car dealers	$166,960	$128,100
Gasoline stations, garages, etc.	53,560	30,200
Clothing and apparel shops	246,230	180,350
Drugs and toilet goods:		
Drug stores	12,910	11,210
Beauty parlors	9,130	8,050
Food products:		
Grocery stores, meat markets, etc.	48,210	47,820
Restaurants and eating places	20,920	17,500
Beverage retailers	700	700
Confectionery stores	1,880	890
Household goods:		
Household equipment dealers	78,480	81,680
Furniture stores	107,780	91,900
Hardware stores	26,520	13,500
Radio retailers	10,830	12,200
Department and general stores	167,824	122,800
Tobacco shops	.....	.....
Miscellaneous	97,800	97,400
Total	$1,049,734	$844,300

General advertising by retail establishments declined 19.5% from the June level but showed a gain of 21.8% over July 1935. Seasonal declines were experienced in practically all fields.

Important gains were registered in several fields as compared to the corresponding month of 1935. These are as follows: automotive dealers, 40.6%; clothing and apparel stores, 34.1%; grocery and delicatessen stores, 62.6%; household equipment retailers (principally mechanical equipment), 49.3%; furniture stores, 22.3%; department stores, 6.0%.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2925. Charging unfair representations in the sale of preparations for treatment and cure of certain skin ailments, a complaint has been issued against **The Tarex Company, Santa Monica, Calif.** Selling its products under three formulas, Tarex Nos. 1, 2 and 3, the respondent company is alleged to have advertised them as effective treatments and cures for eczema, psoriasis, and other skin ailments.

The complaint charges that the formulas of the respondent company's products, either singly or combined, do not constitute competent or adequate remedies for the diseases mentioned, and that the respondent's representations tend to deceive purchasers and cause unfair diversion of trade to the respondent company from competitors.

No. 2926. The John J. McCann Company, 454 Lawrence St., **Burlington, N. J.,** is named respondent in a complaint charging unfair methods of competition in the sale of "Comfort Stump Socks." The respondent corporation's product is used by persons who have suffered amputation of a limb, to cover the stump in order to ease the pressure or friction caused by attaching an artificial appliance.

Representations of the respondent corporation, alleged in the complaint to be false and deceptive, are that its products are seamless, "should literally never wear out," are moth-proof, and are insured against damage by moths for two years.

The complaint charges that the respondent corporation's products have a seam in the bottom, do not wear indefinitely, are susceptible to damage by moths, and that the moth insurance advertised only covers the socks while they remain in possession of the respondent corporation.

No. 2927. False and misleading representations in the sale of pianos is charged in a complaint issued against **F. A. North Co.**, a **Pennsylvania** corporation, and **Lester Pianos, Inc.**, of **New York**, a Delaware corporation, both having headquarters at 1306 Chestnut St., **Philadelphia.** Also named as a respondent in the complaint is A. D. McClenaghan, credit manager of the North company.

To promote the sale of their pianos, the respondents are alleged to have puhlished "come on" advertisements and letters which, according to the complaint, were not issued in good faith hut were part of a plan to obtain contact with prospective purchasers and induce them to come to the respondents' places of business, where they would be induced to buy the instruments, different and higher priced than those advertised.

One sales plan used, according to the complaint, was the "loan free" advertisement, under which a prospective purchaser could select a piano would be "loaned" to him "ahsolutely free." However, the complaint charges, this advertising was merely part of a plan to procure placement of pianos in homes for purposes of sale.

No. 2929. Allegedly representing that it is affiliated with the United States Government, **Washington Training Institute, Inc.**, 1108 Washington Boulevard Building, **Detroit**, is named respondent in a complaint charging unfair methods of competition in selling correspondence courses of instruction to prepare students for civil service examinations.

Among the representations the respondent school is said to make through its salesmen are that the Government has availahle civil service positions for which examinations will be held in the near future, or at definite times stated; that students will he placed in these positions if they pursue the respondent corporation's courses; that if a joh is not ohtained money will he refunded, and that students will receive personal coaching, and only a limited numher will be selected for training in a particular locality.

These representations are false and misleading in that they are exaggerations or distortions of the facts, according to the complaint, which also charges that the respondent misrepresents the number of appointments made, salaries, leaves, and opportunities for promotion in the civil service.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 01446. Acquin Products Co., 318 N. 8th St., St. Louis, will cease representing that "Acquin" prevents pneumonia, influenza, catarrah, mastoiditis, meningitis, tuherculosis, or other "dread diseases"; that it is a remedy for all sorts of aches and pains, colds and sore throats; that it soothes the nerves, is "safe", acts as an antiseptic and contains a "miracle ingredient." The company further agrees not to puhlish any statements which, hy use of the first person or other terminology, create the impression that such statements portray the experience of any individual, unless this is a fact.

No. 01461. Kathryn R. Sabatini, Richmond Hill, N. Y., trading under the name of A. B. C. Laboratories and selling a purported remedy for pyorrhea designated "Triple Formula A9-B17-C54" agrees to discontinue representations that the preparation gives complete relief from pyorrhea and other deadly mouth diseases and checks the principle cause of pyorrhea; that it relieves suffering, restores health and whitens and saves teeth; that it has been used with success by famous European dental surgeons in "thousands and thousands" of cases, and that 40 per cent, or any other percentage, of constitutional diseases and disabilities can he traced directly to the constant drainage of poisonous pyorrhea pus from the gums into the system, unless such a statement is proven by authentic statistics. Other claims that the respondent will discontinue are that formulas "A9", "B17" and "C54" are, respectively, a concentrated liquid, a highly antiseptic wash, and a special medicated dentifrice based upon an official preparation inserted in the U. S. National Formulary.

No. 01462. I. Paul, Second and Poplar Sts., Philadelphia, trading as Russ Pharmaco Products, stipulates he will stop advertising that his medicinal preparation designated "Russlac" is a stomach tonic, builds up hody resistance, prevents headaches and colds, and restores health and strength; that it is an effective remedy for nervous trouble, stomach disorders, gastritis, rheumatism or auto-intoxication, unless the assertion is confined to relief of the distress caused by such conditions, and that it has any effect on the proper functioning of the stomach, liver or kidneys. Paul admitted that "Russlac" is not a famous European discovery as he advertised and will discontinue such representation.

No. 01463. S. J. Mullica, 40 Journal Square, Jersey City, N. J., operating under the trade names of The International Detective System and The International Detective Training School, agrees to stop representing that his correspondence course constitutes a complete course of detective instruction or supplies all of the required training demanded hy employers of detectives; that it trains one for entrance into the United States Secret Service, and that graduates may expect to earn from $2500 to $7500 annually, unless such graduates are actually placed in positions paying salaries within that range. Among other claims the respondent will discontinue are that he employs a staff of secret service detectives; that there is at the time a demand for detectives which will increase as the months go by, and that anything in connection with the course is given free to students, when in fact the cost thereof is included in the price charged for the course. The respondent also will cease using the trade name International Detective System unless in direct connection therewith there appears a statement that his is only a training school for detectives.

No. 01464. William Rosendorf, 1215 G St., N. W., Washington, D. C., agrees to stop describing the furs from which ladies' coats are made in any manner other than by use of the correct name of the fur as the last word of the description in his advertising, and stipulates that when any dye or hlend is used, imitating another fur, the true name of the fur appearing as the last word of the descriptive phrase shall he preceded immediately by the word "dyed" or "blended" compounded with the name of the simulated fur. Rosendorf admitted that the fur coats he advertised as "Beverette" were not made from the fur of the heaver, but from coney dyed to resemhle heaver.

No. 01465. C. L. Wendt, Canton, S. Dak., selling a weight-reducing plan consisting of various laxative tahlets, a system of diet and a list of exercises will discontinue claims that use of his plan enables one to reduce to normal weight or reduce any definite number of pounds in a given time; that his tahlets stimulate the liver or bile duct, or that they are healing, unless this representation is limited to such aid as they may afford in the healing of the conditions of the stomach or intestines. Wendt also will cease advertising that any disease or ailment is more prevalent among overweight persons than among persons of normal weight, unless suhstantiated hy reliahle statistical evidence, and that the prohability of death of an overweight person, as compared with a person of normal weight, is greater by any ratio or percentage than can be substantiated hy reliable statistical evidence.

No. 01466. Henrietta K. and George L. Moore, 1616 N. Vermont Ave., Hollywood, Calif., trading as Breth Kontrol Tablet Co. and selling "Breth Kontrol Tahlets," agree to stop representing that the product will remove all forms of breath odors, regardless of the cause of such odors.

No. 01467. Mantle Lamps Company of America, Inc., 609 West Lake St., Chicago, selling oil lamps designated "Aladdin Lamps", signed an agreement to cease and desist from representing that its product gives 10 times more light than the old luminous flame lamp, and uses less oil than the old lamp; that it is the world's finest light, does not cost a penny, is nearest to sunlight of any light known, and the nearest approach to daylight of all artificial lighting devices. So long as the respondent corporation advertises for sale and keeps in stock fixtures, replacements and repairs for its lamps, it will stop representing that there is nothing on such lamps to get out of order. The stipulation does not prevent the respondent corporation from making, hy the method of comparison, a representation concerning its lamps, when such comparison is supported hy competent evidence of a practical demonstration or experiment.

No. 01468. D. Crimmins, 3741D 60th St., Woodside, Long Island, N. Y., engaged in selling canaries and a hooklet entitled "$500 A Year Raising Canaries", agrees to discontinue representing that the market price for canaries is any amount in excess of that for which canaries are sold for regular purposes under normal conditions; that only the original expense is involved in the hreeding and sale of canaries; that the formulas contained in the respondent's booklet are remedies or cures for diseases of canaries; that the respondent guarantees earnings and a market to those who purchase canaries from him, and that his "service" is the only one of its kind. The respondent further stipulates that he will not make unmodified representations as to the earnings that may he made by hreeders of canaries, and will not exaggerate the average number of young hirds that may be raised annually under normal conditions.

No. 01469. Sinclair Manufacturing Co., Woodland Ave. and New York Central Railroad, Toledo, Ohio, signed an agreement to cease representing that "Sunrae," a washing fluid, kills all germs, including their spores; helps heal scratches, cuts

and abrasions, unless such claim is expressly limited to its effect as an antiseptic; that it is effective in the treatment of athletes foot, except where the germ or fungus can be reached by the solution, and that it is commonly used in hospitals.

No. 01473. Philip Adler, Jr., 525 Fulton St., Indianapolis, trading under the name of American Silk Hosiery Mills, agrees to discontinue the following representations in the sale of his "Snag-Proofed Hosiery": That he wants women merely to demonstrate hosiery, until such time as he actually does employ them for that purpose and pays them for it regardless of sales made; that hose are furnished free to his agents for their use, unless they are in fact furnished without consideration in money or service; that hose are made of 100 per cent pure silk, so long as any other thread enters into the construction of any part of the hose; that they are so manufactured that "there is nothing to catch on rough edges and sharp points," and that purchasers save the cost of selling through retailers so long as the respondent employs agents to obtain orders and expends substantial amounts for advertising.

The respondent further stipulates that he will cease making any comparison, by use of photographs, samples, or otherwise, between his products and those of competitors, unless the results of such comparison are actually and truthfully set forth, and he will discontinue any claims for his hosiery which are not true of both grades, namely, "chiffon" and "service," unless such claims are clearly limited to the appropriate grade.

No. 2265. Prohibiting unfair representations in the sale of a medicinal product called "Casey's Compound," an order to cease and desist has been issued against **J. H. Casey,** trading as **J. H. Casey Company, Portand, Ore.** The respondent company's address is Post Office Box 731.

Under the order, "Casey's Compound" is not to be represented as a cure, remedy or competent treatment for rheumatism, arthritis neuritis and related ailments, nor is it to be advertised as capable of relieving the blood and system of toxic poisoning and excess acidity, and of stimulating the glands to normal functioning.

No. 2628. An order to cease and desist has been issued against **Dallas E. Winslow, Inc.,** Holden Avenue at Lincoln Street, **Detroit,** dealer in automobile parts and accessories, directing it to stop using the name "Durant Motor Car Company" or "Durant Motor Company" as a trade name for its business.

Trading under the name "Durant Motor Car Company," the respondent company, according to findings, succeeded Winslow-Baker-Meyering Corporation, which had purchased all unassembled parts on hand in the Durant Motor Company's plant in Lansing, Mich., at the time the latter was adjudged to be insolvent and a receiver appointed. Findings are that Winslow-Baker-Meyering distributed replacement parts for the "Durant," "Star," and "Rugby" automobiles, selling at first only Durant parts purchased through the receiver, but later, as the stock of such parts became depleted, selling supplies obtained from other manufacturers, but still advertising them as Durant parts.

The order to cease and desist directs the respondent to discontinue using the word "Durant" in any way which may tend to deceive purchasers into believing that the respondent company is successor to the Durant Motor Company; from advertising that its automotive parts and equipment are "authorized Durant parts direct from the factory," and from using the word "factory" in its advertising, alone or with pictures to represent that Dallas E. Winslow, Inc., owns, operates, or controls a factory in which its products are made, when this is not true.

No. 2668. False and illegible labeling of the watt measurement on incandescent lamps is prohibited as a violation of Section 5 of the Federal Trade Commission Act, under an order to cease and desist issued against **Fannie Chanowitz,** trading as **Atlas Products Company,** 307 Peshine Ave., **Newark, N. J.**

The respondent is ordered to discontinue representing that the lamps are of any other watt measurement than that stamped or marked thereon, except that a variation in the watt measurement of 4 per cent above or below the rating marked on the lamps is permissible. The order also directs the respondent to cease placing the watt measurement on lamps in such a manner that the printing or marking may be easily eradicated by ordinary handling.

Findings are that the respondent's lamps, in nearly every instance, are of greater wattage than indicated by the markings, which are easily rubbed off and become illegible so that it is impossible to determine, without submitting the lamps to a test, what their actual watt measurement is.

No. 2766. L. W. Gibson, 4700 North Racine Ave., **Chicago,** a dealer in formulas and specifications for the production of cosmetics, tooth paste and other toilet articles, has been ordered to cease and desist from misleading representations in the conduct of his business.

Findings are that Gibson represented to customers that he was educated in the science of chemistry, that he had had many years of experience in its commercial application; had devoted several years to collecting, studying and perfecting practical working formulas and processes; had been employed as a consultant chemist and advisor to the manufacturing trade for several years, and other similar assertions.

Representations of the respondent were found not to be true, and he was ordered to cease and desist from making them. The respondent admitted the material allegations of the Commission's complaint, and consented to issuance of the findings of fact and order to cease and desist.

No. 2863. R. C. Jenner and **William DeLapp,** 31 Allison St., **Pontiac, Mich.,** trading as **Jenner Manufacturing Company** and **Jenner Sales Company** and engaged in the manufacture and sale of a small electric heater, designated "Wonder Electric Water Heater," has been ordered to discontinue unfair methods of competition which allegedly result in injury to competitors and deception of unemployed persons who answer the respondents' advertisements in the "Help Wanted" columns of newspapers.

The Commission's findings in the case are that the respondents represent to persons applying for positions that they have established or will establish dealers in various cities, and that applicants for work are only required to distribute heaters to replace those previously sold and to make weekly collections and remittances; that an initial deposit of from $60 to $100 is required in lieu of a temporary fidelity bond, which deposit will be refunded; that applicants will receive $5 for each new dealer they obtain and are furnished with automobiles or compensated for the use of their own cars.

These representations are false and fraudulent, according to the findings. The Commission ordered the respondents to cease representing that services to be performed by applicants consist only of making deliveries of and collections for heaters, and that no selling is required; that dealers have been or will be established in various territories, when such is not a fact; that the initial payment is a temporary bond and will be refunded when such is not true, or that it is anything other than payment for a certain number of heaters; that applicants will receive $5 for each new dealer obtained, when no such sum is paid, and that they are furnished with automobiles or paid a weekly allowance for use of their own cars, when this is not done.

No. 2864. Morris Gottsegen and **David Jacoby,** trading as **Mills Sales Company,** 901 Broadway, **New York,** have been ordered to discontinue unfair methods of competition in connection with the sale of general merchandise and peddlers' supplies, including tooth brushes, shaving cream, rubbing alcohol, razor blade hones and toilet articles.

The respondents are directed to cease representing through circulars, catalogs or labels, or by radio broadcasts, that the price marks stamped on their products are the regular or customary resale prices, when such price marks are fictitious and greatly in excess of the regular and customary prices at which the merchandise is sold at retail, and that these fictitious and excessive prices are the regular retail prices customarily received for the products.

No. 2928. Simulation of the corporate name of a competitor, in violation of Section 5 of the Federal Trade Commission Act, is alleged in a complaint issued against **Helmco, Inc.,** 844 West Jackson Boulevard, **Chicago,** formerly the **H. E. Lacy Manufacturing Company.** The respondent is engaged in the manufacture and sale of electric "fudge warmers" and "hot cups," for heating liquid mixtures of chocolate syrup and other ingredients used in the manufacture of candy and soda fountain drinks.

Lacy Products Corporation, 15 Aberdeen St., Chicago, also manufactures and sells similar products under the trade name "Lacy Hot Cups," as did its predecessor, Lacy Manufacturing Company. Under this name, such products are said to have become well and faborably known to the members of the drug trade, who, through long usage and over a long period of time, have identified electric "fudge warmers" and "hot cups" which bear the name "Lacy" as being products of the Lacy Products Corporation.

FTC CLOSES CASE

No. 2394. The Federal Trade Commission has closed its case against **Royal Distillers, Ltd., Chicago,** which is no longer in business, and is insolvent. The respondent corporation, at the time it was engaged in the business of rectifying and selling gin, was charged with misuse of the word "Distillers" in its corporate

name, and with use of a plan to maintain the resale price of its product.

As of June 30, 1935, according to the order, the corporation surrendered all its permits, has transferred its physical assets to the Wexmar Liquor Company, Chicago, and it appears unlikely that the corporation will resume the sale of spirituous beverages in interstate commerce.

In entering the order, the Commission reserved the right to reopen the case should the facts warrant.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

No hearings have been scheduled before either the Broadcast Division or the Examiners of the Commission for the week beginning Monday, October 5, because of the general allocation hearing called on that date.

APPLICATIONS GRANTED

KELD—Radio Enterprises, Inc., El Dorado, Ark.—Granted C. P. to install new transmitter.

NEW—The Travelers Broadcasting Service Corp., Mobile, Hartford, Conn.—Granted C. P. for new experimental relay broadcast station on an experimental basis; frequencies **105000, 200000, 290000, 450000 kc.,** 5 watts day and night, unlimited. Also granted license covering same.

NEW—Pittsburgh Radio Supply House, Mobile (Pittsburgh, Pa.).—Granted C. P. for new experimental relay broadcast station on an experimental basis; frequencies in Group G of Rule 1003 (c) under provisions of Rules 1000, 1001 (b) and 1003 (e).

NEW—WJR, The Goodwill Station, Mobile (Detroit, Mich.) (2 A 1s.).—Granted amended C. P. for general experimental station for broadcast pickup purposes; frequencies **90000, 100000, 200000** and **400000 kc.,** 40 watts.

The WATR Co., Inc., Mobile, Waterbury, Conn.—Granted C. P. for general experimental broadcast pickup station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Reading Broadcasting Co., Mobile (Reading, Pa.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Woodmen of the World Life Ins. Assn., Mobile (Omaha, Nebr.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—West Virginia Broadcasting Corp., Mobile (Wheeling, W. Va.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Olean Broadcasting Co., Inc., Mobile (Olean, N. Y.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Wilton E. Hall, Mobile (Anderson, S. C.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Berks Broadcasting Co., Mobile (Reading, Pa.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Miami Valley Broadcasting Corp., Mobile (Dayton, Ohio).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—The Toledo Broadcasting Co., Mobile (Toledo, Ohio).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—The Atlanta Journal Co., Mobile (Atlanta, Ga.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—WDZ Broadcasting Co., Mobile (Tuscola, Ill.) (4 Appls.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

NEW—Earle C. Anthony, Inc., Mobile (Los Angeles, Calif.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

W3XEW—WTAR Radio Corp., Mobile (Norfolk, Va.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 5 watts.

KOL—Seattle Broadcasting Co., Seattle, Wash.—Granted C. P. to make changes in equipment.

WRDW—Augusta Broadcasting Co., Augusta, Ga.—Granted C. P. to move transmitter to edge of city, North Augusta, S. C., and install new antenna.

W1XT—The Travelers Broadcasting Service Corp., Mobile (Hartford, Conn.).—Granted C. P. for replacement transmitter and increase in power from 7.5 watts to 100 watts unlimited.

W10XDD—Evansville on the Air, Inc., Mobile (Evansville, Ind.).—Granted C. P. to increase power to 35 watts.

W1XD—The Travelers Broadcasting Service Corp., Mobile (Hartford, Conn.).—Granted C. P. to change equipment and increase power from 7.5 watts to 50 watts.

NEW—Woodmen of the World Life Ins. Assn., Mobile (Omaha, Nebr.).—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 100 watts.

WRJN—Racine Broadcasting Corp., Racine, Wis.—Granted license to cover C. P.; **1370 kc.,** 100 watts night, 250 watts day, unlimited.

KGNO—The Dodge City Broadcasting Co., Inc., Dodge City, Kans.—Granted license to cover C. P.; **1340 kc.,** 250 watts, unlimited time.

WMT—Iowa Broadcasting Co., Cedar Rapids, Iowa.—Granted license to cover C. P.; **600 kc.,** 1 KW night, directional antenna; 5 KW day, unlimited.

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Granted license to cover C. P.; **1280 kc.,** 500 watts night, 500 watts day, shares with WTNJ and WCAM.

WPRA—Puerto Rico Advertising Co., Inc., Mayaguez, P. R.—Granted modification of C. P. approving transmitter and studio sites.

KVI—Puget Sound Broadcasting Co., Inc., Tacoma, Wash.—Granted modification of C. P. approving new equipment.

KHQ—Louis Wasmer, Inc., Spokane, Wash.—Granted modification of C. P. approving transmitter site.

WSAR—Doughty & Welch Electric Co., Inc., Fall River, Mass.—Granted modification of C. P. extending completion date to 10-31-36.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted modification of C. P. to change type of transmitter to be installed.

WSAR—Doughty & Welch Electric Co., Inc., Fall River, Mass.—Granted C. P. approving new equipment.

KPRC—Houston Printing Co., Houston, Tex.—Granted modification of license to change name from Houston Printing Co. to Houston Printing Corp.

WPTF—WPTF Radio Co., Raleigh, N. C.—Granted special experimental authority to operate with 5 KW from sunset at KPO to 11 p. m., EST, using directional antenna after sunset, for period ending February 1, 1937.

KWKH—International Broadcasting Corp., Shreveport, La.—Granted extension of special authority to operate on **1100 kc.,** unlimited, with directional antenna night, for period ending February 1, 1937.

WBAA—Purdue University, W. Lafayette, Ind.—Granted authority to install automatic frequency control.

KGFW—Central Nebraska Broadcasting Corp., Kearney, Nebr.—Granted authority to install automatic frequency control.

WCAM—City of Camden, Camden, N. J.—Granted authority to install automatic frequency control.

WRR—City of Dallas, Texas, Dallas, Tex.—Granted authority to use transmitter of KVPA as auxiliary transmitter; present assignment: **1280 kc.,** 500 watts, unlimited. Also granted authority to determine operating power by direct measurement of antenna for auxiliary transmitter.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Granted authority to transfer control of corporation from Harry B. Read to Walter L. Read.

KSLM—Oregon Radio, Inc., Salem, Ore.—Granted authority to transfer control of corporation from Walter L. Read to H. B. Read.

WPEN—Wm. Penn Broadcasting Co., Philadelphia, Pa.—Granted renewal of license for the period September 1, 1936, to March 1, 1937.

WPEN—Wm. Penn Broadcasting Co., Philadelphia, Pa.—Same for auxiliary.

WFBM—Indianapolis Power & Light Co., Indianapolis, Ind.—Granted extension of license for a period of 3 months from October 1, 1936.

WRAX—WRAX Broadcasting Co., Philadelphia, Pa.—Granted renewal of license for the period 9-1-36 to 3-1-37.

WRAX—WRAX Broadcasting Co., Philadelphia, Pa.—Same for auxiliary.

NEW—Bamberger Broadcasting Service, Inc., Portable, Newark, N. J.—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—Bamberger Broadcasting Service, Inc., Portable, Newark, N. J.—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—WDZ Broadcasting Co., Portable (Tuscola, Ill.) (2 Appls.).—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

WDAE—Tampa Times Co., Tampa, Fla.—Granted extension of special experimental authority to operate with power of 2½ KW LS, with equipment changes, for the period ending 4-1-37.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted authority to operate simultaneously with Station WSMK, Dayton, Ohio, from 10 p. m. to 10:15 p. m., EST, September 30, October 7, 14, 21, 28, and November 4, 1936.

KDAL—Red River Broadcasting Co., Inc., Duluth, Minn.—Granted modification of C. P. correcting geographical location of transmitter, change in studio location, and changes in antenna.

NEW—Julio M. Conesa, Portable, Ponce, P. R.—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150, 2790 kc.,** 26.4 watts.

NEW—West Virginia Broadcasting Corp., Portable, Wheeling, W. Va.—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150, 2790 kc.,** 26.4 watts.

NEW—The Toledo Broadcasting Co., Portable (Toledo, Ohio).—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—WSOC, Inc., Portable (Charlotte, N. C.).—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—Fort Worth Broadcasters, Inc., Portable (Fort Worth, Tex.).—Granted C. P. for low frequency relay broadcast station to operate on frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—Intermountain Broadcasting Corp., Portable, Salt Lake City, Utah.—Granted C. P. for temporary broadcast pick-up station; frequencies **1622, 2058, 2150** and **2790 kc.,** 26.4 watts.

NEW—General Electric Co., Schenectady, N. Y.—Granted C. P. for new experimental broadcast station; frequency **790 kc.,** 250 watts, midnight to 6 a. m.

NEW—Honolulu Broadcasting Co., Ltd., Honolulu, T. H., Mobile.—Granted C. P. for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 2 watts.

WTIC—Travelers Broadcasting Service Corp., Hartford, Conn.—Granted authority to rebroadcast over WTIC programs of station W1XEV (experimental broadcast station).

ACTION ON EXAMINERS' REPORTS

NEW—Ex. Rep. 1-214 (in part): Northern Broadcasting Co., Inc., Wausau, Wis.—Granted C. P. for new broadcast station to operate on **1370 kc.,** 100 watts day. Examiner Seward reversed. Order effective November 15, 1936.

WPAR—Ex. Rep. 1-215: Ohio Valley Broadcasting Corp., Parkersburg, W. Va.—Denied C. P. to make changes in equipment and increase power from 100 watts to 100 watts night, 250 watts day. Examiner Bramhall sustained. Order effective December 1, 1936.

NEW—Ex. Rep. 1-217: C. G. Hill, Geo. D. Walker and Susan H. Walker, Winston-Salem, N. C.—Granted C. P. for new broadcast station to operate on **1250 kc.,** 250 watts, daytime (site to be determined subject to Commission's approval). Examiner R. L. Walker reversed. Order effective November 10, 1936.

NEW—Ex. Rep. 1-258: Jonas Weiland, Kinston, N. C.—Granted C. P. for new broadcast station to operate on **1200 kc.,** 100 watts night, 250 watts day, unlimited time (site to be determined subject to Commission's approval). Examiner R. L. Walker sustained. Order effective October 20, 1936.

NEW—Ex. Rep. 1-260: Navarro Broadcasting Assn., J. C. West, Pres., Corsicana, Tex.—Granted C. P. for new broadcast station to operate on **1310 kc.,** 100 watts, daytime. Examiner G. H. Hill sustained. Order effective October 20, 1936.

NEW—Ex. Rep. 1-263: Wilton Harvey Pollard, Huntsville, Ala.—Granted C. P. for new broadcast station to operate on **1200 kc.,** 100 watts, unlimited time. Examiner Seward sustained. Order effective October 27, 1936.

NEW—Jefferson Broadcasting Co., Ormond O. Black, Pres., Birmingham, Ala.—Denied C. P. for new broadcast station to operate on **1200 kc.,** 100 watts night, 250 watts day, unlimited time. Examiner Seward sustained.

KRLC—Ex. Rep. 1-265: H. E. Studebaker, Lewiston, Idaho.—Granted C. P. to install new equipment; move transmitter to site to be determined locally; change frequency from **1420 kc.** to **1390 kc.;** increase power from 100 watts to 250 watts, unlimited time. Examiner R. H. Hyde sustained. Order effective November 3, 1936.

KGFG—Ex. Rep. 1-270: Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—Granted modification of license to change hours of operation from sharing with KCRC to unlimited; **1370 kc.,** 100 watts; also granted authority to transfer control of corporation from Hale V. Davis, controlling corporation, to Harold V. Hough, controlling corporation. Examiner Bramhall sustained. Order effective November 3, 1936.

APPLICATIONS DENIED

WHBB—Selma Broadcasting Co., Selma, Ala.—Denied authority to operate unlimited time beginning October 1, 1936, pending action on modification of license, requesting unlimited time.

WLEU—Leo J. Omelian, Erie, Pa.—Denied special authority to operate with increased night power of 250 watts for period of 45 days.

WIBW—Topeka Boradcasting Assn., Inc., Topeka, Kans.—Denied authority to operate with power of 5 KW from 12 midnight to 1 a. m., CST, for period beginning October 1 and ending October 30, 1936.

WSMK—WSMK, Inc., Dayton, Ohio; KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Denied authority to operate simultaneously from local sunset to midnight for period not exceeding 30 days.

WSPA—Virgil V. Evans, d/b as The Voice of South Carolina, Spartanburg, S. C.—Denied special authority to operate unlimited time with power of 500 watts night, 1 KW day, on frequency **1120 kc.**

WEST—Associated Broadcasters, Inc., Easton, Pa.—Denied special temporary authority to operate simultaneously with station WKBO for a period not to exceed 30 days, in order to broadcast political matters.

WKBO—Keystone Broadcasting Corp., Harrisburg, Pa.—Denied special temporary authority to operate simultaneously with station WEST for a period not to exceed 30 days, in order to broadcast political matters.

APPLICATIONS DISMISSED

The following cases, heretofore set for hearing, were dismissed as in cases of default:

NEW—Joseph G. Morrow, Oakland, Calif.—Applied for C. P., **1150 kc.,** 250 watts LS, daytime.

NEW—KLA, Inc., LaGrande, Ore.—Applied for C. P., **1100 kc.,** 250 watts LS, daytime.

The following cases, heretofore set for hearing, were dismissed at the request of applicants:

WJBR—J. B. Roberts, Gastonia, N. C.—Voluntary assignment of license; **1420 kc.,** 100 watts, unlimited.

NEW—H. A. Hamilton, Asheville, N. C.—C. P. for new station, **1200 kc.,** 100 watts, unlimited.

NEW—Frank F. Airey, Twisp, Wash.—C. P., **1220 kc.,** 250 watts LS, daytime.

The following application, heretofore set for hearing, dismissed inasmuch as applicant for assignment of license to Virgil V. Evans requested the application be dismissed:

WJBR—Virgil V. Evans, Gastonia, N. C.—Modification of C. P., **1420 kc.,** 100 watts, unlimited.

SET FOR HEARING

NEW—Arthur H. Groghan, Minneapolis, Minn.—Application for C. P. for new station at Minneapolis, Minn., to operate on **1310 kc.,** 100 watts, daytime only. Transmitter and studio sites to be approved.

WLB—University of Minnesota, Minneapolis, Minn.—Application for C. P. to install new equipment; change antenna; change frequency from **1250 kc.** to **760 kc.**; increase power from 1 KW to 5 KW, time from S.H. to S-WCAL (2/3 daytime). Contingent upon B4-P-1293, WCAL, and B4-ML-326, WTCN.

WCAL—St. Olaf College, Northfield, Minn.—Application for C. P. to make changes in equipment and install new antenna; change frequency from **1250 kc.** to **760 kc.**; and change power from 1 KW night, 2.5 KW day, specified hours, to 5 KW day, sharing with WLB (1/3 daytime).

WTCN—Minnesota Broadcasting Corp., Minneapolis, Minn.—Application for modification of license to change hours of operation from specified to unlimited.

KWTN—Greater Kempeska Radio Corp., Watertown, S. Dak.—Application for C. P. to install vertical radiator, move transmitter site locally, install new equipment, increase night power to 250 watts and day power to 500 watts, change frequency to **1340 kc.** from **1210 kc.**

KGDY—Voice of South Dakota, Huron, S. Dak.—Application for C. P. to install vertical radiator; move transmitter and studio sites locally; change in equipment; change frequency from **1340 kc.** to **1210 kc.**; and change power from 250 watts daytime to 100 watts night, 250 watts day, unlimited time.

NEW—F. M. Gleason, d/b as North Georgia Broadcasting Co., Rossville, Ga.—Application for C. P. for new station to operate on **1200 kc.**, 100 watts, unlimited (amended 8-21-36 to omit name of Neil O. Davis).

KVOE—The Voice of the Orange Empire, Inc., Ltd., Santa Ana, Calif.—Application for modification of C. P. to make changes in authorized equipment; **1500 kc.**, 100 watts, unlimited.

WLMU—Lincoln Memorial University, Middlesboro, Ky.—Application for modification of C. P. to make changes in equipment and increase power from 100 watts to 100 watts, 250 watts LS.

NEW—C. S. Gooch, d/b as Amarillo Broadcasting Co., Amarillo, Tex.—Application for C. P. for new station to operate on **1500 kc.**, 100 watts, daytime only.

NEW—W. E. Whitmore, Hobbs, N. Mex.—Application for C. P. for new broadcast station at Hobbs, N. Mex., to authorize operation on **1500 kc.**, 100 watts, daytime only; amended 8-16-36 antenna changes,—frequency from **1210 kc.** to **1500 kc.**—operation from unlimited to 100 watts day.

NEW—Virgil V. Evans, Gastonia, N. C.—Application for C. P. for new broadcast station at Gastonia, N. C., to operate on **1420 kc.**, 100 watts, unlimited (requests call WJBR).

NEW—The Schuylkill Broadcasting Co., Pottsville, Pa.—Application for C. P. for new station at Pottsville, Pa., to operate on **580 kc.**, 250 watts, daytime only.

NEW—Northwestern Publishing Co., Danville, Ill.—Application for C. P. for new broadcast station at Danville, Ill., to operate on **1500 kc.**, 250 watts, daytime.

NEW—Waldo Abbot, Ann Arbor, Mich.—Application for C. P. for new special broadcast station at Ann Arbor, Mich., to operate on **1550 kc.**, 1 KW, unlimited.

NEW—Central States Broadcasting Co., Council Bluffs, Iowa.—Application for C. P. for new broadcast station at Council Bluffs, Iowa, to operate on **1500 kc.**, 100 watts, unlimited time; transmitter site to be determined.

SPECIAL AUTHORIZATIONS

WABI—Community Broadcasting Service, Bangor, Maine—Granted special temporary authority to operate between the hours of 2 p. m. and 6 p. m., EST, October 3, 10, 17, 24, and 31, 1936, in order to broadcast football games. (Conditional Clause)

KPAC—Port Arthur College, Port Arthur, Texas—Granted special temporary authority to operate from 5:45 p. m. to 12:00 midnight, CST, on October 2 and 9, 1936, in order to broadcast football games.

WTBO—Associated Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 9 p. m. to 9:30 p. m., EST, September 29, 1936, in order to broadcast speech by President Roosevelt.

WTBO—Associated Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 8:30 p. m. to 9:30 p. m., EST, October 1, 1936, in order to broadcast speeches by President Roosevelt and Governor Earle.

WFOR—Forrest Broadcasting Co., Inc., Hattiesburg, Miss.—Granted special temporary authority to operate station without an approved frequency monitor for period not to exceed 30 days.

WFBC—Greenville News-Piedmont Co., Greenville, S. C.—Granted special temporary authority to operate station without antenna ammeter for a period not to exceed 10 days from September 20, 1936, pending repair of that apparatus damaged by storm.

KSUN—Copper Electric Co., Inc., Lowell, Ariz.—Granted special temporary authority to operate without antenna and transmission line indicating instruments pending replacement for a period not to exceed 20 days.

WCPO—Continental Radio Company, Cincinnati, Ohio.—Granted special temporary authority to operate 100-watt portable test transmitter on **1200 kc.** from midnight to 6 a. m., EST, for period not to exceed 10 days in order to determine new transmitter site, provided station remains silent during those hours prescribed for Commission monitoring schedule.

KGFF—KGFF Broadcasting Co., Inc., Shawnee, Okla.—Granted special temporary authority to use the equipment as specified in license dated June 12, 1936, located at 9th and Bell Sts., Shawnee, Okla., instead of operation under the terms of the C. P. as authorized by program tests on August 22, 1936, for period not to exceed 30 days.

KSEI—Radio Service Corp., Pocatello, Idaho—Granted special temporary authority to operate station without an antenna ammeter for a period beginning September 16, 1936, and ending in no event later than October 1, 1936.

WLAK—Lake Region Broadcasting Co., Lakeland, Fla.—Granted extension of special temporary authority to operate station without an antenna ammeter for a period beginning September 20, 1936, and ending in no event later than October 4, 1936, in order to repair damage caused by lightning.

WHDF—The Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 12:30 p. m. to 3:30 p. m., CST, for period beginning September 30, 1936, and ending in no event later than the conclusion of the World Series Baseball Games.

WILL—University of Illinois, Urbana, Ill.—Granted special temporary authority to operate simultaneously with station KFNF from 1:45 p. m. to 4 p. m., CST, October 3 and 24, 1936, in order to broadcast football games, provided WBAA remains silent.

WAML—New Laurel Radio Station, Inc., Laurel, Miss.—Granted special temporary authority to operate from 2 p. m. to 4 p. m., CST, September 30, 1936, and from October 1 to October 6, 1936, inclusive, in order to broadcast the World Series.

KFNF—KFNF, Inc., Shenandoah, Iowa—Granted special temporary authority to operate simultaneously with WILL from 8 a. m. to 11 a. m., CST, daily except Sundays during the month of October, 1936.

WFAS—Westchester Broadcasting Corp., White Plains, N. Y.—Granted special temporary authority to operate simultaneously with WGNY from 2:15 p. m. to 3 p. m., EST, on October 3, 24, 31, November 7 and 21, 1936, in order to broadcast football games.

KRNR—Southern Oregon Publishing Co., Roseburg, Oreg.—Granted special temporary authority to operate 5:30 p. m. to 6 p. m., EST, on October 3, 10, 17, 24 and 31, 1936, in order to complete broadcast of football games.

KRNR—Southern Oregon Publishing Co., Roseburg, Oreg.—Granted special temporary authority to operate from 4:45 p. m., PST, November 3, 1936, to 1 a. m., PST, November 4, 1936, in order to broadcast election returns.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted special temporary authority to operate from 3:30 p. m. to 6 p. m., MST, October 1, 1936, in order to broadcast football game between American League All Stars and Fort Peck team.

KFEQ—KFEQ, Inc., St. Joseph, Mo.—Granted special temporary authority to operate a portable (high frequency relay broadcast) transmitter on September 30 and October 1, 1936, for purpose of relaying KFEQ programs from St. Joseph Livestock Exposition; frequency **37600 kc.**

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted special temporary authority to operate simultaneously with Station WLBC from 7:30 p. m. to 10:30 p. m., CST, on October 2, 9, 16, 23 and 30, 1936, in order to broadcast football games.

WSAJ—Grove City College, Grove City, Pa.—Granted special temporary authority to operate from 2 p. m. to 5:30 p. m.,

EST, on October 3, 10 and November 14, 1936, in order to broadcast football games.

The Farmers & Bankers Life Ins. Co., 715 Beacon Bldg., Wichita, Kans.—Granted special temporary authority to operate a portable (high frequency relay broadcast) transceiver on October 8 and 9, 1936, for the purpose of relaying the Big Fall Festival street parade in Salina, Kans.; frequency to be used in the band **86000** to **400000 kc.**

MISCELLANEOUS

KDON—Monterey Peninsula Broadcasting Co., Monterey, Calif. —Denied petition asking Commission to reconsider and designate for hearing application of F. W. Atkinson for authority to erect and operate new broadcast station at Watsonville, Calif., to operate on **1310 kc.,** 250 watts, daytime only. This application was granted July 2, 1936.

WMEX—Northern Corporation, Boston, Mass.—Granted petition asking leave to intervene in hearing upon application of WCOP, Boston, for change of frequency from **1120 kc.** to **1130 kc.,** and to increase hours of operation from daytime to local sunset at KSL, Salt Lake City, Utah.

NEW—Bay County Publishers, Inc., Panama City, Fla.—Denied petition requesting its application for authority to construct new broadcast station in Panama City, Fla., to operate on **1420 kc.,** 100 watts, unlimited time, designated for hearing April 14, 1936, be reconsidered and granted in part for daytime operation and leave the request for unlimited time on the hearing docket.

WHDL—Olean Broadcasting Co., Olean, N. Y.—Reconsidered and granted without hearing amended application so as to change frequency from **1420 kc.** to **1400 kc.,** increase power from 100 watts to 250 watts daytime only, and to move transmitter locally.

WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Granted petition asking reconsideration and grant of application for modification of license so as to authorize operation between local sunset and 11 p. m., with power of 50 watts, on **1210 kc.,** on Tuesday, Thursday, Saturday and Sunday nights on a permanent basis, subject to Rule 131. This rule requires where new or additional facilities are requested, licensees shall specify a radiating system the efficiency of which complies with the requirements of good engineering practice for the class and power of the station.

KGMB—Honolulu Broadcasting Co., Honolulu, T. H.—Granted request that hearing on application for authority to transfer control of corporation from J. L. P. Robinson to Pacific Theatre & Supply Co., Ltd., scheduled for November 10, 1936, be postponed indefinitely.

NEW—Findlay Radio Broadcasting Co., Findlay, Ohio.—Granted permission, as respondents, to file answer, to be made part of record in re application of John C. Looney, d/b as High Fidelity Broadcasting Service, for new station at Milton, Mass., to operate on **1570 kc.,** 1 KW, unlimited and variable.

KGCU—Mandan Radio Association, Mandan, N. D.—Reconsidered action of September 17, 1935, and removed application for renewal of license from hearing docket. Granted regular renewal of license for the period October 1, 1936, to April 1, 1937.

WCKY—L. B. Wilson, Inc., Covington, Ky.—Denied petition asking Commission to reconsider action of May 1, 1936, in designating for hearing application for C. P. requesting authority to install new equipment and increase power from 5 KW to 50 KW, employing a non-directional antenna system and to grant the same in part without a hearing, increasing power to 10 KW night, 25 KW day, and to leave the request for 50 KW on hearing docket.

NEW—H. Wimpy, Thomasville, Ga.—Granted authority to file appearance and statement of desire to be heard, as part of record in re application for authority to erect a new station at Albany, Ga., on **1420 kc.,** 100 watts night, 250 watts LS, unlimited. Requests facilities of WGPC.

WMT—Iowa Broadcasting Co., Waterloo, Iowa.—Granted petition to intervene in hearing of application of Waterloo Times-Tribune Publishing Company for C. P. for establishment of a broadcast station at Waterloo, Iowa, to operate on **1370 kc.,** 100 watts, daytime only.

NEW—W. H. Hartman Company, Waterloo, Iowa.—Granted petition to intervene in the hearing of application of Waterloo Times-Tribune Publishing Company for C. P. to operate new station at Waterloo, Iowa, on **1370 kc.,** 100 watts, daytime only. Petitioner has pending application for establishment of new broadcast station at Waterloo to operate on **1420 kc.,** 100 watts.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KGBX, Springfield, Mo.; KMA, Shenandoah, Iowa; KOIL, Council Bluffs, Iowa; KTAT, Fort Worth, Texas; KVOA, Tucson, Ariz.; KWLC, Decorah, Iowa; WCAL, Northfield, Minn.; WCSH, Portland, Maine; WORC, Worcester, Mass.

WCAU—WCAU Broadcasting Co., Philadelphia, Pa.—Granted renewal of license for auxiliary transmitter for period ending February 1, 1937.

KUSD—University of South Dakota, Vermillion, S. Dak.—Granted renewal of license for the period ending March 1, 1937.

The following stations were granted renewals on a temporary basis subject to whatever action may be taken on their pending applications for renewals:

KFBB, Great Falls, Mont.; KTFI, Twin Falls, Idaho; WCAE and auxiliary, Pittsburgh, Pa.

WFAE—Hammond-Calumet Broadcasting Corp., Hammond, Ind. —Present license further extended on a temporary basis only to November 1, 1936, pending receipts and/or action on application for renewal.

KLPM—John E. Cooley, Minot, N. Dak.—Present license further extended on a temporary basis only to November 1, 1936, pending receipt and/or action on application for renewal.

WHIO—Miami Valley Broadcasting Corp., Dayton, Ohio—Present license further extended on a temporary basis only to November 1, 1936, pending receipt and/or action on application for renewal.

WHBI—May Radio Broadcast Corp., Newark, N. J.—Present license further extended on a temporary basis only to November 1, 1936, pending receipt and/or action on application for renewal.

WHBI—May Radio Broadcast Corp., Newark, N. J. (auxiliary)—Present license further extended on a temporary basis only to November 1, 1936, pending receipt and/or action on application for renewal.

WIBA—Badger Broadcasting Co., Inc., Madison, Wis.—Present license further extended on a temporary basis only to November 1, 1936, pending receipt and/or action on application for renewal.

KFQD—Anchorage Radio Club, Inc., Anchorage, Alaska—Present license extended on a temporary basis to November 1, 1936, subject to such action as may be taken upon pending application for renewal.

KGFG—Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—Present license extended on a temporary basis to November 1, 1936, subject to such action as may be taken upon application for renewal and upon application for modification of license as to hours of operation pending before it.

WATL—Atlanta Broadcasting Co., Atlanta, Ga.—Present license extended on a temporary basis only for the period October 1 to November 1, 1936, subject to such action as may be taken upon pending application for renewal.

WRDO—WRDO, Inc., Augusta, Maine—Present license extended on a temporary basis only for the period ending November 1, 1936, pending receipt and/or action on application for renewal.

WNYC (auxiliary)—City of New York, Dept. of Plant and Structures, New York City—Present license extended on a temporary basis only for the period ending November 1, 1936, pending receipt and/or action on application for renewal.

WWL—Loyola University, New Orleans, La.—Special experimental temporary authority extended on a temporary basis for the period ending November 1, 1936, subject to the same conditions as contained in the existing authority, pending consideration of pending petition of station WLWL and petitions in opposition thereto.

KTFI—Radio Broadcasting Corp., Twin Falls, Idaho—Granted extension of special experimental authority from October 1, 1936, to April 1, 1937, on a temporary basis only, subject to a hearing and decision by the Commission.

ORAL ARGUMENTS

KSEI—Ex. Rep. 1-250: Radio Service Corp., Pocatello, Idaho—Granted oral argument to be held December 10, 1936.

NEW—Ex. Rep. 1-287: C. A. Rowley, Ashtabula, Ohio—Granted oral argument to be held December 17, 1937.

MISCELLANEOUS

WATR—The WATR Co., Inc., Waterbury, Conn.—Granted C. P. to change transmitter site locally to Baldwin Ave. and studio to 47 Grand T. Waterbury; make equipment changes; install directional antenna system for day and night operation; change frequency to **1290 kc.**; and increase power from 100 watts, limited time, to 250 watts, unlimited time. (Present assignment: **1190 kc.**, 100 watts, limited.) (Action taken September 22, 1936.)

RATIFICATIONS

The Broadcast Division ratified the following actions taken on the dates shown:

WMT—Iowa Broadcasting Co., Des Moines, Iowa—Granted extension of program test period 30 days from September 22, 1936. (Action taken 9-23.)

W2XK—National Broadcasting Co., Inc., New York City—Granted extension test period 30 days from September 29, 1936. (Action taken 9-25.)

KGFL—KGFL, Inc., Roswell, N. Mex.—Granted authority to operate simultaneously with WICA from 7:30 to 10:30 p. m., MST, October 2, 9, 16 and 30, 1936, in order to broadcast night football games. (Action taken 9-25.)

WMBQ—Joseph Husid, Receiver, Metropolitan Broadcasting Corp., Brooklyn, N. Y.—Granted temporary authority to Joseph Husid to operate station WMBQ under terms of present license for period of 60 days. (Action taken 9-24.)

Detroit National League Football Club, Inc., Detroit, Mich.—Designated for hearing the application to transmit football game programs to station CKLW on September 27, October 11, 18, 25, November 1, 8, 15, 22, 26, 29 and December 6, 1936. (Action taken 9-26.)

APPLICATIONS RECEIVED

First Zone

WDEL—WDEL, Inc., Wilmington, Del.—Authority to make
1120 changes in automatic frequency control.

WSPR—Quincy A. Brackett, Lewis B. Breed and Edmund A.
1140 Laport, co-partners, d/b as Connecticut Valley Broadcasting Co., Springfield, Mass.—Modification of license to change hours of operation from limited local, sunset WAPI, to limited, local sunset, KVOO.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—License
1200 to cover construction permit (B1-P-1237) to install new transmitter.

WGNY—Peter Goelet, Newburgh, N. Y.—Modification of con-
1210 struction permit (B1-P-1166) move studio and transmitter and new equipment, requesting approval of antenna, transmitter and studio sites and install new transmitter.

WNEW—Wodaam Corporation, Newark, N. J.—Modification of
1250 license to change studio location from 116 Market St., Newark, N. J., to 501 Madison Ave., New York, N. Y.

WMBO—WMBO, Inc., Auburn, N. Y.—Authority to transfer
1310 control of corporation from George I. Stevens to Roy L. Albertson, 150 shares of common stock.

WBNX—Standard Cahill Co., Inc., New York, N. Y.—License to
1350 cover construction permit (B1-P-608) as modified for new equipment, increase in power, move of transmitter and approval of directional antenna.

Second Zone

WIBG—Seaboard Radio Broadcasting Corp., Glenside, Pa.—Con-
970 struction permit to move transmitter to site to be determined, Montgomery County, Pennsylvania; install new transmitter, vertical antenna; increase power from 100 watts to 5 KW, and change hours of operation from daytime to limited, Chicago sunset.

WEXL—Royal Oak Broadcasting Co., Royal Oak, Mich.—Con-
1310 struction permit to install new transmitter and make antenna changes. Amended to omit request for antenna changes.

WORK—York Broadcasting Co., York, Pa.—Authority to make
1320 changes in automatic frequency control.

NEW—John Stewart Bryan and Douglas Freeman, Tennant
1370 Bryan, co-partners, Petersburg, Va.—Construction permit to erect a new broadcast station to be operated on **1370 kc.**, 100 watts, daytime operation.

WHDF—Upper Michigan Broadcasting Co., Calumet, Mich.—
1370 Construction permit to install new transmitter.

NEW—Fayette Broadcasting Corp., Uniontown, Pa.—Construc-
1420 tion permit for a new station to be operated on **1420 kc.**, 250 watts, daytime.

WLAP—American Broadcasting Corporation of Kentucky, Lex-
1420 ington, Ky.—Construction permit to move transmitter and studio from Main and Esplanade Sts., Lexington, Ky., to Phoenix Hotel, East Main St., Lexington, Ky., and install new equipment and antenna.

WAZL—Hazleton Broadcasting Service, Inc., Hazleton, Pa.—Au-
1420 thority to make changes in automatic frequency control.

NEW—The Crosley Radio Corp., Portable-Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600** and **40600 kc.**, 2 watts.

NEW—The Crosley Radio Corp., Portable-Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600** and **40600 kc.**, 2 watts.

Third Zone

WPTF—WPTF Radio Company, Raleigh, N. C.—Authority to
680 determine operating power by direct measurement of antenna (of main transmitter when using 1 KW power from local sunset to 11 p. m., EST.).

WMC—Memphis Commercial Appeal, Inc., Memphis, Tenn.—
780 License to cover construction permit (B3-P-621) for changes in equipment, antenna, increase in power, and change in transmitter site.

NEW—World Publishing Co., Tulsa, Okla.—Construction permit
940 to erect a new broadcast station to be operated on **940 kc.**, 1 KW power, unlimited time, to use directional antenna at night. Amended: Install new transmitter and change daytime power from 1 KW to 5 KW.

KTHS—Hot Springs Chamber of Commerce, Hot Springs Na-
1040 tional Park, Arkansas.—Construction permit to install new transmitter and directional antenna for day and night use; change frequency from **1040 kc.** to **1060 kc.**, time from S-KRLD to unlimited; move transmitter from Malvern Road, Hot Springs National Park, Arkansas, to U. S. Highway 67, McAlmont, Ark., and studio to be determined, Little Rock, Ark.

WMAZ—Southeastern Broadcasting Co., Inc., Macon, Ga.—
1180 License to cover construction permit (B3-P-1041) to install auxiliary transmitter to operate on 500 watts power.

WRBL—WRBL Radio Station, Inc., Columbus, Ga.—Construc-
1200 tion permit to install new transmitter and antenna, move transmitter and studio locally, and increase day power from 100 watts to 250 watts.

WJBY—Gadsden Broadcasting Company, Inc., Gadsden, Ala.—
1210 Authority to make changes in automatic frequency control.

KTAT—Raymond E. Buck, Fort Worth, Tex.—Voluntary as-
1240 signment of license from Raymond E. Buck to Tarrant Broadcasting Company.

KUOA—KUOA, Inc., Siloam Springs, Ark.—Modification of con-
1260 struction permit (B3-P-1070) to move transmitter and studio; make equipment changes; install new antenna; and increase in power, requesting further increase in power from 2½ KW to 5 KW; install new transmitter; and additional hours of operation from midnight to 6 a. m., using 5 KW; and extend commencement date to 30 days after grant and completion date to 150 days thereafter.

WSJS—Winston-Salem Journal Co., Winston-Salem, N. C.—
1310 Construction permit to install new transmitter, new antenna (subject to approval); move transmitter to site to be determined, Winston-Salem, N. C.; change frequency from **1310 kc.** to **1250 kc.**, and increase power from 100 watts to 1 KW.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Con-
1310 struction permit to move transmitter to corner Mills and Oregon Sts., El Paso, Tex.; make equipment changes; install vertical antenna; increase day power from 100 to 250 watts; and request authority to carry WDAH schedule on KTSM transmitter.

KMAC—W. W. McAllister, San Antonio, Tex.—Construction
1370 permit to install new transmitter and vertical antenna; increase power from 100 watts to 100 watts night, 250 watts day; move transmitter locally. Amended: Equipment changes.

WAGF—John T. Hubbard and Julian C. Smith, d/b as Dothan
1370 Broadcasting Co., Dothan, Ala.—Assignment of license

from John T. Hubbard and Julian C. Smith, d/b as Dothan Broadcasting Co., to John T. Hubbard, Julian C. Smith and Fred C. Moseley, d/b as Dothan Broadcasting Co.

KABC—Alamo Broadcasting Co., Inc., San Antonio, Tex.—Con-
1420 struction permit to install a new transmitter .

WJBR—J. B. Roberts, Gastonia, N. C.—Modification of con-
1420 struction permit (B3-P-744) for new station on **1420 kc.**, 100 watts, unlimited time, requesting authority to extend commencement date from 12-15-35 to 10-1-36 and completion date from 6-15-36 to 1-1-37.

WGPC—Americus Broadcast Corp., Albany, Ga.—Modification
1420 of construction permit (B3-P-1077) for new equipment, move studio and transmitter, further requesting authority to install new transmitter, make antenna changes, increase day power from 100 watts to 250 watts, and move studio from 127½ N. Jackson St. and transmitter from corner Pine and Jackson Sts., to 125½ N. Jackson St., Albany, Ga., and extend commencement and completion dates to 30 days after grant and 60 days thereafter.

KPLC—Calcasieu Broadcasting Co. (T. B. Lanford, R. M. Dean,
1500 L. M. Sepaugh), Lake Charles, La.—Construction permit to make equipment changes, install vertical antenna, increase in day power from 100 to 250 watts, move transmitter to site to be determined, Lake Charles, La.

KGKB—East Texas Broadcasting Co., Tyler, Tex.—License to
1500 cover construction permit (B3-P-1028) to make changes in equipment and move transmitter.

Fourth Zone

KFYR—Meyer Broadcasting Co., Bismarck, N. Dak.—Construc-
550 tion permit to make equipment changes, install vertical antenna, and move transmitter one-half mile.

NEW—The Journal Company (The Milwaukee Journal), Wau-
620 kesha, Wis.—Application for license for a new facsimile broadcast station to be operated on **620 kc.**, 500 watts, 12 midnight to 6 a. m. (WTMJ broadcast transmitter to be used).

KFEQ—KFEQ, Inc., St. Joseph, Mo.—Construction permit to in-
680 stall new transmitter and antenna, and move transmitter from Pauline and Elwood Sts., St. Joseph, Mo., to the South 15 acres of E. 40 acres of NW ¼ of Sec. 33-57-36, St. Joseph, Mo. Amended to omit request for move of transmitter.

WEW—The St. Louis University, St. Louis, Mo.—License to cover
760 construction permit (B4-P-967) for equipment changes.

NEW—Charles J. Pettinger, Indianapolis, Ind.—Construction
1050 permit for a new station to be operated on **1050 kc.**, 5 KW, daytime.

WOWO—Westinghouse Radio Stations, Inc., Fort Wayne, Ind.—
1160 Construction permit to make equipment changes, increase power from 10 KW to 25 KW night, 10 KW day. Amended to change name to Westinghouse Radio Stations, Inc.

WJBC—Arthur Malcolm McGregor and Dorothy Charlotte Mc-
1200 Gregor, a partnership, Bloomington, Ill.—Authority to make changes in automatic frequency control.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—License
1310 to cover construction permit (B4-P-412) for equipment changes, increase in power, move transmitter, and antenna changes.

KSCJ—Perkins Bros. Co. (The Sioux City Journal), Sioux City,
1330 Iowa.—Construction permit to install new transmitter and increase power from 1 KW night, 2½ KW day, to 1 KW night, 5 KW day.

NEW—W. H. Hartman Co., Publisher of Waterloo Daily Courier,
1420 Waterloo, Iowa.—Construction permit for a new station to be operated on **1420 kc.**, 100 watts, unlimited time.

KOVC—George B. Bairey, Valley City, N. Dak.—Voluntary as-
1500 signment of construction permit from George B. Bairey to KOVC, Inc.

Fifth Zone

KGO—National Broadcasting Co., Inc., San Francisco, Calif.—
790 Authority to install automatic frequency control in auxiliary equipment.

NEW—George H. Payne, San Jose, Calif.—Construction permit
1010 to erect a new broadcast station to be operated on **1010 kc.**, 1 KW power, unlimited time, facilities of KQW.

KFXD—Frank E. Hurt, Nampa, Idaho—Construction permit to
1200 install a new transmitter.

KROY—Royal Miller, Sacramento, Calif.—Modification of con-
1210 struction permit (B5-P-713) for a new station on **1210 kc.**, 100 watts, daytime, to further request authority to install new transmitter and vertical antenna, change frequency from **1210 kc.** to **1340 kc.**, power from 100 watts to 250 watts night, 1 KW day, time from daytime to unlimited, and studio to site to be determined.

NEW—D. L. Thornton, Centralia and Chehalis, Wash.—Construc-
1500 tion permit for a new station to be operated on **1500 kc.**, 100 watts night, 250 watts day, unlimited time.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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FCC ALLOCATION HEARING BEGINS

Nearly 300 representatives of all phases of the broadcast industry were present today at the opening of the allocation hearings called hy the Federal Communications Commission. Judge Eugene O. Sykes, chairman of the Broadcast Division, acted as chairman. During part of the sessions today all of the memhers of the Commission participated.

Today officials of the Commission, representatives of educational broadcasters and the clear channel group presented their testimony. The latter group had not concluded as the hearings adjourned until Tuesday.

Judge Sykes as chairman opened the hearing with a short statement in which he outlined the procedure and spoke of the general suhjects which the Commission desired to have discussed.

Judge Sykes said:

"On behalf of the Broadcast Division, permit me to express to you our appreciation for your interest in and presence at this hearing. The notice of appearances indicates that the educational interests, radio engineering associations, station organizations, individual stations, and others interested in hroadcasting are well represented. We are, therefore, assured of the presentation of thorough and extensive testimony on the subject of broadcasting.

During the course of the allocation hearings by the Federal Communications Commission, NAB Reports will be published daily.

"The notice of this informal hearing (Docket 4063) was sent to all hroadcast licensees, various manufacturers of radio equipment, trade organizations and associations, and government departments. It has also been given wide puhlicity hy the press and hy magazines which are read hy persons and organizations interested in broadcasting.

"In calling this conference, the Broadcast Division of the Commission desires to obtain from the industry the most complete information availahle with respect to their view of this hroad subject of allocation, not only in its engineering phases but also the social and economic phases to the end that such regulations and standards as it may retain or adopt will provide maximum service (both transmission and reception) in the puhlic interest. The improvements in, and the increased knowledge of, the engineering aspects of broadcasting since the inauguration of the present allocation system in 1928 will he taken into consideration; also the amendment of June 5, 1936, to the Communications Act of 1934, repealing Section 302 and modifying Section 307 (h).

"There have been no basic changes in the plan of allocation adopted by the Radio Commission in 1928 hut since that time there have been many important developments in radio engineering as well as in the social and economic phases of hroadcasting. It was felt that opportunity should be given to the industry to present to the Commission at an informal hearing of this type the facts concerning hroadcasting as it sees it today.

"The general subjects on which it was desired that the respondents give testimony are outlined as follows:

"1. Classification of hroadcast stations.
"2. Allocation of frequencies to different classes of stations.
"3. Standards to be applied in determining coverage and the presence or ahsence of objectionable interference.
"4. Geographic distribution of broadcast facilities.
"5. Standards and methods of measurements with respect to essential engineering phases of operation of hroadcast stations.
"6. Apparatus performance requirements to he imposed on hroadcast stations.
"7. Effect of any proposals regarding the foregoing subjects.

"This outline in general covers the scope of the hearing, however, testimony along other lines may he presented hy respondents, hut individual applications, individual assignments, and requests for allocation of hroadcast facilities to particular groups or organizations will not he considered.

"The procedure to he followed at this hearing is that persons desiring to he heard may either present statements, which may be read if desired, or they may have their attorneys read such statements or ask questions to which the person may reply. Since this is a fact-developing hearing, rather than one wherehy it is sought to prove or disprove some preconceived idea, persons will not he sworn, and no one will he compelled to answer questions which he may indicate he does not desire to answer.

"Cross-examination of witnesses appearing in behalf of respondents will he limited to questions hy the Commissioners and other memhers of the Commission's staff. If others desire to ask questions of witnesses, this should he done by suhmitting the questions, in writing, to the Chairman or any other memher of the Commission's staff present. If deemed desirahle, the questions will he asked of the witnesses.

"Upon the completion of cross-examination, the witness, with or without the aid of counsel, may amplify or explain any of his statements. At the close of the hearing, counsel representing the various groups will he permitted a summation or argument of not more than 30 minutes duration for each group appearing on the calendar.

"Doctor Wheeler and Mr. Ring of the Commission's Engineering Staff will present testimony concerning factual data on the allocation survey. These two witnesses may be cross-examined directly hy any respondents on questions of fact only.

"There has been distrihuted for the convenience of those attending this hearing a mimeographed copy of the order in which persons or organizations will be heard. This list contains only those who have notified the Commission of their intention to present evidence at the hearing. However, anyone desiring to he heard who does not appear on the list of respondents should notify the Chairman, in writing, stating the suhject on which he wishes to speak and the approximate time required.

"The ushers will pass registration cards to those present. It is requested that you complete these cards to assist the Commission in determining the attendance and to assist in locating persons when inquiries are received. After completing the cards, they may he passed to the end of the row on your left where the ushers will collect them.

"The Chief Engineer will now present his statement on broadcast allocation and engineering."

T. A. M. CRAVEN

T. A. M. Craven, chief engineer of the Commission, made a statement in connection with broadcast allocation and engineering

in which he called attention, among other things, to the fact that he is of the opinion that the time has arrived for coperation between radio manufacturers and the governmental regulating agency in an effort to render and plan for efficient engineering in the public's broadcasting system.

Mr. Craven said:

The Chairman of the Broadcast Division has already indicated to you that this hearing is for the purpose of securing facts with respect to the engineering principles of allocation within the broadcast band 550-1600 kc, and facts and opinions concerning the social and economic consequences of any proposed changes in the existing regulations of this Commission with reference to the engineering principles of allocation within the frequency band 550-1600 kc.

I might add that the conception of the hearing was pervaded with the spirit of reviewing the progress that has been made in the art of broadcasting since 1928, securing from the industry a practical interpretation of this progress and cooperating with the industry in an intelligent planning in the application of this progress to the betterment of broadcasting service to the public.

Broadly speaking, technical progress should be inevitable and cannot be stopped by artificial measures engendered by fear of the results. To attempt to retard progress by artificial measures is unsound, and leads only to confusion. On the other hand, an intelligent survey of new developments and a logical evolutionary application, by practical people, of new principles resulting from such new developments should be beneficial to all.

This hearing commencing today gives an opportunity to all concerned, to both government and to private individuals, groups and organizations, to discuss publicly a phase of the national broadcasting problem in a cooperative and orderly manner. Such an opportunity has not existed for several years, and we are certain that we shall benefit from the hearing, even though it should result merely in a clarification of thought on controversial subjects.

Some persons have expressed to me the view that the issues at this hearing are not sufficiently specific, and that we should have a definite set of issues upon which several schools of thought could give expressions of opinion. Perhaps the present would be premature for such a procedure, because from the information I can secure, there is still not a unity of engineering thought with respect to practicable standards of service and interference. Until we can secure at this hearing such an expression from the practical engineers of the country, it would appear to me that the reduction to a few isolated issues might not be entirely beneficial.

Growing out of the vast experience, both in engineering and in the economics of broadcasting, which has been gained since 1928, the year in which the present principles were established, there have been certain developments which may enable progressive steps to be taken if the evidence at this hearing should show a need therefor. And, certainly today we are in a position more clearly to distinguish between the effects of the depression and the effects of engineering and other economic factors upon the broadcasting industry, and hence we are in a better position to attempt progressive steps than we have been at any time heretofore since the establishment of the existing allocation system.

The industry in the past few years has learned much with respect to broadcasting. For example, much data have been collected with respect to the performance of radio stations and their ability to render service under various conditions. From this we are able more clearly to understand the difference in value between various frequencies in various parts of the country. Also much data have been secured with respect to the sky wave propagation characteristics of stations, and while factual information with respect to this phase of engineering may not enable us to deal with the question in a precise manner, we have, however, secured sufficient information to be very useful as a guide in determining questions of both service and interference.

Next, by reason of practical studies made by the engineers of various stations, we should be in a position to understand better today than heretofore the relation between signal intensity and useful service under various conditions of interference, both man-made and natural.

In addition, much information has been obtained in the design of receivers, a most essential factor in any engineering plan of allocation of radio broadcasting frequencies. And in this connection, we have an opportunity to accomplish something today which was not accomplished in 1928 because of the lack of facts at that time. In my opinion the receiver, its manufacture, its performance and its distribution to the public, has a most important relationship to the problems of broadcasting, both from an economic and an engineering standpoint. In a sense, it is the other end of the circuit, since both transmitters and receivers are required to complete the service to the public. Therefore, unless we thoroughly understand the relationship between the receiver and transmitter, and in turn, their coordination in a system of allocation, we have not provided properly for a sound engineering system of allocation.

It seems to me that the time has now arrived for an effective cooperation and coordination between the receiver manufacturers, the manufacturers of transmitters, and the government regulating agency, in a cooperative effort to render and plan for efficient engineering in the public's broadcasting system. It is hoped that evidence with reference to this phase of the problem will be presented at this hearing.

Naturally, with the experience gained since 1928 in the economics of broadcasting, whether operated by commercial concerns, social groups, or by any other method, we should be in a position to know better today the relationship between the engineering of allocation and the economics of allocation. Having had some personal experience in the practical end of broadcasting, it appears to me that possibly there is a definite relationship between economics and engineering of radio broadcasting, and therefore it appears that if we are to have a sound system of allocation in the future, the Commission should receive facts with reference to this phase of the broad problem which confronts us today. The notice of hearing comprehends this part of the problem and it is hoped that we shall hear some constructive evidence with reference to the subject.

Another factor which should be considered with reference to the hearing is, first, that persons in the practical operation, particularly engineers, are concerned with practical operation from perhaps a local viewpoint, while others are concerned from a national viewpoint, but by reason of their very closeness to the practical business affairs of everyday life, they may sometimes not appreciate the difficulties of administering the regulation of such a vast organization in the public interest.

On the other hand, the engineers of the Commission, as a result of unavoidable limitations, are unable to secure continuous practical experience in the field in the actual operation of stations, and therefore may be somewhat handicapped, through no fault of their own, in sensing a relationship between engineering and the economics of a broadcasting station. However, they do have expert knowledge with respect to the problems of administration and regulation. This hearing thus affords the engineers of the Commission an opportunity more thoroughly to understand the problems confronting the engineer engaged in practical operation.

I have faith in the engineer of the country, and in his desire to render, broadly speaking, a service. I have faith in his honesty and sincerity of purpose, and therefore it seems to me that here today, through the process of this hearing, we can perhaps secure the unity of engineering opinion with respect to the problems of broadcasting which may be of the utmost service to the country as a whole, and particularly to the individual members of this Commission in their daily problems with respect to regulation. If this can be accompanied with data from experienced persons with reference to the economic phases of broadcasting, it seems to me that the Commission will have a most excellent and thorough background upon which to base the fundamental regulations dealing with the engineering problems of allocation in the future.

Before concluding, I believe it desirable to inform the industry that as a result of the June 15 hearing, the Interdepartment Radio Advisory Committee is making progress in its study of the allocation of frequencies above 30,000 kc to government services. It is my opinion that we may expect with confidence the allocation of sufficient frequencies above 30,000 kc to accommodate aural, facsimile and television broadcasting in the future on an initial experimental basis. In my opinion, the date when these new services will cease to be experimental depends upon many factors, and in particular, upon the rate of progress in development.

NAB WILL NOT PARTICIPATE IN ALLOCATION HEARING

The Board of Directors of the NAB, at a meeting held in Washington October 2, decided that by reason of the character of the allocation hearing as described in the Commission's notice, the NAB should not participate in it.

It is our understanding that the industry has given great effort and incurred much expense in preparation for this hearing. I know the Commission appreciates this, and feels that constructive results will be obtained thereby.

A. D. RING

The next two witnesses included A. D. Ring, assistant chief engineer of the Commission and Dr. L. P. Wheeler, chief of the technical information section. They presented statements concerning the procedure and the factual data on the allocation survey of the Commission made public some time ago.

Mr. Ring also summarized the post card allocation survey by the Commission and its results and he gave some evidence as to the weight to be given to this particular survey.

In discussing this survey Mr. Ring pointed out that the results as published were not sufficient to be of value in competitive commercial broadcasting.

L. P. WHEELER

Dr. Wheeler spoke of the establishment of his section and the assignment which he was given of analyzing the technical data accumulated in the allocation survey.

"There are," said Dr. Wheeler "now upwards of eighty paths throughout the continental United States for which reliable ground conductivities are available. It is believed "that the method of computation used is a most satisfactory and accurate way of determining ground conductivity. It is theoretically sound, provided care is taken to include no field intensity measurements at distances where diffraction effects complicate the prohlem, and the results are in gratifying agreement with the work of other investigators." In concluding his remarks Dr. Wheeler said that "it is my personal helief that the material already accumulated, including that of this survey, affords the basis for a very considerable extension of the theory of sky-wave propagation in the desired direction, any such theoretical discussion lies beyond the scope of this statement, which is merely to place before you the facts developed by the allocation survey from which we are all free to draw our own conclusions."

S. HOWARD EVANS

S. Howard Evans, speaking on behalf of the National Committee on Education by Radio, took up both the economic and social uses of radio.

"In broadcasting," said Mr. Evans "two rather distinct and mutually exclusive formulas have developed. One is strictly education. It largely makes its appeal to specialized minority groups. Its purpose is to supply special kinds of information, to elevate the cultural and intellectual level of the nation, and to stimulate individuals in their powers of discrimination and critical analysis. It gets its support from some public or at least non-commercial source."

"The other formula is commercial," he said. "It is financed by advertising. It makes its appeal to a mass audience. It tries to attract people through entertainment and to hold their attention for advertising announcements which, if successful, repay the sponsors and make them willing to continue financing commercial programs. It has to supply variety and interest as the only means of holding an audience for its purpose."

Mr. Evans told the committee that "the situation in which education finds itself under the commercial broadcasting formula has been outlined for the single purpose of showing the inherent capacity of that formula to make a proper place for education or to fullfill the responsihility of puhlic service broadcasting which commercial broadcasters have undertaken in accordance with the terms of their federal licenses." In concluding his statement Mr. Evans said "the only conclusion which can be drawn from this failure of the present broadcasting structure to supply a service which is socially sound and economically fair is that the Federal Communications Commission has a responsihility to see that this condition is corrected. I believe that the place to make such a correction is in connection with the reallocation of facilities. If there is to be a classification of services in the 1936 allocation as there was in the 1928 allocation the considerations I have outlined should be taken into account in making up that classification."

A. G. CRAIN

Dr. A. G. Crain of the University of Wyoming, chairman of the National Committee on Education by Radio and also chairman of the sub-committee on Conflicts and Cooperation of the Federal Radio Education Committee, also made a statement on behalf of the National Committee.

Dr. Crain explained that he is not a technician and claimed no competence as a radio engineer. He called attention to the fact that radio is a great influence for education in the United States. The plan for broadcasting educational matters, however, is not now satisfactory to the educators of the country. A further plan must he evolved he said for enlightenment of the people by radio and he urged the Commission to look beyond the technical question to the social consequences of its decisions.

Dr. Crain complained that education is being subordinated to advertising and he said that this creates inescapable trouble. The Commission, Dr. Crain said, must be the umpire in connection with educational facilities. He called attention to the fact that many educational stations have heen forced off the air and it is difficult for many of them to remain operating. The few remaining educational stations he told the Commission should be protected.

The stations he testified should not be forced to defend themselves against commercial inroads. He referred to the educational stations as demonstrational lahoratories and called the Commission's attention to the fact that they have a regional service to perform.

Dr. Crain told the Commission also that the educational stations have made good and they have thousands of satisfied listeners.

Radio, said Dr. Crain, is a potent influence in education in the schools as a supplemental teacher. He stated that in his opinion these stations should have a fair and equitahle use of radio. The school programs and advertisers cannot be synchronized and there should he no free sponsored educational programs hy radio.

Dr. Crain stated that reservation should he made in the high frequency hand of certain frequencies for educational stations and this has been endorsed by the Commissioner of Education, he stated. The educators of the country should have a chance to prove they can operate hroadcasting Dr. Crain said. In closing he urged the protection and expansion of educational stations and said that the educators have more hope in the high frequency band than they have in the present hroadcast band.

EDWARD BENNETT

Dr. Edward Bennett, engineer of the University of Wisconsin and instructor in the electrical engineering division of that University, testified on behalf of the national association of educational hroadcasters.

He stated that one of the fundamental problems of the Commission is to estahlish non-monopolistic rights in radio. He said that ninety per cent of the radio facilities of the country are in the hands of commercial hroadcasters with only three per cent in the hands of educational stations. He told the Commission that radio must be safeguarded against centralized radio ownership.

Dr. Bennett spoke of the factions in control of time and told the Commission that it should uphold non-centralized and non-monopolized rights in radio. He testified that in his opinion the Commission should draw plans to facilitate the handing over of certain radio facilities to puhlic hodies such as state and federal authorities. This he said will certainly be in the puhlic interest.

His purpose, Dr. Bennett said, was not to destroy commercial broadcasters nor to supplant them but merely to give additional facilities for educational purposes. There should he competition, he stated, between those having radio stations in puhlic use and commercial stations. He had no specfiic recommendations to make relative to a general engineering plan for public agencies and he stated that he too hoped that new high frequencies may help in the educational situation.

H. B. McCARTHY

H. B. McCarthy, president of the National Association of Educational Broadcasters, told the Commission of the shrinkage of educational stations in the United States and called their attention to the fact that that group has now dwindled from 100 stations to some 25 or 30.

He told the Commission that it should plan now for the future of educators. Many of the educational stations of the old days, he said, were not educational stations in the true sense. Many of these early stations, he said, really hlazed the trail in radio developments. Many of them have been crowded off the air hy commercial stations.

Mr. McCarthy told the Commission of the operation of the two

broadcast stations in Wisconsin with which he is familiar; one being that of the State University and the other of the State Agricultural Department. In this connection he spoke of the broadcast made directly from the class rooms of the University and told in some detail of the experiments of both of these stations which, however, he said, are limited to daylight hours.

Many people, Mr. McCarthy said, want some education at night as well as listening to entertainment. Education by Radio, he contended, should be done by state and federal authorities and not by commercial interests. He complained of the restricted hours, the low power and the poor frequencies now in the hands of the educational stations.

Mr. McCarthy pointed out in his testimony the success rather than the failures of the educational stations. He told the Commission that in his opinion it should plan wisely for the educational stations of the future as it has planned for experimental stations in the past.

Mr. McCarthy also read into the record a statement on behalf of the Ohio State University which has operated a station for over 14 years.

"The Commission," says the Ohio University statement, "we are sure recognizes the importance of making suitable provision for educational radio services, as evidenced by the education hearing in May, 1935, and the subsequent appointment of the Federal Radio Education Committee. We in Ohio regard radio broadcasting channels as a valuable natural resource that can effectively be used in the state educational system and trust that the favorable attitude of the Commission in continuing channel assignments for state services will be continued."

The University's statement said further that "it is practically possible to provide a state radio educational service in the majority of the states through the proper application of allocation principles which it is our intention to point out. While it is true that in some few states geographical and physical conditions make such a service impossible at a cost which can be justified, such cases are few and represent a small proportion of the population of the United States. We believe that it should be possible for those states favorably situated, and which are in the majority, to have such a service through the proper assignment of radio broadcast channels, economically suited to their use.

EDWIN W. CRAIG

Edwin W. Craig of Nashville, Tennessee, licensee of broadcasting station WSM, made a statement on behalf of the clear channel group to the Commission as follows:

My name is Edwin W. Craig, residing in Nashville, Tenn. I am vice-president of the National Life and Accident Insurance Company, licensee of broadcasting station WSM of Nashville, Tenn. I appear at this hearing in the capacity of chairman of what has come to be known as the Clear Channel Group.

The Clear Channel Group is an informal organization composed of the licensees of thirteen independently-owned clear channel broadcast stations. They are, in the order of their frequencies, as follows:

Licensee	*Location*	*Call letters*	*Frequency*	*Power*
Earle C. Anthony, Inc.	Los Angeles, Cal.	KFI	640 kc.	50 kw.
Nat'l Life & Accident Ins. Co.	Nashville, Tenn.	WSM	650 kc.	50 kw.
Crosley Radio Corp.	Cincinnati, Ohio	WLW	700 kc.	50 kw.
WGN, Inc.	Chicago, Illinois	WGN	720 kc.	50 kw.
Atlanta Journal Co.	Atlanta, Georgia	WSB	740 kc.	50 kw.
Carter Publications, Inc.	Ft. Worth, Texas	WBAP	800 kc.	50 kw.
A. H. Belo Corp.	Dallas, Texas	WFAA	800 kc.	50 kw.
The Courier-Journal Co. & The Louisville Times Co.	Louisville, Ky.	WHAS	820 kc.	50 kw.
WWL Development Co.	New Orleans, La.	WWL	850 kc.	10 kw.
	(Application for 50 kw. pending)			
Agricultural Broadcasting Co.	Chicago, Illinois	WLS	870 kc.	50 kw.
Central Broadcasting Co.	Des Moines, Iowa	WHO	1000 kc.	50 kw.
Stromberg-Carlson Tel. Mfg. Co.	Rochester, N. Y.	WHAM	1150 kc.	50 kw.
Southland Industries, Inc.	San Antonio, Tex.	WOAI	1190 kc.	50 kw.

In only one instance is a city represented by more than one station in our Group; this is Chicago where two members are located. In only two instances is a state represented by more than one station, Illinois and Texas. Our member stations are located at ten widely separated points scattered over the country, each station in an important centre of population in the midst of a large agricultural, rural and small-town area. Let me name these cities from east to west: Rochester, N. Y.; Atlanta, Georgia; Cincinnati, Ohio; Louisville, Kentucky; Nashville, Tennessee; Chicago, Illinois; New Orleans, Louisiana; Des Moines, Iowa; Dallas, Fort Worth and San Antonio, Texas; and Los Angeles, California.

Our membership comprises most of the clear channel stations which are independently owned and whose channels have not already been subjected to duplication. In terms of frequencies we represent twelve out of the forty designated as clear channels under the Commission's regulations, although one of the twelve is shared between one of our members and a national network company, and therefore technically we represent eleven and a half. Of the remaining clear channels, twenty and one-half are occupied by stations owned, leased, operated or managed by one or the other of the two major networks or (in two instances) owned by a network and leased to others. Six and three-quarters of these network channels are already subject to duplication. The remaining eight channels are occupied by independently-owned stations but only four and three-quarters of these are free from duplication at present. To summarize, there are only thirty channels which are now actually clear; of these, thirteen and three-quarters are occupied by network-owned or-controlled stations; eleven and one-half by stations owned by members of our Group, and four and three-quarters by stations owned by others.

My role in the presentation of the case in behalf of the Clear Channel Group is not, strictly speaking, that of a witness testifying to technical or economic facts. I am neither engineer, lawyer nor economist, but merely an executive official of a company which owns and operates a clear channel station. Our members have felt, however, that it would be helpful to a correct understanding of the contentions that will be urged in their behalf, and that will be supported by the testimony of later witnesses, if one of us should first provide you with a background from a layman's point of view which would tell you of the origin and purposes of the Group, a history of its allocation problems, and, in broad outline, its position on the principal issues to be determined at this hearing. It is unnecessary to tell you that I have had the assistance of our lawyers and engineers, and of several of the members of our Group, in gathering the information that has gone into this statement and in actually preparing it.

Origin of the Clear Channel Group

The Group originated somewhat over two years ago, in a meeting which it was my privilege to call, early in May 1934, at Chicago, and which was attended by a majority of the present members. Our common interest arose out of the fact that we were all representatives of clear channel stations and that we, together with others, were greatly disturbed by the danger of duplication and loss of rural service areas which seemed to threaten the channels to which our stations were assigned.

I think it important that you understand the reasons for our apprehension; they are as valid today as they were in 1934. To explain them requires an excursion into the history of broadcast station allocation, particularly as it affects clear channels. To find myself talking about "history" in connection with the broadcasting industry gives me somewhat of a shock as I realize that it is less than sixteen years since radio waves were first harnessed for the broadcasting of a program and that, as an industry, broadcasting has hardly lived more than a decade. Nevertheless, short as has been this history in terms of years, it has been crowded with events that can be matched by most other industries only in terms of centuries. I am reminded of that oft-quoted remark of a well-known broadcaster, made several years ago, that "broadcasting is the only industry that wakes up to a new crisis every morning."

What I am about to relate is an old story to Commissioner Sykes who, alone of the present members of the Federal Communications Commission, was a member of the original Federal Radio Commission appointed under the Radio Act of 1927, and who is a veteran of all the major allocation battles since the first meeting of that Commission on March 15, 1927. Commissioner Brown lived through some of these events; also so did Lieutenant-Commander Craven, the Commission's chief engineer, Mr. Ring, the Commission's assistant chief engineer, and undoubtedly other

members of the Commission's staff who are here today. I must ask the indulgence of all these as I review historical matters. After all, the allocation in effect today, which you will preserve or change depending on the evidence and the arguments presented to you in this hearing, is, in essence, the allocation of November 11, 1928. There are, it is true, improvements here and there and, I am afraid, also some scar tissue and evidences of corrosion, but on the whole the principles have remained the same. The allocation of November 11, 1928, was, in turn, the culmination of earlier events to which I now invite your attention, because of the lessons they teach and the evidence they furnish on the issues raised in this hearing.

Clear Channel Allocation Under the Department of Commerce, Prior to February 23, 1927

For present purposes it is unnecessary to go as far back as the prehistoric era when people talked about wave-lengths and meters instead of frequencies and kilocycles, and when 550 broadcast stations in the United States were nominally all assigned to two wave-lengths, 360 meters and 400 meters (833 kc., and 750 kc.), the former for low power stations and the latter for "higb power" stations, having an output from 500 to 1000 watts. In the list of these early stations you will find all but two of the thirteen of our Group, and at least nine of them had the same call letters and were under the same ownership as at present. Most of their stations began their career with small haywire outfits of 50 watts or less.

This primitive age came to an end on May 15, 1923, when, as a result of recommendations by the Second National Radio Conference, regulations were put into effect which to a remarkable extent have been the foundation of broadcast allocation ever since. These regulations made available the band 550-1350 kc. for broadcasting, a total of 81 channels, and inaugurated the principle of 10 kc. separation between channels; and divided this band into three parts for use by different classes of broadcast stations, one of which was the class we now know as clear channel stations.

The Second National Radio Conference had presented a plan under which a band of fifty 10 kc. channels at the lower end of the band was set aside, and proposed tbat those channels

> "be distributed over five zones tbroughout the country, such that no stations in adjacent zones are closer together in frequency than 20 kilocycles, and that within each zone there be 10 stations separated by 50 kilocycles."

and "that only one wave frequency be assigned to" such a station

> "which should transmit exclusively on the wave frequency designated and reserved exclusively for that station."

The plan referred to these channels as "territorial wave frequencies" and expressly recognized that a different quality and purpose of program was expected of stations assigned to these channels than of lower powered stations assigned to duplicated channels.

The Department of Commerce adopted the principal features of this plan, calling the three different classes, Class A, Class B and Class C. Class B broadcast stations were, in general, the "high power" stations (500 to 1000 watts) most of which had previously been operated on the nominal frequency of 750 kc. They were assigned to the bands 550-800 kc. and 870-1000 kc. They were required to maintain high standards with regard to character of program and quality of transmission.

Thus the new régime began with forty Class B channels. It was not long, bowever, before it became obvious that forty was not enough, and by the time the Third National Radio Conference was convened in October, 1924, there were 44, which had been obtained by extending the upper limit of the Class B band from 1000 kc. to 1040 kc. In his opening address, Mr. Herbert Hoover, Secretary of Commerce, said:

> "Our chief trouble is with the Class B situation. They are all assigned within the band 288 to 545 meters (1040 to 550 kc.), within which there are, under the present system of allocation and excluding the Class C band, only 44 available wave bands and only 33 that seem desirable at present. To assign these among the 57 stations necessarily means duplication, although it was the theory of the last conference that individual wave-lengths could be assigned to each."

The pressure for duplication on clear channels is, therefore, not a new phenomenon. As a result of that Conference the upper limit of the broadcast band was extended from 1350 to 1500 kc., and tbe band from 550 to 1070 kc. became the Class B band. This created a total of 53 Class B channels.

In the meantime, however, just complaint has been voiced by our neighbor to the north that in 1923 the United States had allotted to its own licensees practically every channel in the broadcast band and in so doing had duplicated the channels already in use by the Canadian stations, causing severe interference to the latter. To remedy this state of affairs, at the time of this Third Conference our Department of Commerce agreed to regard six of the Class B channels as belonging exclusively to Canada, and that Canada might also use the channels occupied by the southern United States stations which were sufficiently removed from Canada to lessen the possibility of interference. Here, we have the origin of the so-called Canadian-exclusive and Canadian-shared channels.

The six Canadian exclusive channels, instead of being treated on the bloc principle and grouped either into one series of six adjacent channels or into two series of three adjacent channels, were scattered throughout the Class B band. As a result of this historical accident, they now present potential problems for twelve adjacent channels in the United States when only two need to have been involved; nine of those adjacent channels are designated as clear channel under the Commission's regulations and three as regional.

What are now called Canadian regional cbannels grew, in large measure, out of the even greater historical accident as to the chance location of certain of our Class B stations in the southern part of the United States. Of the eleven such channels, six still have formal recognition in the Commission's regulations; these six are likewise scattered without reference to the *bloc* principle, and create potential problems for six adjacent channels designated as clear in this country.

To return to the Third National Radio Conference, its fruits were a net of 47 Class B channels, some of them not clear because of joint occupancy with Canada. In fact, there was already some duplication on Class B channels within the United States. Because of the ever-increasing pressure on the part of new applicants, because of the limitations imposed on the authority of the Secretary of Commerce by decisions of the Court of Appeals of the District of Columbia construing the Radio Act of 1912, and because of tbe congestion of broadcast stations in some sections of the country, the Department of Commerce was unable to carry out completely the plan proposed at the Second Conference. Channel separations set up for stations in the same and contiguous zones had to be reduced in some cases and a few channels were, with reluctance, assigned in duplicate to widely separate zones.

It is interesting and instructive to note the sequel of such duplication. Remember that until the Third Conference in October, 1924, the maximum power of Class B stations was 1000 watts, that most of them had only 500 watts, and that, judged by present-day standards, very few if any of them really had a power output corresponding to their authorizations. Yet even with coast-to-coast duplication at this power trouble occurred. For example, one of our Group, KFI, Los Angeles, operated (as it still does) on 640 kc.; WRC at Washington was assigned to the same frequency. The resulting interference in intervening areas, and the public complaint, necessitated a shift between the two stations so that WRC remained on 640 kc. and KFI was assigned a frequency intermediate between 640 kc. and 650 kc. Such were the early lessons in the need for clear channels.

Power Regulation Under the Department of Commerce Prior to February 23, 1927

Now let us retrace our steps to follow the history of power regulation of Class B stations. Here also the past is eloquent with lessons for the present. The First National Radio Conference, held in May, 1922, when most stations were using 50 watts or less, adopted recommendations that

> "broadcasting stations should not be allowed to use unlimited power."

and that

> "The Secretary of Commerce assign to each radio telephone broadcasting station a permissible power based on the normal range of the station."

Let me digress to note that this First Conference took the optimistic view that the average value for the normal range of "public broadcasting stations" was 250 miles. I am told that in some quarters the leap in power from 50 to 500 watts was viewed with fully as much alarm as any increase proposed since then.

As I have already told you, the Second Conference of March, 1923, classified stations of 500 and 1000 watts as high power stations and, in its regulations effective May 15, 1923, prescribed the maximum power of 1000 watts for such stations. It remained for the Third Conference, in October, 1924, to provide the dramatic climax of debate on the issue of high power, a debate which reached heights that have not been touched before or since and which I believe (and hope) will not be equalled at this hearing.

Before the Conference opened it became generally known throughout the country that the owners of certain stations were seeking and preparing to increase their power to the high peak of 5000 watts. These included, I believe, a gentleman named Earle C. Anthony of Los Angeles, California ,another named Powel Crosley of Cincinnati, Ohio, and what is now the Central Broadcasting Company, now of Des Moines and then of Davenport, Iowa. Perhaps there were others from our Group; I am not sure. There were also stations owned by General Electric, Westinghouse, and American Telephone & Telegraph Company with somewhat the same plans. There was talk that some of the latter desired to go beyond 5000 watts and as high as 50,000 watts. It was even said that some of them had gone so far as actually to order or to build 5-kilowatt transmitters in anticipation of a change in the Department of Commerce regulations.

During the ten days prior to the Conference, the Secretary of Commerce, to quote his own words, had

> "received thousands of letters from men, women, and children all over the country protesting against what they honestly believe would result in depriving them of the chance to listen to the local stations or to use their will in selecting the ones they want to hear. They fear a monopoly of the air."

Mr. Hoover's approach to the question in his opening address was not exactly violently on one side of the issue or the other. He recommended the subject for the conferees' most careful consideration and hoped that they might be able to reach a satisfactory conclusion. The Conference referred the matter to a sub-committee which had some points of resemblance to the group in this room, although much smaller in size. Among those who spoke in favor of increasing the maximum power limitation were Earle C. Anthony and Powel Crosley. To show how history repeats itself, among those opposing the increase was our good friend John Shepard, 3rd, of Boston.

I should like to read into the record all that Mr. Shepard said in October, 1924, twelve years ago, for I suspect that his reasons for opposing higher power now will not differ materially from his reasons then. The same is true of those who argued in favor of increasing the power maximum; their reasons will not differ greatly from those that we shall urge. Time will not permit me to read at length from this earlier testimony but I cannot resist the temptation to read some of what Mr. Shepard said, as follows:

> "Station WGY, Schenectady, N. Y., has been testing late at night on a power of five thousand watts or more, and when they conduct these tests they come into Boston, which is over 150 air miles from Schenectady, with the following result on the average selective set: They are heard with good volume fifty kilocycles on either side of their wave length; and when I say the average selective set, I am not talking about a broad single circuit receiver, nor am I talking about a super heterodyne or other loop set.
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> * * *
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> "If the power is increased without any limitation of hours or season, it will result in less enjoyment to millions of people, and for that reason it should not be done at this time.
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> "With the wire connections that can be made, I can not see that the public need be deprived of any programs of a national character because of an increase in power not being allowed. It has been stated that those opposed to the increase were standing in the way of progress. I don't feel that I am, because I feel that the experiments should be continued and proof submitted to the people by actual demonstration as to just what a super power station can do, and proof that it will not blanket other stations. (Applause.)"

I also must yield to the temptation to give you one short excerpt from a statement made by Mr. Crosley, because of its prophetic character. He said:

> "To crystallize my thoughts in a few words, in conclusion, the higher power station should come. The limit I do not know, but the limit should be controlled by the distance from any thickly populated district; and if there is such a station as two hundred kilowatts some time in the future,—perhaps it will come,—it should perhaps be located in the wilds of Maine, or perhaps down on the great American desert, (Laughter) or some other point where it will cause the minimum of interference. But it's bound to come, just as they are building such stations abroad . . ."

The Department of Commerce proceeded immediately to announce regulations pursuant to the recommendations of the Conference. It declared that it would issue licenses for power up to 5000 watts on a gradual and purely experimental basis.

It was not long, however, before the increased power amply demonstrated its advantages. By the time the Fourth National Radio Conference convened, in November, 1925, the apprehension had disappeared and we find the Secretary of Commerce, Mr. Hoover, saying the following in his opening address:

> "A year ago we were fearful of the effect of greater power. We were told by some that the use of anything more than 1,000 watts would mean excessive blanketing, the blotting out of smaller competitors, the creation of large areas into which no other signals could enter. Some of the most pessimistic even warned us that our tubes would explode under the impact of this tremendous force. But our experience so far leads to the opinion that high power is not only harmless in these respects but advantageous. Power increase has meant a general rise in broadcasting efficiency; it has meant clearer reception; it has helped greatly to overcome static and other difficulties inherent in summer broadcasting, so as to give us improved all-year service. Whatever the limit may be, I believe that substantial power increase has come to stay, and the public is the gainer from it."

This time the Conference Committee having to do with the subject reported the following on "high-power broadcasting Stations."

> "The fear which was felt a year ago that high power would adversely affect the reception of a large number of listeners has been shown to be without foundation. The increase of power by transmitting stations has improved general conditions of reception. It is recommended that the present attitude of the Department of Commerce of authorizing experimental development of high-power broadcasting stations be continued."

In the meantime, experimentation with the use of fifty kilowatts was, with the approval of the Department of Commerce, being carried on. The trend of progress under the administration of radio regulation of the Department of Commerce was definitely in the direction of high power on clear channels, so far as the limitations imposed by an inadequate law permitted it to give effect to these objectives.

The Chaos of 1926

We come now to the great disaster in the history of American Broadcasting, the imprint of which still remains on some portions of our allocation structure. I refer to what is commonly known as the breakdown of the law which occurred in the period beginning July 9, 1926. Within a few months some two hundred new broadcast stations crowded into the already over-congested ether, while existing stations "jumped" their wave-lengths and increased their power. By the time the Radio Act of 1927 became law, there was not a clear channel left and, consequently, there was no radio reception in the rural sections of the country or, indeed, anywhere except in the immediate vicinity of those cities that had broadcast stations. If ever the necessity for clear channels was demonstrated it was in this lawless period when, for the rural listener, the broadcast band became a radio desert inhabited only by shrieks, howls, whistles and a Babel of unintelligible cross-talk.

In a radio sense, civilization based on law and regulation had broken down and the savage tribes had swarmed in. For almost six years the Department of Commerce had, with fair success, resisted the repeated assaults on the part of those who would break down the allocation so as to provide for new stations. How great this pressure was became all too apparent when the resistance disappeared. This mediaeval era in the history of broadcasting came to an end with the enactment of a new radio statute on February 23, 1927, and the creation of the Federal Radio Commission, the chief and immediate mission of which was to bring order out of chaos.

Clear Channel and Power Regulation Under the Federal Radio Commission

The period between the first meeting of the Federal Radio Commission on March 15, 1927, and the allocation of November 11, 1928, may be called the revival of learning in the history of broadcasting. The events of this period are so recent and are so familiar to all of you that I would be imposing on your good nature and your patience were I to discuss it at length. There are, however, mile posts which must be mentioned briefly.

One of the first important actions of the Federal Radio Commission was to arrange a public hearing, very much of the same character as that in which we are now engaged, to which all interested parties were invited to appear and make known their views. At this public hearing the Commission was strongly urged to re-establish the system of two classes of stations, the former to be of low power to serve local areas and the latter to be of high power to serve large territories, including remote points and rural areas. This was urged, for example, by the Committee on Radio Broadcasting of the American Engineering Council. The Committee recommended that the broadcast band be divided at any chosen point into two bands for the two classes of stations, suggesting that from 550 to 1250 kc. be assigned to national stations and from 1250 to 1500 kc. to local stations. Excluding the six Canadian exclusive channels, this would have provided 64 so-called national channels for the United States. Because of the interference range of this class of stations, the Committee stated that

> "the repetition of assignment of these frequencies is not feasible, except if the power used is not greater than 5 kilowatts and the stations in question are not less than 2,000 miles apart."

With respect to power, the Committee stated:

> "It is not necessary nor desirable to impose power limits on the national stations (except as above-noted for frequency duplication for stations more than 2,000 miles apart). They will more effectively serve all listeners the greater the power they use."

Later on, the report says;

> "Any plan which provides for a greater number of stations will evidently diminish rather than increase the actual radio service to the several communities of the United States."

In the main, as most of you will remember, the Commission did not give effect to these recommendations in its first re-allocation, which went into effect on June 15, 1927. Stations were not classified with respect to power, frequency or area to be served. No recognition was given to the necessity for clear channels, and no channel was left clear. The results of this allocation appear in the Commission's Second Annual Report, as follows:

> "Radio-reception conditions were far from satisfactory as the result of the Commission's re-allocation of June 15, 1927. The re-allocation had succeeded to a marked extent in reducing interference arising from congestion in the larger metropolitan centers, where the stations had been crowded together without adequate frequency separation; it had not, however, succeeded in remedying the heterodyne interference (resulting from two or more stations operating simultaneously on the same channel), which was ruining reception in rural areas, and indeed in all parts of the country. The complaints which deluged the commission immediately made it apparent that changes would have to be effected.
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> * * *
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> "With the approach of winter conditions in the fall of 1927 the widespread development of heterodyne interference, in rural areas particularly, made immediate action imperative. On November 14, 1927, the commission, in an effort to ameliorate the situation, issued its General Order No. 19."

In the light of the Commission's present rather definite regulations on the subject, General Order No. 19 must necessarily appear as a curiosity. It designated the band 600-1000 kc.

> "as frequencies to be maintained free from heterodynes or other interference."

and then proceeded to order all stations operating on the frequencies designated "to clear these channels of heterodyning during the present license period." Obviously, the Commission did not know broadcasters as well as it now knows them. Simultaneously, however, the Commission ordered a number of changes in station assignments, and further changes were made during the early months of 1928. Some improvement resulted but the situation still was very bad; very few channels were actually clear, and good rural reception was almost non-existent in a large part of the country.

The next important event was the enactment of the late lamented Davis Amendment by Congress on March 24, 1928. I should like to skip this unpleasant chapter of allocation history entirely, when Joshua commanded the sun to stand still and Congress attempted to prescribe by law how radio waves should perform. It must be mentioned, however, because it was the prelude to another very interesting and important series of conferences and a public hearing of the same general character as this, in which the Commission sought information as to the principles which should govern it in applying the Davis Amendment and in effecting a re-allocation so as to improve reception. Various plans were submitted to the Commission. That which was ultimately adopted was based in large measure on a plan presented by a group of experts, consisting of well-known radio engineers, to whom the Commission had submitted the problem. It "proposed to allocate 50 channels for rural as well as urban service, each channel to be exclusive."

On April 23, 1928, Dr. Dellinger, who was acting chief engineer of the Commission, published a statement discussing certain proposals which had been made to the Commission by other groups that were opposed to this plan. Among the opponents, incidentally, was the Congressman from Tennessee who insisted that there should be only 25 clear channels. Dr. Dellinger said:

> "Perhaps the chief point of the engineers' recommendations which has been overlooked is the outstanding importance of providing not less than 50 exclusive channels, together with the fact that very much more power can be used on exclusive channels than on shared channels. It is only on exclusive channels that listeners at a distance can receive service. The rural population of the country will be heavily discriminated against unless a large number of exclusive channels are provided. Furthermore, when channels are exclusive there is no necessity of holding their power down to any particular limit. While the engineers' recommendations stated that the limit for the exclusive channels might be 50 kilowatts at the present time, the only power limit need be that fixed by the production of interchannel interference. In other words, it is contemplated that with improvements in the radio art the power used on the exclusive channels may be increased without limit, thus increasing service to the rural population."

These and other statements of Dr. Dellinger, published at that time, are valuable because they afford unmistakable evidence of the original purpose for which clear channels were established and the need they were intended to fill. In these statements, incidentally, Dr. Dellinger made several references to the then-chaotic condition of reception and the fact that the rural listener was receiving no service at all. In other words, away from the urban centres of population, the broadcast band was still a radio desert.

Passing over events not directly related to the history of clear channels, we come now to that memorable event, the adoption of General Order No. 40 on August 30, 1928, and the far-reaching re-allocation effective November 11th of that year. As you all know, the difference of opinion as to the desirable number of clear channels was resolved by a compromise, and the total was fixed at forty. In the light of the almost insuperable difficulties which faced the Commission at the time, this number seems to have been a sensible compromise. Instead of beginning at the low frequency end of the broadcast band as had been regularly advocated by the engineers since 1923, the forty clear channels were all contained in the band from 640 kc. to 1190 kc., again a compromise. Instead of being all in one *bloc,* they were interspersed with the six Canadian exclusive channels, a bloc of regional channels, and isolated regionals which were also Canadian-shared, a third compromise.

In a statement which accompanied and explained General Order No. 40, the Commission said:

> "On these 40 channels only one station will be permitted to operate at any time during night hours, thus insuring clear reception of the station's program, up to the extreme limit of its service range."

In describing General Order No. 40 in its Second Annual Report, the Commission said:

> "Forty channels were set apart for stations of sufficient power on cleared channels to give good service to rural and remote listeners."

In a published analysis of the Order and of the proposed re-allocation on September 14, 1928, Dr. Dellinger said:

> "It is only when a station has exclusive use of its channel that program service free from interference can be furnished at great distances."

With this re-allocation, the Renaissance period was over and our modern era began. Not all that had been lost during the dark days of chaos was recovered but enough was, and the advances of science and particularly the use of better apparatus and better operating methods, together with higher power, have helped to make up for the losses. The rural listener was restored to his seat at the radio show at least in the evening and when the static was not too great. In some parts of the country, his feat was (and is) still pretty much in the back row, particularly in the daytime but it is better than the worse-than-nothing which came out of his radio set during the nightmare period of radio history.

That conditions were still far from the millenium was, of course, obvious. In its report to the United States Senate on January 1, 1932, the Federal Radio Commission stated that only 46 per cent of the total area of the continental United States had consistent radio reception at night and only 56.2 per cent in the daytime. A large portion of the area and population receiving consistent service was served only by clear channel stations, and the remaining area and population receiving an intermittent service obtained that service only from clear channel stations. One attempt was made, late in 1929, to persuade the Commission to increase the number of clear channels from 40 to 50 in a *bloc*, beginning at 550 kc. and extending to 1140 kc. (including the six Canadian exclusive channels). The attempt took the form of a petition in behalf of several clear channel stations which were dividing time on clear channels. This petition was denied. It probably could not have been granted without undue hardship on the many regional and local stations affected.

During the spring and summer of 1929, the Commission itself endeavored to ascertain the nature and extent of the improvements brought about by the re-allocation. To this end, it sent out thousands of questionnaires to amateurs and farmers. Some 4,200 replied. Of these, 72 per cent listed a clear channel station as their first choice, and most of the remaining 28 per cent came from listeners in the comparatively immediate vicinity of particular regional stations. Seventy-one per cent of the replies listed clear channel stations as the first four stations preferred. These results were imposed on maps of the United States. These maps showed that over the greater part of the country, in terms of area, listeners relied upon clear channel stations for broadcasting service. The percentages I have given are strikingly close to those which resulted six years later from the clear channel survey. Remember that no 500 kilowatt station was in operation in 1929, and that only a handful of stations were licensed to use 50 kilowatts. Most of them were using 5 kilowatts.

Shortly afterwards the Commission solicited and received from the Department of Commerce supervisors in the several districts, reports on the same subject. These reports left no room for doubt. For example, the Radio Supervisor at Detroit reported:

> "The use of high power on clear channels is the only factor at this time which makes possible any degree of good radio reception to the rural broadcast listener. . . . It would be of far greater benefit to the radio industry and to the public if the number of cleared channels were increased to provide still more diversified reception. . . . When it is remembered that most broadcast listeners, especially those in the country, rely on their radio set entirely for weather reports, time signals, news, education, information and entertainment, it will be appreciated that they should have the best receiving conditions which it is possible from an engineering point of view to furnish, and to impair their reception by abandoning the use of cleared channels is very comparable to placing their radio service on a 1920 basis when it was a plaything and not a public necessity."

If further evidence were desired, I could cite later reports and decisions of the Commission, but surely it is unnecessary to prove the obvious.

It remains only to bring the account of the Commission's regulation of maximum and minimum power on clear channels up to date. Until the re-allocation of November 11, 1928, no power restrictions were composed by any regulation. In General Order No. 42, promulgated in connection with the re-allocation, the Commission imposed a limitation of 50 kilowatts, of which 25 kilowatts was experimental. On June 16, 1930, the Commission amended this order so as to provide that not more than four out of the eight clear channels assigned to each zone should be authorized to use 50 kilowatts, and it was because of this amendment that the extended so-called high-power hearings took place in the fall of 1930. At that time ten 50-kilowatt stations were in operation and five were under construction on a total of 13 clear channels. Later on, the Commission removed this restriction and opened all clear channels to the use of 50 kilowatts. Nearly all clear channel stations have availed themselves of this privilege, with a vast improvement in service to the listening public in both urban and rural areas, an increase in the rural areas provided with service, and no substantial complaint based either on interference or economic considerations. In 1932, the Commission granted a construction permit to one of the members of our Group (WLW) to construct a 500 kilowatt station. This station was first placed in operation in the closing days of 1933, and beginning with the spring of 1934 it was licensed continuously thereafter to use 50 kilowatts regularly and an additional 450 kilowatts experimentally.

This brings my story of the modern civilized era in broadcast allocation regulation up to the present date. What, now, are the dangers that threaten this civilization? Are there any signs that it is crumbling?

The Breakdown of Certain Clear Channels

With knowledge of the historical background which I have related at some length, you will readily appreciate the concern with which most licensees of clear channel stations regard any effort to subject clear channels to duplication. The members of our Group, who for the most part have been broadcasters since the prehistoric days, have seen the tides of pressure for duplication ebb and flow for thirteen years. They saw the flood break through the dikes in 1926. They know the havoc which was wrought, not merely from technical theory but from actual experience, as they watched their rural audiences cut off from all broadcast service and submerged with interference, and as complaints poured in from all directions. They know that the havoc resulted from the pressure for new stations, and for improved facilities for existing stations. It was with growing apprehension, therefore, that they watched holes appear here and there in the dikes during the period from November 11, 1928, to the time when they met in Chicago in May, 1934.

These holes in the dikes consisted in duplication which, in one form or another, the Commission had authorized on ten clear channels. The first of these was not of the Commission's doing; it resulted from a court decision rendered shortly after the re-allocation went into effect. The next duplication to occur was in 1931, almost three years later. Two more duplications occurred in 1933 and five more in the early part of 1934. In addition, under an agreement dated May 5, 1932, between the United States and Canada, two clear channels were made available for use in Canada by proposed 50-kilowatt stations; one of these channels, however, is included among the five subjected to duplication in the United States in 1934. These two channels are now described as "Canadian-shared" in the Commission's allocation lists and as "clear" in its regulations. The net result was that by July 1, 1934, there were actually 30 and not 40 clear channels in the United States.

In and of itself, these duplications, while a cause for regret among the members of our Group because of their effect on rural broadcasting service, would not necessarily have occasioned apprehension over the fate of the clear channels on which our members' stations were operating. Except for the two duplications brought about by the Canadian Agreement, they were all based on the consent of the dominant clear channel stations.

Let me digress at this point to say that our Group hopes and urges that this Commission shall never again give recognition to the principle that the licensee of a clear channel station has the right to bargain away the rights of the listening public by a so-called consent, whether given for a consideration or gratuitously, and whether given for an evening or for a whole license period. It seems to us that nothing could be more inconsistent with the fundamental meaning of public interest as applied to clear channels than this. As I say this, I realize, of course, that there were peculiar circumstances of hardship which led to several of the ten duplications referred to, particularly in cases where two dominant clear channel stations divided time in widely separated cities, and where formidable economic factors were present. Such duplications seem excusable.

The example set by these "consents" has, however, proved con-

tagious. Every one of our members whose station is on a channel inhabited by one or more daytime or limited time stations is subjected to constant direct and indirect pressure from the owners of those stations for "consent" to the destruction of its rural service, sometimes permanently and sometimes only for a single evening or a small portion of an evening. Needless to say, those requests for duplication often involve hours and programs when it is most important that the channel be kept clear so that the rural public may listen to events or talks of national interest. In any event, unnecessary embarrassment and ill-feeling are all too frequently engendered by a refusal of the requests.

More significant than any of these factors in our minds, perhaps, was the increasing pressure for new stations, or for better facilities for existing stations, at the expense of clear channels. This was evidenced in a mounting number of applications filed with the Commission in the first few months in 1934, totalling some very large number of which I have no record. Still others were openly threatened. One of the most persistent of these applicants was our friend John Shepard who applied for full time on two clear channels (640 kc. and 830 kc.) and, with the aid of Dr. Pickard as his technical counsel, forced the licensees of the dominant stations on those channels through two long and expensive hearings in the latter part of 1934 and the early part of 1935. Several of us were the object of every conceivable sort of pressure to consent to the granting of such applications, sometimes proceeding from Senators, Congressmen and other public officials who had been somehow enlisted in the cause of the applicant for a new station and who understood neither the purpose of clear channels nor the technical facts which make them a necessity. That this should be possible in the face of the Commission's regulations can be explained only by the widespread feeling at the time that, in view of the duplications which had already taken place by consent, the Commission might authorize duplication without consent, and in spite of its regulations to the contrary. The uncertainty persisted until the spring of 1936, when Shepard's applications were denied, only to be renewed a few weeks later when he began to rally an incredibly large number of regional station licensees to his cause of breaking down clear channels, of destroying rural reception, and of thus increasing the number of regional stations in the United States.

It is one thing to prepare for a hearing in which some question is raised as to the coverage of your station in its immediate vicinity; it is quite another to prepare for a hearing in which you must defend your secondary or clear channel coverage extending perhaps over several hundred thousand square miles and produce field intensity measurements over this wide area. Yet all of this effort and expense had to be borne by the licensee of each clear channel station that was subjected to such an attack,—and to prove what? Merely what was common knowledge and obvious but had not been proved by actual measurements taken in approved legal and technical fashion—something that was known at the time of the Second National Radio Conference in 1923 and recognized at each succeeding Conference, something that was given effect in the re-allocation of November 11, 1928, something about which there could be no reasonable doubt, namely, that the listening public in rural and remote areas is dependent on clear channel stations for broadcasting service!

Such were the thoughts that were in our minds when we met in Chicago in May, 1934.

The Clear Channel Petition and the Secondary Coverage Survey

Prior to our meeting I had discussed the matter with our counsel, Mr. Louis G. Caldwell, and had asked him to prepare for us a plan of defense for the remaining clear channels. The plan he suggested was unanimously approved by those present. It was incorporated in the petition which he prepared and filed with the newly created Federal Communications Commission on August 7, 1934.

The licensees of thirteen clear channel stations joined in that petition. Eleven of the thirteen are still members of the Group, one of the others having since then sold its station to a network company and the other having dropped out for other reasons. Two new members have been added. Before the petition was filed, the few remaining independently owned clear channel stations were invited to join. You will be interested to know the reasons which some of them (or their attorneys) gave for not joining; it was that the proposed survey might furnish an excuse to the Commission for a drastic reallocation!

We did not invite the network companies to join. One reason was that both of them had been parties to several of the duplications by "consent" which had already been authorized. Another reason was that to our minds it was, and is, important to preserve as much independent ownership of clear channel stations as possible. I shall return to this point later. In fairness, let me say, however, that both of the networks, and I think, two regional broadcasters (one of which was Mr. Shepard) cooperated in the survey, both financially and with the generous use of their technical staffs.

The contents of our petition is familiar to all of you and need not be stated. It recited the importance of and purpose served by clear channels, the apprehensions felt by our members and others as to their preservation, and the need for a technical study and investigation of clear channels to determine, among other things,

> "the extent to which the people of the United States, and particularly those located in rural areas, are dependent upon clear channel stations for broadcast reception. * * *"

and

> "the extent to which such service should be protected from interference."

The Group proposed that the Commission authorize and direct the undertaking of such a survey

> "under the supervision of a radio engineer of recognized ability, integrity and independence and preferably a member of the Commission's technical staff, and with the cooperation of all broadcasters and radio laboratories willing to give such cooperation."

In reply to those who, I understand, are complaining that the survey does not cover a sufficient period of time, let me point out that the petition stated that the survey

> "should be carried on for a period of not less than a year so as to permit a proper study of the varying conditions due to the seasons as well as the care and completeness which should attend such a report."

The petition asked that upon the conclusion of the survey

> "the Commission adopt and promulgate such new regulations, or such clarifications and amendments of existing regulations, regarding clear channels, as will accurately reflect and give effect to the scientific facts and principles thereby developed, and thereafter rigidly and uniformly apply and enforce such regulations unless and until formally amended."

The principal request in our petition, for a survey, was granted by the Commission in October, 1934, although the survey authorized was not for as long a period as requested. The story of this survey and of its results has been related by the Commission's witnesses. Some $30,000 was expended on apparatus alone, and the contributions in the form of continuous services by technical experts over a period of several months cannot be even approximately stated.

It may be that this survey is incomplete because it did not cover all hours of the day, all the seasons of the year, and all the eleven years of the sunspot cycle. It may be that it has other defects and imperfections. We know, and even if we did not, we have learned in the course of this study, that information is still lacking or inadequate on many questions that may have a bearing on broadcast allocation problems. Our technical witnesses will undoubtedly refer to some of these questions. Whatever may be the degree of perfection or imperfection ascribed to the survey, the fact remains that it furnishes us with coordinated facts collected on a systematic basis under trustworthy auspices where we had nothing before but scattered measurements and technical theory. Furthermore, it checks so closely with what was already known from other sources that it cannot be much in error.

The survey is a splendid demonstration of the ability of representatives of Government and of private industry to cooperate in the quest for information on which to build regulation. The Clear Channel Group takes a pardonable pride in having originated the project and in having participated in its carrying out, and it feels that both the industry and the public are deeply indebted to the Commission for having authorized it, and to the Commission's technical staff for the capable and efficient manner in which they conducted it.

Let me say in passing that to me as a layman it is little short of remarkable how closely the various sources of information agree with each other. The questionnaires sent out to farmers and amateurs in the summer of 1929, when there was no 500 kilowatt

station and there were only a few 50 kilowatt stations, showed, as I have already told you, that 72 per cent of the replies listed clear channel stations as first choice and 71 per cent listed them as the first four choices. The recent questionnaire survey showed a 76.3 per cent preference for clear channel stations, and the data obtained by the inspectors showed a 75.1 per cent first choice of such stations, together with an overall 73.3 per cent selection of clear channel stations for the first three choices, win, place and show. An examination of the questionnaires shows, I am told, that where regional stations were chosen it was almost invariably within their expected normal service areas, and in any event within a comparatively short distance of the transmitters. When such evidence is combined with what the engineers tell us as to scientific facts and principles, which have enabled them to forecast substantially what the surveys have proved, it seems to us that little remains to be said.

In this connection let me say one thing more. I am authorized by our Group to say that should it appear from this hearing that there is need for further study and investigation, whether along the lines of the survey of 1935 or along different lines, our members tender to the Commission their full and complete cooperation, and offer to place their technical staffs and apparatus at the disposal of such person as the Commission may select to supervise and direct the undertaking. We believe that other groups would gladly make the same tender. It would be little short of a tragedy if, simply for lack of information that can be secured, unsound regulations leading to an impairment of rural service should be adopted. For making such studies the United States enjoys an advantage over all other countries in the world, because of its large area under a single flag and its many stations equipped to assist. Whatever may be the result of this hearing, let us continue this cooperation between Government and industry.

Contentions of the Clear Channel Group at This Hearing

The Commission's notice of this hearing sent out last July is a formidable and somewhat disconcerting document. The issues indicated by the long list of headings and subheadings reveal how varied and complicated are the factors that enter into the Commission's allocation problems. Obviously, most of these subjects are of a technical character and detailed discussion of them must be left to technical experts. I am told that really to furnish answers to all the issues raised, we should have to employ a university full of experts and set them to work for eleven years or so, and that even then there would be more to do. I am confident the Commission will forgive me, therefore, if I refrain from stating my views on such matters as sunspots and the Heaviside layer.

The fundamental issues, however, at least so far as they concern clear channels, may, I think, be understood and discussed even by a layman broadcaster. These issues, as I see them, are two in number; first, to what extent shall the Commission preserve and protect clear channels, and second, what shall be the minimum and maximum power permitted on those channels. Mind you, I do not say that there are not other important issues. In fact, there are a number of them, as you will hear presently, from our technical experts, although most of them are subordinate aspects of the two major problems.

With the indulgence of the Commission, therefore, I propose to depart from the order of subjects set forth in the Commission's notice and to proceed straightway to give you as clear a picture as I can, in a preliminary way, of the position of our Group on these fundamental issues.

In approaching these, and all other issues raised by the notice, I hope that we shall be able to distinguish carefully between three entirely different sets of questions. They have not always been treated separately, and not a few of our allocation difficulties, past and present, are traceable to the confusion. The first set of questions is the one in which, I take it, you are primarily interested at this hearing; they are primarily of a technical engineering character, and are concerned with how best to divide up and regulate the use of the broadcast band so as to provide a maximum of tracks of good reception over the area and for the people of the United States. The second set has to do with regulation of what programs shall be transported to the people over those tracks. The third set has to do with a determination of what persons shall be licensed to use those tracks.

If I were limited to contributing but one thought to this discussion it would be to urge that you treat the first set of questions separately and on their merits, on the basis of sound technical facts and principles, and that you do not allow the cause of good radio reception to suffer because of considerations arising out of the second and third sets. The latter can be treated and regulated separately on their own merits. In the words of one of the original members of the Federal Radio Commission:

> "Having laid the tracks for good reception, one can then decide what is going to be supplied on those tracks. But the first thing is to get the tracks laid."

I need not tell you why I am giving emphasis to this thought. There are two bogey-men that have their perennial abode in the second and third sets of questions, and that invariably sally forth at the mention of either clear channels or high power. One of these bogey-men is the so-called duplication of network programs. The other is the closely related cry of monopoly dating back to the early national radio conferences.

Neither I, nor, I venture to say, anyone in this room is in a position to say that there *is* too much duplication of network programs or that there is *not* too much. The necessary study and investigation simply have not been made. The answer lies not in loose assertions but in technical data, showing the actual coverage of stations in terms of field strength and showing the signal intensities necessary to give service in city, residential and rural areas throughout the country. I do not envy the task of anyone who attempts to find out how much duplication is going on, what with the multitude of variations in programs that obtain as between affiliate stations and even over a given affiliate station from time to time. Chain connections come and go, particularly if a station is kept under independent ownership; some of our members have had affiliations first with one network and then another, and, subject to contracts for specified periods of time, they are all free to change these affiliations in the future.

No expert is needed to see that *some* duplication is unavoidable, once you grant that the rural population of this country is entitled to reception and at the same time that the dwellers in cities and towns are entitled to a sufficient signal intensity to overcome local electrical noise levels. To say that all net work programs should be broadcast by regional stations is simply to say that our farmers and the inhabitants of our sparsely settled areas have no right to listen to the programs of music, entertainment, education, religious services and news that, on the whole, are available in far better quality and much greater quantity in a few large populous and cultural centres than in the smaller centres. I know of no more effective way in which to destroy one of the greatest advantages which radio has brought to our civilization.

To say that not more than three clear channel stations, or five, or some other small number, whatever their power, may broadcast the same program differs only in degree from the contention that I have just answered. It means that extensive areas and much of our population must be satisfied with a very low signal strength which will frequently or regularly not be sufficient to overcome static and electrical noise.

We have progressed far since the days of the Third National Radio Conference in 1924 when we find Mr. Hoover and the Conference bending effort to encourage and bring about what is now so lightly condemned. He declared that a station

> "must be able to bring to its listeners the greatest music and entertainment of the Nation, but far beyond this it must be able to deliver important pronouncements of public men; it must bring instantly to our people a hundred and one matters of national interest. To this it must add its matters of local interest. This can only be accomplished by regularly organized interconnection on a national basis with nationally organized and directed programs for some part of the day in supplement to local material."

The Conference adopted a report expressing belief that network broadcasting "deserves every encouragement and stimulation." By 1925, Mr. Hoover was able to report to the Fourth Conference that network broadcasting now "is commonplace," and said:

> "The number of people who throbbed with joys and sorrows at the dramatic presentation of minute-to-minute events of the world's series is one of the most astonishing landmarks in radio broadcasting."

Now, such programs have become so much of a commonplace that we sometimes forget what they really mean to broadcasting and to the listening public.

Please note that I do not say that program duplication is not a matter deserving the careful attention of the Commission. Somewhere, undoubtedly, there is a limit. Somewhere a decision must be made between the comparative advantages of giv-

ing a certain percentage of our area and population a choice of, say, three programs delivered with satisfactory signal strength, and of giving a smaller percentage of our area and population a choice of four programs with the same signal strength; or perhaps the decision must be made between four and five, or five and six. I do not pretend to know the answer. There are some programs with regard to which I suspect you will not prohibit duplication but welcome it, such as an address by the President during a national crisis.

Most of us who are in the business of broadcasting feel sure that, so far as commercial programs are concerned, the man who will effectively prevent excessive duplication is the advertiser. In fact, we think we have detected signs of his unwillingness to pay for double coverage for a long time. If we are wrong in this belief, the Commission has ample power to settle the matter under the Communications Act of 1934 which specifically authorizes it

> "to make special regulations applicable to radio stations engaged in chain broadcasting."

This power holds good whether there are fifty clear channels or five, and the fact that it has not been exercised should not, in our opinion, affect the Commission's decision as to whether the number of clear channels should be fifty or five.

From what quarters does this charge of excessive duplication of programs emanate? It seems to us that this question should be answered before the complaint is taken too seriously. If the complaint comes in substantial volume from the listening public, uninspired by any broadcaster or interested party, it must give us concern. If it comes from persons who have a direct interest in breaking down clear channels, it should be scrutinized carefully before it is made the basis for any drastic action.

The third set of questions has to do with what persons should be licensed to operate on clear channel stations. The cry of "monopoly" is occasionally raised, usually based on an indiscriminate confusion of network-owned stations and independently-owned stations that take a certain amount of network programs, and some vaguely conceived relationship between that factor and the alleged excessive duplication of programs. Frankly, I have no idea whether too many broadcasting stations, on clear channels or otherwise, have been allowed to fall into the hands of either network company. I believe that there is a point beyond which the acquisition of further stations would be unhealthy. I know that the Commission has ample power under the statute to prevent such a state of affairs by refusing to approve assignments, transfers of control and the like. Surely we all agree it would be unfortunate if the control of broadcasting should come under the arbitrary power of any person or group of persons.

It is important, we believe, tremendously important, to give due recognition to the principle of independent ownership in the licensing of broadcast stations. By "independent" I mean not merely absence of network ownership but the presence of ownership by people who are in and of the community or region in which the station is located and which it primarily serves, as contrasted with absentee ownership or control. Stations that are independently owned in this sense can best render the service needed or desired by their listeners; they can also best meet the needs of the community or region for an outlet on the air. They can best make the choice, which they should always be free to make, between programs of national, regional and local interest, and the proportion to observe between these classes of programs, just as publishers choose the contents of newspapers from material furnished by a national press association, a city news bureau and their own reporters. Underlying this principle of independent ownership there is something very fundamental. In one aspect it is the time-honored principle of competition; under another aspect it is closely akin to freedom of speech and liberty of expression. There is no more effective method of protecting this country against any danger of monopoly, actual or threatened, than by preserving and strengthening the position of the independently-owned clear channel station.

The first of the two fundamental issues I have mentioned is raised by the very first item of your notice dealing with the desirability of establishing new classes of broadcast stations, or of abolishing any existing class. The Clear Channel Group has no new class of station to suggest or to add to the four existing classes, clear channel, high power, regional and local. Needless to say, it vigorously opposes abolishing the clear channel class, as is proposed by at least one group appearing at this hearing. The question as to what should be a proper definition for this class, I shall return to later.

What has happened since the spring of 1923 or the fall of 1928 to make the exclusive use of a channel after sunset less necessary to provide broadcast reception to rural and remote areas? Sometimes I hear, in answer to my inquiry, that certain technical improvements have changed the picture. Our technical experts will show you, I think, that these improvements, valuable though they may be for some purposes, have not made clear channels any the less vitally necessary. The problem of rendering rural service remains the same. Furthermore, whatever be the entering wedge by which duplication comes, the result is the same for the future, whatever may be the case for the transient present. A barrier which may prove insuperable has been thrown up on the duplicated frequency against progress toward better rural service through higher power. We cannot afford this gamble.

You have asked for views as to the number of channels in the broadcast band to be assigned to each class of station. In answering we shall confine ourselves to the clear channel class. Our answer to this question cannot, in the very nature of things, be categorical. So much depends on what you want to accomplish. Our country has an area over 3,000,000 square miles, a population of 130,000,000 very unevenly distributed over this area, with a large concentration in the northeast. To add to the complication, the locations of our centres of population, our metropolitan areas, cities and larger towns follow no pattern whatsoever. Their contours and boundaries defy analysis or classification. Some are so large or so irregular in size that no regional station under present conditions, power limitations, and regulations on regional channels can deliver a sufficient, interference-free signal, day and night, to all their population, and many are of such size that no local station under present conditions and regulations on local channels can deliver such service.

It is interesting, of course, but not particularly profitable, to speculate on what could be done if our cities and towns were symmetrically dotted on the map, and all the ninety broadcast channels were clear channels on the one hand, or regional and local channels on the other. Out of curiosity, on the first theory, I have checked to see which is the ninety-first city in population, the largest that would not get a clear channel station. I find that if you count all the separate municipalities, the empty honor would fall to Tampa, Florida, with a population of 101,161 under the 1930 census; if you count the metropolitan areas, then the honor falls to Manchester, New Hampshire, with a population of 76,834. Then I have checked on the other theory to see how many cities and towns there are that would probably want at least one station, not to mention a choice of three, four or a dozen programs. I find that there are 467 cities and towns with population in excess of 20,000 and 1849 with population in excess of 5000.

Manifestly, such speculations only lead up blind alleys. Neither extreme fits in with any reasonable conception of public interest or with the needs and desires of the listening public. Neither fits in with the law which requires the Commission to make such a distribution of broadcast facilities among the several States and communities "as to provide a fair, efficient and equitable distribution of radio service to each of the same." This means fair, efficient and equitable to rural communities just as much as to urban communities. We do not want to be unfair to either the city-dweller or the farmer. Nor do we want to limit either of them to one program if we can help it; we would like to give him a choice of several. Some balance between many different considerations must be found. The matter is, of course, complicated by a multitude of bewildering technical factors. One is strongly tempted to say: Let us not make any rule or regulations at all; let us leave the matter to the process of evolution, to the old method of trial-and-error, fit in a station here and another there.

This temptation is, I think, a great danger to good broadcast reception. The human animal is so constituted that he needs rules, in other words, laws, to guide him. This is true both of the citizen and the government official. It is always possible for an individual to drive on the left hand side of the road without danger to anyone, *if* no one else is on the road or likely to come on the road. There is the space and it is not being used. So, also, it is possible, with an ingenious array of directional antennas and an elaborate showing of statistics on field strength and conductivity, and under peculiar circumstances, to show that there are a tiny number of instances where clear channels can be duplicated in this country—*if* you assume that the future hold forth no hope of progress and that, unlike every other agency of communication, the clear channel broadcast station is condemned to remain at a standstill with respect to power and coverage. Once you have yielded to this assumption, the result is somewhat like

what happens when an unexpected pedestrian steps in front of the automobile speeding on the wrong side of the road. The damage is done and cannot usually be remedied. What happens without rules, strictly and uniformly applied and enforced, is all too clearly shown by the radio anarchy of 1926.

I am stressing this thought because there is at least one group that will appear before you, the National Association of Regional Broadcast Stations, that will urge you to abandon any semblance of a rule protecting clear channels and keeping them clear. That group's proposal, on file with the Commission, is that you delete the word "clear" wherever it appears in your regulations and substitute the word "high-power"; that you delete every other expression in your regulations that indicates that these channels are to be used by only one station after sunset; and that you close the door to any increase of power on these channels so that this aim of duplication may be easier to accomplish. Thus, the last line of defense of the rights of the rural listening public in the Commission's regulations would be torn down; a bait is dangled before the eyes of every applicant who wants a new station or better facilities for an existing station while every clear channel station must defend its rural coverage and even its nearby coverage, over and over again, against any and all comers without help from the regulations. Oh, I know that it is easy to take a map of the United States and to impose lines on it showing that two five-kilowatt stations or even two fifty-kilowatt stations can be placed on opposite coasts, with directional antennas wasting electrical energy out over the two oceans, and that it is easy to take the census book and to show that the two areas covered contain more people than one of these stations can cover with a given signal. But to do this you have to say to yourself that the copperminer in Arizona or the rancher in Idaho is not entitled to service, or that he is getting too much and that some coastal city which may already have a choice of six, eight or ten programs is entitled to still another. This matter of clear channel protection cannot be decided from case to case and from channel to channel, depending on the evidence introduced in each case by interested parties and on the ingenuity of lawyers and engineers employed by those parties. It should be decided by regulation, scrupulously adhered to until repealed or amended. We urge, therefore, that whatever may be the number of clear channels that you decide upon, you at least continue to provide in your regulations that they shall be *clear,* and that you class the channels on which you permit duplication for what they are, high power regional.

How many frequencies should be allotted to the clear channel classification? Our Group believes that the original number of forty established in 1928 represented a sensible compromise between the conflicting objectives and the complicated factors that had to be considered. It regrets, for the sake of the future as well as the present interests of rural and remote listeners, that ten of them have been deteriorated into high-power regionals. It does not, however, advocate that these duplicated channels be restored to their virgin condition. We recognize that there may be practical obstacles to such a step. Representatives of a number of those stations will appear before you at this hearing and we have no desire to prejudge or prejudice their cases. In any event, that is a question for the Commission to decide and it would be presumptuous for us to intervene in it.

We do earnestly urge that the present *actual* number, thirty, be maintained inviolate and that they be kept clear not only within the confines of the United States but also, so far as possible under existing and future international treaties and agreements, they be kept clear throughout the continent of North America and the West Indies.

We would be burying our heads in the sand, however, if we did not recognize the formidable character of the pressure which is being exercised on this Commission to permit duplication and the impressive character of the considerations that are being urged in support of such duplication in a few particular cases. This pressure, it seems to me, falls into three classes.

Some of it may come, as it has in the past, from the licensees of clear channel stations themselves who are in peculiar and difficult situations. Such, for example, is the case where two clear channel stations are dividing time and are located at substantial distances from each other. We can readily appreciate and sympathize with the economic hardship imposed on them. Some of them, I understand, will appear before you at this hearing; what they will propose I do not know. Again, we do not want to be so presumptuous as to attempt to tell them or the Commission what public interest and justice require in such cases.

The second kind of pressure for duplication seems to arise because of instances, of which unfortunately there are a few, where the clear channel licensee is not making the best use of his channel for the purposes for which it was intended. The deficiency may be with respect to power, or antenna efficiency, or some other aspect of the technical side of station operation. Let us consider the matter of power. With one exception, all of our members' stations are using 50 kilowatts, the maximum permitted under the Commission's regulations, and one member's station is using an additional 450 kilowatts experimentally. The one exception involves a station now operating with 10 kilowatts; it has an application for 50 kilowatts pending.

There are, however, several other stations using only five or ten kilowatts on clear channels that are still clear. I have heard it argued that the licensees of these stations have failed to make proper use of their channels, that there is no serious obstacle to duplication at their present power, and that they should, so to speak, be punished for their neglect of duty, by introducing one or more other stations on the channel. Who, I may ask, is being punished? The rural public, of course, which is receiving at least some service on such channels and may look forward to a future when it will receive a much better service. The way to discipline such licensees, it seems to me, is to require them to make proper use of their channels, to install 50-kilowatt transmitters with efficient antennas, and to take any other steps that will *remedy* the defect and not to make the defect permanent. The rural public wherever such stations are located has the right to look forward to the same quality of broadcast reception as is made possible in the rest of the country under the Commission's regulations.

The third kind of pressure comes, needless to say, from applicants who want new stations or better facilities for their existing stations. In this respect the problem is not very different from what it was in 1923 and in every succeeding year. It is not only interesting, but very important, to note in what localities this pressure arises. If it comes from cities that have no service either of their own or from contiguous cities, that is one thing. If it comes from cities like Boston, New York, and Los Angeles that already have several stations, it is quite another. Perhaps a listener who already has a choice of anywhere from six to twelve programs and who also has access to the original sources of entertainment and instruction, such as theatres, movies, the lecture hall and the concert auditorium needs another program; for myself, I do not believe his need is great enough to compensate for any impairment, no matter how slight, to the meagre measure of reception that the rural listener now has and that is his only contact with the talent of this nation.

In the notice of this hearing, the Commission has asked for discussion of the social and economic effects upon the public and the industry of any proposals that are made at this hearing. If it is true, however, as I believe it is, that the breaking down of clear channels simply means a lot of new regional stations in communities that already have stations, the economic effects of the proposals on existing regionals in those communities seems more or less obvious. I can understand the point of view of the man who hopes to pluck a better assignment out of the wreckage. I cannot understand how other regional broadcasters expect to gain any advantage from having such a proposal adopted. What, incidentally, is the significance of the tendency, which has been so manifest during recent years, to move regional stations from the medium-sized and smaller cities and towns into the larger cities? Is it not more and more to concentrate regional stations in the larger cities and to leave the others to be served by clear channel stations?

Our Group hopes, therefore, that you will not effect any reduction in the present actual number of clear channels and that in no event will you effect any reduction beyond what may be necessary to meet the isolated cases of extreme hardship that I have referred to. If we are to be disappointed in this hope and you are persuaded to make even a further reduction, then I want to leave one more thought with you. We implore that you do not make such a reduction at the expense of any independently owned clear channel station. This thought is not uttered in any spirit of antagonism to either network or with any desire to see their clear channels destroyed. I think I have made it clear that our position is the very opposite of such a desire. The thought is based on the same fundamental principle which I have already dwelt on at length—the importance of keeping the independently owned station strong and healthy and in a position of bargaining equality with the most powerful broadcasting organization that may arise. We all agree—and I am sure the networks agree with this as heartily as anyone else in this room—that monopoly is not to be

tolerated in broadcasting. If all the high-power clear channel stations, or too many of them, should fall into the hands of two organizations with headquarters in New York we shall have gone a long way toward what we all agree is bad. There will be at least a partial monopoly of that very important part of the radio audience that lives in rural areas.

Our Group's fundamental position on the preservation of clear channels does not require or call for any amendment to the Commission's regulations, unless and to the extent that you change or reduce the number of clear channels. In the latter event, the amendment would consist of simply making appropriate changes in the lists of frequencies appearing under your Rules 116 and 119, transferring to the list of high-power regional channels those frequencies on which you permit duplication. You may even want to subdivide these high-power regionals, and provide a special subclassification for frequencies on which real synchronization is being carried on in good faith. But do not call such frequencies clear channels.

You have also asked for definitions. Frankly it has puzzled us to know how to meet this request. In certain respects it may be said that your present regulations are ambiguous and that they really do not define clear channels. Rule 72 says that:

> "The term 'clear channel' station means a station licensed to operate on a frequency designated as a clear channel. (See par. 116)"

Rule 116 simply designates and lists the clear channels. Taken by themselves these rules seem incomplete in that they do not say, in so many words, that the channel is to be used exclusively by one station after sunset. On the other hand, this essential feature is manifestly implied in the word "clear" and no doubt on the subject is left when the definitions of limited time and daytime stations are examined. Furthermore, the term "clear channel" has been frequently given its correct meaning in decisions and other pronouncements of the Commission, and this meaning is generally accepted and understood. We do not, therefore, believe any amendment is necessary to denote that a clear channel is exclusively used by one station after sunset and that its purpose is to provide broadcast service over large areas to the rural and remote public.

This matter of sunset, limited time stations and daytime stations is a more difficult matter. Really the only difference between these two classes under the Commission's regulations is that a limited time station is authorized to operate "during night hours, if any, not used by the dominant clear channel station". Thus the limited time station is of a class which, by its very definition, will be found only on clear channels. I do not know whether there are still any instances of limited time stations using this additional privilege. If there are, they must be only a handful in number, in view of the constant tendency of all stations, including clear channel stations, to use the early morning hours, and to extend broadcast service throughout the night. It seems to us that there is no longer any occasion for this classification and that its continuance simply means eventual hardship for the licensee of the limited time station who may have built up an audience and a business in part on the unused hours when the time comes for the clear channel station to reclaim those hours. It also means embarrassment to the clear channel licensee, and probably litigation. We, therefore, propose that either the classification of limited time stations be abolished by repeal of Rule 77, or that the rule be amended by adding a sentence somewhat as follows:

> "On and after October ...., 1936, no application for the construction or operation of a new limited time station will be granted."

We have no desire to work any hardship on any existing limited time station licensee. Limited time stations that are not using any nighttime hours should be changed over to the daytime station classification.

Daytime stations present a number of serious problems for clear channel service. There are, of course, positions on clear channels that can be occupied by daytime stations without interference to anyone, not, however, as many as sometimes thought or claimed. There are certain problems of interference which will be discussed by our technical expert, particularly due to the advancing curtain of sunset in different time zones. In addition, there is a very practical problem that is constantly raised for the dominant clear channel station by requests for consent to evening operation on the part of the daytime station and by pressure for duplication on the plea that daytime operation is uneconomic. To express our thoughts frankly, we could wish that there were no daytime stations but we realize that a proposal to this end would be impracticable and would work injustice to established stations. We are, therefore, contenting ourselves with asking no amendment to the regulations and instead we are, through our technical expert, suggesting standards of protection that should be applied to insure protection from interference.

The second of the two fundamental issues in which the Clear Channel Group is interested at this hearing is the matter of the minimum and maximum power to be required on clear channels. I can best introduce my statement of our position on this question by reading the exact amendment which we propose to your regulations. Your Rule 117 now reads as follows:

> "The authorized power of a dominant clear channel station shall be not less than 5 kilowatts nor more than 50 kilowatts."

We request that you amend it to read:

> "The authorized power of a dominant clear channel station shall be not less than 50 kilowatts."

This proposal has, of course, two aspects, the increase of minimum power from 5 to 50 kilowatts and the removal of any limitation on maximum power.

With respect to the increase of minimum power there is little to be added to what I have already said. The charge that the use of 5 kilowatts on a clear channel is not an efficient use of that power for the purpose for which it is intended, can hardly be denied. It gives *some* rural service, and at times a great deal, but not what it should. Of the few clear channel stations that still use less than 50 kilowatts, several have applications pending to go to that amount and, so far as I know, all would be willing to take the step.

The minimum should not, however, be increased above 50 kilowatts for the present. I mention this because it was rumored last fall that the Commission might require a minimum of 500 kilowatts of every clear channel station. I think practically every clear channel licensee, and certainly everyone in our Group, would be willing to meet such a requirement if in no other way could he keep the channel clear of duplication. But the economic side of the question must be frankly faced. The cities in which clear channel stations are located, and the surrounding rural areas which rely on those stations for service, differ vastly in their ability to support the necessary outlay. These differences are reflected in statistics as to population, receiving-sets per capita, and purchasing power, not to mention other factors. It is not alone the city which must be considered but the large territory which may be tributary to it in a trade sense.

Some cities and regions are able to support 500-kilowatt stations immediately. With the present trend toward prosperity, others may be expected to acquire this ability in the very near future, in one, two or three years. A few others may take a little longer. Some owners of these stations are dismayed at the original cost without realizing that, once the outlay is made, the increased cost of operation does not account for a very large proportion of the total expense of operating a station. Some have peculiar problems of their own, such as those whose stations divide time with others and who may need more time in which to resolve their problems.

It would, therefore, be unfair and unjust to such clear channel licensees to impose a minimum requirement of 500 kilowatts, at least at this time. That can be left for the future. It would be even more unfair and unjust to the rural audiences of such stations, however, if the way were blocked to the future use of this power by any restriction in the Commission's regulations which would leave the door open to some and closed to others. We urge that all clear channel stations be treated on equal terms in this regard.

What, now, are our reasons for urging that you remove the maximum limitation? We have little that is not an old story, a story that was told by Mr. Crosley, Mr. Anthony and others in support of increases in the maximum from one kilowatt to five kilowatts in October, 1924, and that was told again throughout those memorable five weeks of 50-kilowatt hearings in the fall of 1930. It is the story of improved rural coverage, both in quality and extent, and of improved urban coverage as well, made possible by the advance of applied science to the point where 500-kilowatt transmitters are available, have been tried, and have demonstrated their merits. Demonstration of these merits is a matter of proof in terms of field intensity contour maps and the like, which will be presented to you by our technical expert. I am told, and I believe it is true, that from an enigneering point of view there is no valid reason against, and there is every reason for, the installation of such transmitters on clear channels.

Thirteen years ago one kilowatt was the highest power permitted on a clear channel; now a clear channel station operating with such power is a museum-piece. Generally speaking, in 1928 five kilowatts was the highest power used by any broadcast station; a clear channel station using such power now has all but become an extinct species. Now, when we are ready to advance forward another step, which after all is of exactly the same order and the same proportionate effect as the leap from five to fifty kilowatts, why should there be opposition?

Part of the opposition is, I suppose, psychological. Five hundred thousand watts sounds like a lot of electricity. It is, however, the equivalent of only 675 horse-power, or less than one-third of the power it takes to drive a new Douglas airplane.

Some of the opposition, I gather, comes from those who are apprehensive of interference, whether through hlanketing or adjacent channel interference. Our technical experts will show that these apprehensions are unfounded. Let me digress at this point, however, to point out the perfectly ohvious fact that an increase in the power of a regional station from five hundred watts to five thousand watts is exactly the same relative increase, with exactly the same relative effect as an increase in the power of a clear channel station from fifty to five hundred kilowatts. The relative difference in signal strengths resulting from the increases contemplated hy one-kilowatt regional stations to five kilowatts and by 50-kilowatt clear channel stations to 500 kilowatts is one that is imperceptible to the human ear when translated into sound in the loudspeaker of a receiving set.

A third type of opposition is, I am told, hased on so-called economic considerations. I confess that I am more puzzled by the various meanings that are attrihuted to this word "economic" in this era of modern thought. It seems to cover all thoughts that cannot he classified under some other heading, and to bob up, like a woman's last word, when all other arguments have been demolished. I find no help in the classic treatises of Adam Smith or John Stuart Mill and must take comfort in the thought that all is not economics that is called economics. This much I say without fear of challenge from any reasonahle man; no theory, whether tagged as economics or with any other imposing label, can possihly be sound that blocks progress or that says that because a scattered few may be apprehensive of some imaginary injury the people of the country must be denied the benefits of advancing civilization.

Apparently, those who use the word in opposition to increased power on clear channels are pursuing one or hoth of two lines of thought. One of these has to do with the ability of the higher power station to support itself. The other has to do with the commercial welfare of other stations that may lie within the orbit of its service. There is much I should like to say on both subjects but, since they are in charge of another of our witnesses, I shall confine myself to a few words of a general character.

Whether a man is wise or foolish in making an investment which he believes will improve his ability to serve is often a very difficult question to answer. The advance of civilization would have been at an immeasurahly slower pace if men had not been free to hazard their fortunes on the uncertain and the unforeseeable. I do *not* think, however, that a hearing of this character can possihly be the proper forum for deciding such a question. In a way, this hearing is legislative in character. You are deciding what regulations to adopt, *not* what applications to grant. The removal of the maximum power limitation does not mean that you will permit any and all clear channel licensees to increase the power of their stations to 500 kilowatts. You are free to do so; on the other hand, you are free to deny any application or to grant it only in part, depending upon the evidence heard in each case. It is at such a hearing that consideration of a particular applicant's ahility or the community's ahility to bear and support the increased financial burden is a legitimate issue, not here. Nevertheless, we have assembled some information of a general character that may have a bearing on the issue which a later witness will summarize.

On the other line of thought, namely, the effect of a 500-kilowatt station on the economic welfare of other stations, the same later witness will, I think, demonstrate that any apprehensions on this suhject are perfectly groundless, and I shall not try to anticipate his testimony, which is the fruit of a very earnest and intensive study of the question. The apprehension seems to be, not so much that regional and local stations serving the same community will suffer; almost the exact contrary seems more likely. It is rather that such stations in other cities and towns may lose their audiences or their advertising. The answer to this is found partly in technical facts, that is, the actual increase in signal strengths involved. It is also found in the psychology of listeners who turn to the station located where they live in preference to the station of another city, if the program service is of equal interest. If the program service is not of equal interest, is it a sound principle of economics that the listener should be deprived of the hetter program so as not to cause any loss of listening puhlic or revenue to the hroadcaster of the inferior program? Does puhlic interest mean the interest of the broadcaster of or the puhlic? Should an air transport company be forhidden to place a new and improved model of plane in use because it may attract passengers from a competing line? Where would civilization be if we had followed such a philosophy? Finally, the conclusive answer is found in the actual financial record, present and past, of regional and local stations located within areas served by clear channel stations.

While we have temporarily heen halted on the 50-kilowatt line, our neighhors to the south have already advanced the hall to the 100 and 150 kilowatt lines. In Europe, some 23 hroadcast stations have power in excess of 50 kilowatts and 19 use 100 kilowatts or more. There are two 500-kilowatt stations.

So far I have spoken as if the proposed change in the regulations contemplated an increase in the maximum to 500 kilowatts. As you know, our proposal is that the maximum he not fixed at any limit. There are convincing reasons for this, of an engineering character, to he discussed hy our technical expert. In lay language, there are no valid reasons that can he urged against unlimited increases in the power used on a clear channel, suhject, of course, to such questions as adjacent-channel interference and economic ohstacles, if any, which may arise and can hest be disposed of in hearings on individual applications. Each increase means an improvement in rural coverage, advantageous at nighttime and vitally necessary in the daytime, if the entire country is to have some measure of hroadcasting service. It is perfectly possihle, that the future may hring forth as the next step forward in power an increase to 5 megawatts. At least we should take such a possihility into consideration in building the present frame-work of regulations. Consequently, we have asked our technical experts to prepare a showing of the rural broadcasting service that may be expected when the five-megawatt era arrives. Without attempting to play the rôle either of a Jules Verne or a Buck Rogers, we cannot avoid the responsibility of taking the future into account and of trying to forecast the shape of things to come.

Whatever may be your decision as to the proper maximum power, we urge you to make the privilege available to *all* clear channel stations. I do not mean that on a particular application, heard and decided at a later date, you may not find adequate reasons for refusing to withhold the privilege, but rather that the regulation leave the way open to all. The claims of particular applicants cannot be heard at this hearing and an advance decision should not he made against them by limiting the number of clear channels eligihle for the higher power. If you are not anxious to encourage such applications, it seems to me that the experience of the Federal Radio Commission with the 50-kilowatt hearings in 1930 demonstrates that the most effective way to encourage them is to give the impression through your regulations that the privileges will be limited in number and consequently to the first-comers, and that some dire consequence such as duplication may descend upon those who do not come immediately to the box-office for seats on the 500 yard line.

We have no quarrel with the claims that will be made in behalf of the regional stations for an amendment in the regulations so as to permit a horizontal nighttime power increase to five kilowatts. We believe it is reasonable, based on sound engineering facts and principles, and should be granted. So far as we have any knowledge, we have no quarrel with the claims to be made by any other group at this hearing for improvement in the regulations governing their channels. Our interest is solely in the two major issues which I have discussed.

Underlying these two issues, as well as some of the issues that will arise from the claims of other groups, there are international prohlems which we all must recognize. There are steps that might well he taken in the field of international and diplomatic negotiations which would simplify solution of the allocation prohlems in this country. There are contentions that might well be made by the delegations from the United States to the next C. C. I. R. meeting at Bucharest and the next International Telecommunications Conference at Cairo in 1938 to the same end. I have in mind, of course, difficulties such as were faced hy one of our memhers hecause of the fact that the channel used hy his station is adjacent to a Canadian exclusive channel and such as are

faced, I understand, by several stations, particularly in the regional group, in the United States hecause of interference from high power Mexican stations. This does not seem the proper time or place to discuss such prohlems or to offer any proposals for their solution. This much can he said, however. If, by reason of any change in the regulations, provision is made for additional facilities that can be used in Mexico, then those facilities should not be consumed in estahlishing additional stations in the United States until the needs of Mexico, so far as they prove well-founded, are met. Any other course of action would he a deep injustice to the broadcasting industry in this country, which stands to suffer as a whole from interference horne in from the south.

You have asked for discussion of the matter of geographical distrihution of hroadcast facilities, and of the desirahility of establishing a quota system. We see no need or occasion for establishing a quota system or any other yardstick method, so far as clear channels are concerned. The Commission's re-allocation of Novemher 11, 1928 accomplished a remarkahly fair distribution of clear channel stations, with due regard to such factors as area, population and economic support. The first four zones, which are of very unequal size, were approximately equal in population. The fifth zone, with ahout two-fifths the area of the United States, had only ahout half the population of each of the other zones. Within the zones, the distribution was also fair. The principal centers of population, which were also in most cases the principal sources of talent for broadcast programs, received more than one clear channel station, thus automatically assuring the rural public of a choice of programs. The lesser centers, strategically located over the country, received one each. You have only to consider the scattered locations of the stations helonging to our Group to realize that a very sensihle pattern was laid down. If there is to be another quota system, we suggest that you avoid one injustice that was inherent in the one recently abandoned. The state in which a clear channel station is located should not he exclusively charged with the units represented by that station, since reception from such a station may he shared by several states. Otherwise, the state is disenabled from having its fair share of regional and local facilities that it might otherwise easily accommodate.

We feel confident that the Commission does not, as a result of this hearing, contemplate any drastic or radical changes in the existing allocation. We helieve that its statement made public on July 25th last was intended as an assurance to this effect. Certainly it would be unfortunate if the industry had to undergo a major operation such as was performed on it in 1928, or if the great industry which has been built upon the present state of affairs and the immense puhlic which has attuned its listening habits to it should awake tomorrow to find many stations changed in frequency or curtailed in hours of operation or cut off from the listener by interference. Opening the door to higher power, such as is proposed hy our Group, the Regional Group and perhaps hy other groups, is necessary to keep ahreast of the technical art in the puhlic interest. It comes within the description of evolution and voluntary action. As to other proposals that may be urged upon you in the name of "evolution," we know that you will scrutinize them carefully to see if they are not really throwhacks, attempts to have you surrender ground gained in the past, reversions to the dark ages in the history of hroadcasting.

In conclusion, I take pleasure in expressing to the Commission the feeling shared hy all memhers of the Clear Channel Group that a hearing such as this is of great henefit to the cause of good radio broadcasting. There is no better route to the adoption of sound regulations than the hearing of evidence and arguments from those who may he affected. We are all deeply indehted to the Commission and its Chief Engineer and his staff for having conceived and carried out this method approach to the important prohlems with which hoth the Commission and the industry are faced.

The National Association of Broadcasters
NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.
JAMES W. BALDWIN, Managing Director

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FCC Allocation Hearing Continues

On the second day of the allocation hearings before the Federal Communications Commission the Radio Manufacturers Association, the Institute of Radio Engineers and the Columbia Broadcasting System were given an opportunity to present their case. Also the clear channel group which made an extended statement yesterday as reported in NAB REPORTS made a full statement from the engineering standpoint.

Most of the members of the Commission whether they belonged to the Broadcast Division or not were in attendance at today's hearing as well as apparently the 300 persons who registered with the Commission.

William S. Paley, President of the Columbia Broadcasting System, made a statement to the Commission on "The Direction of Progress in Radio Broadcasting."

Mr. Paley's complete statement follows:

Mr. Chairman, Members of the Federal Communications Commission: Less than four months ago I stood in this same place, before this same official body, and, I would say, before very much this same audience. And reviewing the program of speakers who have appeared and those still to appear in this hearing, it strikes me forcibly that I am one of much the same group of spokesmen for radio broadcasting who presented their views and offered their counsel to you at that time.

Then we dealt with an adventurous future. Now we are dealing with the practical present. Then we were scanning the newest miracles of the laboratory—weighing the imponderables of television—of aural broadcasting in frequencies so high they are barely within the ken of engineers—of facsimile printing of magazines and newspapers with invisible ink through the air.

Today we are faced with the problems of today—and of a visible tomorrow. We are dealing with practical but far-reaching questions of change in the domain in which we live and work and solve our daily problems—the present band of American broadcasting.

You, the members and the counsel of the Commission, and we, the broadcasters, "are at it again"—restlessly striving to improve the standards and service of American broadcasting, jointly seeking, as your announcement of this hearing phrased it, "to secure maximum service in the public interest" from the use of the frequency band of 550 to 1600 kilocycles.

I believe any thoughtful observer who has attended both the June hearing and this one must realize how striking in itself is the fact of our being re-gathered here now, to attack with fresh impact a wholly different set of problems, re-focussing all the resources of the broadcasting industry on a new field of possibilities and advancements—while the ink is barely dry on the reports of evidence submitted in that recent exploration.

I find, in this sequence, a real significance. I believe it is a tribute to the energy and ideals of both the industry and the Commission. But in it I find something else. I find proof of a grave need for great wisdom.

Searching ourselves, I find an instinctive impatience to be done with the old and on with the new. That is typical. I believe it is wholesome. But, by our very impatience, I believe we are throwing upon you—as stewards of this public domain—a heavier load, a more serious responsibility for wise and far-sighted guidance than we have ever thrown before. I believe that the last few years in the laboratory and the next few years in the field will long be viewed, in subsequent perspective, as the catalytic period of broadcasting in which its ultimate form and function will have been most largely crystallized. I believe that we are forming, in a sense, the present fulcrum of a future lever "long enough to move the world." We *must* move wisely.

A Triple Approach

Our study of the field of proposed changes in the regulations governing the allocation and use of frequencies in the present broadcast band has followed three lines of approach. One is represented by our technical staff, which has analyzed the engineering facts which bear upon part or all of the contemplated modifications. A second approach has been made by our Market Research Division, which has related the known and the implied effects of this engineering data to population distribution and to the coverage and service of market areas, attempting to orient its conclusions to the economic life of America and to the constructive service that broadcasting renders to American industry.

Our third approach to the problem, while it depended for facts on both the other two, expressly freed itself from the limitations of both. This third approach was, in a sense, a social approach, or a public service approach, and represented the sum of what we feel the Columbia Broadcasting System is and should be—with all the serious responsibilities which it embraces in our network relations with more than a hundred separate broadcasting stations—and with more than eighty million radio listeners. Subsequently, our thinking moved on to still another plane, but I will come to that later.

What I want to say now is that the Columbia Broadcasting System appears at this hearing not as a technical organization, although our technicians will present certain exhibits which I believe the Commission will find to be original and helpful contributions. Nor does Columbia appear here primarily as a business organization, except to the extent that economics are a necessary means to any social end. Surely any stress of economics as an end in themselves would betray a lack of understanding of the vital role which broadcasting plays on every plane of American life. I should therefore like to emphasize the point that further exhibits which will be presented by our Market Research Division are not offered as ends in themselves, but as additional data which may be of assistance to the Commission in its complex problem of interrelating the parts to the whole.

Columbia *is* appearing at this hearing primarily as a service organization—because our record in broadcasting, and our proper role, is one of service to the public. Only to the extent that we have rendered such a service—broadly and well—have we grown and progressed.

One Star Is Fixed

Of the many suggested topics and sub-topics outlined by the Commission for discussion in this hearing, I have therefore felt free to select only those basic proposals which we believe contain the greatest potential effect on public service. And because we are fundamentally committed to this concept, I should like to say at once that any modification in the Commission's rules, any change in its regulations which will advance the public service which the Columbia Network or the broadcasting industry as a whole can render, must and will receive our enthusiastic support. By the same unvarying compass, any changes which threaten to lower present standards of public service we must as resolutely oppose.

From this viewpoint it seems to me that the most important topics which lie within the scope of this hearing are the increases in power above fifty kilowatts—presumably to five hundred kilowatts—on clear channels, the duplicated use of other clear channel frequencies by two 50-kilowatt stations, and the horizontal increases in power applicable to regional stations and permitting many of them now limited to one thousand watts to operate simultaneously with five thousand watts at night. I do not mean to minimize the

importance of many of the other topics named for consideration in this hearing. But I believe their importance is relative and, in many instances, corollary to or parallel to these three basic shifts of standards.

What Is Public Service In Broadcasting?

I have promised to view these changes from the standpoint of public service. I should now like further to clear the ground by defining what we of the Columbia Broadcasting System believe service to the radio listening public must essentially involve. Stripped of all controversial questions, reduced to the bare essentials which we believe command universal agreement, we define it as two things: a signal service and a program service.

These, we feel, are the two basic dimensions of public service in radio broadcasting—the delivery of a clear signal to radio receiving sets, and the use of that signal to bring to listeners programs of the highest standards of creative art in the field of entertainment, the highest standards of intellectual integrity in the field of education and public affairs, the highest standards of honesty and good taste in the fields of merchandising and advertising. I call these two things—radio programs and radio signals—the two dimensions of *a single thing,* public service, because it is self-evident that public service in broadcasting cannot exist with only one of them. They are related to each other as length and breadth, as form and substance.

It is the essential indivisibility of these two factors which forms the keynote of our thinking about contemplated changes in the present broadcast structure. We have *made* it a keynote because we believe there may be a danger, which I will touch on more fully later, of seeing too clearly the advantages in signal service which more and more power promises, without seeing as clearly the need for searching analysis of any threat to program service which might be the ultimate result.

This note of caution may seem a strange approach to what I am going to say next.

> *Because I am prepared to state that, subject only to variables which do not permit too specific a prediction, we believe the public service offered by the Columbia Broadcasting System, judged in terms of rendering the greatest good to the largest number, will not be conspicuously affected by the general advent of super-power, of duplicated 50-kilowatt stations, or of horizontal increases in power by regional stations.*

That is our best judgment of the changes and counter-changes, the additions and subtractions, the adjustments and readjustments, which we believe would result from those three basic changes in the broadcast structure.

Let me touch separately on our attitude, as a network, toward each of the three moves, because our conclusions as to their combined effect are, of course, based on the separate effects of each. I shall do this briefly, at this point, only to pave the way for a more detailed analysis, which I wish to offer from a fresh and different viewpoint shortly.

Super-power and the Network

First, super-power. To protect our thinking in terms of super-power, it was necessary to make certain assumptions. Since the effect of super-power would naturally vary in degree with the number and location of 500-kilowatt stations, we assumed what seemed to be a probable outside limit for the development of super-power stations. In other words, we asked ourselves the question, "How would the public service which Columbia renders be affected if a *maximum* number of super-power stations were built?" We estimated that maximum, under any general ruling which encouraged super-power on unimpaired clear channels, to permit as many as twenty-five 500-kilowatt stations in the United States.

We then further assumed—although I think I would be justified in calling this "expert opinion", rather than mere assumption—that we would be forced to drop from our network any stations which lay within the primary service area of each new super-power station. Conversely, we assumed that we would *not* be forced to drop any stations in fair-sized or larger cities which lay outside that primary area, but which did lie in the secondary area of the super-power stations—that is, in the area of their distant night-time coverage.

When I say "forced to drop certain stations", I mean simply this: we owe certain things to each station on the Columbia Network. Chief among these things are programs. They are of two kinds, commercial and non-commercial programs. Whichever they are, they are aimed at so high a standard of entertainment or education or information that they will build and maintain for that network station a large and steady audience. This audience must be large enough and dependable enough to permit the station profitably to render a corresponding local service in its own community.

I am not unmindful of the striking examples of distinguished programs which these stations, out of their own local resources, have frequently originated—some of them so worthwhile that we have been proud to carry them over the coast-to-coast CBS Network. But this in no way alters the fact that the network station depends—and has a right to depend—on the fullest support of network programs. This is a creative, competitive, constructive kind of support and lies at the base of much that is vital to American radio.

I say we *owe* that support to each station on our network. Now it would be obviously unfair for us to undermine the very stations to whom we have pledged that support by providing the same programs to several stations that lay in each other's primary service area. Instead of building audience for each, this would divide it. That is true of both sponsored and non-sponsored network programs, and lest it be overlooked, let me point out that today many of the most popular programs from the audience standpoint, as well as many of the finest musical and educational programs, are sponsored programs.

Need I add, that even were we willing as a network, to supply the same sustaining programs to stations that lie in each other's primary service area, the sponsor of commercial programs would not make the same mistake. He would not and could not buy wasteful duplication. The smaller stations in the primary area of super-power stations, even were they kept nominally on the network, would thus fail to receive the strong schedule of sponsored network programs and would fight a losing battle.

In short, so far as we can estimate its effect on Columbia as a network, it is our reasoned conclusion that super-power would result in the substitution by advertisers of one super-power station for several of the smaller stations now on the network in the area encircling any new super-power station. The net result should increase our service to remote rural areas at night—at the possible expense of providing parts of certain cities with a remote signal wholly satisfactory for reception, but of lower level than the present signal of the network stations now within those cities. So much, for the moment, about super-power.

50,000-Watt Duplication and the Network

Our network viewpoint of the second of the three possible moves I am discussing can be summarized almost in a sentence. In the duplicate use of certain clear channels by two 50-kilowatt stations, we see a real improvement in public service, particularly on those clear channels already impaired by the presence of two stations sharing time, and thereby limiting the over-all public service rendered by each in its area. But here, too, I must point out that any corresponding gain in *our network service* would be reduced by two interlocking factors. (Although we know of no probable area in which both of these factors are apt to occur, we must admit their possibility and be prepared to cope with it.) On the one hand, any such 50-kilowatt stations which lay within the primary area of new 500-kilowatt stations would, like lower power stations, *tend* to be dropped from the network. On the other hand, the gain in service from any station remaining on the network which increased its power to 50 kilowatts under this move would sooner or later force us to drop regional or local stations which lay, in turn, within the enlarged primary service area of the 50-kilowatt station.

5000-Watt Regional Stations and the Network

The third contemplated move is negligible in its effect on network service, compared to the two I have touched on. In the increase of power for many regional stations from 1000 to 5000 watts, we see gains for each station in signal service. It must be remembered, however, that to the extent such stations were forced off the networks by the other two moves, these gains in coverage would not be reflected in the service rendered by the networks themselves.

Revised Network Structure

Broadly then, and still speaking from the viewpoint of the service which we of the Columbia are rendering as a network, we believe that all three moves toward super-power, toward duplication and toward 5000-watt regional stations, combine to force a new pattern of network coverage—a pattern involving the use of fewer stations

of greater power . . . with a stronger signal service in rural areas . . . with a satisfactory, if sometimes lesser signal service in cities where stations must be dropped from the network to maintain a balance of economics and of public service. We foresee no material effect upon our *program service*, in such a network structure. We believe that it is salable, perhaps at somewhat higher cost, to those leaders of American industry whose use of broadcasting as a medium for nation-wide advertising has provided the economic base for the finest program service of any country in the world.

Under the present broadcast structure, $10,000,000 annually for talent alone is poured into sixteen hours a day of Columbia programs. Under the possible new structure I have outlined, we believe this generous endowment would not be threatened. It is upon this kind of reasoning, based on innumerable maps and charts and work-sheets which I have gone over in the past few weeks, that I venture the statement which I have made that Columbia's service to the public, super-power or no super-power, will be steadfastly maintained.

Another Viewpoint

Up to this point in my comments, I have discussed the contemplated changes in the broadcast structure solely from the viewpoint of the Columbia Network. I have done tbis deliberately. I have tried to do it dispassionately. I think that it would be less than honest not to admit that this viewpoint must be our first viewpoint. More than that, I believe that the program service Columbia is rendering to the nation is a sufficiently important part of the total public service in radio broadcasting to constitute, if it *did* hang in the balance, a factor to be weighed by the Commission in its review of the entire problem. That we find it does *not* hang in the balance, that we find no *vital* issue involved, from our own standpoint, is the focal point of everything else that I have to say.

I mentioned at the outset of this talk that our thinking moved from one plane onto another, as we progressed in our analysis of the problems. The first plane was the one I have described—the interests of Columbia as a network, in terms of the public service which we render. The second plane was that of Columbia, not as a whole, but as the various parts of that whole.

Our identity is, in reality, the identity of 105 stations which compose our network. Those 105 stations include clear channel stations, regional stations, and local stations. And because we found that Columbia as a whole could view with essential neutrality all or any of the proposed changes, we were placed in a position to study impartially and sympathetically the effect of these changes on our member stations in each classification.

These stations are not, to us, mere kilocycle numbers on the wave-band or power ratings at transmitters. They are station owners and managers. They are people and groups of people who have grown with us and worked with us through the last eight years of broadcasting. They have helped us solve our problems and we have been able to help them with theirs. And I propose to outline briefly here the specific effects, the disadvantages and the advantages, which we believe super-power, as the most drastic single change under consideration, promises to each of these three groups of stations.

In this effort to divide ourselves into the identities of our affiliated stations, I believe we have at once projected our thinking beyond even those boundaries. I mean that our inferences in behalf of Columbia stations on clear, regional and local channels, have necessarily been extended to stations in these classifications regardless of what their network affiliation may be.

A Broader Evaluation

I hope that such a listing of the pros and cons of super-power, from a source witbin the industry which numbers affiliates in each class of station, will add something of sound perspective to the evidence submitted at this hearing. I should like to offer it without the presumption that we know any station's individual problems as well as it knows its own, but only with tbe assumption that we are in a unique position to attempt this broad evaluation.

Some of the advantages and disadvantages which we see will be stated as conclusions, some will be stated as questions, either because we believe that more searching and complete data are needed than are now available, or because regardless of data only the play and counter-play of practical experience can write the final answers.

If I seem, in this further analysis, to refer more frequently to the economics of broadcasting from the standpoint of individual stations, I think you will find, before I have concluded, that again we have given thought to these considerations only as essential strands in the fibers and cross-fibers of the service to listeners which these stations render.

Effects of Super-power on Super-power Stations

First, what are the benefits and dangers of super-power to the super-power stations themselves? Are there pitfalls in tbe path of those stations which hope to benefit most from super-power?

The *advantages* of super-power to the super-power station itself are self-evident. A stronger signal throughout its entire area, an extension of that area of service, an increase in rural audience, a greater theoretical revenue because its time should be more valuable.

The *disadvantages* are, on one hand, less specific, on the other hand, more numerous. First, if the station's own program standards are not to suffer, its greater theoretical sales revenue must carry the load of an investment in the neighborhood of half a million dollars and an operating cost estimated to be $150,000 higber annually than that of even a 50,000-watt station. This presumes no profit wbatever on the additional investment or operating cost. If its increased sales fail to provide all of this differential, then funds now going into program service and management must be taken out of programs and management and put into transmitter operation.

A second disadvantage emphasizes the first: Except in the largest cities, and except for the largest merchants, the increased card rate necessary to a 500-kilowatt station will tend to make it a prohibitive medium for local advertisers. Single exceptions notwithstanding, tbe record of local advertising media whose circulation has grown well beyond their trading areas reveals that tbey have been forced to lose local retail advertising, or to offer it at a special and lowered rate. This is feasible for a newspaper, for instance, which can sell its city circulation at a lowered rate, because it can exclude the local merchants' advertising from its state-wide or inter-state editions. That, however, is impossible for a super-power radio station. If it does lower its rate to local advertisers, while delivering tbe same coverage as it delivers to national advertisers, tbe net result is apt to be an actual operating loss on the sale of local advertising, which must be compensated by an artificially high rate to national advertisers. An economic paradox results which makes the super-power station's problems harder.

The third disadvantage for the super-power station lies in the multiplication of its numbers. Here I should like to fall back upon questions. Can twenty or twenty-five super-power stations be as successful as one? Will the existence of many 500-kilowatt stations tend to equalize and nullify the advantages of eacb, although it does nothing to nullify the heavy investment and operating cost of each? In other words, isn't it dangerous to project the phenomenon of one superpower station into the commonplace of many?

Defensive Necessity

And now I should like to abandon, for a moment, these pros and cons, to make a point which I think is essential to all our thinking about super-power. I said in the first part of this report that in our analysis, we had assumed a maximum number of super-power stations—as many as twenty-five. We assumed this because we believe it is exactly what will happen if super-power is once admitted by new regulations. Tbere has been, I think, some belief that super-power would limit itself, by reason of common sense and economics, to a few of our largest markets. I do not believe tbis is so. I believe that once tbe bars are let down, no one can stop it. Stations which do not want it and cannot support it will be driven defensively to apply for it and build it—either to protect their own service areas from invasion or to maintain their competitive position in prestige and sales. I think we must face honestly the almost certain fact that if super-power is generally admitted under tbe rules, it will appear in cities and in markets that have little possibility of supporting it without detriment to local program service, and will extend so widely tbat it becomes a commonplace.

Effects of Super-power on Regional Network Stations

Turning now to the effect which super-power stations are likely to exert on regional stations throughout the United States, we find the likelihood of strong repercussions. There appear to us to be definite advantages which should accrue to certain regional stations. It is our belief that regional stations located in the same cities as new super-power stations may well strengthen rather than weaken their competitive position. These regional stations are now competing locally with clear channel stations whose present maximum power is 50,000 watts. For the most part, it is a successful competition. In the field of retail advertising by local merchants, com-

petition with a super-power station should favor the regional station. It will remain a lower-cost medium for reaching the metropolitan market without waste, and should "inherit" the advertising accounts of many local merchants who find super-power prohibitive in cost and wasteful in circulation.

Again, however, the disadantages of super-power in its effect upon regional stations are more numerous, and, in this class of station, more specific. For instance, the one *advantage* I have just cited in hehalf of regional stations in large cities hecomes a serious *disadvantage* when we move out of those metropolitan markets. Let's look at the prohlems of regional stations in medium-size and smaller cities, in which an outside super-power station will deliver a strong signal. Such regional stations have no local business to *gain* from the distant super-power station, but they have a suhstantial amount of national husiness to *lose*. The national advertiser who has used these stations for transcriptions or spot announcements will be able to reach the regional station's market satisfactorily with super-power. He will tend, just as the network advertiser will tend, to pay a higher price for fewer stations. How can such regional stations expect to stay on his list?

But perhaps the most serious problem which confronts these regional stations which are now on one of the networks, and which lie within the future service area of a super-power station, is the fact that they must face the prohahle loss of their network affiliation. Without trying to glorify the importance of network service to regional stations, but looking at this service realistically, its loss is apt to prove a serious detriment to the survival of such stations, or at least to the standard of puhlic service which they now render. This loss is of three kinds. First, a loss of audience, and on this point we need not rely upon theory or opinion. Authentic and authoritative data are availahle, running hack over a six-year period, to show what difference in a station's audience network programs make. Our data cover the addition and subtraction of stations to and from hoth the Columbia and NBC Networks. The addition of network programs seldom fails to douhle the habitual audience of a station, even within its own city. The subtraction of network programs seldom fails to reduce that audience hy half. I need hardly add that when a station's audience is cut in half, many consequences follow. Its time is sushstantially less salable, its revenues are threatened, it is faced with the choice, usually, of accepting undesirable husiness not in the public interest, or for foregoing that business and stinting its own program service.

The second loss involved in dropping a station from the network is the station's loss of actual revenue from the network for its time. This loss in turn has two aspects. a positive and a negative aspect. The positive aspect represents the amount of money which the station no longer receives from the network. The negative aspect is the consequent additional cost to the station in building its own programs to fill the hours previously filled hy sponsored network programs, except to the extent that it can sell those hours locally.

The third loss which such a station faces is the loss of many hours a day of non-commercial network programs availahle to it now, representing many of the high points of station prestige and of audience appeal. It must find the funds, out of a diminishing return, to fill those hours, too, with its own programs.

I have dwelt on these three losses separately, not with any wish to dramatize them, hut hecause they reflect the essential nature of the relationship hetween the network and the stations which it serves.

Effect of Super-power on Local Network Stations

As to the effect of super-power *on local stations,* we find only disadvantages and dangers. All of the disadvantages which I have mentioned in behalf of regional stations will hit first and hardest at local stations. Ohviously, those which lie within the service areas of super-power stations will he the first to he forced off the networks. Because they tend to lie in still smaller communities, their task of finding both local revenue and programs to maintain their service to the puhlic will be still harder.

As an example of the specific effect of super-power in two cities on the present Columhia Network, we found that seven stations would, in all prohahility, have to be dropped from the network. This was determined hy the simple yardstick which I mentioned earlier. We mapped conservative contours of the primary service area of a theoretical 500-kilowatt station in each of these two cities. These contours were based upon careful engineering research, upon carefully chosen transmitter sites, upon detailed knowledge of terrain, soil conductivity, and attenuation. The seven stations of which I speak, hoth regional and local, fell clearly within the primary service areas of the two super-power stations. May I add that we would have no *desire* to drop these or any other stations, but that it is our inescapable conclusion, for reasons already set forth, that we should be forced to do so.

Effect of Super-power on Non-Network Stations

It was inevitable that our thinking along these lines, once it was freed from any threat to the service Columhia renders as a network, should go one step further. All of the stations I have considered up to this point are network stations. There remains another group of stations upon whom the effect of super-power would be considerable. These are stations not on any network, nor within the primary service area of any present network station. They are stations, for the larger part, located in cities with populations ranging from less than 1000 to over 100,000. Their average population is 26,173. These stations range in power from 5,000 watts down to 50 watts. Most of them are 500-watt, 250-watt and 100-watt stations. There are 203 such stations in the United States. They are stations which, for the most part, have established a balance, even though a precarious balance, in the economic life of their communities. Taking the broadcasting day as a whole, they rarely command a sizahle portion of the audience within their limited trading areas, because in practically all of them they are competing with the distant signal of more powerful stations, carrying outstanding programs. But they enjoy sufficient audience for the local sale of time at modest rates. And for perhaps an hour in the morning, or a half-hour at noon, or in some period early or late in the evening, they do a giant's joh for their communities, hecause they reflect the life and express the pulse of their own people. They deliver, to those communities, a signal which is at least good enough to compete with present signals from outside stations. Moreover, many of these smaller stations render a regular service to outlying farms—a service keyed to the special crops and the special soil of the community, to county agricultural problems, to community blight problems—a service, in other words, which no remote station can render. What will happen to most of these 203 stations if the signal from distant stations sweeps through their communities with three and four times its present strength, and if the number of distant stations now competing with these local stations in their own towns is also substantially increased? Can they continue to hold an average audience large enough for them to preserve their modest revenues from the sale of time? Are we threatening, by means of super-power, the actual existence of these stations, these "innocent hystanders" of super-power—and the splendid role they play in the social and civic life of their communities?

The Strong Will Grow Stronger

I think it will be clear from what I have said that, in contrast with our interests as a network, we are seriously concerned with the many problems super-power raises outside the network field, in the interests of radio broadcasting as a whole. I am not trying to plead two sides of a case, but all the evidence at our disposal and all the logic we can hring to bear on the issue of super-power tends to show simply this: super-power, if awarded to anyone, can only be awarded to the stations which today have the highest power. Its threat lies against the stations with lower power, its worst threat against those of lowest power. In effect, it will make the hig fellow stronger, it will make the little fellow weaker.

Unless some way can be found to check or counteract this tendency, it would seem destined to hurt, not to help, the complex local, regional and national service which radio broadcasting now renders, if *all* of America's audience is given equal consideration. In attempting to give farm areas themselves a better national service, it might well undermine the valuable local service which many of those farms now depend on.

In fact, I wonder if there has been any clear evaluation of the *degree* of improvement in signal service throughout the nation generally—and in farm areas specifically—which super-power would, in reality, achieve. I wonder if advocates of super-power have been thinking in terms of black and white, in which the black is too black and the white is too white. If we consider super-power not in terms of the stations which would henefit hy it or the stations which would suffer from it, but in terms of *the listening public,* what do we find? We find that the difference between 500 kilowatts and 50 kilowatts is clearly *not* the difference between good service and bad service. Even in deep rural areas, it is rarely the difference between a usable and a non-usahle signal. The Commission's own study of farm reception showed that practically every farm home actually listened to three or four stations, and named them as *favorite* stations. Perhaps in one-half of one percent of the radio homes of the United States, and there only

at night, super-power, as such, would make the difference between an adequate and an inadequate signal. And in about half of these homes, the replacement of obsolete sets with new sets could effect an equal improvement, since they are preponderantly farm homes, the only class of homes in which the replacement of old sets has lagged behind.

I believe we should cling, in shaping the direction of progress in radio broadcasting, to the sound principle of providing "the greatest good for the largest number." If, to achieve merely "a moderate good for the smallest number", super-power threatens the full and varied service now rendered to all radio homes in the United States, including the farm homes it is most meant to benefit, it is self-indicted at the outset.

A Familiar Cross-roads

Let me diverge for a moment from the hard ground of cause and effect I have been treading to make a more general observation. Too often in the history of scientific or inventive achievement, the physical development of an invention is allowed to eclipse its proper place in human life. Too often the machine runs away with itself, as it were, instead of keeping pace with the social needs it was created to serve.

I believe that in the indiscriminate use of super-power in radio broadcasting, we may well face the same kind of threat. I hope and believe that, in this enlightened day and in this enlightened industry, we can avoid so needless a mistake. For the progress of radio is already marked by a striking change in interest—a qualitative change from *mechanical* interest to *social and mental and human interest*. Eight years ago we maintained a complete department to answer radio listeners in remote sections of the country who sent in records of the stations they had heard, the call letters of the stations, the wave-length on the dial, the hour at which they tuned it in. These correspondents asked just one thing—that we verify the fact that such a station did broadcast such and such a program on such and such a wave-length at the stated hour. The listener was interested in the mechanical phenomenon as such.

Today that department is no longer in existence. Today listeners write about the significance of a broadcast message they have heard, the validity of a talk they have tuned in, the arrangement of music, the character of a performer, the spiritual quality of a sermon, the performance of a symphony.

Dynamic Equilibrium

That shift from radio's domination by the machines which transmit it—that shift to radio's liberation as an art—typifies not only the listening audience. It typifies the actual work of the broadcasters. Our own energies have found new outlets. Today we are in the middle of a quarter-million dollar program of research into new studio techniques, new acoustical principles for broadcasting, new dimensions of sound to create symphonies which composers of the past could not have dreamed of. We have endowed a group of contemporary composers to do something they have never tried to do before: to write serious music expressly for radio broadcasting, music freed from the intrinsic limitations of the instruments which will play it, by virtue of the microphone and sound control. Instruments of such delicate tone that they could be heard only in the hush of small drawing-rooms of the past may reappear to dominate brasses and drums in great orchestras of the air. New experiments are going on in surges of creative zeal. A dozen young men are seeking new forms of the dramatic art in Columbia's Dramatic Workshop. Millions of children are finding history brought to life through the new artistic forms of Columbia's School of the Air. I may seem to draw too heavily on our own creative work. But I am sure it is typical of the broadcasting field. I am sure it represents the true purpose of radio. I do not mean to infer that vigilance has been relaxed, or should be relaxed, from the physical facilities of radio, but that preoccupation with those physical facilities should not subtract from our contributions in other fields. We have, I am sincerely convinced, struck what might be called a dynamic equilibrium between the physical resources of radio—and the vital and moving forces which promise its fullest social usefulness. Let us not upset that equilibrium. Above all, let us not reverse the nature and direction of the progress broadcasting has made.

Coming back from this foray into the abstract truths which, I believe, lie behind our concrete problems, I should like to urge upon the Commission and the industry one basic consideration on the subject of super-power:

Study it.

I do not believe any of us knows enough about the immediate effects and the subsequent effects of super-power, both in itself and in relation to the progress and welfare of radio broadcasting and radio listening in American life. Many of the doubts I have raised have been, expressly, doubts. Many of them have been questions, not answers. *We* need those answers. I believe the Commission needs those answers before altering the basic structure of broadcasting. I believe that a dozen studies of the most exhaustive sort are in order. Studies which will tell us more than we know now about listening and signals in rural areas. Studies which will tell us more about super-power as it bounds and rebounds against itself and against regional and local stations. Studies which will tell us whether super-power, held within rigid geographical and numerical limits, might render a service free from the threats of widespread super-power. Studies which will determine if it has a sphere of real usefulness.

We need specific facts to answer such questions as these: Can a 500-kilowatt station located on either seaboard be as efficient as one located in the center of the country? Isn't half the coverage of a super-power station which is squandered on an ocean a proof of self-evident waste? By barring super-power, at least from east and west coasts, how many more channels would be open for duplicated 50-kilowatt stations? Might not these additional 50-kilowatt stations, strategically placed, produce a greater total public service?

Members of our Market Research Division will outline, at this hearing, the specific nature of the further research which we hope may precede any change in the Commission's regulations on this score.

There is one final point which I wish to throw into the balance against any drastic change in the broadcast structure at the present time. That is the threshold of new pioneering into other fields upon which the broadcasters stand. I spoke of the June hearing at the opening of this talk. I would like to close with the same reference—put into more definite terms. The industry as a whole is faced with capital expenditures that many individual broadcasters may still have no conception of. In television alone, it is my opinion, after a study of European developments and a knowledge of television's status here, that the broadcasters are less than two years away from commitments of many millions of dollars. Columbia's budget alone is over $2,000,000—for experimental broadcasting work in this new field. Many more millions must follow, in the public interest, before there is any hope of return.

Now what about the cost of super-power? Our careful estimates of the cost of 500-kilowatt stations indicate a burden of over $10,000,000 of capital investment by the broadcasters—with an additional operating cost of between $3,000,000 and $4,000,000 per year. These are not guesses, but careful estimates by engineers and accountants. Knowing the economics of broadcasting as well as we do, I feel justified in saying that if the burden of cost of super-power is thrown upon the industry at almost the same time it is faced with costly developmental work in new fields, one or the other is very apt to suffer.

Meanwhile, the Columbia Broadcasting System stands ready to accept its share of the load, if super-power is admitted as a full-fledged member of the broadcast family. If the Commission sees fit, in the light of all the evidence, to sanction super-power, Columbia will apply for its full quota. Three of our affiliate stations, WJR, Detroit, WHAS, Louisville, and KSL, Salt Lake City, have already applied. Certain of our other affiliate stations *will* apply. Six more of the clear channel stations on the Columbia Network, six stations which we own ourselves, will similarly file applications for five hundred kilowatts in New York, Chicago, Charlotte, Minneapolis, St. Louis, and Los Angeles. We have, in fact, no other choice. If the individual station, to protect its own signal from disparity or to protect its signal area from invasion, is forced to build super-power in its *own* market, this is still more true of the network. Because *all* markets are the markets of the network. *All* areas are its service areas. *All* listeners, in a constant creative bidding for their interest, are its listeners. Therefore, if super-power is to come we will build and operate 500 kilowatt stations wherever the Commission will sanction them at strategic points on the Columbia Network.

The engineering conception of the clear channel, Dr. Alan Hazeltine, President of the Institute of Radio Engineers told the Commission, "has always been the absolute absence of duplication of assignments in the North American region during night hours. If more than one station is assigned for night operation on a given channel that channel automatically becomes shared and it is believed that it should be so classified by the Commission."

Dr. Hazeltine said that the Institute recognizes that engineering

problems involved in broadcast allocation are intimately interwoven with problems of social, legal and economic character.

Dr. Hazeltine continued:

In the announcement of this hearing the Commission has outlined in considerable detail the topics on which discussion is desired. Many of these items are essentially technical and quite fundamental in their nature. It has been felt, therefore, that comment by a purely engineering group, such as the Institute of Radio Engineers, should be helpful and would be welcomed. Accordingly, the statement which follows has been prepared by the Institute's Broadcast Committee and is presented to you with the approval of its Board of Directors.

Engineering Problems

At the outset, the Institute of Radio Engineers recognizes that the engineering problems involved in broadcast allocation are intimately interwoven with problems of social, legal and economic character. Such latter problems are inherently less capable of precise formulation than engineering problems; and their tentative solutions are best described under the term general policy.

Among the matters of general policy lies that of maintaining both reasonable stability in the broadcast structure and its healthy growth. On the one band, no sudden and drastic change, regardless of its technical merits, would be possible from a practical standpoint. For we have a great body of listeners who collectively have an investment in over 25,000,000 radio receivers and behind them a well established industry employing tens of thousands of people and representing a large capital outlay. Thus for the time being at least the country will look to the 550-1600 kilocycle band for the bulk of its broadcast service. On the other hand, provision is needed for the application in service of technical advances, both in improving conditions in the 550-1600 kilocycle band and in making use of other portions of the spectrum that may be found suitable and available for broadcasting. Thus the present policy of granting experimental licenses to qualified applicants for exploratory work is sound and should be continued. The questions that must be answered before a decision can be reached on the establishment of a broadcast service at frequencies remote from the present broadcast band are so wide in scope and so involved that, in general, only actual operation over a reasonable period of time will afford adequate information. The pioneering work that is now being done in the high frequency and very high frequency bands is thought to be particularly worthy of encouragement. It is firmly believed to be in the public interest that such changes as are found desirable in methods of operation or in the bands allocated to broadcasting should be made on an evolutionary basis after experimental trial.

Clear Channels

An important matter of policy is the establishment of *clear channels* and the determination of their number and their geographical and frequency distributions. The engineering conception of the clear channel has always been the absolute absence of duplication of assignments in the North American region during night hours. If more than one station is assigned for night operation on a given channel, that channel automatically becomes *shared;* and it is believed that it should be so classified by the Commission.

Some three years ago, the Institute's Broadcast Committee prepared a statement dealing with the question of the relative number of clear and shared channels. This statement was transmitted to the Radio Commission and subsequently published in the IRE Proceedings (vol. 21, p. 331, March, 1933) under the title "The Clear Channel in American Broadcasting." Subsequent developments have not affected the validity of the conclusions; and the following quotations from it may serve to indicate more clearly the existing situation with regard to such matters and to point out the direction in which remedial measures should be applied.

Statement

The statement first points out that:

1. "The field of the shared channel is to afford broadcasting service to important detached centers of population, such as our cities and larger towns.

2. "The field of the clear channel is to afford service to those vast intervening areas in which the density of population is so low that a broadcast service could not otherwise be supported, and in addition to a single large center."

From these definitions it is concluded that:

1. "Decreasing the number of clear channels by assigning additional stations (for nighttime operation) to channels now used by only one station at a time would have the effect of affording additional services to certain localized urban groups but at the expense of decreasing the service to rural listeners and to those at remote points.

2. "Increasing the number of clear channels at the expense of the shared channels would have the opposite effect, assuming that assignments for the stations thus displaced could not be provided for on the remaining shared channels."

And finally the situation is summarized in the final paragraph as follows:

"Assuming that service to distant listeners is to be maintained it is evident that continued provision must be made for an adequate number of clear channels. Whether the number should be forty, or more, or less, however, is a matter that can be determined only by careful study. The balance of service between the rural listener and the urban listener is determined in considerable measure by the relative number of allocated clear and shared channels. Decision as to the correct balance point is a matter of general policy."

Adequate Channels

From the engineering standpoint, it is believed that the continuance of an adequate number of clear channels is the only economic way of extending broadcast service worthy of the name to the scattered populations of the nation's farms and country towns and thus to comply with the provision of the law that "the Commission shall make such distribution of licenses, frequencies, hours of operation and of power among the several States and communities as to provide a fair, efficient and equitable distribution of radio service to each of the same" (recent revision of the Communications Act, Section 307 (b)). If there were ever any doubt concerning the extent to which rural listeners depend upon clear channel stations for their service, the results of the Allocation Survey recently published by the Commission should serve to remove it.

Define Clear Channels

It is believed that, to avoid confusion of thought and action, it would be helpful to include in the Commission's regulations a definition of a clear channel station as one adapted to serve a substantial portion of the whole country. Essential elements in achieving this purpose are recognized in the "empirical standards" employed by the Engineering Department of the Commission. The incorporation of standards of this character into the regulations in also recommended.

The exclusive nature of the clear channel assignment can only be justified by the night-time service to remote points which is made possible thereby. Such an exclusive assignment, therefore, carries with it a responsibility for extended rural service that should be fully recognized by all concerned. Of prime importance in this connection is the matter of power. After sixteen years of experience there is certainly ample technical evidence with regard to the dependence of satisfactory service on adequate power. Under the circumstances, it seems only logical and consistent to require on channels that are set aside at some sacrifice to serve the more distant rural sections of the country the use of the highest power that is technically and economically feasible. In view of the great success of the experiments with high power at WLW, which is strikingly confirmed by the results of the Allocation Survey, it is evident that a desirable power for at least some clear channel stations is 500 kilowatts or more. Many of the reputed limitations of clear channel coverage which have come up for discussion in recent years are undoubtedly merely the inevitable consequences of inadequate power for this type of assignment.

Allocations

Turning now to the *shared channel allocations,* we are fortunate in having available for guidance the principle embodied in the distance tables of the Commission of affording protection against interference to the good service area of a station. Here the Institute recognizes the policies necessitated by other than engineering considerations of classifying stations in accordance with the different degrees of protection afforded and of modifying the degree of protection in specific instances when this appears to be in the public interest. However, it is felt that distance tables, revised from time to time as the radio art advances and as more transmission data become available, constitute a valuable general guide, and it is

recommended that they be given formal recognition in the Commission's regulations. In applying and in revising these distance tahles, the Institute invites attention to the engineering factors outlined in the following paragraphs.

Distance Tables

In applying the distance tahles, the data which should determine whether or not a particular assignment is satisfactory from the interference standpoint should preferably not he average values computed to he reasonahly representative of conditions throughout the whole country, hut actual measurements made within the area under consideration, whenever these are available. The wide variations in earth conductivity known to exist in the country, and the recognized change of attenuation with frequency, comhine to produce wide departures from the national average in particular cases. Under the circumstances, it is helieved that hetter balance within the allocations structure and increased capacity for service within the broadcast hand will he promoted hy allowing the distance tahles to he superseded in specific instances by an adequate showing of fact.

In revising the distance tables, it is recommended that the most recent transmission data be employed. In particular, the transmission data resulting from the Allocation Survey is evidently hased upon a much greater number of observations and should be much more complete and reliahle than those previously available.

Service Area

The good service area of a station is hounded hy a contour at which its field intensity has some specified value, as one millivolt per meter, and within which the listeners to that station are protected against interference from other stations. The proper value or values to he selected for the limiting intensities are associated with the general power level of the stations. Engineering considerations call for adequate power as the primary means for minimizing natural and man-made noise. The noise hackground is an extremely important factor in determining the entertainment value of a reproduced program. This has heen very clearly demonstrated in the experience of the radio industry during the past few years with high fidelity receivers. It has been shown that in urhan areas under many conditions even the local stations do not estahlish sufficiently strong fields to bring out the inherent qualities of the apparatus and the artistic excellence of the programs. On the shared channels, for ohvious reasons, higher night-time power cannot be regarded as a measure for reaching a larger group of listeners, hut rather as a desirable step to improve the service heing received hy the audience which already exists. It is believed that in many cases 1 kilowatt is wholly inadequate for affording the grade of service which the local communities served by regional stations have a right to expect at the present stage of the art. Douhling the limiting field intensity, as from 1 to 2 millivolts per meter, would permit quadrupling the powers of a group of stations without altering their mutual interference.

Limiting Ratio

The assumed limiting ratio of 20:1 between wanted and unwanted signals is thought to he a fairly representative figure and it is recommended that it he retained as a minimum. A 20:1 ratio represents a fair grade of service when the relatively low fields to which it is applied and the correspondingly high noise levels due to natural and man-made disturhances are kept in mind. To attempt to apply a much higher ratio generally under existing conditions is undouhtedly impractical. It is also recommended that the 20:1 ratio he understood to apply for 90% of the time, or in other words, intermittent interference that does not exceed the specified value more than 10% of the time should he taken to indicate compliance. This procedure is consistent, it is helieved, with the practice now being followed by the Commission's engineers.

Receiver Selectivity

There is considerahle evidence to the effect that the receiver selectivity curve assumed for the present distance tables is appreciably below the capabilities of modern receivers. It is understood that the Radio Manufacturers Association will present data on this point. In undertaking to estahlish a new average curve for regulatory purposes, it is felt that the Commission is justified in setting a reasonahly high standard in fairness to the owners of the better classes of modern receivers. It seems neither logical nor equitable to base the service for the entire country on the poorest receivers now being bought, nor on receivers that were bought so long ago that they are effectively obsolete. Since good selectivity must necessarily be reflected in the purchase price, it is practically certain that receivers helow any reasonahle standard adopted by the Commission will continue to be sold for some time to come. There are undoubtedly locations in which such receivers will give very acceptahle service, and, in any event, the listener should he permitted to choose his own price and ohtain a curtailed service if he so desires. In so far as obsolescence is concerned, the receiver data resulting from the Allocation Survey are most interesting and seem to indicate that consideration for early types of receivers is not as important as has sometimes been assumed.

Allocation Factor

In recomputing the distance tahles, it is believed that special consideration should he given to the "allocation factor." This factor was evidently employed in the original calculations hecause the data then availahle were relatively meager and empirical methods were necessary. Since the factor employed in evaluating adjacent channel interference varies over a range of several hundred per cent, however, it is thought to play an unjustifiably prominent part in fixing the minimum geographical spacings. With more adequate information on transmission and on receiver characteristics, it should now he possible to employ more accurate methods and unless its use can he shown to be essential, the avoidance of any arbitrary factor of this character is recommended.

Service Conditions

In the course of its work, the Commission is undoubtedly confronted at relatively frequent intervals with the necessity of deciding upon an appropriate course of action in the absence of adequate information with regard to actual service conditions. There is evidently need for a much more detailed and accurate engineering survey of radio service throughout the entire country than is now availahle. Such a survey should not only chart the service areas of individual stations but should also endeavor to integrate the service available to listeners in various sections so that some picture may be obtained of the structure as a whole. This is obviously an undertaking of large magnitude which will require the slow and painstaking assemhly and analysis of a mass of engineering data relating to conditions at numerous points in the country. It will undouhtedly take years for its completion and will have to be started as a skeleton structure, to be supplemented, clarified and developed in greater detail as further information hecomes available. It is firmly believed, however, that this is the course that the Commission and its engineers must follow to make fully effective the provisions of Section 307(h). Radio transmission over a large heterogeneous area such as the North American continent is too complex a phenomenon and is suhject to too many exceptions and variations to he fully represented by so rudimentary a concept as the distance tahles, useful as these are for obtaining a first approximation to the minimum geographical spacing between stations. No amount of measuring and averaging of conditions throughout the entire country, however, will give a simple formula which can hope to express in the same terms the results achieved hy a low-frequency station on the plains of Texas and a high-frequency station in New England. In our efforts to make intensive use of the hroadcast band, we have passed the point where nation-wide averages will afford adequate guidance and it is only by recognizing the fact that the phenomena with which we have to deal are suhject to wide variations in various sections of the country that we can hope to rectify the service deficiencies which now exist and to effect further improvements.

In conclusion, the Institute of Radio Engineers wishes to express its appreciation for this opportunity of appearing before the Commission and its desire to aid the Commission, whenever possible, in clarifying the technical and engineering principles underlying frequency allocation.

Bond Geddes, Executive Vice-President of the Radio Manufacturers Association at this point read into the record resolutions adopted hy the Board on September 24 in New York City in connection with the hearing as follows:

Resolutions

WHEREAS the Radio Manufacturers Association is of the opinion that the clear channel stations render a distinct service to the listening puhlic of the United States, due hoth to the fact that no other stations are on the same wave length, and, just as important, hecause the clear channel stations, as a general rule, are high-powered stations serving large territories and affording good re-

ception to communities remote from broadcasting stations. The elimination or impairment of clear channels would thus result in poor and practically unintelligible response to many listeners by reason of the interference of stations who might be on the same wave length, thereby greatly restricting the use and quality of reception of a large majority of people, particularly in the remote and rural areas, and also would tend to restrict the power used by stations.

THEREFORE, *Be It Resolved,* That the Board of Directors of the Radio Manufacturers Association recommend to the Federal Communications Commission that clear channels be retained as they now are; that restrictions as to increase of the power used by these stations on clear channels be withdrawn and that the Commission establish minimum power requirements for such clear channel stations.

Short Wave

WHEREAS the Radio Manufacturers Association is of the opinion that short wave broadcasting in this country is far behind that offered by foreign short wave stations, and that because of this situation many of our nationals residing in foreign countries, as well as citizens of other countries, are thus deprived of the opportunity of listening to the United States programs, and

WHEREAS good short wave broadcasting would reach and serve many locations in this country where, because of remoteness from regular broadcasting stations. bad static conditions, and other natural conditions, day time reception on the standard broadcast band is practically impossible and night time reception is poor, and

WHEREAS the Radio Manufacturers Association is of the opinion that the building of higher-powered, more efficient short wave broadcasting stations with better and more regular programs is being retarded, if not entirely stopped, because licenses for the operation of short wave stations in this country are on an experimental basis only, and commercial use and sale of the time of these stations is denied to their owners and operators,

THEREFORE, *Be It Resolved,* That the Board of Directors of the Radio Manufacturers Association recommend to the Federal Communications Commission that restrictions as to commercial use in the sale of time by the short wave stations of this country be eliminated, and that said short wave broadcasting stations be placed on the same commercial basis as the broadcasting stations on the standard broadcast band.

Pick Up

WHEREAS under the present rules it is unlawful for any broadcast station to pick up a short wave program and rebroadcast it, and

WHEREAS there are many low-powered, local stations serving communities, who because of their lack of power and consequent small coverage are unable to maintain and broadcast good programs, therefore, necessitating the use of phonograph records and in some cases the pick up of programs of larger broadcast stations and their rebroadcast with the permission of the originating station, the latter is very successfully done where the broadcast station whose program is picked up is not too far remote, and where static and natural conditions do not interfere too greatly. In the latter case, if these stations were allowed to pick up good short wave programs from the larger stations with, of course, the permission of the originating station, these programs could be picked up at a greater distance and with greater clarity and less interference from static and other natural conditions.

THEREFORE, *Be It Resolved,* That the Board of Directors of the Radio Manufacturers Association recommend to the Federal Communications Commission that the restrictions regarding the pick up and rebroadcast of short wave programs be eliminated and be on the same basis as those regulations governing the pick up and rebroadcast of programs from stations broadcasting on the standard broadcasting band; such pick ups and rebroadcasting only to be done with the expressed permission of the originating station.

Horle On Technical Aspects

L. C. F. Horle who presented the technical aspects of the case on behalf of the Radio Manufacturers Association at today's hearing told the Commission that the Engineering Division of the Association had been instructed by the Board of Directors "to provide all available data of value to the Commission in this hearing and it here presents that data along with certain recommendations based not only on the data that is offered but on its general experiences in apparatus design and its experience in the use of that apparatus in the field."

Mr. Horle stated that several of the research and development groups in its membership which are largely concerned with technical problems of the industry were encouraged to gather this data.

Fidelity of Receivers

The data he stated falls into two categories. "The first concerns itself with the selectivity and fidelity of receivers as commonly defined and, in fact, comprises the results of measurements made on a host of receivers manufactured during the last three years from which measurements the engineering division believes the Commission can make useful deductions as to receiver performance in the field of value in the solution of some of the problems which it faces in the allocation and assignment of frequencies to broadcasting."

Mr. Horle testified that "the engineering division does not feel that its limited experience and familiarity with allocation and frequency assignment problems provide sufficient basis for the interpretation of the data given in terms of suggested rules or regulations."

Chambers Uses Slides

J. A. Chambers, radio technician, appearing at the hearing today on behalf of the clear channel group, showed elaborate lantern slides together with sound effects. He showed during the course of his statement the results of duplication and conditions on duplicated channels. He made an analysis of the results now being obtained under present conditions and stated that it would be most undesirable to change the allocation at once. He spoke in some detail of the present use of the broadcast spectrum and of the geographic distribution of broadcasting stations throughout the country.

Distribution of Stations

Mr. Chambers also talked on the distribution of stations on clear channels and took up the night coverage of a typical 500-kilowatt station. He spoke not only of clear channels but of regional and local stations and stated that all of them are needed. No one of these types, he said, can serve the public exclusively or should be abandoned. The rural and small town listeners, Mr. Chambers said, need the operation of clear channel stations. He contended that the high frequencies will not be good for clear channels.

The present clear channel stations, Mr. Chambers testified, should be allowed to remain as they are. During the course of his illustrated talk he took up the soil conductivity in the United States and also spoke at length on the constant development in radio receivers. He stated that eleven million receivers have been sold in this country from the beginning of 1935 up to the 1st of September this year.

Mr. Chambers spoke also of field intensities and showed by the use of records the absence of blanketing by WLW.

Among those attending the conference were:

A

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The National Association of Broadcasters

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Crosley and Others Testify on Third Day of Allocation Hearing

Powel Crosley, Jr., R. J. Rockwell, technical supervisor of WLW, Cincinnati, Ohio, and Joseph A. Chambers, technical advisor on behalf of the Clear Channel Group were the only witnesses heard today in connection with the allocation hearing before the Federal Communications Commission.

During the course of Mr. Crosley's testimony he was cross-examined by Commissioner Payne of the Telegraph Division in connection with time which his station gives to minority political parties and competitors in some lines of business.

"I believe that the high powered station located on a clear channel frequency performs a definite and necessary function," said Mr. Crosley "and as a meritorious institution should be preserved and encouraged. This belief is based upon experience."

During the course of his testimony Mr. Crosley also discussed the history of WLW, the economic effects of 500 kilowatt station operation and other topics relative to the latter question.

Paul Crosley

Mr. Crosley said:

Although some of the views which I will express here have been expressed by other members of the industry, I have taken the opportunity afforded me to appear and give to the Commission certain facts, which relate particularly to the operation of Station WLW.

Having been engaged in business as an independent broadcaster and manufacturer of receiving apparatus for more than fourteen years, I feel that some of my experiences and observations over this period may have a bearing upon the many and difficult questions which confront this Commission in determining its future allocation policies. Since these policies, as determined by you, will, to a large extent at least, determine the broadcasting future of this country, the importance of this meeting and the decisions to which it will ultimately lead can scarcely be exaggerated or over-emphasized.

On Experimental Basis

While I am not speaking as the advocate of any particular theory of allocation, our experience has largely been in the development of stations using power greater than that commonly and currently in use, and my remarks, since confined to that experience, will be largely so directed. Moreover, the fact that we have been permitted by the Commission to operate with power of 500 KW on an experimental basis has put in our possession certain information which we believe will be helpful to the Commission and to the industry at large.

It will, therefore, be my purpose to acquaint the Commission with such facts as I have relating to the operation of so-called "super-power" stations, as that term has been understood and applied from time to time; and more particularly and specifically to various stages in the development of WLW. I shall also take the liberty of reciting such of my own personal experiences as may or might have a bearing upon the solution of this issue, since they are related to the presentation and determination of similar issues in the past. I believe that the high powered station located on a clear channel frequency performs a definite and necessary function, and as a meritorious institution should be preserved and encouraged. This belief is based upon experience.

History of Station WLW

While the records of the Commission contain a full disclosure of the history of Station WLW from its inception down to date, I believe that a brief recital of the following facts will make some of my statements and observations more understandable.

We first became interested in radio broadcasting in the early "twenties", at which time we were engaged in the manufacturing business, making phonograph cabinets and other articles of a similar nature. We were attracted at the outset by the various and what appeared to me to be the unlimited possibilities of radio from its social and educational, as well as its economic, aspects. I saw, or thought I saw, at the time, a new field for an entirely new article, namely, radio receiving sets. I realized that the public demand for such sets would be directly in proportion to the number of high quality programs which listeners could receive. We, therefore, became interested in the research end of radio broadcasting and made application for and were granted an experimental broadcasting license, and in April, 1921, began the operation of a station with a power of 20 watts under the call letters 8CR.

Originate in Workshop

The programs of this station were originated in a workshop in my home and consisted largely of the playing of phonograph records and conversation. We conducted this station until March, 1922, when we constructed a station to be operated with a power of 50 watts under the call letters WLW. This was the beginning of the station which has been continued under the same call letters and under various frequency and power assignments down to date. The changes in our operating power have been as follows: From March, 1922, to September, 1922, with a power of 50 watts; September, 1922, to January, 1925, with power of 500 watts; from January, 1925, to May, 1928, with power of 5000 watts; from May, 1928, to March, 1934, with power of 50,000 watts; and since March, 1934, down to date, we have been permitted to operate experimentally with power of 500,000 watts.

Super Power

The first time that I heard the term *"super-power"* was back in 1922 just after we had inaugurated our first 50-watt station with the call letters WLW. Another organization in Cincinnati, operating a 20-watt broadcasting station for some months, encouraged a radio club in Cincinnati composed of prominent radio listeners to get together and make a protest about our 50-watt "super-power" transmitter. A committee was appointed to investigate, I was invited to appear before this committee. I did so with a clothes basket full of letters, many of them from far away points such as Troy, Ohio.

The committee pondered the evidence weightily and a week later reported to the radio club its finding that even though we were using 50 watts we were evidently rendering a better service than we would be able to render with 20 watts as indicated by the favorable comments and congratulations upon our forward step as expressed in this mass of letters.

I well remember the deadlock on the question of power that existed at one of the early radio conferences called by Secretary Hoover. There again the question of "super-power" reared it head when the question came up as to whether 500 watts should be the limit of power or whether 5,000 watt stations should be permitted. I was one of those strongly advocating the proposal that broadcasting stations that wished to, might increase their power from 500 to 5,000 watts. The deadlock was finaly broken down by a compromise that power of 5,000 watts might be tried experimentally.

We again presented a very grave question to the Radio Commission in 1928 when we asked to be allowed to increase from 5,000 watts to the "super-power" of 50,000 watts. I feel that the Radio Commission was wise in permitting us to build an experimental transmitter to use 50,000 watts. I feel that the Federal Communications Commission in 1934, having weighed most carefully and studied the matter from every angle, was wise when it permitted us to build experimentally our station of 500,000 watts.

Now why has my company continually advocated the use of greater and greater power? Why have we pioneered the advance from 500 to 5,000 watts; 5,000 to 50,000 watts; and from 50,000 to 500,000 watts? Perhaps it is because we have been manufacturing radio receiving sets during the same period; because very early in the game we appreciated that a radio signal is of identically the same nature as static and forms of man-made interference. We recognized the futility of any effort to separate the two signals in the receiving set, and realized that the answer to better radio reception was simply more power in the transmitter.

Our interest in greater power was manifest long before the present commercial possibilities of broadcasting became evident. Our policy has constantly been to improve our service; to plow back into better service a large portion of the profits that might accrue from the improvement of that service. I sincerely feel that the public has been served better by each and every step-up in power of our broadcasting station.

I shall attempt to be more specific in this matter and more particularly in the last stage of WLW's operation, by the recital of certain specific facts and conclusions which have been demonstrated by our experimental operation.

Benefits to the Public

From the very beginning it was our desire to increase the range of our station because we were selling large numbers of radio receiving sets into the small towns and rural districts and we felt a certain obligation to supply a broadcasting service to go along with the sale of the sets themselves. We were constantly striving to overcome the bugaboo of radio reception known as static. We had little interest in reaching out into the urban centers and obtaining much of an audience, because we knew that those areas were well taken care of by their local broadcasting stations. We were and still are interested in reaching the sections of the country remote from good broadcasting. We have endeavored to cover that "No Man's Land" lying between areas well served by local or regional broadcasting station, to deliver, winter or summer, in spite of atmospheric or other forms of interference, satisfactory reception for the radio listener who can not afford the more elaborate and costly receiving sets. That we have succeeded in doing this is evidenced by the recent engineering report of the Federal Communications Commission, indicating the popularity of our station in rural districts.

Commercial Angle

True it is we later became conscious of the fact that after many years of operating broadcasting stations at our own expense, there was a commercial angle to the venture, and perhaps we have profited because of our desire to serve better. I repeat that most of our profits have been plowed back into better and better programs, more and more closely presentation of programs, and better and better electrical, mechanical and technical equipment. The fact that we have been able to put our signal within the reach of more and more people is amply demonstrated by many measurements on file with the Commission which have either been supplied by us or made by the Commission's own technical staff.

Because of the fact that WLW has from the outset attempted to reach and serve the rural listener and the residents of the small town and countryside, it has perhaps engaged in less purely community enterprises than stations whose objects and purpose is to render an intensive service only to a particular metropolitan area. This is illustrated by the fact that WLW has some years carried no purely local advertising accounts; this type of business being taken care of by the other Cincinnati stations. It is further illustrated by the fact that our public service features are not designed and intended only for the residents of Cincinnati and the metropolitan area, but are planned to appeal to and to be used by an audience much more widely distributed.

Educational Programs

For example, for more than six years we have devoted one full hour each week day during the school year to Ohio State University at Columbus, Ohio, for its exclusive use in such a manner as the directing heads of that institution see fit to use the time. This feature is known as the "Ohio School of the Air," and the programs which have been broadcast during this period have been of wide appeal, having included scientific talks, lectures on literature and the classics, music appreciation programss and the giving of much useful information in such manner as it could be applied by the farmer or the housewife resident at points remote from either Cincinnati or the City of Columbus. We have always broadcast "The Farm and Home Hour" put on by the National Broadcasting Company, from its inception, and it is the policy of our station, observed throughout the years, that no fact or circumstance can interfere with the regular rendition of this program. Throughout the years we have regularly put on live-stock and weather reports, which we know are used and relied upon by the farmers, small merchants and producers throughout a vast area. As a matter of fact, all the important livestock markets throughout the Middle West, and as far East as Buffalo, are equipped with receiving sets centrally located and tuned at these periods to WLW, from which they obtain the most recent and up to date market quotations. This service is used and relied upon in much the same manner that traders upon the commodity and other exchanges utilize a ticker service.

Survey of Service

We mention these facts, not with a view of making an exhaustive survey of the public service features which we are now rendering and have rendered throughout the entire period of our operation. We refer to them only as illustrating the type of program which we broadcast and the variety of audience which we attempt to reach.

Although I realize that fan mail is not always the proper criterion of a station's regular listening audience, or a true measure of the extent of service which a station renders, due either to special appeals or the extreme or sensational character of the program broadcasts, nevertheless, it does offer some guide as to the number and extent of a station's potential listening audience. In this connection the following may be of interest.

Fan Mail

With the power of 500,000 watts during the first three months of 1935, we received almost 4 times as many fan letters as we had received during the same period the preceding year operating with a power of 50 KW. For the six-month period, October, 1935, to March, 1936, operating with 500,000 watts, we received almost 5 times as many pieces of fan mail as we received during the same six-months period, October, 1933, to March, 1934, when operating with a power of 50 KW.

When you consider that a great bulk of our fan mail comes from the small towns and rural districts, and the further fact that experience has shown that a relatively small number of listeners do actually write fan letters, it is clear that the power increase of WLW has resulted in furnishing a radio service not heretofore available to a vast number of such listeners.

By way of summary, I believe that the benefits to the public from our successive power increases have been threefold. First, many listeners received programs which, because of the type of receiving equipment used or because of distance, they never would have received otherwise; second, the reception for those who could hear the programs is vastly improved; and third, we have been able by increased revenues to improve the programs themselves.

No Interference

One of the first and most frequently expressed fears against the use of so-called "super-power" was that it would have a blanketing effect on the reception of other stations. I heard this fear first expressed in 1922, when we went from a power of 20 to 50 watts, and it has been repeated at various times by those who are not completely familiar with the facts ever since. Due to extensive experiments and tests which we have made, I again say definitely that such a fear it not borne out by the facts.

Certain of the experiments made at and near our station while in operation with power of 500 KW have already been explained and demonstrated. In the city of Cincinnati, 20 miles from our station, one of our standard tests of our receiving sets is to separate, without cross-talk, WGN from WLW in the daytime. WGN is only 20 kc removed from WLW. At night at our proving station, which is between 10 and 15 miles from WLW, we regularly bring in WOR, without cross-talk, which station is separated 10 kc from WLW, whenever static and atmospheric conditions will permit the

WOR signal to come through clearly. Our Mr. Rockwell will demonstrate to you with a sound moving picture a receiving set located only 2500 feet from WLW's antenna with —— volts from WLW in the receiving antenna, hringing in stations almost all over the dial with a #40 7-tuhe set. Mr. Rockwell will give still further demonstrations, which in my opinion and in the opinion of competent technicians who participated in and ohserved these tests, definitely explode the early fears of hlanketing as fallacious and unsound.

Cross Talk

I, of course, would be the last to assert that some radio listeners in close proximity to certain stations, and in fact any station, do not occasionally receive a form of cross-talk which is undesirahle and frequently so ohjectionahle as to destroy the usefulness of the desired program. I do assert that according to experiments conducted hy us, hoth in and out of the laboratory, the prevalent cause for such a condition is neither defective receivers nor the proximity of high-powered transmitting equipment. That on the other hand, it is caused hy the rectification of certain objects, resulting from corroded power line connections, unsoldered splices in antenna or ground leads, antenna leads loosely in contact with metal window screens or sills, and other conditions of a similar nature which are more or less common in metropolitan areas, and more particularly, in such areas where the power lines, and the radio and electrical appliances in use are not of recent installation. The presence of such conditions results in a demodulation of the desired signal or a separation of the audio frequency and radio frequency components in such a manner as to result in the signal of an undesired station appearing on the frequency of a desired station. Mr. Rockwell will demonstrate this type of cross-talk and the prevalent causes therefor.

Economic Effects of 500 KW. Operation

The economic results of the use of power of 500 kw. to a station using it or to other stations are not as susceptible of definite proof as are the technical henefits to the listening puhlic or the absence of injury to the listening puhlic from the technical operation of such a station. This is true hecause, among other reasons, each station and each locality presents an individual prohlem. Differences in location, in directing personnel, in program policies, in the prior experience and popularity of the station, and many other factors enter into the determination of these questions.

I am, however, able to give certain facts showing the relative cost of installation and operation of a 500 kw. and a 50 kw. plant based upon our experience, and since 50 kw. equipment is now standard, and a sufficient numher of such units have heen installed and in operation over a period of years, it should not he difficult to apply these ratios to any given case.

Operating Costs

In determining total operating costs, it is necessary to provide for a depreciation or amortization of the original cost of equipment for a period which approximates the life of the equipment. In the following comparison of figures we have used a depreciation of 10% hased on ten year life, for hoth the 50 kw. equipment and its comparative 500 kw. equipment. Breaking down the purely technical items, we find that it costs us 371% more for electrical power; our water hill is 80% higher, tubes cost us 33% more in operating the 500 kw. transmitter over a 50 kw. unit. These figures do not take into account added program expenses, extensive huilding or construction, or additions to the administrative or executive staff which may he regarded desirable or even necessary. In our own case we did add 140% to administration and salaries; 9% to fixed charges and rent; 75% to program costs, and depreciation of 10%, so that in going from 50 kw. to 500 kw. our operating cost has increased 68%. As against this total operating increase of 68%, we increased our advertising card rate 20%, hut have been able with the greater demand for our station to operate at a profit.

It is even more difficult to estimate the economic effects of 500 kw. operation upon stations of other classes located within the service area of the 500 kw. station. We have had no experience on this point and no opportunity to ohserve, other than that afforded hy our ownership and operation of Station WSAI which is a regional station also located in Cincinnati. In that case the operation of the 500 kw. transmitter at WLW has had no adverse effect upon the network or other husiness of WSAI. As a matter of fact, the husiness of the regional station has increased steadily through this period.

Conclusions

In conclusion, I wish to thank the Commission for the opportunity of heing permitted to state my views in a forum and for a purpose of this kind. I am strongly of the opinion that proceedings of this nature are not only useful hut absolutely necessary to the industry for a proper understanding of its prohlems. Because of the very nature of the work in which we are engaged, we tend to hecome individualists and not members of a closely knit industrial organization. It is therefore well nigh impossihle for all the members of the industry independently to keep closely in touch with the problems which confront us all. This type of proceeding performs this function.

I sincerely hope that the Commission will find that it has not suffered in vain, and that it will likewise derive some benefit from the views expressed here.

Following Mr. Crosley's statement he was cross-examined during the course of which he stated that WLW, his 500 kilowatt station, has heen fully as good an investment for the Crosley Company as was the 50 kilowatt station. This means, he said, that the station is taking in more dollars than it was before because expenses of operating the 500 kilowatt station are much more than for the lower powered station.

The investment cost of the 500 kilowatt station Mr. Crosley told the Commission is ahout half a million dollars more than that for the 50 kilowatt one which preceded it including the erection of a new antenna and a new building.

History May Repeat

Mr. Crosley was asked if he thought that the granting of thirty 500 kilowatt stations would have any effect on the present broadcasting system of the country. He said that in his opinion history might repeat itself regarding the whole high powered question and he expressed himself as being in favor of a horizontal increase in power for small stations.

The small stations of the country, he contended, have a hard time competing against network programs because of their excellence but he expressed the opinion that there is a place in this country for all classes of stations, high power, regional and local.

Mr. Crosley told the Commission that he personally is not advocating any special policy on the high powered situation. He did say, however, that he did not believe that estahlishment of thirty 500 kilowatt stations would keep local stations from operating or take away their need in their own sphere of action.

Questioned on the European situation Mr. Crosley said that his understanding was that most of the European stations are government owned and contended that the broadcasting problem there differs materially from the problem in the United States. Just as the hroadcasting prohlem is different in Europe and in this country so, he said, engineering problems are also different.

Can Station Pay?

Asked what he thought should be the controlling factors in the granting of a high power license hy the Communications Commission, Mr. Crosley stated that the Commission would have to consider among other things whether the station was ahle to pay for the high power transmitter, the history of the station's ahility to serve the puhlic and how it has served the puhlic in the past would also be a matter for the Commission to think ahout in granting such a license. The location of the proposed high powered station and its relation to other stations would also have to he considered. He definitely expressed himself against the Commission's putting any limit to high power.

Cross Examination

Commissioner Payne during the course of cross examining Mr. Crosley asked about the profits which the latter had stated in his testimony his company had plowed hack into the business. Mr. Crosley could not give any definite figures but said that one of the ways in which this had heen done was to estahlish better and hetter programs. He was questioned as to the dividends of the Crosley Company and stated that last year it had paid twenty-five cents a share and on further questioning testified that he owned about one-fourth of the stock of the Crosley Company.

Pharmaceutical Company

Commissioner Payne asked some questions relative to the General Pharmaceutical Company. Mr. Crosley testified that his company owns all of the stock of the Pharmaceutical Company which has

two products. The Commissioner insisted on knowing whether WLW made any charge for advertising this company's products on the air and Mr. Crosley stated that no charge was made either for that company or for the Crosley Company manufacturing radio sets or refrigerators.

Commissioner Payne was told in answer to one of his questions that Mr. Crosley had not refused to allow labor questions to be discussed on WLW. He stated that Townsend representatives had been refused time on WLW only because hearings were being held at that time by Congress on the Townsend question following which the Townsendites had no desire for time on WLW. He denied that Lemke had been refused time on his station and insisted that it was the policy of WLW to give the same treatment to all political parties both major and minority.

Programs on WLW

Commissioner Payne further questioned Mr. Crosley relative to some of the programs used over WLW. He spoke particularly of one Alfred Gus Karger, a news commentator whom Commissioner Payne intimated talked for one political party. There was some discussion also of a feature of the Gruen Watch Company including talks by Drew Pearson and Robert Allen, also news commentators. It came out during the course of this part of the cross examination that the station was fearful of libel because of the personalities discussed in this program. This matter was later adjusted to the satisfaction of the watch company.

A letter from Senator Norris was read by Commissioner Payne in which the Senator spoke about complaints he had received against WLW in connection with political broadcasts. During the course of this cross examination Mr. Crosley pointed out to Commissioner Payne that he had to protect his station against possible libel and this was in answer to a question by the Commissioner relative to censorship in not allowing the Gruen Watch Company to go on with its Pearson and Allen comment.

R. J. Rockwell

R. J. Rockwell, the technical advisor of WLW and WSAI, showed sound pictures with the intent of demonstrating the fact that good reception can be obtained in close proximity of high powered stations taking WLW as a typical example.

He showed three separate exhibits to demonstrate the actual conditions in the operation of Station WLW. One of these included a recording of a WLW broadcast taken 300 miles from that station and using both 50 kilowatt and 500 kilowatt power. Mr. Rockwell also discussed complaints which had been received following the removal of WSAI to a new location which appeared to include external cross modulation. He said that WSAI is still continuing experiments to find out exactly what is happening. Mr. Rockwell contended during the course of his talk that no blanketing exists in connection with WLW using 500 kilowatt power.

Chambers Continues

Joseph A. Chambers, technical advisor for the Clear Channel Group, returned to the stand today to continue his testimony of yesterday. He was cross examined by T. A. M. Craven, chief engineer of the Commission, and then there was redirect examination by Louis Caldwell, counsel for the group.

Mr. Chambers told the Commission that about fifty million people in the United States depend upon clear channel stations at night for their reception and between thirty and forty million during the day time. He stated that the use of a number of clear channel stations could cover the whole country.

European Stations

He discussed at some length also the use of high powered clear channel stations in Europe and he stated that the Europeans think it necessary to use high power and further that it is necessary to retain clear channel stations.

Mr. Chambers also discussed the service radii of fifty and 500 kilowatt stations and went into the theoretical day time coverage area of a 50 kilowatt station. This latter he stated has a day time coverage of a hundred and sixty-six thousand two-hundred square miles with a night time coverage of approximately half a million square miles. He discussed further the trend of maximum and average power of United States licensed stations and said that not less than 50 kilowatts should be used by clear channel stations.

Under cross examination Mr. Chambers spoke of his qualifications as a radio engineer from 1922 on, stating that at one time he had been connected with General Electric, later with Crosley, and is now Consulting Engineer.

Doctrine of Group

Questioned on the doctrine of the Clear Channel Group he was asked if each high powered station believes that it should serve the whole United States. He answered by stating that each station would try to cover remote areas but there are other factors going into the complete coverage of the country. He stated also in answer to a question that there has been no change in the doctrine in the high power group since the early radio conferences.

Mr. Chambers contended that even if all clear channel stations are operating they could probably not give a good signal all over the United States. Mr. Craven endeavored to get a correct answer from Mr. Chambers in connection with the number of clear channel stations to cover the whole country. Mr. Chambers said that in his opinion all of the rural inhabitants could get good service from fifteen clear channel stations. In this connection, however, he stated specifically that this would be night time reception and that day time reception would be definitely limited. In his opinion he said the Commission would be taking a chance in giving up any more clear channels.

Directional Antennas

Local stations Mr. Chambers believed might be taken care of on the frequency band from 1500 to 1600 kilocycles. He spoke of the possibilities of the use of directional antennas by regional stations and he stated definitely that he had no suggestions to make regarding the abandonment of either regional or local stations.

Mr. Chambers said that cross talk on adjacent channels is one of the limitations at present on the use of 500 kilowatt stations. External cross modulation he stated is really the basis of many of the complaints of blanketing.

Still under cross-examination Mr. Chambers said that a 500 kilowatt station on the West Coast and a 500 watt station located in Maine with a directional antenna would not give good results owing to interference, especially if the West Coast station wished to serve rural population. The West Coast station he stated undoubtedly would put out some signals that would reach into Maine.

Problems Similar

From an engineering point of view Mr. Chambers stated that European and United States problems are similar. The use of high power is a good insurance against interference in the United States from outside sources.

In connection with the cost of 50 kilowatt transmitters Mr. Chambers stated that the technical cost of such a station including depreciation, maintenance and operation would be about $66,000 a year while for a 500 kilowatt station it would be about $200,000.

On redirect examination Mr. Chambers said that there would be no chance of interference between a 500 kilowatt station in the United States and Europe. In his opinion he said the waves take a southern route going from this country to Europe thereby traveling a distance greater than that represented by air miles. If the Europeans increase their power and we do not and if there is interference then he said that we would be the sufferers.

Additional Registrations

The following additional registrations were made with the Commission yesterday:

A

Allen, Edward A., Lynchburg Brdcstg. Corp., Lynchburg, Va.

B

Berne, Louis W., Station WCNW, 846 Flatbush Ave., Brooklyn, N. Y.; Blackley, Chas. P., Station WSVA, Harrisonburg, Va.; Bennett, Edw., Univ. of Wis., Madison, Wis.; Blanton, Matthews, Attorney, KRBC, KBST, KPLT.

C

Campbell, Richard D., Engineer, Amer. Tel. and Telg. Co., 195 Broadway, New York City; Carpenter, H. K., United Brdcstg. Co., Terminal Tower, Cleveland, Ohio; Corkhill, C. W., Station KSCJ, Sioux City, Iowa.

F

Faske, Arthur, Station WCNW, 846 Flatbush Ave., Brooklyn, N. Y.; Fraser, Russell, Imperial Aerogram Corp., Hollywood, Calif.

G

Goulden, Stanley W.. RCA Mfg. Co., Inc., Camden, N. J.

H

Hamilton, Ray V., Stas. KXOK-KFRU, St. Louis and Columbia, Mo.; Hill, C. A., Station WIBM, Jackson, Mich.

P

Ponsford, Walter W., Graybar Elec. Co., Philadelphia, Pa.

R

Richards, J. E., Gen. Mgr., Station WBNO, St. Charles Hotel, New Orleans, La.; Rosenberg, E. J., Transamerican Brdcstg. & Television Corp., 521 Fifth Ave., New York City.

S

Staubitz, E. J., Blaw Knox Co., Pittsburgh, Pa.

T

Thomas, Norman A., Station WDOD, Hotel Patten, Chattanooga, Tenn.

W

Williamson, Jr., W. P., WKBN Brdcstg. Corp., Youngstown, Ohio; Wooten, Hoyt, Pres. and Owner, Station WREC, Memphis, Tenn.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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IN THIS ISSUE

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

Thorrez & Maes Manufacturing Company, Jackson, Mich. (2-2479, Form A-1)

Marchant Calculating Machine Company, Oakland, Calif. (2-2482, Form A-2)

Susquehanna Capital Corporation, Jersey City, N. J. (2-2483, Form A-1)

Selected American Shares, Inc., Chicago, Ill. (2-2484, Form A-2)

A & K Petroleum Company, Oklahoma City, Okla. (2-2485, Form A-1)

Charles P. Limbert Company, Holland, Mich. (2-2486, Form A-2)

Lexington Brewing Company, Lexington, Ky. (2-2488, Form A-1)

Gilbert Klinck Brewery Corporation, Buffalo, N. Y. (2-2489, Form A-1)

Celanese Corporation of America, New York City. (2-2490, Form A-2)

American Refrigerator Transit Co., St. Louis, Mo. (2-2495, Form A-2)

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2930. Misrepresentation of the tone quality and value of an electrical musical instrument called "The Hammond Organ" is alleged in a complaint issued against the **Hammond Clock Company,** 2915 North Western Ave., **Chicago.** The respondent company's practices in the sale of its instrument are held to constitute unfair methods of competition in violation of Section 5 of the Federal Trade Commission Act.

Among representations allegedly made by the respondent company in its advertising matter are that use of "The Hammond Organ" means "that real organ music of unbelievably beautiful quality is now possible in any home at an expense no greater than that of a good piano"; that the instrument "produces the entire range of tone coloring necessary for the rendition, without sacrifice, of the great works of classical organ literature," and that many organists agree the instrument is comparable to pipe organs costing $10,000.

No. 2931. Alleging suppression of competition in interstate commerce in the hot air furnace industry, a complaint has been issued against the **New York State Sheet Metal Roofing and Air Conditioning Contractors' Association,** of **Utica, N. Y., Fox Furnace Company,** of **Elyria, Ohio,** and officers of both organizations.

Unfair competition against hot air furnace manufacturers selling their products to mail order houses is the principal charge. The complaint alleges that the New York association, whose membership consists of plumbing contractors and dealers in sheet metal, roofing supplies and hot air furnaces, entered into an agreement and combination with the Fox Furnace Company, manufacturer of hot air furnaces, to blacklist or boycott hot air furnace manufacturers selling to mail order houses.

According to the complaint, the respondents, in their alleged combination and conspiracy, sought to prejudice members of the New York association and other trade associations against manufacturers selling to mail order houses, and to urge them to purchase only from the manufacturers recommended by the New York association and the Fox Company.

No. 2932. A complaint has been issued against **J. W. Gibson,** trading as **J. W. Gibson Company,** 1828 Central Avenue, **Indianapolis,** charging use of false advertising in which he misrepresents the quality of his extracts and food flavors and the amount of money salesmen may earn selling his merchandise.

Gibson is said to advertise that agents can obtain from him free sales kits, earn from $24 to $50 a week, and receive a new automobile as a bonus in addition to regular commissions, when, the complaint alleges, such representations are untrue.

According to the complaint, the respondent requires a deposit of $1 for each sales kit, which amount is not refunded until the agent has purchased a stated quantity of merchandise; agents' earnings do not approximate the amounts advertsied, and agents do not receive an automobile free, but on the contrary must sell merchandise amounting to $4,500 before they are entitled to a car. It is alleged that no salesman has ever received an automobile from the respondent, free or otherwise.

No. 2933. P. A. Lefebvre & Company, Limited, of **Alexandria, Ontario, Canada,** and **Zatique Lacomb,** are named respondents in a complaint charging them with unfair methods of competition in connection with the sale of "Magic Gas." The company has its manufacturing establishment and an office for business transacted within the United States at Malone, New York.

According to the complaint, "Magic Gas," when mixed with gasoline or kerosene and used in internal combustion engines of motor vehicles, does not, as the respondents allegedly advertise and represent, eliminate "knocks" or carbon trouble, increase mileage and engine power, save gasoline or oil, make cars pick up easier or quicker, or solve the gasoline problem.

These false and misleading claims, the complaint charges, tend to deceive purchasers regarding the value and effect of "Magic Gas," and divert trade unfairly to the respondents from competitors who truthfully advertise their products.

No. 2934. Misleading representations in connection with the sale of "Dr. Haller's Famous Prescription 5000," a woman's remedy, are alleged in a complaint issued against **Lewyn Drug Incorporated,** 1928 Taft Ave., **Hollywood, Calif.**

In magazines of national circulation, the respondent corporation is said to advertise that the preparation is safe and dependable, has been dispensed through ethical channels for almost half a century, and is the best product of its kind in the world.

These representations are untrue, according to the complaint, which charges that use of the preparation may produce serious results.

Nos. 2935-2936-2937. Three complaints charging violations of the Robinson-Patman anti-price discrimination act, amending Section 2 of the Clayton Act, have been issued. They are the first complaints to be issued by the Federal Trade Commission under the Robinson-Patman amendments to the Clayton Act, enacted during the closing days of the last session of Congress.

One complaint, brought under Section 2 (a) of the Robinson-Patman Act, names the Kraft-Phenix Cheese Corporation, of Chicago, as respondent. In another, the Shefford Cheese Company, Inc., having its principal place of business at Syracuse, N. Y., is the respondent. This complaint also charges violation of Section 2 (a) of the Robinson-Patman Act. The third complaint names Bird & Son, Inc., the Bird Floor Covering Sales Corporation, a subsidiary of Bird & Son, Inc., both of East Walpole, Mass., and Montgomery Ward & Company, Inc., of Chicago, as respondents. In this complaint Bird & Son, Inc., and the Bird Floor Covering Sales Corporation are charged with violation of Section 2 (a) of the Robinson-Patman Act, and Montgomery Ward & Company, Inc., with violation of Section 2 (f) of that Act.

No. 2939. A complaint has been issued charging **Helena Rubinstein, Inc.,** 8 East 57th St., **New York,** with misrepresenting the properties, nature and effect of a wide variety of cosmetics, facial creams and toilet articles which the corporation sells in interstate commerce.

In newspapers and magazine advertisements, in circulars and on labels, the respondent corporation allegedly makes representations to the effect that its preparations possess properties or contain ingredients that feed or nourish the skin or lips, restore youth to the skin, prevent crows' feet and wrinkles, and contain hormones or "living sparks of life" which increase the therapeutic value of the products, when, according to the complaint, such claims are exaggerated and false.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1776. Edward Ehrlich, trading as Fairway Distributing Company, 333 6th Ave., New York, in the sale of midget radio sets, agrees to cease using the word "Majestic" alone or with the words "Radio Corp." as a trade name or brand so as to imply that his products are manufactured by Grigsby-Grunow Company, an Illinois corporation, when such is not a fact. Ehrlich also will stop use of the word "Bell" independently or in conjunction with the word "International," as a designation for radio sets he sells so as to give the impression that such products are made by the American Telephone and Telegraph Company, its subsidiaries or associates, or the Western Electric Company, Inc., when this is untrue. According to the stipulation, the name "Majestic" is now vested in Frank McKey, trustee in bankruptcy for the creditors of Grigsby-Grunow Company, and the name "Bell" and the representation of a bell as used are the legal property of the American Telephone and Telegraph Company, its subsidiaries or associates, and the Western Electric Company, Inc.

No. 1777. Benedict Oskin, 5144 Cornelia Ave., Chicago, trading as United States Supply Co. and selling watches and spectacles by mail order, agrees to discontinue using any words in such sizes and arrangements, either alone or in connection with any pictorial representation which may have the tendency to mislead purchasers as to the true meaning of his advertisements. According to the stipulation, the respondent's advertisements were so worded and arranged that they tended to deceive purchasers into the belief that they would receive a pair of spectacles for 20 cents, and would receive a watch for 20 cents, or an Elgin or thin model, when in fact the watches sold by the respondent were "Sport" models, manufactured by a company other than Elgin and made to retail at $1.19 each. The respondent also will stop failing to disclose in his catalogue that the watches listed are second-hand and reconditioned.

No. 1778. W. M. Jacobson, 308 F. 51st St., Chicago, trading as Wonder Manufacturing Company and selling wood fiber ornaments and gift shop novelties under the trade name "Wonder-Tex," agrees to discontinue using the word "Manufacturing" in his trade name or in any manner so as to create the impression that he is a manufacturer or owns or operates a factory where his products are made or fabricated, when such is not a fact. Jacobson also will cease representing that he is identified with or is successor to the Syracuse Ornamental Company, Syracuse, N. Y., which markets wood fiber ornaments, carvings, and similar articles; that the merchandise he sells are the products of the Syracuse company, or that he has purchased the machinery of that company and equipped a plant in Chicago and resumed its business.

No. 1779. Bertram A. Straus, 1919 Broadway, New York, a jobber trading as Columbia Pencil Company, stipulates that he will discontinue use in advertising matter of such phrases as "Direct from the factory" and "From the factory to the ultimate consumer" so as to imply that he owns or operates a plant where the pencils sold by him are manufactured.

No. 1780. Claire Frocks, Inc., Woodford Building, Cincinnati, engaged in the sale of women's dresses, aprons, uniforms, and hosiery, and men's uniforms and shirts, agrees to stop employing the word "manufacturers" alone or with other words in advertising matter relating to products it does not manufacture, and to cease use of that word or such statements as "Brought to you direct from our big factory," so as to imply that it manufactures its products or owns or controls a factory where such products are made, when such is not a fact. The corporation will refrain from representing in advertising matter that dresses are given free to its agents, when such purported gifts are in fact bought and paid for by the services performed by the agents in the sale of the respondent company's merchandise.

No. 1781. Union Pharmacal Company, Inc., 67 Irving Place, New York, trading as Certified Aspirin Company, will discontinue advertising that its aspirin product is free from uncombined salicylic acid, is tasteless, is a remedy for colds or cold infections, and that it complies with Government standards, when such is not a fact. The respondent corporation will stop representing that its product relieves pain generally, unless such representation is so limited as to apply to a few simple pains which experience shows can usually be relieved by the use of aspirin.

No. 1782. Ramsey Accessories Manufacturing Corporation, 3693 Forest Park Boulevard, St. Louis, engaged in the manufacture and sale of automobile piston rings having an inner spring, will cease making exaggerated representations respecting the increase of its volume of business at any time; and will stop advertising that its products, sold under the trade name "Ramco," represent 16 years' concentration on spring ring construction or that they are the result of exclusive patents held on spring ring design. The respondent corporation also will discontinue claims that automobile repairmen can make a profit of $16 on each "Ramco job," or that automobile motors can be overhauled for $18, unless such representations are limited, with respect to the type of car to be overhauled, to the kind and amount of work to be done or to the parts to be supplied, and in such a way as to bring the cost to the car owner and the profit of the repairmen within the range of probability.

No. 1783. Schiller-Cable Piano Manufacturing Company, Oregon, Ill., agrees to discontinue use of the word "grand" to describe any piano not having its strings placed horizontally, with gravity action, and not possessing the tonal and other qualities associated by the trade and general public with grand pianos. The company also will cease advertising that its piano sold under the trade name "Schiller Vertical Grand" is a "big grand," "a real grand," or "actually a grand piano accoustically."

No. 1784. Hyman Abish and Joseph Roger, trading as New York Hat and Cap Company, 840 Broadway, New York, will cease use of the word "Panama" alone or with the word "Toyo" to describe a hat not made from the leaves of the jipajapa plant in accordance with the process used in the manufacture of Panama hats, and will stop using the word "Panama" in any way as descriptive of hats so as to imply that such products are Panama hats, when such is not a fact.

No. 1785. Herman E. Ballard, 743 Dwight Way, Berkeley, Calif., trading as Elco Chemical Co., and manufacturing and selling valve lubricants, agrees to cease representing in advertising matter that any of his products "is an exact duplicate" of, or that he duplicates, the lubricants sold under the brand name "Merco", when such is not a fact. According to the stipulation, there is a corporation known as Merco Nordstrom Valve Company, Oakland, Calif., which manufactures and sells tapered rotary plug valves and lubricants for use in such valves, under the trade name "Merco."

No. 1786. Charlotte Thomas, 1334 Douglas Ave., Los Angeles, trading as Thomas Radium Cone Company, is engaged in the sale of "Radium Cones", which are designed to charge water with radio-activity. She will cease representing that her products have any therapeutic or curative value for any bodily ailment or disease; that the drinking of water activated by her "Radium Cones" is a cure for or will ameliorate the symptoms of any human ailment further than such benefits as may arise from the drinking of an increased quantity of water, and that the Mayo Clinic uses radium-activated water for treating patients. The respondent agrees to cease and desist from publishing the purported opinions of physicians or medical experts in reference to the therapeutic value of radio-active therapy not specifically applicable to her product, unless the fact that such opinions were not made specifically in connection with her product is also clearly indicated.

No. 1787. Wally Frank, Ltd., 10 E. 45th St., New York, is engaged in selling tobacco, assembling pipes, and importing finished and unfinished briar pipes and blocks of briar wood to be made into pipes. The corporation agrees to cease and desist from using in advertisements any pictorial representation of the British royal coat of arms or the official seal of the King of England, alone or with the words "Best British Brand" or "Wally Frank, Ltd., London," which have the tendency to mislead purchasers into the belief that the respondent is a British company with an office in London, that it is registered under the British Companies Act or that it manufactures the pipes it sells.

Other practices that will be discontinued are use of the words "Sold Direct to You" so as to give the impression that the respondent corporation's pipes move directly from the manufacturer to the user, when such is not the fact, and use of words and figures which exaggerate the true value of its products.

No. 1788. Castilian Products Corporation, 1027 North Seward St., Hollywood, Calif., in selling soap, will stop employing the words "Imported Olive Oil" as a brand to designate its products which are not composed wholly of imported olive oil; and the word "Olive", alone or in conjunction with the words "Imported" and "Oil" so as to imply that the fatty content of the soap is composed wholly of olive oil, when such is not a fact. The corporation also will cease using the word "Importers" in any manner that might lead purchasers to believe that it is an importer, when this is not true.

No. 1789. Ansley L. Coleman, 809 Huger St., Columbia, S. C., trading as New Aseptic Laboratories, agrees that in the sale of absorbent and surgical cotton he will discontinue use of the words "sterilized" or "aseptic" as a brand or label to describe or designate products which are not free from bacteria both at the time of the final packaging by the manufacturer and at the time of the sale of the packages to the ultimate purchasers.

No. 1790. Philco Radio and Television Corporation, Tioga and C Sts., Philadelphia, stipulates that, in advertising its radio sets for sale, it will discontinue broadcasting representations, the effect of which is to imply to listeners-in that the announcer has actually tuned in a designated foreign broadcasting station; that the program heard is picked up from such foreign station and is being rebroadcast through the local station or network over which the announcer is speaking, or that the foreign station was originally picked up and a recording made therefrom, when such are not the facts.

According to the stipulation, the respondent corporation, in soliciting the sale of Philco products, caused advertising programs entitled "Around the World with Boake Carter" to be broadcast, these programs consisting of a series of electrically transcribed talks in the form of continuities prepared by Carter and describing his visits to foreign countries. At certain points during the broadcasting of such electrically transcribed discourses, Carter is said to simulate a demonstration of tuning in a musical program from a radio station in the foreign land being discussed, when, according to the stipulation, the music heard by listeners-in does not come from a foreign station but is produced in the studio of the station from which the broadcast is being made.

The respondent corporation also agrees to cease and desist, when referring to the possibilities of short wave radio reception, from use of such statements as "With the new Philco I can tune what I want now when I want it", or any representations of similar meaning, implying that foreign radio programs may be obtained with a reasonable degree of clarity, regardless of static, atmospheric conditions or signal strength.

No. 1791. Lewis Tannenbaum, trading as Sha-Po Manufacturing Company, 12 Bleecker St., New York, will discontinue selling baseball caps or other novelty headgear manufactured from second-hand, used or discarded felt or other materials, unless he stamps upon such products words clearly indicating that they are not manufactured from new and unused materials, but from second-hand, used or discarded materials.

No. 1792. Gilbert Alexander Sheard, Post Office Box 666, Dayton, O., trading as Supreme Lubricants Company and as Lubricating Specialties, agrees to discontinue employing the name "Pyroil" on measuring cups used in connection with the sale of his product which is not manufactured by the Pvroil Company of La Crosse, Wis., and from using that name or making any representation so as to imply that the lubricant he sells is made by the Pyroil Company, when such is not a fact. Pyroil Company, according to the stipulation, is the trade name under which a graphited lubricant has become well known to and recognized by the trade and public to be the product made and sold first by William V. Kidder and, subsequent to his death, by his widow, trading as Pyroil Company.

The respondent also stipulates that he will cease using the labels or in any other manner the words "Fyroyl" or "Powroil", or any other words simulating "Pyroil", either alone or with the word "original", to designate his product so as to imply that it is manufactured by Pyroil Company.

No. 1793. H. E. Ohls, Post Office Box 35, Marion, O., trading as Ohls Poultry Yards and Hatchery, stipulates that in advertising matter he will refrain from representing that he has sold more than 1,000,000, or any other number, of baby chicks in a designated state or place during a specified period of time, when such stated number of chicks so sold is inaccurate or much in excess of the actual number.

No. 2370. Acme Distilleries, Inc., 723 West Pratt St., **Baltimore,** has been ordered to cease and desist from representing, through use of the word "Distilleries" in its corporate name and in advertising or on labels, that it is a distiller of whiskies or other spirituous beverages. Findings are that the respondent company is a rectifier, blender and bottler of liquors.

Under the order, representation that the respondent company owns, operates or controls a plant where liquor is manufactured by distillation, is prohibited, unless and until the company shall actually own or control a distillery.

According to findings, the respondent company's business was placed in the hands of receivers and its assets sold by auction except that no sale was made of the name "Acme Distilleries, Inc.," or of the right to use it, "unless and insofar as such right may be incident to a sale made by said receivers to the Overbrook Co., another Baltimore rectifier, of respondent's unused labels bearing its corporate name."

No. 2534. W. A. Gibbs & Son, Inc., Chester, Pa., has been ordered to discontinue unfair methods of competition in connection with the sale of animal traps designated as "Two-Trigger," used principally for trapping muskrats.

The order to cease and desist directs the respondent corporation to cease representing in its advertising matter that its traps are 100 per cent efficient in operation or effect a 100 per cent catch; that they will entirely eliminate misses, escapes, "wring-offs" or losses, and that every animal that springs the trap will "stay caught."

No. 2732. An order has been issued to cease and desist requiring **Garten Table Pad Co.,** 131 Market St., **Philadelphia,** to cease and desist from unfair representations in the sale of its manufactured articles, namely, table pads used for protection of table surfaces from hot dishes.

Representation is prohibited through use of labels or otherwise, that this company's table pads are backed with felt, a material produced from wool fibres, or wool and cotton materials, which have been matted together, compressed and shrunk, when in fact they have not been backed with such material.

No. 2865. The Atlantic Coast Oil Company of New York, Inc., with headquarters at Dry Harbor Road and Cooper Avenue, Glendale, Queens, **New York City,** blender and wholesaler of motor oils and greases, has been ordered to discontinue representing, through use of the emblem of the Pennsylvania Grade Crude Oil Association, that it is a member of this association, until and unless such is the case.

Findings are that the Pennsylvania association is composed of practically all the refiners of motor oil produced from the Pennsylvania oil fields and a large number of jobbers and distributors of Pennsylvania oil.

The order also directs the respondent company to stop representing, through use of the Pennsylvania association emblem, and of the phrase "Guaranteed 100 per cent Pure Pennsylvania Oil, Specially Processed," of the word "Pennsylvania," of the phrase "Permit No. —," or the word "License," together with the emblem, that the oil or greases sold by the respondent company are pure, unadulterated Pennsylvania oils or greases produced in the Pennsylvania fields, unless and until this is true.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

No hearings have been scheduled before the Broadcast Division or the Examiners of the Commission for the week beginning October 12, because of the general allocation hearings which are now being held.

The Broadcast Division did not have its meeting at the regular time this week.

APPLICATIONS RECEIVED

First Zone

WGY—General Electric Co., Schenectady, N. Y.—Construction
790 permit to install new transmitter; make changes in antenna; increase power from 50 to 500 kilowatts; move transmitter from Mariaville Rd., near South Schenectady, N. Y., to site to be determined, Schenectady, N. Y.

WBAL—The WBAL Broadcasting Company, Baltimore, Md.—
1060 Construction permit to install directional antenna for night use; change hours of operation from shares with WTIC to unlimited.

WIBX—WIBX, Inc., Utica, N. Y.—Construction permit to install
1200 new transmitter and vertical antenna; change power from 100 watts night, 300 watts day, to 100 watts night, 250 watts day; and move transmitter from 187 Genesee St., First National Bank Bldg., Utica, N. Y., to Schuyler St., Town of Marcy, N. Y.

NEW—Kings Broadcasting Corp., Borough of Brooklyn, New
1400 York.—Construction permit for a new broadcast station to be operated on **1400 kc.,** 500 watts, shares with WLTH and WARD. Requests facilities of WBBC and WVFW.

WWRL—Long Island Broadcasting Corp., Woodside, Long Island,
1500 N. Y.—Modification of license to change specified hours. Request hours of WMBQ.

NEW—Westinghouse Electric & Manufacturing Co., Portable-Mobile.—Construction permit for low frequency relay broadcast station on **1606, 2022, 2102, 2758 kc.,** 15 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Portable-Mobile.—License to cover above.

Second Zone

WKBN—WKBN Broadcasting Corp., Youngstown, Ohio.—Con-
570 struction permit to erect a vertical antenna and move transmitter from YMCA Bldg., 17 North Champion St., Youngstown, Ohio, to 3120 Sunset Blvd., Youngstown, Ohio.

NEW—West Virginia Newspaper Publishing Company, Clarks-
630 burg, W. Va.—Construction permit for new broadcast station to be operated on **630 kc.,** 5 KW power, unlimited time. Amended: Change power requested from 5 KW to 1 KW night and 5 KW day power, giving studio site as 209-215 S. Third Street, Clarksburg, W. Va., and change transmitter site from Clarksburg, W. Va., to 16 Chancery Street, Buckhannon, W. Va.

WPHR—WLBG, Inc., Petersburg, Va.—Modification of license
880 to change hours of operation from daytime to unlimited, using 500 watts power day and night.

WHBC—Edward P. Graham, Canton, Ohio.—Modification of
1200 construction permit (B2-P-241) to install new equipment, increase power, requesting extension of completion date from 4-27-36 to 7-27-36. Amended: Extend completion date from 4-27-36 to 1-27-37.

WEST—Associated Broadcasters, Inc., Easton, Pa.—Authority to
1200 make changes in automatic frequency control apparatus.

WJIM—Harold F. Gross, M. B. Keeler and L. A. Versluis, d/b
1210 as Capitol City Broadcasting Company, Lansing, Mich.—Voluntary assignment of license from Harold F. Gross, M. B. Keeler, and L. A. Versluis, d/b as Capitol City Broadcasting Company, to Harold F. Gross.

WSAN—WSAN, Inc., Allentown, Pa.—Construction permit to
1440 install new transmitter and vertical antenna.

WCBA—B. Bryan Musselman, Allentown, Pa.—Construction per-
1440 mit to install new transmitter and vertical antenna.

Third Zone

KTSA—KTSA Broadcasting Co., San Antonio, Tex.—Authority
550 to determine operating power by direct measurement of antenna.

KTSA—KTSA Broadcasting Co., San Antonio, Tex.—License to
550 cover C. P. (B3-P-1294) for new transmitter.

WAML—The New Laurel Radio Station, Inc., Laurel, Miss.—
1310 Modification of license to change hours of operation from specified hours to unlimited time.

WCOA—Pensacola Broadcasting Co., Pensacola, Fla.—Construc-
1340 tion permit to make changes in transmitter and antenna and move transmitter from San Carlos Hotel, Pensacola, Fla., to site to be determined, Pensacola, Fla.; increase power from 500 watts to 1 KW.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—License to
1420 cover construction permit (B3-P-439) as modified for new station on **1420 kc.,** 100 watts power, unlimited time.

KGFI—Eagle Broadcasting Co., Inc., Corpus Christi, Tex.—Modi-
1500 fication of construction permit B3-P-1056 to move transmitter and changes in equipment; change in frequency from **1500 kc.** to **1330 kc.;** increase in power from 100 watts night, 250 watts day, to 500 watts day and night; make changes in equipment; extend commencement and completion dates.

Fourth Zone

WDAF—The Kansas City Star Co., Kansas City, Mo.—Construc-
610 tion permit to install new transmitter and vertical antenna; move transmitter from 1729 Grand Ave., Kansas City, Mo., to Mission Road and Somerset Drive, Johnson County, Kansas.

NEW—Northwest Publications, Inc., Duluth, Minn.—Construc-
920 tion permit to erect a new broadcast station to be operated on **920 kc.,** 250 watts, daytime operation.

WEAU—Central Broadcasting Co., Eau Claire, Wis.—Modifica-
1050 tion of construction permit (B4-P-736) for new station, further requesting changes in equipment, increase in power from 250 watts to 1 KW.

WFBM—Indianapolis Power & Light Co., Indianapolis, Ind.—
1230 Modification of license to change power from 1 KW night, 5 KW day, to 5 KW day and night, using directional antenna at night.

KGLO—Mason City Globe Gazette Co., Mason City, Iowa.—
1210 Modification of construction permit B4-P-789 for new station, requesting changes in transmitter and antenna and move transmitter and studio from State and Delaware Sts., Mason City, Iowa, to West 4th St., Mason City, Iowa; extend commencement and completion dates from 9-24-36 and 3-24-37, respectively, to 30 days after grant and 90 days thereafter.

WBOW—Banks of Wabash, Inc., Terre Haute, Ind.—Construc-
1310 tion permit to install new transmitter, directional antenna, night use; change frequency from **1310 kc.** to **930 kc.,** power from 100 watts night, 250 watts day, to 500 watts night, 1 KW day; and move transmitter from 25th and Dimmick Sts., Terre Haute, Ind., to Terre Haute, Ind.

WTAQ—WHBY, Inc., Green Bay, Wis.—Construction permit to
1330 install new transmitter, increase power from 1 KW day and night to 1 KW night and 5 KW day.

NEW—Harold A. Lason and Ernest G. Hendrickson, d/b as
1340 Lason-Hendrickson Broadcasting Company, Huron, S. Dak.—Construction permit to erect a new broadcast station to be operated on **1340 kc.,** 250 watts, unlimited time. Request facilities of KGDY.

WDWS—Champaign News Gazette, Inc., Champaign, Ill.—Modi-
1370 fication of construction permit (B4-P-475) for new station for changes in equipment; change in studio site from U. S. Route No. 25, .6 mile south of city limits, Champaign, Ill.; for approval of antenna and transmitter site as specified on construction permit. Amended to correct transmitter site to 600 feet south of Kirby Ave., Champaign, Ill.

NEW—The Waterloo Times-Tribune Publishing Company, Water-
1370 loo, Iowa.—Construction permit for a new broadcasting station to be operated on **1370 kc.,** 100 watts, daytime operation. Amended: From a special broadcast to a regular broadcast station.

KOBH—Black Hills Broadcast Co. (Robert Lee Dean), Rapid
1370 City, S. Dak.—Modification of construction permit (B4-P-231) for new station to change type of RCA transmitter equipment from ET 4230 to ET 4240.

KABR—Aberdeen Broadcast Co., Aberdeen, S. Dak.—Construc-
1420 tion permit to install new transmitter, change frequency from **1420 kc.** to **1390 kc.,** increase power from 100 watts to 1 KW.

Fifth Zone

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—Construction
970 permit to make changes and move present licensed auxiliary transmitter of KOMO to 26th Ave., S. W., and Fla. St., West Waterway, Seattle, Wash., to be used as an auxiliary transmitter for station KOMO and KJR, using the same antenna.

KWJJ—KWJJ Broadcast Co., Inc., Portland, Ore.—Modification
1066 of construction permit (B5-P-837) for equipment changes (antenna), move transmitter and studio, requesting extension of completion date to 12-8-36.

KFIO—Spokane Broadcasting Corporation, Spokane, Wash.—
1120 Construction permit to install new transmitter; change frequency from **1120 kc.** to **1110 kc.,** power from 100 to 500 watts, time from day to unlimited; antenna to be determined; move transmitter from 526 Riverside Ave. to site to be determined, Spokane, Wash.

KDON—Monterey Peninsula Broadcasting Company, Del Monte,
1210 Calif.—Construction permit to change frequency from **1210 kc.** to **1280 kc.,** install a new transmitter, and increase power from 100 watts to 250 watts night and 1 KW day. Amended to change requested equipment.

KFJR—Ashley C. Dixon, KFJR, Inc., Portland, Ore.—Voluntary
1300 assignment of license from Ashley C. Dixon, KFJR, Inc., to KALE, Inc.

KGHF—Curtis P. Ritchie, Pueblo, Colo.—Authority to install
1320 automatic frequency control.

KUMA—Albert H. Schermann, Yuma, Ariz.—Construction per-
1420 mit to make equipment changes.

The National Association of Broadcasters
NATIONAL PRESS BUILDING * * * * * WASHINGTON, D. C.
JAMES W. BALDWIN, Managing Director

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Clear Channel Group Completes Testimony at Allocation Hearing

Joseph O. Maland of Station WHO, Des Moines, Iowa, at today's allocation hearing before the Federal Communications Commission took up the social and economic questions on behalf of the Clear Channel Group. With his testimony that group completed its part in the hearing.

Others who addressed the Commission today included Louis G. Caldwell, counsel for the Clear Channel Group; Judge John C. Kendall, Portland, Oregon, on behalf of certain licensees on shared clear channels; Harold A. LaFount, formerly a member of the Radio Commission; John Shepard, 3rd, chairman of the Executive Committee of the National Association of Regional Broadcast Stations; and Dr. G. W. Pickard who discussed technical questions for the Regional Group.

During the course of today's hearing Judge Sykes acting as chairman announced that owing to the fact that the Broadcast Division of the Commission wished to hold its executive meeting on Friday, that hearings on the allocation question would be adjourned at noon on Friday until 10:00 o'clock Monday morning.

LOUIS G. CALDWELL

Mr. Caldwell returned to the stand today on behalf of the Clear Channel Group to put some figures into the record relative to the expenses of clear channel stations.

A broadcaster now operating a 50 kilowatt station would have to expend about $310,000 to change that station to 500 kilowatts, Mr. Caldwell told the Commission. He compared monthly operating expenses of a 50 kilowatt and 500 kilowatt station by stating that the energy for a 50 kilowatt station would cost about $1,600 a month, increasing to $6,500 for a 500 kilowatt station.

Mr. Caldwell said further that tubes for the lower power station would cost about $900 per month and for the higher power station about $4,000. Personnel for the low power would be $800 per month, increasing to $1,000 for the higher power. He said that monthly miscellaneous expenses for the low power station would be about $200 with about $440 for the higher power.

Total expense per month for the 50 kilowatt station he estimated would be $3,500 and $12,000 for the 500 kilowatt station. There would be a depreciation charge of $2,000 per month for the 50 kw. station and $4,630 for the 500 kw. station. The totals for the month therefore, he said, would be 55,500 for the 50 kw. station and $16,630 for the 500 kw. station. He gave no estimates for any increased appropriation for programs.

JOSEPH O. MALAND

Mr. Maland in a detailed discussion for the Clear Channel Group said that his group is opposed to the abolishment or reduction in the number of clear channel stations. That group he said, however, supports a minimum of 50 kilowatts for clear channels and urges that the present maximum limitation of 50 kilowatts be removed.

"The real danger in the economics of broadcasting," said Mr. Maland, "is that the interest of the advertiser in reaching large masses of listeners, and the profit that is to be made in accommodating him, will result in laying down too many tracts of good reception to thickly inhabitated centers and too few or none at all, to sparsely settled areas, which are not such attractive markets."

Owing to the fact that the Broadcast Division will hold its regular executive meeting Friday Afternoon the Allocation Hearings will be adjourned at noon on Friday until next Monday. Therefore there will be no daily Bulletin until that dated October 12.

(NOTE—In Mr. Maland's complete statement which follows reference is made to certain figures and exhibits which are not reproduced in this Bulletin. However, his references explain what these figures mean.)

Mr. Maland said:

Member of Group

My name is Joseph O. Maland. My residence is Des Moines, Iowa. I am vice-president of the Central Broadcasting Co., and manage WHO, a broadcast station operated by that company under a license issued by the Federal Communications Commission. My company is a member of the Clear channel Group, and I am making this statement in behalf of the Group.

Two words, somewhat inconspicuously placed in the notice of this hearing, are packed with more tantalizing and elusive opportunities for debate than will be found in the several pages of technical topics. These two words are "social" and "economic."

Logically, I suppose, economic questions should be discussed by an economist. I am not sure what kind of an expert social questions require. So far as I know, I am not an expert in either field (although I reserve the right to withdraw this confession), but, like our chairman, Mr. Craig, I am just one of the executives charged with the operation of a clear channel station. Frankly, I do not know where we could have found an expert really competent to throw any light on such economic and social issues as may be raised in this hearing. These issues are so closely intertwined with technical, legal and other problems thought to be peculiar to the industry, that it is not easy to unscramble them. The members of our Group have concluded, therefore, that it would be of more assistance to you if the issues were discussed from a practical standpoint by one of us who has had continuous and intensive experience in the business side of broadcasting and yet is not unfamiliar with the technical background. The choice has fallen on me.

I do not mean, of course, that the peculiarities of broadcasting call for the application of any radically new rules, economic, or social. As a matter of fact, almost the opposite is true, if it is to continue on a sound basis. On the economic side, broadcasting is a medium of advertising, and belongs to rather a large family of advertising media, including the newspaper and the magazine. On the social side, broadcasting is an agency of mass communication and belongs to a family which embraces, in addition to the newspaper and the magazine, the moving picture theatre, the public platform, and other relatives, some closely akin and some very distantly. These facts are often obscured by the impressive technical and legal clothing which radio engineers and lawyers have thrown over our industry, and by some of the surprising deductions that others have drawn by looking at the clothes only. Strip the industry of its technical language, however, and you find

pretty much the same sort of creature as the members of its family on both sides who have been familiar figures for years and even centuries.

Economic and Social

Since I am apparently the first witness to deal specifically with economic and social issues at this hearing, I have the privilege (and the responsibility) of selecting my own definitions. I have chosen the very commonplace method of reference to the dictionary for my starting point. Among the wide choice of meanings provided by Webster, I have chosen a definition of "economic" which, with a little paraphrasing, reads:

> "of or pertaining to the management of a business with reference to its source of income, its expenditures and its maintenance or productiveness."

The word "social" was not quite so easy; any definition I could find was somewhat of a circle. So I have taken Webster's definition of "social" as

> "of or pertaining to society or a social organism."

although I am not completely satisfied with it.

The dividing line between the two words is not difficult to find so far as broadcasting is concerned. Expressed in their simplest terms, for the purpose of this hearing, "economic" seems to me to have to do with the industry's means of support, principally advertising; "social", I think, has to do with the industry's means of serving the public, its dissemination of program service. As would naturally be expected, there is no hard and fast line between the two for they frequently cross paths and react on each other. The difference is largely a matter of emphasis but nevertheless it is important.

So far as clear channels are concerned, there are two proposals before you of sufficiently important character to call for discussion of their economic and social effects. One proposal, to which our Group is opposed, is that clear channels be abolished or reduced in number. The other, which our Group supports, is that the power minimum on clear channels be raised to fifty kilowatts and that the present maximum limitation of 50 kilowatts be removed. As you know, there are other proposals in which we are interested but they are of minor importance compared to these two.

Economic Effects of Proposals Relating to Clear Channels

Before taking up the economic effects of either proposal, I must review with you a few elementary facts about the business side of broadcasting.

Broadcasting is supported by the sale of time, most of it to American business concerns desiring to bring their products or services to the favorable attention of the public. There are, of course, sales of time for other purposes, one such purpose being considerably in evidence during these pre-election months. It will serve to simplify the discussion, however, if I assume that the sale of time is all for advertising purposes.

American System of Ownership

This economic basis was made inevitable when the decision was made, back in what Mr. Craig has called the prehistoric days, to have broadcasting carried on under the American system of private ownership and operation as contrasted with the system of government ownership and operation, accompanied by the licensing of receiving sets, so prevalent in other parts of the world. In his opening address at the Fourth National Radio Conference in 1925, the then Secretary of Commerce said:

> "The decision that we should not imitate some of our foreign colleagues with governmentally controlled broadcasting supported by a tax upon the listener has secured for us a far greater variety of programs and excellence in service free of cost to the listener. This decision has avoided the pitfalls of political, religious, and social conflicts in the use of speech over the radio which no Government could solve—it has preserved free speech to this medium."

It is not necessary in this gathering, I take it, to justify the decision. I am sure that the American public, as a whole, does not regret it, particularly when it now sees that in some of the countries where other systems prevail the broadcasting systems have become tools in the hands of dictators, that in none of them does freedom of speech obtain in the sense that we know it, and that none of them offers a program service even remotely approaching ours. If a decision had been made the other way, we should not be having a hearing such as this although we might be gathered together to protest against the size of license fees the Government was charging for the use of our own receiving sets or to complain about the quality of programs the Government was broadcasting.

There was another important decision made back in those early days, which has had both economic and social effects. It was, that a monopoly of broadcasting would not be tolerated. The Third National Radio Conference went on record as being "unalterably opposed to any monopoly in broadcasting" and the Secretary of Commerce said:

> "It would be unfortunate, indeed, if such an important function as the distribution of information should ever fall into the hands of the Government. It would be still more unfortunate if its control should come under the arbitrary power of any person or group of persons. It is inconceivable that such a situation could be allowed to exist * * *."

This decision, which was reflected in the laws passed by Congress in 1927 and in 1934, is again one that I am sure no one regrets.

System Has Grown

Our system has grown, has prospered, and has served the public, on the economic basis of advertising. No system, however, is perfect, and we must reckon with the dangers in ours. The principal danger in our system is not that which you most often hear charged against it, namely, excessive or undesirable advertising. Such missteps as may have been made in this direction were, I am convinced, merely the growing pains of a young industry, accentuated by the depression. The real danger in the economics of broadcasting is that the interest of the advertiser in reaching large masses of listeners, and the profit that is to be made in accommodating him, will result in laying down too many tracks of good reception to thickly inhabited centres and too few, or none at all, to sparsely settled areas, which are not such attractive markets. Analyze these issues that now face you to see if underneath the elaborate technical charts and graphs and the impressive statistics and tabulations you do not find a fundamental issue between those who want more stations in cities that already have stations and those who are striving to preserve what there is of rural reception and to improve it.

An Autocrat

An autocrat can place his country's broadcast stations where he chooses and see to it that all parts of his domain are as well served as the state of the art permits. Our stations must be so located and given such assignments of frequency, power and hours of operation that they can survive economically. Fortunately, there is nothing in our system which prevents our doing as good a job in laying down tracks of good reception as the autocrat. There is simply the temptation and pressure to do otherwise, which must be recognized for what it is and guarded against. That, I take it, is one of the essential purposes of inserting the phrase "public interest, convenience or necessity" in the radio law, to be sure that the listener's rights do not suffer because of some private interest.

Let us turn now to a study of the broadcasting industry's source of revenue, and the prospects for its future increase. This will help us determine whether, as an industry, it can afford to make expenditures such as are contemplated in proposals for higher power and the consequent increase both in investment and in cost of operation. Let us take the source of revenue for all business, the national income, as our starting point.

Figure No. 1 shows the income produced in this country since 1929 (the first year for which this information is available), in terms of billions of dollars. The information is taken from a report of the Division of Economic Research of the Department of Commerce. No graph is necessary to inform you that in years prior to 1929, or perhaps a year or two before then, the trend has been steadily upward from the beginning, not in a straight line, of course, but varied by peaks and depressions. As shown by the graph, our national income in 1929 was $81,034,000,000. By 1932 it had declined to $39,545,000,000, but since then there has been a steady increase to $52,959,000,000 in 1935 and it is freely predicted that for 1936 it will exceed $60,000,000,000. Even were it to remain at its present point, the financial condition of the broadcasting industry as a whole would be healthy. But the trend upwards is not going to stop with 1936.

National Income

Out of this national income is paid the bill for advertising. In terms of dollars, as you would naturally expect, it follows the

same general trend as national produced income. Figure No. 2 is a graph prepared by the Bureau of Foreign and Domestic Commerce in the Department of Commerce as a general index of advertising activity from 1922 to 1935. Note that its peak year was 1929 and that its low point was 1933, a year after the bottom had been reached in national produced income. Since then, general advertising activity has followed an upward trend, keeping pace with the income out of which it is paid. One significant point is that in 1935 the general index of advertising activity stood 42 points below the 1929 peak and 20 points below the 1928-1932 average. In other words, advertising volume will have to increase 25 per cent before it reaches anything like what might be called normal and approximately 55 per cent before it reaches the 1929 level.

Out of that portion of the national income which pays the bill for advertising, the broadcasting industry is supported. The industry is too young to be armed with any great amount of statistics. It was not really until 1928 that it entered the commercial advertising field, which it has had to share with other media of advertising, including newspapers, magazines and outdoor advertising, competing at every turn for the advertiser's dollar. It enjoyed less than two years of commercial advertising activity before the depression set in. Nevertheless, swimming against the current, its revenue continued to rise until 1932 when it suffered its only decline, reaching its low at the end of the year. Since 1933 its rise has been sharp, both in terms of dollars and when compared to the advance of other media.

Advertising

Figure No. 3 is a graph prepared by the Bureau of Foreign and Domestic Commerce, made public last March, showing the annual index of advertising volume of the five classes of major media from 1921 to date. The first comprehensive compilation of statistics on broadcast advertising was made by the National Association of Broadcasters for the year 1934. Prior to that year we have only estimates. The estimated total gross receipts for 1933 amounted to approximately $57,000,000. In 1934 they rose to $72,887,169, an increase of 27 per cent over 1933. The receipts for 1934 thus equalled, if they did not actually exceed, the previous peak year of 1931 when, according to the calculations of the Federal Radio Commission, corrected for duplications, the total gross revenue ranged between $70,000,000 and $73,000,000. At this point let me utter a word of caution. The figures I am giving you are gross revenue, not profits. The survey made by the Federal Radio Commission in 1931 shows that the industry as a whole was operating at a net loss, and this was the peak year up to that time. Broadcasting had had a decade of being heavily in the red before it even approached breaking even, and it was thirteen years old before it crossed the line into the black. Broadcasters were losing anywhere from a few dollars to half a million dollars a year in that earlier period.

New Level

In 1935 a new high level was reached, with a total of $87,523,848, a gain of 20 per cent over 1934. That the figures for 1936 will exceed those of 1935 is evidenced by the fact that the total for the first six months was $50,802,179, an increase of approximately 13 per cent over the corresponding period in 1935. I realize how dangerous it is to predict or to raise false hopes for the future on the basis of past performance. The fact is, however, that, reducing the trend to terms of dollars, we may expect a substantial increase in broadcast advertising by the time advertising activity reaches a normal level and a very large increase if and when the 1929 level comes.

This, however, is on the assumption that broadcast advertising will remain at a standstill in its relative position among advertising media. Figure No. 4 is a graph showing a comparison between the index for broadcast advertising and the general index of advertising activity. If the relative trend is maintained, the industry may look forward to even greater increases than are indicated by the percentages and the sums I have mentioned.

Outlook for Increased Revenue

The truth is that not only is the outlook for increased revenue from broadcast advertising better than at any earlier period in the history of the industry but broadcasting is today outstripping all other media in its bid for a share of the advertiser's dollar. This is attested every day by actual events.

Figure No. 5 is a chart showing the percentage increases each year during the past three years in advertising volume of the four media, broadcasting, national magazines, national farm papers and newspapers. It shows the following:

	1933	1934	1935
Broadcasting	—18%	+27%	+ 20%
National magazines	—16%	+21%	+5.9%
National farm papers	—17%	+29%	+7.0%
Newspapers	—11%	+10%	+5.8%

Yet, in the face of all that I have said, the broadcasting industry received but 10.8 per cent of the amount of money spent in 1934 for advertising in the major media, and but 11.9 per cent in 1935. The future is one for optimism, indeed, if broadcasting continues to enjoy the favor of its large listening public and thus to be an increasingly attractive method of reaching that public.

Certainly, as we review these figures we cannot help being impressed with the fact that here is an industry that can well afford, and might justly think it a duty, to turn some of its profit to the high aim of improving the tracks of reception into American homes, so that, so far as possible, the signal that is now marred by its weakness, or by static, or by other electrical disturbances, may be lifted to the level of satisfactory program service and so that a greater measure of service can be extended over those vast rural and remote areas where it is most needed and appreciated and where, in some respects, it renders its greatest service and is more of a necessity than a luxury. This means the placing of all equipment in efficient condition, in keeping with the advancing standards which the Commission's technical staff has so competently and so reasonably devised for the sake of the listening public. More than that, it means higher power for those that are lagging behind, such as those who are using only five kilowatts on a clear channel, and higher power for those who are financially prepared and willing to pioneer ahead on other clear channels. It means higher power for the regionals and the locals, an advance all along the line throughout the broadcast spectrum with due allowance for those cases where economic support may not yet have reached a point that will justify the expenditure. The figures show, in my opinion, not only that the industry can well afford to lay down these improved tracks but that there will be plenty left over to take care of prospective developments in television, experimentation with the ultra-high frequencies, and any other development that may be on the horizon. , Such a course is not inconsistent with the selfish interest of the broadcasters themselves.

What Does High Power Mean?

What does higher power mean from the economic standpoint? What, if not more circulation? The attraction of the broadcasting station to the advertiser lies primarily in the fact that it delivers an interference-free signal at a satisfactory signal strength over a territory inhabited by a certain number of people. I do not mean, of course, that stations will not differ in their "circulation" for other reasons, such as the good-will built up through excellent programs, the ability of executives, and other factors. They *do* differ, but these are variables under the control of the station owners and to avoid complicating this discussion I must assume they are equal in such respects.

Our technical experts tell us that the broadcasting industry is today failing to deliver what might be described as primary daytime service to about 75 per cent of the area in this country, containing over 40,000,000 people, not to mention the deficiencies in its nighttime service. There are enormous areas and millions of people that have *no* reception at day and only intermittent service at night. You appreciate, I am sure, that I am discussing this from a coldly business point of view. The social aspects of the failure to reach this large territory and these millions of people belong under my second subject-heading. It is not without reason that there is only one receiving set for every 8.82 persons in rural areas as against one for every 4.35 persons in the cities. Here is a large potential circulation, which is untapped and which advertisers can reach, in the daytime particularly, only by using newspapers, magazines and bill boards. We speak of economics. Is it good economics for the industry to attempt to lay down tracks of good reception to this larger audience and to improve the tracks to the present audience? Or is it good economics for the industry not only to ignore the potential audience but also to cut down its present audience still further and surrender it entirely into the hands of other media?

Answer Clear

To me, the answer seems clear. The industry as a whole will gain in revenue as it gains in circulation and as it gives better

assurance that its programs will reach what it claims as its present circulation. It will lose in revenue if it decreases its present circulation by cutting off listeners through interference. Much of its present circulation is like a newspaper printed in poor type, on obsolete presses, with large portions of it so blurred or faint as to be illegible, and delivered by an unreliable carrier system.

This is not the proper time in which to discuss the ability of particular stations in particular localities to meet the expense of going to higher power. As Mr. Craig has already pointed out, for economic reasons traceable directly to advertising support, some cities and regions are able to support 500-kilowatt stations on clear channels immediately. Others are not quite ready. As you know from the applications pending before you, some clear channel licensees are ready and anxious to take the step tomorrow if you will permit it, and others are holding back. Others are reluctant to do so immediately but would if the only alternative were to suffer duplication on their channels. All matters such as the financial ability of the applicant to make the expenditure, his wisdom in doing so and the capacity of the city and region to support the station, can, if they become pertinent, be decided on the hearing of each particular application.

Statistics

You may, however, be interested in a few statistics of a general character on this subject. The approximate additional cost of installing a 500-kilowatt transmitter, by those now having 50-kilowatt stations, exclusive of such matters as land and buildings that may be involved, is estimated at $310,000.

As Mr. Chambers has shown you, once the initial outlay has been made, the additional cost of operating with the increased power does not present any serious economic questions. Such an increase would normally and necessarily be followed by an increase in rates on the part of clear channel stations. I have endeavored to obtain some idea of how much this increase would be but it is impossible to form any definite conclusion. In the one example we have, the increase in rates has been a little over 25 per cent. Others, whose rates are probably already too low, might have to adopt a somewhat greater increase. From what I have already stated with regard to the trend of broadcast advertising, and with the increased coverage that would result, it can hardly be doubted that the higher rates would be easily absorbed and would be met cheerfully by advertisers.

At this point, I want to digress for a moment to point out a characteristic of the clear channel licensees composing our Group which is very significant. I do this without intending to make any invidious comparisons, for I know that there are many others outside the Group of whom the same may be said. But, in general, this Group is comprised of concerns that have put service ahead of dollars and cents, that have been in broadcasting since its prehistoric days, that made heavy expenditures and suffered tremendous losses for years before they operated their stations at a profit, and that, in general, have poured what profit they have made back into better equipment, higher power transmitters, and better program service, instead of taking that profit in the form of dividends. In the main they have grown from tiny installations of 50 watts or less to efficient modern plants of 50 kilowatts and, in one case, the station has grown from 20 watts to 500 kilowatts. In general, they had expended anywhere from about $200,000 to as high as $2,000,000 before they operated at a profit. Only a minority of the number have ever paid any dividends; those have been only in recent years and in modest amounts of five per cent annually. The very small percentage of their time devoted to phonograph records (in eight instances none at all) tells you something of the responsibility they feel with respect to their program service, as do also their monthly expenditures for talent which run as high as $40,000. I mention these circumstances to show you that the members of our Group and, I think, clear channel licensees generally, have had a high conception of their trust from the outset, and that they can be relied upon to accept an enlarged trust with the same spirit.

Another Side

Now let us turn to another side of the picture, the effect of the two fundamental proposals on other broadcasters, regional and local. First, I lay down the general premise that, even from the most narrowly selfish point of view, no part of the industry has anything to gain from a proposal that hurts the industry as a whole or that impairs the service now rendered by it to the public or that blocks the way to improvement of that service. Its "circulation" cannot be cut down without playing into the hands of competing media, with an eventual adverse effect on all members of our industry. Future increases in that "circulation" cannot be prevented without a similar adverse effect on the industry's natural growth, shared in by all its members. Fortunately, however, it is unnecessary to rely on these broad principles to prove my point. The proof is at hand in obvious facts and trustworthy statistics.

Consider, first, the effect of introducing duplication on clear channels. What will be the economic corollaries for those very station-owners that now propose it, the National Association of Regional Broadcast Stations? The most obvious corollary is that there will be more stations which, with respect to power and coverage, will in general fall in the category of regional stations. Where will those stations be located? This is not difficult to forecast from past history and present tendencies.

667 Broadcast Stations

There are about 667 broadcast stations in the United States, scattered over the country, but, as you have seen from the technical exhibits, with a heavy concentration in the northeast. Ignoring the existing duplication on certain clear channels, there are 47 dominant clear channel stations located in 35 metropolitan areas, the most populous being the New York City area with 10,901,424 people and the least being Hot Springs, Ark., with 20,238 people. In those same metropolitan areas are 135.5 other stations, 98 of them regional and 37.5 local. I am including daytime and limited time stations on clear channels as regional, and, where two stations divide time, I count them as one station. Daytime and limited time stations I am counting as separate stations. On this basis, there are 280.25 regional stations and 250.25 local stations. Thus, 35 per cent of the regional stations and 15 per cent of the local stations are now in metropolitan areas where clear channel stations are located.

It is impossible to say categorically how large a city or trade area must be to support a regional station. So many intangible and variable factors enter into such a calculation, including, of course, the number of other stations in the city, their power and coverage, the wealth of the community and other items. I have heard it said that a city should have a population of about 75,000, and about 150,000 in the station's service area, to support a one-kilowatt full time regional. I do not know whether this is correct but it will serve as a basis for some statistics I want to leave with you. There are, it happens, ninety cities in the United States with a population in excess of 77,000, the ninety-first being Manchester, New Hampshire, with a population of 76,834, under the 1930 census. This is not on the basis of counting every separate municipality; it is on the basis of metropolitan areas. In the ninety metropolitan areas there are 168 regional stations and 89 local stations, or about 60 and 30 per cent respectively of the totals.

Different Angle

Figure No. 6 approaches the issue from a somewhat different angle. It shows the location of stations in cities of various sizes in population, those above one million; those from 500,000 to 1,000,000; those from 100,000 to 500,000; those from 50,000 to 100,000; those from 25,000 to 50,000; 10,000 to 25,000; 5,000 to 10,000; and those below 5,000. The figures with regard to revenue require some explanation and some qualification. They are taken from the station renewal applications on file with the Commission, reporting the gross revenue. It is rather obvious that several different theories of bookkeeping and accounting have been followed, and variations due to the amount charged to exective salaries, depreciation and other items are in all probability very great. Still, as averages these figures serve a useful purpose and cannot be ignored. They show a steady decrease in average as the population decreases, although particular instances will vary greatly because of the presence or absence of competition, the desirability of frequency assignments and so on.

Study of Rates

As we turn to a study of rates we arrive at somewhat the same conclusions. The best unit for comparison seems to be the highest, the nighttime quarter hour rate. Taking the last issue of Standard Rate and Data Service as the source of information, we find that the lowest rate in the country is $1.80 charged by a local station with power of 100 watts at Dublin, Texas; and that the highest is $532 charged by a clear channel station with power of 500 kilowatts at Cincinnati, Ohio. Between the two extremes, the classes

of stations cross paths as to rates just as they do with respect to revenue.

Figure 7 shows the average rates for the several classes of stations in cities of the same population classification as shown in the previous exhibit. This exhibit is exceedingly interesting, as it portrays the rate at which rates decrease as population decreases and also as coverage decreases. The progression is not entirely mathematical but it comes very near being so. The rates strongly suggest that the operation of clear channel or regional stations in cities of less than 50,000 is, as a rule, a very doubtful venture from a commercial point of view. So many factors enter into the matter, however, that I refrain from making any more positive statement.

Method of Approach

The next significant method of approach is in terms of pressure exercised for new stations as evidenced by applications for new stations, or for better assignments of frequency and power by existing stations. For this purpose, we made an analysis of all applications pending before the Commission, and all applications which have been denied during the past year, in an attempt to ascertain to what extent they came from cities that already had anywhere from one to five stations or more. The results are incorporated in Figure No. 8. This is based on a very elaborate analysis which is in our possession in typewritten form and which shows, with reference to each city from which such an application has proceeded, the number and classes of stations located there and the kind of station applied for. Let me say in explanation of this exhibit that for simplicity the stations have been classified entirely in accordance with the type of channel; in other words, a daytime station on a clear channel has been counted as a clear channel station. You will notice that while 71 of the pending applications are from cities that have no stations, only eight affect clear or region channels. The others are locals. These eight are from the cities having populations as follows:

St. Cloud, Minn.	21,000
Traverse City, Mich.	12,533
Helena, Mont.	11,803
Sarasota, Fla.	8,398
La Cruces, N. M.	5,811
Marysville, Calif. (2 applications)	5,763
Mt. Pleasant, Mich.	5,211

The eight which were denied last year were from cities having populations as follows:

Ann Arbor, Mich. (2 applications)	26,872
Johnson City, Tenn.	25,080
Cheyenne, Wyo.	17,361
Du Bois, Pa.	11,593
La Grand, Ore.	8,050
Lufkin, Tex.	7,311
Twisp, Wash.	335

Thus, out of a total of 124 clear and regional channel applications now pending, 116 were from cities already having stations. The detailed analysis shows, in general, that the more stations a city has, the more applications are pending from that city, although this is not always true. New York City has five, Los Angeles 4, and so on.

Other Straws

There are other straws which give additional evidence of the tendency. The applications for new stations that have been granted in the regional and daytime clear channel classes during recent years constitute one of them. The applications on the part of regional stations, and even of local stations, to move from smaller towns and cities into larger cities which already have stations constitute another. We have not attempted to make an analysis of these two categories but we are sure that instances in point will readily occur to all of you.

Figure 9 is a study of pending applications and of applications denied during the past year from the standpoint of cities of various sizes with respect to population. Forty-seven of the applications came from metropolitan areas having a population of 1,000,000 or more, and thirty-six of these were for assignments on clear or regional channels. Only nineteen came from towns of less than 5,000 and fifteen of these were for locals. The greatest number of applications (130) in any one population group was from cities of from 100,000 to 500,000, of which fifty were for assignments on clear or regional channels.

Even these Figures 8 and 9 and the supporting analysis are by no means a true indication of the actual pressure from the cities that already have stations. The Commission's present regulations, and the standards recommended by its engineering staff, although not always adhered to, have undoubtedly kept down the number of applications, particularly in the congested cities where a new station could hardly be fitted in without reducing the traditional 50 kc. separation to 40 kc. or even less.

One Station

There is no city with a population over 81,000 that does not have at least one broadcasting station. The largest city that has none is Saginaw, Michigan, with a population of 80,715, and it might well be included as part of the same community as Bay City, Michigan, which has a station. Figure 10 is a tabulation of cities having populations from that figure down to 20,000 that do not have stations. Incidentally, I have discovered that, due to oversight, this list is not entirely consistent with the analysis supporting Figure 8, and includes a few cities as separate municipalities that were considered as parts of communities listed in the analysis. In this list you will find a number that have had stations in the past but whose stations, with the approval of the Commission, have been moved to larger cities. I have counted fifteen that had stations according to the Commission's allocation list of June 30, 1928, and know that there must be others, such as in the case of the regional station in my state that was moved from Waterloo, Iowa.

There are seventy cities on the list. All but eleven of the cities are east of the Mississippi and for those that are west of the Mississippi, five are in Iowa (of which three formerly had stations and gave them up) and two each are in Minnesota, Missouri and Texas. Of the fifty-nine cities east of the Mississippi, all but two are north of the Mason and Dixon line, the two exceptions being in Georgia and Tennessee. Forty-three of the remaining fifty-seven are in five states, Massachusetts, Connecticut, New York, Pennsylvania and Ohio. The reasons for their not having more stations will, from a technical point of view alone, be readily appreciated.

It is significant that, with the exceptions I have mentioned, every city west of the Mississippi or south of the Ohio River with a population over 20,000 has a broadcast station. The four cities mentioned in Mr. Ring's testimony as having a population of between 50,000 and 100,000 and as being without broadcast stations, are, according to our calculations, two in Ohio (one of which formerly had a regional station and the other a local), and one each in Massachusetts and Michigan.

Figures Not Conclusive

I hesitate to say that these statistics and figures are worth much or little. I grant they are not conclusive. We have had to take what we could find and put it together for what it is worth. When, however, these various straws are added to what I think each one of us knows in his heart to be true, perhaps one or two additional conclusions may be ventured as to the economic effect of breaking down clear channels.

The first of these conclusions is that, by paying the price of destruction of present or future rural service, we shall merely get additional stations which in general will belong to the regional category and will be located in cities already well supplied with stations. If this is true, while undoubtedly a few regional broadcasters who are dissatisfied with their present facilities may draw something attractive out of the grab-bag, if they scramble soon and hard enough, the rest of them will simply draw additional competitors seeking to win the attention of their audiences and the favor of their advertisers.

Second Conclusion

A second conclusion is that, in general, this breakdown will not provide broadcast service to any appreciable amount of that portion of the country's area and population that is not now receiving service. Until you get down to cities having a population of less than 50,000, the cities of this country are wonderfully well supplied with broadcast facilities. Until you get down to cities having a population of less than 20,000, with only a handful of exceptions, all parts of this country, except a relatively small section in the northeast, are supplied with broadcast facilities. A city of 20,000 in the rural south and west is something very different as a centre of population from a city of the same population in Massachusetts or Connecticut. The former is usually the focus of

a sizeable tributary area, of farms and villages; the latter is flanked with many other cities of equal or greater population packed into a small area, each with only a tiny tributary area surrounding it. In any event, it seems obvious that no matter what happens to clear channels you cannot find facilities for every one of these cities crowded together on either regional or clear channels. It is not possible even to find positions for local stations in most of these areas. They must share their radio service with other cities close by. By reason of the congestion of stations in this part of the country, and thanks to the high power clear channel station, those listeners are now getting better than the average service given to the rest of the country.

I am sorry that we cannot give you a breakdown of cities having population less than 20,000 but time has not permitted. From such study as we have made, however, I am convinced that in general the same situation obtains. The heavy majority of these small cities will be found east of the Mississippi and north of the Ohio.

Let us turn now to the other fundamental issue, raised by the proposed elimination of the power maximum on clear channels. Suppose that the Commission acts favorably on this proposal, and as a result a number of 50-kilowatt stations increase their power to 500 kilowatts. There are, I understand, thirteen such applications pending, and no one has announced any intention of asking for greater power.

What will be the economic effects of such a power increase on existing regional and local stations? By way of introduction to my answer, I shall make an assertion that may have the ring of a challenge but I am confident that I can demonstrate its truth. Regional and local stations, as a whole, will benefit and not suffer from the increase.

Technical Facts

Take the physical technical facts as a starting point. These, at least, are not difficult to prophesy. A 500-kilowatt station will deliver a signal at any given point slightly over three times the signal a 50-kilowatt station would have delivered at the same point. Its contours in terms of field strength will be somewhat enlarged, although not anywhere as much as the layman might expect, as you have already seen from the technical exhibits. I confess I am utterly unable to understand the thought the President of the Columbia Broadcasting System expressed yesterday in this connection. He said, as I understood him, that this tripling of signal strength would make such a difference that Columbia would be forced to drop affiliate stations located within the primary service area of the clear channel station. A few minutes later he said, as I understood him, that this same tripling of signal would not substantially improve rural and remote service. In any event, take any field strength you want, ten millivolts or five or two or one-half a millivolt, and you will find the contour somewhat further out and including some cities and towns that were not included within the corresponding contour of the 50-kilowatt station. The 10-millivolt contour, of course, encircles the area in which a signal satisfactory for city-dwellers is delivered, according to the Commission's standards. The 2-millivolt contour does the same for the residential or suburban dweller. We can, I think, disregard anything beyond the 2-millivolt contour, since the signal is insufficient for listeners in any communities likely to have broadcast stations. And I suspect that Columbia would not drop any affiliate unless it were located at least within the five-millivolt contour and perhaps closer.

Signal Strength

It becomes of interest, then, from the purely technical point of view, to form some idea of what regional and local stations come within the new zone of satisfactory signal strength added by the increase in power of the clear channel station. In order not to inflict too many different figures on you, we arbitrarily selected the 5-millivolt contour as the test. One or our technical staff prepared a map, which I shall refer to as Figure No. 11, on which are plotted the theoretical 5-millivolt contours of the thirty-one 50-kilowatt stations in this country and of the same stations if increased to 500 kilowatts. These contours were based on the curves published by the Commission's engineering staff and on information as to conductivity data which is believed trustworthy. The Commission's standard of antenna efficiency for clear channel stations was used. Figure 11-A lists the stations whose contours were thus plotted, with their frequencies, their radii to the two contours, and the conductivity assumed. While this map is, in a sense, theoretical, it is, we believe, sufficiently close to fact to be used for the purpose I shall make of it. On the whole, its assumptions tend to include a larger number of regional and local stations than are really in any danger of being affected. Certainly, no one really anticipates that 31 of the clear channel stations are going to construct 500-kilowatt stations in the immediate future.

By examination of this map, we find that 97 regional stations (counted by licenses) are within the 5-millivolt contours of the thirty-one stations at present and that, if they increase their power to 500 kilowatts, 24 more will come within those contours, an increase of 24 per cent. Of the 24, nine are affiliated with networks, four with NBC and five with Columbia. These are the stations which will lose network connections if Mr. Paley's prophecy is correct. There are 59 local stations (counted by licenses) within the present contour and 26 more within the new contour, an increase of 44 per cent. None of these is affiliated with a network and consequently no local will be injured in this respect.

Bridges to be Crossed

There are several bridges that must be crossed before there is even a debatable question raised. If, for example, the regional station is accorded a horizontal increase of power to 5 kilowatts, then the relative difference between its signal and that of the 50-kilowatt station which has increased to 500 kilowatts will be imperceptible to the human ear. Even without this, the regional station will deliver a signal for a considerable area around its transmitter that is much stronger than the clear channel station can compete with. A regional station of one kilowatt on 900 kc., with average conductivity will, I am told, give a signal of 5 millivolts at 14 miles from its transmitter, and a 100-watt local station, under the same circumstances, at 5½ miles. Within those contours, the regional and local stations will deliver much stronger signals. At a mile from its transmitter the regional station will deliver around 150 millivolts and the local station about 40 millivolts.

Another bridge that would have to be crossed is that of listeners' habits, the rather marked preference of the listener for the programs of a station located in and serving his city as against those of a station located somewhere else, other things being equal.

Let us cross all those bridges without more ado and attempt to see where we arrive. What sources of information have we for that purpose? What better than the actual experience, past and present, of regional and local broadcast stations that have actually been encircled within the 5-millivolt contours of clear channel stations as they have progressed from 5 kilowatts or less to 50 kilowatts? At this point, we have an opportunity to be unfair to our opponents. We have made a superficial check of the financial record of regionals and locals under such circumstances to determine what has happened to their gross receipts, their net revenue, and their rates as the clear channel stations have made this increase in power. They have shown a remarkable gain. It was not necessary to make more than a superficial check, however, to realize that the return of prosperity is more responsible for this than any increase in the clear channel station's power.

Method of Approach

We have, therefore, chosen another method of approach. It has its weaknesses but it is the best that can be done. Taking the last renewal applications of regional and local stations as our source of information, we have calculated the average monthly profits of regionals and locals within the 5-millivolt contours of 50 kilowatt clear channel stations and have compared these figures with the average monthly profits of regionals and locals outside those contours, as well as the over-all averages. We have, of course, excluded non-commercial stations and 130 locals. The averages are based on returns from 160 regional stations and 130 locals. The average monthly profit of all regionals (so far as shown by the applications) is $2,534.84. The average monthly profit of regionals outside the 5-millivolt contours is $1,894.10. The average monthly profit of regionals within the 5-millivolt contours is $3,675.05. Incidentally, as a matter of interest, the average monthly profit of the members of the National Association of Regional Broadcast Stations is $2,904.33, or almost $400 better than the average for all regionals.

True of Locals

The same holds true of the locals. The average monthly profit of all of them, as shown by the renewal applications, is $535.10; of those outside the 5-millivolt contours, $409.90; and of those within the contours, $1,187.99.

The highest profits reported by any regional and by any local are from stations located in cities having clear channel stations.

The same is true of the highest profit reported by any regional belonging to N. A. R. B. S.

We endeavored to compile the same figures with respect to the one case where a clear channel station has increased its power from 50-kilowatts to 500 kilowatts. We immediately ran into the difficulty that is to be expected when you attempt to base averages on a few individual cases. There are only two regional stations in Cincinnati, and the renewal application of one of them does not show its profit. If its profit be assumed to be the same as that shown for the other, and this, I believe, is a legitimate assumption, the average monthly profit for all regionals within the 5-millivolt contour of the 500 kilowatt station is $3,497.60, and, if you exclude a high power regional at Covington, the average becomes $3,932.97. Otherwise, it drops to $2,545.45, due to the fact that the station at Dayton, which was moved into that city during the past year or two, records a monthly loss of $1,800 and the high power regional shows a monthly profit of only $450. A very similar situation appears in the case of the locals in that area, due to a heavy monthly loss reported in the last renewal application of a local in a small city in Kentucky, although in several preceding license periods that station reported a profit.

It is difficult, therefore, to find any basis in actual experience for the claim that the proposed increase of power of clear channel stations would work injury to regional or local stations. It may be claimed, however, that this method of approach is not fair because it centers attention on regionals and locals in or near thickly populated centers where clear channel stations are located. This claim is not tenable, in my opinion, because no very different question is raised, so far as distance from the principal city is concerned, by an increase in the 5-millivolt contour resulting from use of 500 kilowatts.

Further Circumstances

Nevertheless, there are still further circumstances that confirm the conclusion that no injury would result. I shall have to pass over these very hurriedly but they are, I think, so obvious that common sense makes the answer inevitable. The increase of power of the clear channel station necessarily drives local advertising to the regional and local stations. The increased power means increased rates. The local advertiser, interested only in coverage of the city, cannot or will not pay for coverage that for him is wasted on rural areas that give him no market. The clear channel station becomes more and more distinct as an advertising medium, less and less a competitor. To use a familiar analogy, it resembles a magazine read over a wide area as distinguished from a local newspaper.

The experience of all members of our Group already shows that this is, and must be, so. Even with their present power of 50 kilowatts, they find themselves used increasingly and predominantly for national advertising and not for local advertising. A rapid survey of such information as I could get from members of our Group showed that in most cases the national advertising constitutes 90 per cent or more and the local advertising 10 per cent or less of the total. In only two cases does the national business drop below 70 per cent, the lowest being 67.5 per cent. They all tell me that the tendency is marked in this same direction. It is bound to be so. They have all had the experience of losing an increasing amount of local advertising to regional and local stations in the same community. At least two of them have seen regional stations move into their communities in the recent past and take a large share of their advertising from them.

Regional or Local

Manifestly, a regional or local station fifty or one hundred or more miles away from the clear channel station will not suffer with respect to its local advertising. In fact, all regionals and locals are more likely to gain than to lose. There is no greater incentive to local advertising than the interest in advertising that is created among prospective local advertisers by successful national advertising. They are awakened to its usefulness. This statement is not susceptible of proof in the legal sense but I dare say every broadcaster in this room will confirm it from his own experience.

What about national advertising? Here, we must recognize two kinds, network and non-network. Let us take first the network. I understand that there is apprehension among a few regional broadcasters that have network affiliations that they may lose those affiliations if clear channel stations in other cities are permitted to increase their power. This apprehension is readily understood in the light of statements such as were made by the President of Columbia Broadcasting System. The number of such instances would, at most, be very limited since the city served by the regional would have to be close enough to the location of the clear channel station so that the latter would deliver a very high signal strength into the former's territory, at least five and more likely ten millivolts or more. Chicago clear channel stations deliver an average of 6 millivolts into Milwaukee and the Columbia station at Chicago an average, I am told, of eight millivolts. Yet Milwaukee regionals still have their NBC and Columbia affiliations. Suppose, however, that they should lose their present network connections. What reason is there for believing that additional networks will not be established, or for believing that the regional station may not find a very worthwhile mission to perform in additional programs of a local interest? The apprehension is, however, completely unfounded, so far as the independently-owned clear channel station is concerned. The tendency would inevitably be in the other direction, with the clear channel station taking a smaller and smaller amount of network programs and the regional station taking an increasing amount. This is not guess-work. It can be demonstrated from actual experience.

Renewals of Regionals

The last renewals of all regional stations that are members of the N. A. R. B. S. (so far as known to us) have been examined to determine the amount of network programs carried by those members that have network affiliations. The process could have been applied to all regionals but would have been tediously long, and we have felt that the N. A. R. B. S. can safely be taken as a representative group. Fifty-two of its members are affiliated with either NBC or CBS. The network affiliates in this Group devote an average of 64.4 per cent of their hours to network programs. So far as we know, only two of these are owned or controlled by either of the networks, in both cases CBS, so that fifty of them are independently owned.

The same process was applied to all the stations that are considered dominant clear channel stations by the Commission, some twenty-one or which are owned or controlled by the networks, and naturally carry a heavy percentage of network programs. Even with the totals thus heavily weighted, the average for all was 63 per cent.

We then applied the process to the members of our Group, consisting of entirely independently owned stations. The average was only 56.7 per cent. The one 500 kilowatt station showed slightly less than 52 per cent. In addition, the tendency is everywhere manifest among such stations to originate their own programs, some, of course, to a much greater degree than others, depending somewhat on the size of city in which each is located. The fact is, that such clear channel stations are being more and more used for a type of national advertising that cannot be handled over a network. It is what, for want of a better name, may be described as regional coverage. Frequently it is supplementary to network advertising and is in no sense a substitute for it. It belongs to the category of national non-network business.

The advertiser who wants regional coverage in the sense of reaching the rural and small town population will not use a regional or local station in any event. He does not do so now and he would not do so if clear channel stations increase power to 500 kilowatts. The advertiser who wants to cover any city of large or even fair population intensively will not use a clear channel station 75 or 100 miles away; he will use a regional or local station in that city, if it has a station. Even in this field of national regional advertising, a tendency is fast developing which bids fair to bring a substantial source of revenue to regional and local stations. This is in the rebroadcasting by such stations of programs disseminated by a high power clear channel station some distance away. Several of our members are already engaged in this arrangement on a large scale, to the manifest satisfaction both of themselves and of local broadcasters. From a technical point of view, this gives ideal regional coverage. The rural areas are served by the clear channel station. The cities and larger towns in that area, where noise levels are too high to permit good reception, are served by the local broadcasters who, by locating receiving apparatus away from the inhabited area, are able to bring the rebroadcast program to their listeners unmarred by local noise. The possibilities of such service will be enormously increased with higher power. In a sense, this is regional network broadcasting.

Advertising Revenue

Some idea of the part played by the several kinds of advertising in the total revenue of the broadcast industry is given by the analysis of gross time sales periodically published by the National

Association of Broadcasters. For the past two years and a half, these totals are as follows:

Class of Business	*1934*	*1935*	*1st 6 mo. 1936*
National Network	$42,647,081	$50,067,686	$28,181,976
Regional Network	717,117	1,110,739	644,473
National Spot.....	13,541,770	17,063,688	11,527,860
Local	15,981,201	19,281,735	10.447,870
	$72,887,169	$87,523,848	$50,802,179

The upward trends in all classes of broadcast advertising is clear from these figures. To assume that the possibilities in any class have been exhausted would be absurd. There are limitless opportunities for each type of broadcast station to develop new business from wells that have hardly been tapped, and in this development the clear channel station, on the one hand, and the regional and local on the other, are bound to pursue paths which diverge more and more widely. They will compete with each other less and less as the difference in these paths becomes more pronounced.

I am sorry to have taken so much time with arid figures and to have placed so much emphasis on the prosaic subject of broadcast advertising. So far as the statistics and tabulations are concerned, I shall have to accompany them with the legend "These figures are not guaranteed but are believed to be substantially correct." I have not known how else to meet the economic issues raised by the notice of hearing, in the time we have had for preparation. Perhaps when the Commission has its next hearing of this sort our industry will have better statistics and we shall be able to do a better job.

More Economics

There is another kind of economics that I am not sure was intended to be covered by the notice but which I should like to mention. That is the economics of hearings before the Federal Communications Commission. I hasten to assure you that I am not speaking of the sort of hearing in which we are now engaged, for I think it, in the long run, represents a saving for both the Government and the Industry. Cooperative effort and a sharing of expense is possible and, if sound regulations result, the effort and expense will be more than repaid. I *am* talking about useless hearings on applications which are, on their face, contrary to the Commission's regulations or its engineering standards and have, or ought to have, no reasonable possibility of being granted. The Commission undoubtedly already has some conception of the large sums which broadcasters must pay annually to defend their assignments and their listeners against such applications. It seems to us that much will be gained by a rigid adherence to any regulations that may be adopted so that there will not be the continuous temptation to new applicants to gamble on a waiver of the rules.

Social Effects of Proposals Relating to Clear Channels.

The Commission's request for information on the social effects of proposals made at this hearing can, so far as clear channels are concerned be met by asking two questions which answer themselves. One of these questions is whether it is socially desirable that the broadcast service now being rendered to rural and remote areas be impaired or destroyed. The other is whether it is socially desirable that broadcast service be extended to rural and remote areas that now have no service and that it be improved in those areas where it is now unsatisfactory.

I assume that it is unnecessary to justify broadcasting itself. No one is urging that it be abolished. As an agency of mass communication, it was first a novelty, later a convenience, and now a necessity for large portions of our population. Its social importance is too obvious for discussion. Volumes have been written on all its important social aspects, as a medium for entertainment, education, religious devotions, news and the other ingredients of its daily program. Why, then is it necessary to debate whether the vehicle on which this intangible commodity is transported should be modernized, instead of being antiqued?

With the help of my associates in the Clear Channel Group, I have canvassed everywhere for information with respect to our program service that might be specifically arranged and classified under the heading "social". Our counsel has in his possession a great deal of material which has been faithfully compiled by our station staffs in response to questionnaires. We have examined the information contained in present and past renewal applications of all broadcast stations. We have supplemented this with a reading of much current literature, learned and otherwise. Yet when it is all done, the student can come to only one conclusion—the entire broadcast program service is important socially, the music and entertainment as well as the education, the sports events as well as the religious services, the comic strips as well as the news. The question at this hearing is not whether any part of it is good or bad but whether the whole should be extended in coverage.

I could devote days to an analysis of the program service rendered by members of our Group, or by clear channel stations generally, or by any class of broadcast stations. There are important differences but you know about them already. A clear channel station with a large coverage endeavors to, and does, provide a program service such as is needed and desired by listeners within that coverage. A regional station does the same for listeners within its coverage. So also does a local station. Consequently, their programs, considered as a whole, differ in the emphasis placed upon matters of general as against more local interest. The market reports desired by a single city are not the same as those desired by a large agricultural region. Neither is the educational or the informational matter. Neither is the music. Neither are the political debates and election news. The sort of program service expected from a 50-kilowatt clear channel station costs more, on the average, than that expected from a 1-kilowatt regional station, although there are instances where the two overlap. For example, the average monthly talent cost of the clear channel stations, as shown by their last renewal applications, is $8,253.91, the highest being over $47,000. The average for the regional stations that are members of the N.A.R.B.S. is $2,233.82; the highest is $12,726.44.

But I am confident that you do not expect a detailed analysis or comparison of program service, or statistics on program cost.

Conclusion

We have travelled a long way from our starting point. The requirement that we give thought to the broad economic and social aspects of the issues involved in this hearing has been to our interest and profit. The work has been well worth while, both for its educational value to ourselves and for the conclusion it points to and confirms.

This conclusion is that there is no conflict, as is sometimes claimed, between sound economic and social principles and sound technical principles. Adherence to the latter will further the public or social interest, and at the same time will further the industry's true economic interest. It is non-adherence to sound technical principles that leads to uneconomic and anti-social consequences.

CROSS-EXAMINATION

Under cross-examination Mr. Maland stated that he believes in the doctrine of competition in the broadcast industry, in a variety of programs and in better signal service to all. He also believes that there is a definite place for local stations. Answering a specific question Mr. Maland said that he did not believe that it would be possible to have thirty 500-kilowatt stations in the next two or three years. He said that in his opinion there is a trend toward the 500-kilowatt station and that eventually this would benefit all broadcasting. There is only one thing that is certain about broadcasting, he stated, and that is that it is going to change. However, he does not see any radical change in the next few years.

STATION PROFIT

Answering further cross-examination questions Mr. Maland said that his own station is now operating at a profit but he could not tell definitely whether all clear channel stations are now profitable. He is of the opinion, he said, that the shared clear channel stations are now operating at a profit. Mr. Maland said the use of 500 kilowatts with increased revenue might have a tendency to hasten television.

Mr. Maland said that he thought that the Commission should limit the number of high powered stations under one ownership. Increasing cost of thirty 500-kilowatt stations, he contended, could be taken care of by the broadcast industry.

JOHN C. KENDALL

Judge John C. Kendall made a statement today on behalf of stations interested in part time assignments on clear channels. He said that the operation of such stations, after a trial of 8 years, shows that it is economically unsound.

Mr. Kendall said:

Come now Oregonian Publishing Company, Portland, Oregon, licensee of Station KEX, Westinghouse Radio Stations, Inc., Fort Wayne, Indiana, licensee of Station WOWO, West Virginia Broadcasting Corporation, Wheeling, West Virginia, licensee of Station WWVA, Hot Springs Chamber of Commerce, licensee of Station KTHS, Hot Springs, Arkansas, and WBAL Broadcasting Company, licensee of Station WBAL, Baltimore, Maryland, and in response to the request and invitation of the Federal Communications Commission for the presentation at an informal hearing to be held before it on to wit, the 5th day of October, 1936, of evidence for the purpose of determining what principles should guide the Commission in matters relating to or affecting the allocation of frequencies, and in particular, what changes, if any, should be made in the Commission's existing Regulations, respectfully show,

Cleared Channels

That heretofore and in November, 1928, the hereinafter named broadcasting stations were assigned to cleared channel frequencies on a time sharing basis, viz,

WBBM-KFAB	— 770 kilocycles
WFAA-WBAP	— 800 kilocycles
WWL-KWKH	— 850 kilocycles
WLS-WENR	— 870 kilocycles
KTHS-KRLD	—1040 kilocycles
WTIC-WBAL	—1060 kilocycles
WPG-WLWL	—1100 kilocycles
KVOO-WAPI	—1140 kilocycles
WOWO-WWVA	—1160 kilocycles
KEX-KOB	—1180 kilocycles

That such assignments to said stations were made primarily for the purpose of making an equitable division of cleared channel service among the various states to meet the requirements of the Davis Amendment of the Radio Act of 1927.

Assignments Modified

Said station assignments have since been modified as follows:

a. WFAA-WBAP and WLS-WENR now use the same transmitters so that insofar as the listening public is concerned there is a constant signal on the respective frequencies of 800 and 870 kilocycles.

b. WBBM-KFAB have been given experimental authorization to operate in synchronism at nighttime.

c. WWL has received special authority to operate unlimited time on 850 kilocycles while KWKH has received special authority experimentally to operate on 1100 kilocycles, unlimited time, using a directional antenna to protect WLWL and WPG.

d. WTIC-KRLD have received special authority on an experimental basis to operate unlimited time on 1040 kilocycles.

e. KTHS-WBAL operate simultaneously during daytime hours, dividing time at night. However, after 9 P. M. WBAL operates in synchronism with WJZ on 760 kilocycles with a reduction in power from 10 kilowatts to 2500 watts. This makes it necessary for KTHS to remain silent from local sunset to 9 P. M.

f. KVOO-WAPI, WOWO-WWVA and KEX-KOB have been permitted to operate simultaneously during daytime hours.

g. No change has been made in the operating assignments of WPG and WLWL operating on 1100 kilocycles, but as has already been noted, KWKH is now operating on this frequency experimentally, unlimited time.

Eight Years of Trial

More than eight years of trial and operating experience has clearly demonstrated that the operation of cleared channel stations on a time sharing basis is economically unsound and does not permit of the rendition of the maximum service by such stations to which the radio listening public is entitled.

Present operating assignments of shared time cleared channel stations are economically unsound for the following reasons:

a. The same investment is required for installation and maintenance as is required for a full time cleared channel station, and the operating cost is substantially the same.

b. Due to the fact that nearly one-half of the most valuable nighttime hours are not available there is a substantial loss in station revenue.

c. Listener popularity and station prestige are seriously impaired by reason of the interruption in the continuity of program service.

Public Deprived

The radio listening public is now being deprived of program service from shared time cleared channel stations which with full time operation from such stations would be available to it because:

a. Shared time cleared channel stations under present assignments are required to observe a silent period up to a maximum of four hours each day during certain months of the year. Such nighttime hours are generally recognized as most valuable from the standpoint of the listening public.

b. During the hours when these stations are forced to remain silent occur the greatest number of programs in which the public is most interested, such as the major commercial programs, local and chain, local and national news reports, market reports, sports events, educational programs, political speeches and other events of public interest.

c. An analysis of the radio listener habits has demonstrated that the early evening hours are the most popular to the rural listener. On account of such silent period the shared time cleared channel stations are unable to render the maximum service to the rural listeners residing within their respective service areas.

In June, 1936, the Davis Amendment hereinbefore referred to was repealed and we submit that the present is an opportune and logical time to make it possible for these part time cleared channel stations to operate full time.

Conclusion and Recommendation

Based upon the foregoing showing and representations, it is respectfully submitted that the Federal Communications Commission should now amend its existing Rules and Regulations, particularly with reference to Rule 116, so as to permit full time operation on such of the foregoing shared time cleared channel frequencies, as sound engineering standards and practice may determine proper and feasible after a hearing to be held before your body upon due notice to the stations affected.

HAROLD A. LaFOUNT

Harold A. LaFount, former member of the Federal Radio Commission, also made a statement at the hearing today in which he said that he was speaking in his own capacity and not on behalf of anyone.

He told the Commission that in his opinion without adequate power and with only part time it is almost impossible to operate a station without loss. He also advocated that the Commission delay action on applications of clear channel stations for power increases up to 500 kilowatts "until additional information has been made available."

Mr. LaFount said:

Engineering Problems

The Radio Engineering problems confronting your Honorable Body have been so eloquently presented by so many distinguished gentlemen that I hesitate to burden you with my views on that subect. However, there are a few additional points which I should like to present for your consideration. Before doing so, I want to make my position perfectly clear. I represent no one. I am not trying to make a case for any individual or any group of individuals. I have absolutely no financial interest in any radio station. My radio experience covers a period of fifteen years, and includes many activities in that field. Nothing I say here should be construed as a criticism of existing practices, rules or regulations, or of any station, chain or group of stations. My purpose is to be constructive and helpful. I present my own opinions, and have reached my own conclusions. They are given to you in a spirit of helpfulness. I have no other purpose in addressing you.

State of Flux

The radio industry continues to be in a state of flux. This hearing is in recognition of past and impending changes in the structure of radio broadcasting. Those changes have been many in number and far-reaching in effect, and coming as they do with increasing rapidity, it is well to take pause from time to time in order to make an inventory of progress and to chart a course which may be used as a guide to progress in the future. It is for the purpose of clarifying the present position of the radio industry, as I see it, that I shall divide my remarks into three parts, classified as follows:

1. The objective;
2. Present conditions;
3. Suggested improvements.

Serve the Public

The Federal Communications Commission was created and has been maintained so that it may serve the public interest, convenience, and necessity. It, in turn, must fulfill that responsibility by applying the same yardstick to the hundreds of radio broadcasting stations which fall within the purview of its authority. In this sense, the obligations and responsibilities of the governing body and the governed are identical. The broadcasting industry must, by sincere and continuous cooperation with the Commission, make it possible for this body to effectuate its mandate from the Congress. The Commission must, by the same sort of cooperation, make it possible for the radio industry to fulfill *its* responsibilities. Without this sort of mutual interest in the common welfare, the very object and purpose of the Communications Act must suffer defeat.

High Ideals

The path which leads to the attainment of the high ideals prescribed for the industry is marked with pitfalls and barriers. The problems confronting the broadcaster only begin with the issuance of his license. The programs which he will air through the facilities of his station must not only be in the public interest, but must also *interest* the public. As you will appreciate, that public includes authors, actors, carpenters, composers, poets, plumbers, the rich and poor, the young and old, the single and married. It is difficult to conceive of a more highly heterogeneous group than the radio audience. To reach such a group requires that the radio be all things to all men. It places the broadcaster in the position of having to please as many of these diverse elements as possible in the time at his disposal, and by the same token, makes it necessary for him to incur the risk of displeasing one group in order to please another. There can be no question that one of the most difficult jobs on earth is to operate a radio station successfully, not only from the financial standpoint which poses a number of difficult problems, but also from the standpoint of serving the conglomerate public.

Listening Public

The only phase of the radio broadcasting structure which enters the consciousness of the listening public is the program itself. They may not know which station it is coming from; they may not know whether it is a local or a network program; they do not care how high the antenna is nor how efficient the frequency monitor; they only know whether or not they like what they have to listen to. The observance of the very essential rules and regulations promulgated by your Honorable Commission is, after all, but a means to an end. The end is public service. We must be careful to differentiate between the service itself and the technical or engineering methods which have been adopted to make that service possible.

I, therefore, suggest that the matter of paramount importance to the public is the *radio program itself*. It is upon the success and popularity of these programs that the mighty radio industry depends for its existence. Under the present allocation and program arrangement peculiar to the United States, the radio industry has expanded beyond the expectations of the most optimistic. Nearly three-fourths of a billion dollars was the cost of entertainment by radio in the United States last year. With more homes equipped with radio receiving sets than with either telephones or electric lights, and the annual use of 3500 carloads of lumber, 1500 carloads of steel, and millions of miles of copper wire in servicing the industry, everyone must be impressed with the size of the undertaking of which every broadcaster is a part, and the size of the responsibility which devolves upon him. If he fails in his efforts to entertain or to interest the American public, or to render a satisfactory service to that public, the effect upon this vast industry would be devastating. Again, I acknowledge the importance of satisfactory reception and quality of reproduction, but urge that our prime object should be satisfactory program content and quality of presentation.

Present Conditions

The present status of the radio art and industry is in many respects extremely satisfactory. The results of your postcard questionnaire, a part of your allocation survey, were gratifying. It proves conclusively that cleared channel stations are producing the results sought by their creation. The information compiled by your inspectors is likewise most encouraging. As a matter of fact, the results of the allocation survey are almost identical with those I had anticipated, and in my opinion, reflect much credit upon the efficient engineering staff of the Commission. In addition to this information, it is interesting to study the distribution of power which also would justify our expecting the results indicated by your survey.

On January 1, 1936, we had 374 full time radio broadcasting stations. To them was assigned 2,188,650 watts power at night. Of that amount, 2,000,000 watts were allocated full time stations on cleared channels. It should be remembered too that all full time, cleared channel stations are owned, operated or affiliated with one of the three national chains, either The National Broadcasting Company. the Columbia Broadcasting System, or the Mutual Broadcasting System. As I have said, the total night power allocated to the 374 full time stations in this country is 2,188,650 watts. Of this amount 2,130,300 watts, or over 97%, is used by the 165 full time stations affiliated with one of the three national chains. This includes cleared channel and regional stations. It will be seen that we have 58,350 watts power remaining for the use of the 209 independent full time stations.

Stations Profitable

From my observation almost all full time stations are profitable, especially those having a network affiliation. I have also observed that part time stations are engaged in a struggle for existence. I appreciate the fact that you are not obligated by law to make it possible for broadcasters to operate at a profit. However, I respectfully suggest that morally you are so obligated. In my opinion it is of the utmost importance that due consideration be given the economic aspects of broadcasting.

Under our system, broadcasting is maintained by advertisers, time being sold at rates proportionate to the size of the potential listening audience. There are hundreds of other contributing factors, but power is one of the most important. Without adequate power and with only part time, it is almost impossible to operate a station without loss. With such stations, profit-making is the exception rather than the rule. Under these adverse circumstances, a station cannot hope to fulfill its responsibilities. The ability of any station to support itself, is the measure of its ability to render a public service. One definitely depends upon the other, so that although not directly, you are indirectly responsible for the type of programs broadcast and you are thus the arbiter of the service rendered by all radio stations. Practically all full time stations, and some part time stations, are doing a splendid program job. The chains, especially, are providing entertainment and rendering a service to the American public unequaled on earth. But, gentlemen, all stations cannot be and should not be affiliated with these national networks.

Chain Broadcasting

Realizing the value of so-called chain broadcasting, smaller groups of regional and local stations are operating successful units. Credit is due Mr. John Shepherd and others for their efforts along these lines. However, do not forget that these unaffiliated full time stations, of which there are 209, have a combined night power of only 58,350 watts, or little more than is assigned to the average cleared channel station. Included in this number of full time outlets there are 153 local, or 100 watt stations. Also, I call your attention to the fact that no independent station in this country has more than 1000 watts power at night.

624 Stations

On January 1, 1936, we had approximately 624 stations licensed to operate in the regular broadcast band, 374 full time and 250 part time stations. The total day power allocated to the part time stations was 460,700 watts, and the night power, 328,900 watts. This figure, however, is very misleading. It should be understood that where two stations share time on the same frequency, the power of each is included in the figure given although obviously only one station is on the air at a time. For example, WPG, 5000 watts, and WLWL, 5000 watts, sharing time have been considered 10,000 watts. Of the total power allocated these part time stations, 279,450 watts day power and 265,800 night power are used by stations affiliated with national chains, leaving 181,250 watts day power and only 63,100 watts night power for use by 232 part time, independent stations. Certainly I need not tell you of the many problems confronting these small, independent broadcasters. They have the desire and usually the ability

to render a much greater public service than is possible under such conditions. I have heard it said by some people that these broadcasters should be put out of business. However, from my observation, I find them usually very competent and anxious to render a service, but without a chain connection and without power or adequate time, they are severely handicapped. The solution lies not in eliminating them, but in the elimination of the handicaps which beset them. It is interesting to note the location of these part time stations. For instance, the nine southeastern states have only 19, while the State of New York has 27, Pennsylvania, 18, and Illinois, 21. New Jersey has only two full time stations, and 11 part time stations.

Part Time Stations

The following states have more part time than full time stations:—Colorado, Connecticut, Illinois, Indiana, Iowa, Missouri, New Jersey, New Mexico, New York, Pennsylvania, and South Dakota. The following states have no part time stations: Tennessee, South Carolina, Wyoming, Utah, Idaho, Kentucky, Rhode Island, Nevada and the District of Columbia. One of the reasons for the existence of so many part time stations is the partial adherence to the Commission's separation requirements which, in my opinion, have outlived their usefulness. I can thoroughly understand why the signal of a southern or western station serving a large area should be protected almost to the vanishing point, but in the east and middle west where stations are very close together, and where programs are so frequently duplicated, such protection seems entirely unnecessary. The eastern and middle western stations frequently have no desire to be heard at any appreciable distance. They have a large population in rather close proximity to the station, thus making an effective appeal to advertisers. However, in the west and south a station must in some instances cover the entire state and even then its potential listening audience is less than 100,000.

New Frequencies

There seems to be some justification for the belief that broadcasting stations may within a few years be operating in a totally different band of frequencies, the effect of which will be far-reaching. The realization of this fact necessarily causes the smaller broadcaster some concern. It is a cause of concern to this body, and to all broadcasters. If, as a result, the Commission should authorize as many new stations as engineers may make room for, the result would be disastrous to most of the 441 independent stations, and especially to the 250 part time stations. The law of supply and demand is as thoroughly operative in the field of radio broadcasting as in any other competitive field.

Local Business

As you doubtless know, independent stations must depend largely upon local business for their support. Especially is this true of the local and part time station, and, gentlemen, when you realize that some cities have more radio stations than newspapers, you can be sure that selling enough time to desirable advertisers to make the station profitable is a very difficult task. We should also remember that a few years ago the newspapers handled almost all of the local advertising. Today we have the same number of newspapers, plus our radio broadcasting stations, both depending upon the same source of revenue for their existence. Also, we must remember the amount of advertising a radio station must refuse to accept, in order to conform to the ethical standards of this body, the Federal Trade Commission, and the station's own management. All of these considerations complicate administrative and operative procedures.

National Advertisers

National advertisers buy time on the national chains. They likewise buy it from the individual chain stations, but national advertisers are seldom interested in buying it from part time or local stations, and only a very limited amount of such business is available. An advertiser is safe in the presumption that the chain station has an audience, due to its ability to present meritorious programs. This ability is not necessarily due to an enterprising station management, but rather results from the fortuitous circumstances that one of the national networks selected that station as an outlet. But, on the other hand, the independent station must prepare and present its own program, sell its own time locally, and with a very limited power assignment, the price they can command from their local advertisers is only a small portion of that which comes alomst without effort to the chain station. It must be remembered also that most of the stations affiliated with the national chains sell time to local advertisers during the day. Consequently, the problems confronting the independent broadcaster becomes still more complicated,

Place in Radio

But, regardless of all his problems, there is, in my opinion, a definite place for him in the radio picture, unless you permit competition to the point of extermination or absorption. Gentlemen, if I talk for anyone, it is the independent, small broadcaster, who all too frequently has his life's savings invested in his station and possesses a sincere desire to render a public service, but due to the problems here referred to, plus others far too numerous to mention, has a task of tremendous magnitude. I believe in local and independent stations. I know there is a real need for them, and I urge your consideration of the 441 stations not affiliated with national networks. I could not say too much for the chains and what they are doing, but certainly they can and do take care of themselves.

Unaffiliated Stations

The function which the affiliated station can perform is in many respects distinct and separate from that which the unaffiliated station performs. A local station is in a position to provide a program product to the community it serves, which a network station, devoting much of its time to national broadcasts, cannot hope to perform. The facts which I have reviewed here, are conclusive evidence, it seems to me, that the interests of this large group of independent broadcasters have been sadly neglected. The ratio of the value of local service to the value of network service is incorrectly reflected in the ratio of independent station power to network station power.

These small stations can be of great public service. They are operating under a mandate from this Commission to provide that service. Without adequate time and power, they will remain without adequate revenue. Without adequate revenue, they cannot serve the public interest effectively. Compared with their big brothers, they are in a very disadvantageous competitive position. It is very easy for one to comply with the requirements of the law and this Commission, but the other must start with a very great handicap.

Suggested Improvements

In the light of these facts, I should like to recommend a few possible improvements.

First, I sincerely believe we have all the radio broadcasting stations this country can possibly support, and that additional facilities will necessitate the commercialization of stations to the exclusion of public service programs. With an increased number of stations, advertising rates must be decreased. With decreased advertising rates, more time must be sold in order to operate the station. With more sponsored time on the air, public service and sustaining programs must of necessity be reduced in number.

Second, action upon the applications of cleared channel stations for power increases up to 500 kw. should, in my opinion, be delayed until additional information has been made available. The survey conducted by you proves conclusively that these stations are now serving the rural listeners, and that additional power at this time is not essential. It is not expected that the signal strength provided city listeners be also available to rural listeners, any more than the rancher expects four or five deliveries of mail a day. As a matter of fact, he is satisfied with one. The additional investment necessary is not justified from the standpoint of service to the rural listener, but may be profitable and justifiable from the standpoint of monopolizing city and urban receiving sets in that their signal strength would be so very much greater than that of any local station. The fact that all full time, cleared channel stations are affiliated with the national chains makes additional power assignments to these stations at this time and under these circumstances unnecessary. National chain programs are heard satisfactorily in almost every part of the United States. The exceptions would likely not be benefitted by the granting of any of the pending applications. The question of the duplication of programs also becomes a subject of great importance. It seems entirely probable that the networks would, if granted 500 kw. at certain strategic locations, discontinue affiliated stations in that general vicinity, thus forcing more stations to depend upon local business and increasing local competition.

Mileage Separation

Tbird, the mileage separation requirements of the Commission should be discontinued, and every case considered upon its merits, giving due consideration to all factors, including duplication of programs in certain areas, and also the economic problems involved. There can be no advantage to the public, to the industry, or to the Government in permitting existing or new stations to operate at a loss or to struggle for a bare existence because of inadequate assignments.

Consolidations

Fourth, all part time stations should be urged to consolidate, to move to new locations where there are no existing stations, and population sufficient to support them, or be given an opportunity to become full time stations. I am aware that such changes cannot be initiated by the Commission, but applications for sucb changes should, in my opinion, be given preference over applications for *new* stations. The investment in equipment already having been made, such adjustments would be of benefit to the public, to the industry generally, and to the broadcaster specifically.

Fifth, all broadcasting licenses should be issued for a period of at least two years. This would materially help the morale of broadcasters and do much toward stabilizing the industry.

These things will aid substantially in improving service to the radio listener, in forestalling lopsided progress, in increasing the ability of broadcasters to render a public service in the bighest sense of that word, and in providing a firmer foundation upon which to build even greater achievements tban those whicb the radio industry has already contributed to contemporary civilization.

CROSS-EXAMINATION OF LaFOUNT

Under cross-examination Mr. LaFount said that after having made a survey of many of the stations of tbe country he felt assured that half of the independent stations in the United States did not make a profit during the past year. Some of them have, he said, but this depended very much on location. He advocated that the Commission not grant new station applications but that it increase the power of present ones and allow consolidations of shared time stations instead. He believed that the Commission should go so far as not even to grant applications for new stations in cities where there are no stations at present. Under further cross-examination he said that tbere are a few cities in the United States today who can support a radio station where there is none.

CANNOT SUPPORT TWO STATIONS

Mr. LaFount testified that in his opinion in a town witb a population of 15,000 it would be impossible to support two broadcasting stations.

He stated that the two clear channel stations in tbe Fifth Zone cover that zone satisfactorily. He also advocated two-year licenses and said that if this were granted it would not freeze tbe situation. He asserted that the broadcasters of the country could do a much better job with a two-year license than a six-months license.

JOHN SHEPARD, 3rd

John Shepard, 3rd, chairman of the Executive Committee of the National Association of Regional Broadcast Stations, opened the argument before the Commission on behalf of the Regional stations.

He said that his Association advocates supporting cbanges in the rules of the Commission so that they would permit the operation "of Regional Broadcast Stations with 5000 watts power at night, as well as day, and so as to permit the operation of more than one full time station on a clear channel."

He said that members of his group feel that they would be adversely and most seriously affected if stations should be authorized and regularly licensed to operate with 500 kilowatts.

Mr. Shepard said.

As Chairman of the Executive Committee of the National Association of Regional Broadcast Stations, and at the very outset of the presentation of evidence supporting the position of the Association, it is in order that the Commission be informed as to what the National Association of Regional Broadcast Stations is, how it came into being, what its purposes are, and what it has been doing.

Discuss Regionals

At the convention of the National Association of Broadcasters held in Chicago last July, some of those who are responsible for the management and operation of regional stations began to discuss informally wbat regional stations should do and wbat an organization of such stations could do in assisting the Commission in collecting data for this hearing. No attempt was made to organize the regional stations at that particular time, but some of tbem met in Chicago later and organized tbe National Association of Regional Broadcast Stations. Between the informal discussions during the NAB convention in Chicago and the time the Association was organized, numerous regional station licensees were talked to and their problems and ideas were all found to be generally tbe same. It was therefore relatively easy to determine at the time the Association was organized what the interests of regional stations were and to determine what general proposals this group of regional stations should make to you.

The Association has 81 members located in 34 states and bas one or more members on 35 different frequencies out of 40 frequencies assigned to regional stations. Thus this Association is, in the fullest sense, truly representative.

Stations' Interests

Having determined what all of the stations' general interests were and attempting to condense these into as few definite proposals as possible. It was unanimously determined that the Association should sponsor and present evidence supporting cbanges in the rules of the Commission so that such rules as amended would permit the operation of regional broadcast stations witb 5 kw. power at night, as well as day, and so as to also permit the operation of more than one full time station on a clear cbannel. It was also definitely determined as the governing policy of the Association that it should and therefore would sponsor tbese changes in Commission rules for general application to regional broadcast stations. Your Division, in giving notice of this hearing and in inviting participation in it, made it clear tbat the information and data desired should go to general applicability of rules rather than attempt to produce evidence in support of relatively few stations or a small number of regional frequencies. The Association has tried sincerely to comply with tbis implied if not direct request of the Commission and has prepared the showing wbich it will make along these lines.

Unanimous Opinion

The Association was unanimously of tbe opinion that regional stations, both as a group and as individuals, would be adversely and most severely affected if stations should be authorized and regularly licensed to operate with 500 kw. Believing in our own stations and being convinced that they are rendering an indispensable service to the American public, we were convinced that we would be negligent in our duty as individuals and as an Association, to both this Division and ourselves, if we did not show some of the facts as to how the regional stations would be so adversely affected by the regular operation of 500 kw. stations.

Prepare Evidence

An executive committee of the Association was elected and authorized to engage assistance for the purpose of preparing the evidence and to present it to your Division. After the Executive Committee had studied the question of how best to present the evidence, it decided that such evidence should be presented, not alone as to the technical or engineering questions involved, but also as to the all-important social and economic questions and considerations which we believe are of primary importance and which we also believe must be the controlling factors in any final conclusion reached by this Commission as to what rules shall govern the future of American broadcasting.

The Association engaged Dr. Greenleaf Whittier Pickard to direct the technical studies and Paul D. P. Spearman to direct the other studies which we shall present for your consideration with the sincere hope that the facts and principles so presented will prove beneficial. Dr. Pickard bas had the assistance of several able engineers and Mr. Spearman has had several assistants working in cooperation with him. It would have been impossible to prepare and present our evidence in any other way. To make possible the consumption of the smallest amount of your time, the technical studies and investigations will be presented by Dr. Pickard. The results of the remaining studies and investigations will be presented under the direction of Mr. Spearman.

Peculiar Problems

The regional stations have their own peculiar problems and the interests of regional stations may conflict with the interests of

some other class of stations or some other station within a class, and if such conflicts should arise the only way the facts can be fairly and fully presented on behalf of regional stations is through an organization or association made up of such stations. The National Association of Broadcasters having a membership which is made up of every class of station cannot, of course, afford to, and the regional stations would neither ask nor expect it to take sides with the interests of any other class of station represented by membership in the National Association of Broadcasters.

Conclusions

Our Association appreciates the action of your Division in affording the opportunity which this informal hearing does afford to lay our problems before you and to present the facts with respect to such problems. Every member of the Association is deeply grateful to your Commission and appreciates fully your desire and intention to study the important questions involved in the regulation of broadcast stations in this manner, and to get some of the practical viewpoints, as well as the theories to which you should, we believe, give most careful consideration.

Dr. Pickard will, as I have already stated, present the technical and engineering evidence on behalf of the National Association of Regional Broadcast Stations. He will be the first to appear on our behalf.

DR. G. W. PICKARD

Dr. G. W. Pickard followed Mr. Shepard on the stand taking up the technical side of the regional station situation. He presented lantern slides by which he pointed out possible duplications on clear channels.

He took up three specific hypothetical cases of duplications on clear channels. One of these dealt with a proposed station at Seattle, Washington, on 760 kilocycles, the frequency of WJZ. The Seattle station he proposed would use a directional antenna and he contended that with its use WJZ would be given full protection.

He also took up a hypothetical case of a station at San Francisco using 1170 kilocycles which is the frequency of WCAU and other stations. In a third example he proposed a hypothetical station at Cincinnati on 150 kilocycles, that now used by KNX. In all of these cases Dr. Pickard contended that there could be duplication without serious interference.

Open Space Coverage

Dr. G. W. Pickard said that 50 kilowatt stations could not cover the great wide open spaces and even if these were increased to 500 kilowatts he contended that there could not be complete daytime coverage of these places. He even went so far as to state that 5000 kilowatt stations could not give good daytime coverage.

International Interference

Dr. Pickard then took up the international side of the use of 500 kilowatt stations. He spoke in this connection particularly of the interference range. He contended that a 500 kilowatt station would create interference well down into South America, into portions of Europe as far as Berlin, into Asia, Africa, and large portions of the Pacific Ocean. He spoke also of the reception in Europe of America's stations, mostly of 50 kilowatt power and located on the Coast. Dr. Pickard will continue his testimony on Friday morning.

The National Association of Broadcasters
NATIONAL PRESS BUILDING * * * * * WASHINGTON, D. C.
JAMES W. BALDWIN, Managing Director

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Regional Group Concludes Engineering Testimony

The Federal Communications Commission today resumed its hearings in the general allocation case which was adjourned last Friday.

Dr. G. W. Pickard, engineer for the regional group, was on the stand all day today undergoing cross examination hy the chief engineer of the Commission, T. A. M. Craven. He concluded his part of the case today and it is expected that Paul D. P. Spearman, counsel for the regional group, will present the economic side of their case tomorrow, which will conclude what that group has to offer.

It is anticipated hy memhers of the Commission that the hearing will conclude this week but it is possible that it may have to sit next week.

Pickard Continues

Dr. Pickard, at a short session of the hearing on Friday morning, continued his testimony. He discussed further the question of international interference from 500 kilowatt stations. He called attention to the fact that there are a number of Mexican stations operating on the same frequencies as our own clear channels and that the Mexican stations have really made our clear channel stations anything hut clear.

Coverage

He discussed at some length the distribution of both day and night regional service and told the Commission of a study of coverage of regional services which he had made. He stated that his survey showed that regional stations in the United States cover a daytime audience of 175,206,988, which of course, he pointed out, is an overlapping of regional service. Nighttime coverage of these stations, he asserted, reached 245,292,649.

During the course of his examination Dr. Pickard stated that he agrees in part with the Engineering Division of the Commission in connection with signal intensity. He said that in his opinion a ten millivolt signal is too low and that it should he twenty millivolts. In connection with a signal in the residential part of the city, he contended that two millivolts are too low and that this should be increased to five millivolts. He said also that in rural areas the signal intensity of one tenth of a millivolt is too low.

Agrees with Engineers

Dr. Pickard testified under cross examination that he agrees with many of the conclusions reached by the Engineering Division of the Commission in its recent allocation survey. However, the Commission's standard on hlanketing is too low, Dr. Pickard contended.

Asked regarding radio prohlems from the standpoint of the listener and the government, Dr. Pickard said that he best understands the radio prohlem from the standpoint of the listener. He advocated reallocation on a frequency basis to give such stations as the regionals a frequency in keeping with soil conductivity. He admitted that it would be hard to accomplish such a reallocation.

City Listeners

Dr. Pickard told the Commission that the listeners in the cities should he given stronger signals than they now receive. City and rural listeners have much the same listening likes and dislikes, Dr. Pickard continued, and said that in his opinion the hroadcasters should give the greatest variety of programs to rural as well as city listeners.

Staggering Stations

Dr. Pickard suggested in answer to one of Mr. Craven's questions the staggering of station frequencies where two or more stations are on the same frequency. By staggering the stations approximately 17 cycles it would eliminate the zero heating, sea wash effect which is much more ohjectionahle, he stated, than the overlapping of two programs.

Dr. Pickard pointed out that from zero to 10 cycles difference hetween stations an objectionable flutter is experienced hut from 10 cycles to approximately 25 cycles the heterodyne between stations is not audihle, due to the inherent characteristics of a receiver. He suggested that an acceptahle ratio of 10 to 1 between two stations would be satisfactory where this staggering is used, instead of 20 to 1 where this staggering is not employed.

Local Stations

It was contended hy Dr. Pickard during the course of his examination that local stations should he used for local problems. He said that full time is much more important to the listening puhlic than part time.

There is a definite limit, Dr. Pickard testified, as to what can be done in the duplication of clear channels.

Mr. Craven called Dr. Pickard's attention to the fact that there are now 40 clear channels designated as such and he asked him how many duplications there could he. Dr. Pickard expressed the opinion that possihly there should not be more than 10 or 15 of these channels duplicated. He advocated a horizontal increase in power to 5 kilowatts for all regional stations.

Canadian Channels

Dr. Pickard said that in his opinion stations on Canadian shared channels could go to 5 kilowatts with the use of a directional antenna. He contended that 5 kilowatts will increase fields hut not interference. He also advocated the consideration by 250 and 500 watt stations going to 5 kilowatts. He admitted that there is a serious engineering prohlem here but contended that it could he worked out. He said further that if the regional stations of the country should increase their power that local stations on adjacent channels would not he seriously interfered with.

Rural Interference

It was testified by Dr. Pickard also that no rural interference would he caused if regional stations increased their power and the clear channels stay at their present power. He advocated the use of directional antennæ for all stations on shared frequencies, including locals, and said he knew of no reason why at least certain of the local stations should not be permitted thereby to increase their operating power.

City listeners, Dr. Pickard stated, still answering questions by the chief engineer, need higher power through their local as well as distant stations. He expressed it as his opinion that shared time stations should go to full time if this is at all possible.

Rural Listeners

Rural listeners now receive good service under the present engineering standards, Dr. Pickard stated, but he repeatedly advocated higher power for the regional stations.

Taking up again the question of rural listeners, Dr. Pickard said that his investigations show that they receive at least two network programs and in many cases three. However, he stated definitely that the rural listeners do not receive good daytime service from clear channel stations. His contention was that no matter how much the power of the clear channel stations was increased it would not give good daytime reception to the rural listeners.

All Listeners Alike

Dr. Pickard told the Commission that in his opinion all of the listeners of the country, both rural and city, should be treated alike but it is not technically and economically possible. He said in this connection that it is no more possible to give the rural listeners as good a program as the city listeners receive than it is for the rural residents to have sewers, lights, police protection, etc., compared with city dwellings.

Dr. Pickard thought that the rural listener could be better taken care of by increasing the number of stations, by increasing power on regional stations, and by synchronization.

No Inflexible Regulations

Dr. Pickard went on record in a most emphatic manner against the imposition by the Communications Commission of any inflexible regulations which would hamper radio experimentation. He stated positively that in his opinion the use of 500 kilowatts is not a technical advance.

In this connection Dr. Pickard drew an analogy between the use of high power on clear channels and the distribution of energy via telephone lines. He said that it had been his experience as a telephone engineer that there were definite limits beyond which power could not be distributed from one source; and that it was more economical to distribute it by steps. Questioned by Mr. Craven as to how his analogy applied to the horizontal increase in the power of regional stations to 5 kilowatts, he drew a further analogy with the use of light. In this connection he explained that our seniors had been forced to use weak and inefficient candle and lamp light but that today there was a level beyond which it was not necessary to go in furnishing efficient light.

Higher Power for Regionals

He made a very positive statement to the effect that higher power should be granted the regional stations of the country but that no increase should be granted to the clear channel stations. He said that the use of 500 kilowatts is not feasible or the best solution of the present problem. He contended (1) that the stations have reached the useful limit of their increased power, (2) he compared this increased power with the telephone situation, (3) he brought up the question of international interference, and (4) economic reasons.

WLW

Questioned regarding the service of WLW 716 miles away from the station, Dr. Pickard said that it is not rendering a satisfactory service in June or July. He said in fact that if a circle were drawn around WLW 716 miles in circumference that there would be certain times when it would not give a good service. The summer service of the station, he contended, is impaired as compared with fall, winter and spring. He admitted, however, that if the power was reduced it would impair the service range.

Satisfactory Service

Dr. Pickard told the Commission that he believed that the broadcasters of the country should give such satisfactory signal to the listener as is acceptable to him. This, he said, of course will vary with the circumstances of the listener. During the course of his examination Dr. Pickard stated that his observation showed that there is a higher disturbance on the east coast than on the west coast.

There should be a signal intensity, said Dr. Pickard, of more than 500 millivolts used to cover towns and villages even in rural areas.

Rural Stations

Many towns and villages in the United States now have no radio station of their own, Dr. Pickard testified, at which point Mr. Craven read into the record that there are 280 towns in the United States today having inhabitants from 10 to 15 thousand which have no radio station and there are 562 towns with inhabitants of between 5,000 and 10,000 who have no station of their own.

Florida has a high disturbance area in the summer because of the storms, Dr. Pickard said. Dealing still with this state he testified that there are a number of towns in Florida having from 2,500 to 25,000 inhabitants which are dependent on clear channel stations for their radio reception. He said that in a case of this kind increased power would help.

The increasing of the power of clear channel stations he said in his opinion would give rural listeners better programs only to a very limited extent. Neither regional nor clear channel stations use a hundred per cent network, Dr. Pickard testified, but he did not know what percentage of network time these two classes of stations used.

One Wave Franklin Antennas

Dr. Pickard pointed out that clear channel stations, by the use of One Wave Franklin Antenna, could increase their coverage to a degree which would be the equivalent of an increase in power from 50 kilowatts to 136 kilowatts. Asked whether he would advocate the use of the One Wave Franklin Antennas by clear channel stations, Dr. Pickard said that he would favor their use particularly if such stations operated on the higher frequencies.

Following is a supplemental list of those attending the hearings:

B

Baker, Thomas S.; Berne, Louis W., Station WCNW, Brooklyn, N. Y.

C

Chafey, Clifford M., Station WEEU, Reading Pa.

F

Faske, Arthur, Station WCNW, Brooklyn, N. Y.; Frazier, Howard S., Cons. Engineer, Hotel Philadelphia, Philadelphia, Pa.

G

Gillin, Jr., John J., Station WOW, Omaha, Nebr.; Godley, Paul F., Cons. Engineer, Montclair, N. J.; Gould, Purnell H., Commercial Mgr., Station WFBR, Baltimore, Md.

H

Halff, Hugh A. L., Station WOAI, San Antonio, Tex.; Harmon, R. N. Westinghouse Co., Chicopee Falls, Mass.; Hildreth, Melvin D., Attorney, WORL, Boston, Mass.

L

Landis, Harold O., Station WEEU, Reading, Pa.

M

Megargee, Frank, Station WGBI, Scranton, Pa.

P

Prall, A. M., V.-P., Trans-American Broadcasting & Television Corp., 521 Fifth Ave., New York City.

T

Tolman, David E., Segal & Smith, Washington, D. C.

W

Webb, William H., Attorney, 1128 Connnecticut Ave., N. W., Washington, D. C.; White, Ray B., Stations WAWZ-KPOF, Zarephath, N. J.; Wrathall, Grant, Utah Broadcasting Co., Station KUTA, National Press Bldg.

The National Association of Broadcasters
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Regionals Testimony Completed by Spearman

Paul D. P. Spearman, counsel for the National Association of Regional Broadcast Stations, completed their presentation before the Federal Communications Commission today at the allocation hearing when he took up the social and economic considerations vital to regional stations.

Mr. Spearman was subjected to cross examination by T. A. M. Craven, chief engineer of the Commission on behalf of the Commission, and questions were propounded through him at the direction of Chairman Sykes prepared by Louis G. Caldwell, counsel for the Clear Channel Group. It is expected that Paul M. Segal, counsel for a group of regional stations who have asked the Commission for an increase of power to 5 kilowatts, will present their case tomorrow. It is anticipated also that some time during tomorrow's session the National Broadcasting Company will present testimony.

Economic Questions

Mr. Spearman told the Commission at the beginning of his statement that his particular discussion would be limited to the social and economic questions involved.

"The group which I represent," said Mr. Spearman, "holds as fundamental and self evident truths that social and economic consideration and facts taken into account by the Commission and used as the basis for the future regulation of broadcasting transcend and outweigh in importance any question or questions of mechanics which might be given consideration or which might affect the future of radio broadcast regulation."

Mr. Spearman contended that regional broadcast stations are the backbone of American broadcasting. "The Association which I represent," he said, "has no quarrel with the networks as such. Chain programs have made possible the growth and popularity of broadcasting."

Regional stations, said Mr. Spearman, render unique program service to their communities and adjacent areas which it is difficult, if not impossible, for other classes of stations to duplicate.

Recommendations

"The National Association of Regional Broadcast Stations," said Mr. Spearman, "on the bases of the social and economic facts, which are of primary importance, and the technical facts as well, all of which we believe sincerely to have supported our proposals, once again most respectfully urges the promulgation of rules or changes in rules so as to permit the operation of regional stations with 5 kilowatt night power; permit duplication and operation of more than one station on the clear channels, and retain the present rules fixing 50 kilowatt as the maximum power with which any station will be regularly licensed to operate."

Paul D. P. Spearman

Mr. Spearman said:

The Broadcast Division of the Commission in giving its notice of this informal hearing, stated that its purpose was to obtain the most complete information available with respect to the broad subject of allocation, and emphasized that the data desired was not limited to technical or engineering facts, but included a request for the presentation of evidence with respect to social and economic considerations which should be considered in the formulation of regulations and standards governing the use of the band 550 to 1600 kilocycles. It was to make social, economic and engineering studies and to present the results of these studies at this hearing that the National Association of Regional Broadcast Stations was organized. This Association is composed of licensees who operate a large number of regional broadcast stations, including commercial and non-commercial stations, as well as stations affiliated with national networks and commercial stations operating independent of such networks.

The National Association of Regional Broadcast Stations employed Mr. G. W. Pickard to direct the studies of technical questions affecting regional stations in particular and broadcasting in general. I was retained to direct and to present studies affecting the other phases of the regional stations' presentation. This particular discussion will be limited to the social and economic question involved, and if references are made to technical matters it will be because of the inter-relationship which may appear to make this necessary. It is not the purpose of this statement to deal with engineering questions as such, and the only technical references which will be presented in this discussion are those which may directly bear upon a proper presentation of the social and economic aspects of the questions being considered. Moreover, such reference as may be made to technical questions are based upon the main body of the engineering presentation which has been made on behalf of the Association by Mr. Pickard.

Importance of Social and Economic Considerations

The group which I represent holds as fundamental and self-evident truths that social and economic considerations and facts taken into account by the Commission and used as the basis for the future regulation of broadcasting transcend and outweigh in importance any question or questions of mechanics which might be given consideration or which might affect the future of radio broadcast regulation. These social and economic laws and facts cannot be measured with absolute precision or mathematical exactitude, yet they are the factors of paramount importance which should be reckoned with and first solved as far as possible before consideration is given to the mechanics of radio in the formulation of rules to guide and govern the future of broadcasting. After, and only after, the social needs and economic demands and limits have been determined can the Commission ascertain how and in what way the mechanics of broadcasting should be fitted into the result. The only reason for the existence of radio transmitters and receivers is to serve the social and economic needs and demands of the public. The public and its social problems do not exist merely for the purpose of being reached through the mechanics of radio and their interests should not, and we are sure will not, be subordinated to mere technical considerations. The public is the master and radio its servant. To set up engineering or technical rules and then attempt to fit the public needs into the resultant picture would be tantamount to the "tail wagging the dog." The group which I represent appreciates fully and is proud of the great advances made in the technique of radio. It is convinced that where engineering theories run counter to social demands and economic laws, the needs and demands of the public must control.

The Position of Regional Stations in Broadcasting

Regional broadcast stations are the backbone of American broadcasting. We do not believe this statement will be challenged. We do believe, however, that the importance of regional stations in the present structure and listener service of broadcasting and the important function they perform would not be amiss if pointed out here.

In the allocation of 1928 the Federal Radio Commission established three classes of stations, each intended to render a particular kind of service, i. e., clear channel, regional and local. Clear channel stations were provided for the purpose of rendering general service over large areas. Regional stations were created for the purpose of serving important communities and their adjacent areas of influence. Local stations were designed to serve localized needs in more limited territories.

Out of that allocation and from this classification of stations there developed a natural but important aspect of American broadcasting; specialization of function. Each class of stations was designed, and indeed best suited, to serve a particular function. Much of American radio broadcasting and the service which the public has received has developed since that basic allocation as the direct result of the natural working out of this specialization of function.

The principle of specialization of function strikes deeper into the broadcast structure and the daily operation of broadcast stations than might appear at first glance. Not only does it affect the range of radio signals, but it exerts a powerful and important influence upon the nature of the program service rendered and, as well, upon the economics involved.

Local stations more and more have come to develop program service designed to meet particular local needs and to fit into local demands and local psychology, finding in this development or evolution the only successful means of winning and holding listeners in competition with the network and larger and more prosperous stations. This specialization or concentration by local stations on local conditions and local factors has been a most constructive addition to the field of broadcast service and has added materially to the wealth and variety of listener service made available.

Program Service

The differentiation of program service between regional and clear channel stations has been less marked, just as the difference between their range of service and influence is at times less clearly defined. On the other hand, however, there has been a particularly noticeable tendency for the regional stations to be more and more closely allied to every civic enterprise of the community and area which it serves and to tie itself as closely as possible to the community life, the reference to community here being not only to the city in which a given station may be located, but includes as well the adjacent areas which it serves. Part of this policy has been dictated by clear channel competition, and part by desire to win and hold a loyal, local following in general. Again specialization of function has tended to develop a distinctive service on the part of many regional stations.

This specialization of function has also affected the economic operation of stations of various classes. Local stations have tended to specialize in local advertising and to render important service to smaller retail establishments. Regional stations have tended to serve and do serve those larger commercial concerns—department stores, local manufacturers, bakeries, and the like—interested in a wider area than the immediate locality and concerned with and desirous of reaching the entire trading area of the community. Regional stations from the beginning have served as important network outlets and in this way have served regional and national distributors in a most important capacity.

Clear channel stations have served and continue to serve as important links in the chain of American broadcasting. Their widespread coverage has, as would naturally be expected, given them less local interest and has tended to restrict their scope of local service and at the same time, so far as the circulation received outside of the community and its adjacent trading area is concerned, has introduced a large element of waste for the local advertiser.

Populous Areas

In more populous areas there is the grave question as to whether the clear channel station has performed any function different from that of the regional station enjoying good coverage. In many of these populous areas a clear channel station has served either as a key station or outlet station for networks, thus performing practically the same function and giving generally the same service of regional stations elsewhere which are affiliated with such networks.

Thus it is seen that the principle of specialization of function has worked itself out in the technical, social and economic fields and these three classes of stations may be compared roughly to three aspects of the press. The clear channel station may be compared to the large metropolitan daily with a large circulation scattered over a large portion of the country. The New York Times would be an example in point. The regional station may be compared to the average city newspaper which constitutes the backbone of the American press as the regional stations constitute the backbone of American broadcasting. Finally, the local station is similar to the country press or to the neighborhood papers in the large cities. It might be said, however, that in community movements and community drives the large metropolitan daily with its scattered circulation may not be relied upon and such movements must depend for their success upon the local daily newspaper which builds its service around the city and its environs just as the regional station does.

Press and Radio

Analogies may be dangerous, but to the extent to which the press and radio are at all similar, this comparison serves to point out the development and the *value*, socially and economically, of specialization of function as it is found in American broadcasting. From it we may draw an important conclusion: that specialization of function and specialized service must be preserved in future allocation systems, and indeed, must be encouraged. This encouragement should not go so far as to injure any important class of stations rendering service to the American public unless it is conclusively shown that such injury will be more than compensated for by the added service rendered by any class so preferred in encouragement.

Regional stations have rendered and continue to render a distinctive and unique service to the listeners within the communities where they operate and this service is, as we pointed out, by no means limited to the immediate city but includes the areas in which the cities wield social and economic influence. 44 per cent of all the stations in the country are classified as regionals and number approximately 277. 78 per cent of all the stations affiliated with either the National Broadcasting Company or the Columbia Broadcasting System are regionals. If the regional stations which are affiliated with the Mutual Broadcasting System are considered, it is found that 80 per cent of all stations affiliated with all national networks would be placed in the regional category.

The Association which I represent has no quarrel with the networks as such. Chain programs have made possible the growth and popularity of broadcasting. Without the cost of producing programs of a high order which have been and are being carried by the networks being distributed over a large number of stations including a preponderance of regional stations, bringing about a relatively lower cost in the production of these programs, this excellent service to the listening public would have been economically impracticable, if not impossible. By directly or indirectly absorbing their share of these costs the regional stations of the country have made possible a high order of program service which would have been impossible without them. Again I repeat that regional stations are the backbone of broadcasting; have been and still are the backbone of national network service.

Regionals Serve Bulk

Moreover, regional stations serve the bulk of our population. Unlimited-time regional stations serve all of our important cities and their contiguous areas of influence. 48.9 per cent of all regional stations and 53.9 per cent of those which operate unlimited time are located in cities of 100,000 and over. Within 20 to 50 miles of these 93 largest centers live almost half of our entire population including a large rural population. 51.1 per cent of all regional stations and 46.1 per cent of all those operating unlimited time are located in cities having populations of less than 100,000. Thus it is seen that regional stations are widely distributed throughout the country and it cannot be disputed that the majority of the regional stations being located in cities of less than 100,000 population must and in actuality do serve the preponderance of the rural listeners of the country.

In addition, it is found that daytime and limited time regional stations are concentrated in the smaller towns where they render important rural service. As a matter of fact it is common knowledge that these stations build their programs around the needs and with the purpose of serving, reaching and appealing to large rural audiences. Further study with respect to the location of shared-time regionals disclose that these are situated in small towns and in large metropolitan communities. Being so situated they have catered to rural audiences on the one hand or localized neighborhood audiences on the other. Those who have catered to the latter serve principally as counter-parts of localized or neighborhood newspapers in these large centers.

The importance of regional stations in the economic fabric of broadcasting may be ascertained from the Commission's own records.

Study

A study was made of the regional stations which have regularly reported their revenues and expenditures to the commission and this study reveals that of approximately 277 regional stations in the country, 240 of them have been so reported. Taking into account the 240 regional stations so reporting and studied, their distribution over the country is found to be as follows:

Size of Community	*Number of Stations*	*Per Cent of Total*
under 50,000	62	25.7
50-99,000	37	15.4
100-199,000	43	18.0
200-499,000	53	22.1
500,000 and over	45	18.8
Total	240	100%

Of the entire group of regional stations mentioned, it is found that 141 of these are located in the 93 cities of the country having a population of 100,000 and over. It follows, therefore, that the other regional stations accounted for are located in cities or communities of 100,000 population or less.

When those stations which have regularly reported their revenues and expenditures to the commission are separated and the unlimited time stations are segregated, their distribution is found to be as follows:

Size of	*Affiliated with NBC or CBS*	*Percent*	*Independent*	*Percent*	*Total*	*Percent*
under 50,000	16	14.6	17	31.0	33	21.7
50-99,000	18	16.5	8	15.1	26	17.1
100-199,000	23	21.1	11	20.7	34	22.3
200-499,000	32	30.2	11	20.7	43	21.7
500,000 and over	20	17.6	6	12.5	26	17.2
Total	109*	100%	53	100%	162	100%

* The latest count shows that there are actually 122 regional stations affiliated with NBC or CBS. The 109 accounted for are those which have regularly reported their revenues and expenditures to the commission.

Affiliations

From these figures it will be seen that 71.7 per cent of all the unlimited time regional stations of the country are affiliated with either the National Broadcasting Company or the Columbia Broadcasting System. It is therefore at once apparent and obvious that regional stations and networks are mutually dependent upon each other. The fact that the networks are using so many regional stations is proof of the present dependence of networks on regional stations.

As has been pointed out, 71.7 per cent of the unlimited time regional stations of the country are affiliated with and carry the network programs of the National Broadcasting Company and the Columbia Broadcasting System. According to the 1935 U. S. Census of Business, 22.2 per cent of the revenues of all stations in the United States came from national networks. This represents more than $12,500,000 per annum and by far the largest number of stations in any one class participating in this revenue are the stations in the regional category.

A questionnaire was sent to regional broadcast stations asking for a breakdown of their revenue as to sources, *i. e.,* national network, regional network, national spot and local business. A tabulation and study of the responses made by 19 regional stations in various parts of the country shows that the average percentage of the total revenues received by these stations from national networks for 1935 was 27.4 per cent of their total revenues. While this is not a large number of stations, it is believed to be representative since the responses came from stations located in the various classification of communities by populations used heretofore. Moreover, the majority of the stations studied are optional and the minority of them are on the basic national networks. Had a majority of them been on the basic networks the percentage of revenues from network business would have been greater. If the cost of oprating these 19 stations is deducted from their total revenues to ascertain the profit from operating them, and if then from the profit so arrived at the income from networks should be subtracted, it is found that taken as a group these 19 stations would be operated at an annual loss of $111,798.00, or an average loss per station of $5,884.00. 10 of these 19 stations would be operated at a loss if they should lose their network business, while 9 of them would more than break even. If the cost of supplying sustaining programs to take place of the network programs which the stations receive from the networks should be added, this net loss would be much greater than $111,798.00.

It is therefore apparent that the national networks and regional stations are mutually dependent upon each other. It is likewise clear that any disturbing influence which would affect the present relationship between networks and regional stations, particularly the revenues received from the networks, not only might but most certainly would adversely affect that class of stations which constitutes the backbone and mainspring of American broadcasting, and if such disturbing influence should so adversely affect the economic and financial structure of these stations it would just as surely depreciate the quality of service which the public has come to rely upon and which it has the right to continue to expect.

Further economic data will be presented in connection with specific questions to be discussed later in this statement.

Community Importance of Regional Stations

Regional stations render unique program service to their communities and adjacent areas which it is difficult, if not impossible, for other classes of stations to duplicate.

It is common knowledge, as already pointed out, that regional stations have affiliated themselves with and tied themselves to the peculiar interests of the communities in which they are located. It is well known that regional stations cooperate with all worthwhile civic organizations and give generously of their time and facilities to all such organizations and institutions throughout their entire service areas. Civic movements often reach beyond the mere boundary lines of the city in which a radio station is located. Many of these movements affect either directly or indirectly the areas adjacent to these cities and the urban dweller as well as the rural resident is often vitally interested in them. In this connection the regional stations of the country render a distinct and peculiar service. It is one of their natural functions and fields. As a rule local stations cannot cover these areas, and distant listeners not being interested in these movements, do not care to listen to the programs when carried by clear channel stations. Why should a listener in Mobile, Alabama, be interested in a discussion as to where a new high school building should be located in St. Louis, Missouri? And why should a listener in St. Louis be interested in a discussion as to what part of the city a municipal swimming pool will be located in Mobile? And why and on what theory would a cotton farmer in the South be interested in a program calculated to aid the wheat farmer of Iowa, and vice versa? The regional stations naturally fit into these uses to which radio can be and is put. They cooperate with the heads of the schools and school systems and render valuable aid to them since it is usual that the schools within the area served by a regional station have more or less the same problems. Like cooperation is given to colleges. This cooperation is rendered to both the academic and athletic fields. It is not limited merely to the regular schools and colleges, but in many instances it has reached out into the field of adult education and in cooperation with local school officials who understand the problems at hand and the psychology of those whom they seek to aid and has done yeoman service in furtherance and support of this worthy cause.

Economically Important

The cities of this country in which regional stations are located are not only economically important to their environs, but they are the cultural centers for these areas. The urban and the rural radio listener looks to these cities for cultural guidance and business leadership. Radio stations aiding in the handling and solution of cultural and economic problems certainly have more influence and carry much more weight than some distant station could hope to wield unless the economic structure of regional stations is so disturbed as to deplete their revenues and reduce the amount which they can invest in and spend for programs broadcast by them. They will remain influential and will be listened to only so long as they can afford to broadcast programs which will arrest the attention and hold the interest of their respective audiences, and no longer. If they should lose their audiences or any appreciable portion of their listeners, their value as an advertising medium will be proportionately reduced and their value to the communities in which they are located in cooperating with civic, education, cultural and economic forces and in furthering these interests will be dealt a death blow. This will be not merely a solar plexus to the regional stations of the country, but will be a mighty blow delivered against these highly important institutions and organizations.

As pointed out, not only the urban but likewise the rural listener looks to the cities and towns in which regional stations are located for cultural guidance. He enjoys listening to music and sermons from nearby centers. He learns to appreciate the cultural value of the local symphonies and the better local talent. His interest is stirred and he is persuaded to visit and make use of the local libraries. He becomes acquainted with its educational institutions and his outlook is broadened and his ambition and that of his children is increased. These are not mere passing fancies but are practical actualities and interest in them is more easily built at short range than from long distances.

Farmer Interested

The farmer may be somewhat interested in what the wheat quotations in Chicago are, what the cotton market may be in New York, New Orleans or Liverpool or what wool is bringing in New York City, but he and you understand that what he gets for his produce and what he received for his farm products is almost entirely determined by the markets in the cities in which regional stations are located. The housewife who lives in the medium or small city or on the farm is interested in knowing what the department stores in the nearby cities have to offer, and if interested at all in what some department store may be offering 500 or 1,000 miles away, her interest arises out of pure curiosity.

The urban dweller and the farmer and their folk want to hear national news, of course, but who would challenge the statement that they are not more interested in receiving news from a nearby regional station which covers the local territory? They are interested in knowing what the weather forecast is for their local areas and care little or nothing about what it is for some distant state. They prefer to hear the mayor of the local metropolitan center and other public officials discuss local economic and political questions. They prefer to listen to local forums and hear local conditions and local issues debated and aired. They prefer to listen to programs publicizing and aiding local drives for worthy causes than to hear like drives for the benefit of far distant cities.

These are among the limitless number of services for which regional stations are peculiarly fitted and which they render.

The foreign population and the population of foreign extraction in this country is largely concentrated in and adjacent to the cities in which regional stations are located, and regional stations are the natural medium for reaching these groups and they are reaching them with emphasis on Americanism. Programs of this character, if broadcast by stations having the coverage claimed for clear channel stations, would be done at the expense of an extremely high waste circulation. A very large percentage of those who would be reached in this way would be as disinterested in such programs as the listeners in one state would be in programs on conservation, agriculture and industry originating in a wholly dissimilar state and built around the specific and different problems of the latter.

Professor Edmund deS. Brunner in a recent publication entitled "Radio and the Farmer" has included some very interesting information. Of the services rendered to the farmers by national networks this publication shows that all of these programs are carried around the noon hour. Taking the states up one by one he points out the programs carried in the various states in the interest of those engaged in agricultural pursuits, and shows the day of the week and the time of day when these programs are broadcast. A study of this exhaustive list shows that almost all of them, like the national network programs, are broadcast during the daytime. In only three or four states is it shown that any programs of this nature are broadcast during the evening hours. The most amazing result of a tabulation of the stations which cooperate in this agricultural service is that more than 90 percent of all these agricultural programs are broadcast by regional stations. We commend Professor Brunner's publication, "Radio and the Farmer", to the Commission as proof positive of the high order of service rendered to the rural listener by regional stations, coming as it does from an entirely neutral source.

Economic Service of Regional Stations

As will be seen from the distribution of regional stations already referred to, these stations afford advertisers coverage of the principal markets of the country. As was also pointed out, regional stations have played an important and indispensable part in building the national networks and are today the mainstays of both the National Broadcasting Company and the Columbia Broadcasting System. Regional stations account for probably half of the revenues of the entire broadcasting industry. We have already pointed out that the average monthly revenues of stations as reported to the commission for the last license period before July of this year show that the average monthly revenues of the clear channel stations is in round figures a little more than $1,380,000, and that all the regional stations accounted for average monthly revenues slightly in excess of $2,000,000. (These figures do not include stations owned and operated by the national networks. The national networks operate both clear channel and regional stations and if these were accounted for, regional stations would still show that they receive approximately one half of the revenue paid to all stations of all classes.)

The results of an analysis of the business of 65 stations representing approximately 25 per cent of the volume done by the entire industry was made by Bernard Rose at the Wharton School of Finance and Commerce of the University of Pennsylvania indicated the following situations with respect to varying types of business prevalent over different classes of stations and pending the publication of detailed analysis of this situation in the final census report on the radio broadcasting industry, this is the most authoritative information available on the subject. These are similar to the results which have been reported in NAB Bulletins.

When non-network volume was considered it was found that 60 per cent of clear channel and high-power regional station volume was national and regional in origin and 40 per cent local. In the case of regional stations as a group, 35 per cent of their business was national and 65 per cent local. On local stations national business represented approximately 12 per cent and local business 88 per cent of their total revenue.

Advertising by Retailers

Advertising by retail establishments showed equally interesting concentration. In the case of clear channel and high-power regional stations 16.9 per cent of non-network business represented that from retail establishments. Regional station non-network business was 33.1 per cent retail in origin. 43.4 per cent of the total business done by local stations came from retail establishments, and if all advertisers whose business approached the nature of retail distribution were included, the proportion would have been much higher or close to 2/3 of the total volume of local station business.

Although the ratio of retail business advertising, to total non-network volume, is highest in the case of local stations, the largest dollar volume is probably found on regional stations. In 1934, on the basis of this study and other information available to him as to station non-network volume, Dr. Herman S. Hettinger of the University of Pennsylvania, estimated that approximately 56 per cent of all retail establishment advertising was done over regional stations, 24 per cent over local stations and 20 per cent over clear channel and high-power regional stations. (See "Some Fundamental Aspects of Radio Broadcasting Economics", *Harvard Law Review, Autumn* 1935.) These general conclusions as to the placement of business are generally in line with the conclusions which must be necessarily drawn from statistical data published in the reports of the National Association of Broadcasters. (See NAB Reports, V. 3, No. 33; V. 3, No. 36.)

With this preponderance of local business in favor of regional stations, the fact remains, as already pointed out, that these stations cannot continue their present high quality service unless they continue to hold and receive the revenues now being received from national network and national spot advertising. Moreover, these facts emphasize the economic importance of regional stations and unmistakably warrant, and, in fact, demand that their economic and indispensable service be safeguarded in any allocation system or in any changes which the Commission may make for the regulation of regional stations or the regulation of any other class of stations, which change in regulation might affect regional stations. They also show that local advertising is insufficient alone to support regional stations and guarantee the continuance of the present high order of service rendered by them.

The protection to which regional stations are justly entitled can be best effected by safeguarding the position of these stations in their natural markets. We have pointed out the service which these stations render; we have shown that they render a service which is not and cannot be rendered by any other class of station. That service and their importance to the whole listening public are such as to show clearly that these stations are the closest approach to fitting ideally into the statutory standard of public interest, convenience and necessity.

The proposals which the National Association of Regional Broadcast Stations makes for changes in existing regulations are based upon the premise that regional stations as a class are of such im-

portance and are rendering such service as to entitle them to the improvements which would inure to these stations and to the protection which they are entitled to enjoy and which they must have if they continue to he what they most certainly are—the hackbone of hroadcasting.

Proposals for Changes in Regulations

The National Association of Regional Broadcast Stations offers three definite proposals, two of which require changes in the existing rules and regulations of the commission, and the third requires no change as the Association suhmits that the present maximum authorized power of 50 kilowatts with which any station is authorized to operate should be retained.

These proposals are:

I

Change the present regulation limiting regional stations to the use of a maximum of 1 kilowatt power at night so as to permit their operation with 5 kilowatts power hoth day and night. To accomplish this, the Association respectfully suggests that the commission amend the last paragraph of Rule 120 so that as amended the last paragraph of that Rule will read as follows:

> "The operating power of such a station shall not be less than 250 watts, nor during night time or day time, greater than 5000 watts."

And further suggests that the commission amend Rule 123 so as to delete therefrom all that portion thereof which follows listing of frequencies in the Rule.

II

Maintain the present regulations which limit the maximum power with which any station will be regularly licensed to operate to 50 kilowatts.

III

Change the present regulations so as to permit the operation of more than one unlimited-time high-power station on the so-called clear channels. To accomplish this, the Association respectfully suggests the following specific amendments to the existing rules and regulations.

A. Amend Rule 116 so as to read as follows:

> "116. The following frequencies are designated as high-power channels."

and follow this with a list of frequencies as now set out in Rule 116, leaving out all reference to zones.

B. Amend Rule 117 so as to read as follows:

> "117. The authorized power of a high-power channel station shall not he less than 5 kilowatts nor more than 50 kilowatts."

C. Amend Rule 72 so as to read as follows:

> "The term 'high-power station' means a station licensed to operate on a frequency designated as a high-power channel."

Authorize Regional Stations to Operate with 5 Kilowatt Power at Night

The technical evidence already submitted by the National Association of Regional Broadcast Stations shows that if regional stations should be authorized to operate with 5 kilowatts night power instead of 1 kilowatt, the effect would be to increase the signal of such stations 2.2 times their present signal intensity throughout the entire service area of each regional station.

The commission has stated on numerous occasions that the minimum signal intensity of broadcast stations necessary to give satisfactory service in residential sections of urhan communities is 2 MV/M. The hasis on which this standard was established was the knowledge the commission had that in such communities the local noise level is of such intensity as to destroy the value of programs unless the radio signal was of such intensity as to overcome local interference, and the knowledge that a radio signal having an intensity of 2 MV/M was necessary to accomplish this.

In view of the great hody of evidence which the commission has received to support its numerous findings that a minimum signal intensity of 2 MV/M is necessary to give reliahle and satisfactory service in residential sections of urhan communities, we are justified in assuming that such sections do not receive reliable and satisfactory service if they must depend for their programs on stations the field intensity of which is less than 2 MV/M.

The Commission has stated generally that the protection which would be afforded regional stations would extend over the area in which a given station delivered a signal of 1 MV/M or greater.

Protection to Regionals

Taking the protection to regional stations of 1 MV/M and the commission's standard of a minimum of 2 MV/M signal intensity necessary to render satisfactory service to urhan communities, it follows therefore, that listeners in residential sections of urban communities who are located between the 1 MV/M and the 2 MV/M contours of any station cannot and do not receive satisfactory and reliable radio service. If stations now licensed to operate with 1 kilowatt power at night should he authorized to operate with 5 kilowatts power at night the resulting signal would he 2.2 times as strong as the present signals are, and all listeners who now receive only 1 MV/M in signal intensity from these stations would receive a signal of 2.2 MV/M, thus providing, according to the commission's standard, satisfactory residential service to the thousands upon thousands of urhan dwellers who now live outside, over, and beyond the 2 MV/M contour of practically all regional stations and inside their present 1 MV/M contours. This would he the result and is the improvement which can he expected even if the interference free service area of regional stations should remain constant. By "interference free service area" is meant the area in which the signal of any given station is not limited hy heterodyne or cross-talk interference.

It has been argued by some that a horizontal increase of night operating power of regional stations would not extend their service areas beyond their present limits. Those who have argued thus do admit, however, that the signal intensity of the stations would he appreciably increased, and that the ratio of signal intensity to noise level would likewise he materially increased and improved. As already pointed out, such an increase in signal intensity and improvement hy increasing ratio of signal to noise level, would hring thousands upon thousands of listeners who live in cities and towns within the primary and satisfactory night time service area of such stations.

Not Limited to Heterodyne

There are at least some few regional stations which are not limited by heterodyne and cross-talk interference to their 1 MV/M contours. This is shown hy the commission's allocation survey of September 1, 1936, as the average satisfactory signal on which listeners depend at night, based on regional stations, is less than 1 MV/M. If the average is less than this intensity, certainly some of them must have been much lower. This is also supported hy actual investigation made in other regional station areas. If the stations which operate on the same frequency occupied by WMC, for instance, should each use five times as much power at night, WMC would still he free from heterodyne and cross-talk interference out to and heyond its present 1 MV/M contour. It requires little argument to this commission which is conversant with the facts, to show or indicate what a material, and, in fact, wonderful improvement this would work in the service area of this station. It is therefore apparent that local interference or noise level and not heterodyne or cross-talk interference is the limiting factor marking the outer limits of areas within which reliahle service from some regional stations is now possihle. It is at the same time apparent that a horizontal increase in regional station operating power from 1 kilowatt to 5 kilowatts at night would actually expand service area of regional stations and make possible a satisfactory reception of programs broadcast hy them hy thousands upon thousands of listeners who cannot now enjoy this service.

Here, as everywhere in hroadcasting, the all important question of economics enters and must he weighed and carefully considered along with the social henefits which would accrue to the puhlic, if the upper limit for night time power for regional stations is raised from 1 kilowatt to 5 kilowatts.

Because programs from many commercial regional stations cannot now he satisfactorily received, hecause of local noise and local interference, even though in these areas their signals are free from heterodyne and cross-talk interference, they have lost many desirable advertising accounts and have failed to receive large revenues. These revenues could have heen used for the general improvement of the stations and would have afforded wider latitude in building and broadcasting programs of a high order.

Reason for Discontinuance

It has been determined that the definite reason why some accounts were discontinued over regional stations was because the

individual responsible for the continuation of the business could not receive the programs satisfactorily in his home located in a populous residential area because of local interference although at these places the signals of the stations in question were free from heterodyne and cross-talk interference. In some of these cases which have been investigated, it was determined that if the signal was twice as strong as it is at present, the intensity would be sufficient to overcome the prevailing noise level and deliver satisfactory service. As examples of this, three accounts were lost by WNAC because of this condition.

Because of the same prevailing conditions, regional stations in many locations have been unable to induce prospective sponsors to make use of their facilities. Based on the information which we have received from a large number of regional stations, this condition seems to be a chronic condition and has tended to prevent regional stations from receiving increased revenues.

Since regional stations constitute close to half of all the stations in the country; do half the combined business of the industry; serve the social and economic needs of local trade areas, and cater to the cultural and business needs of these communities; and since the local advertiser pays taxes in the community served by regional stations, contributes to and supports the welfare organizations, adds to its social life and cultural influence and depends almost entirely on the area served by regional stations for existence; and since the listeners within such areas in return receive concessions from local business men and look to and depend upon them for economic leadership, the Association which I represent respectfully submits that regional stations should be permitted to increase the intensity of their signals so that the service rendered by them to their respective regional areas may be improved and made satisfactory. These principles and these facts were necessarily considered and finally determined in favor of regional stations and were the basis on which the commission necessarily acted in permitting regional stations to increase their day time operating power to 5 kilowatt.

Increasing the reliability of signals throughout regional station areas will definitely improve the service rendered by them; will enhance their value as advertising mediums, increase their revenues and generally improve the economic fabric of the stations. The program service given by any station depends very largely and, in fact, in the main on its income or on its financial and economic condition. It follows, therefore, that if by increasing the reliability of signals delivered by regional stations this will increase the revenues received, the ultimate effect will be to improve greatly the quality of program service which the stations broadcast.

Increasing Signal

These improvements which will result from increasing the signal intensity of regional stations within their respective trade areas will make listening to such stations easier for the public and will build larger, more loyal and more valuable audiences for all of them. The value of a station as an advertising medium depends upon the number of listeners and the regularity of their listening.

Mr. Pickard has spoken of the great benefits which many stations could secure from operating on staggered frequencies so that the carrier waves of these stations would be separated by more than the maximum difference in carriers which produce flutter and by less than the difference in cycles necessary to produce heterodynes. He has stated quite definitely that the ratio of desired to undesired signals on the same channel or frequency could be reduced to 10 to 1 in figures if the stations would but follow this system of operation, which they could do within the present deviation tolerance permitted by the Commission's Rules and Regulations. This is a new and great improvement over the improvements which we have detailed and if it is added to the other improvements which would be experienced by regional broadcast stations, it requires little or no imagination to calculate the vast benefits that operation of regional stations with 5 kw. power, day and night, on staggered frequencies would mean to the vast majority of American listeners.

It has been found somewhat easier to sell the services of regional stations to local advertisers, if the local advertiser is convinced that the station has been carrying a large amount of national business, as many advertisers believe that the popularity of a station is largely dependent upon national business for high quality programs. Thus, again, it is seen that if regional stations are to maintain their local business, they must at the same time retain their national business, and it is also seen that any disturbing influence which might reduce the national business carried by regional stations would tend to make them less desired by local advertisers.

We have attempted to ascertain what influence the operation of regional stations with 5 kilowatt day time power has had. Inquiry was made of regional stations authorized to so operate, and, without going into cold statistical data, suffice it to say that the experience of every one of these stations from which responses were received shows that their business has been increased, their advertisers sponsoring day time programs have become better satisfied, their day time programs have been improved, and the listeners have received better service, both from the viewpoints of better signals and better programs. A greater number of listeners have been able to receive their programs as a natural consequence.

For these and for numerous reasons already stated, the Association is convinced that like results and experiences would follow if the commission should authorize regional stations to operate with 5 kilowatt power at night.

Further Inquiry

Further inquiry of regional stations authorized to operate with 5 kilowatt day time power indicates that the increased cost in technical operation with 5 kilowatt day time power has been relatively slight. For 5 representative stations which furnished authentic and reliable data to the Association as to the increased costs of operation with 5 kilowatt day power as compared to costs of technical operation before shifting over from their low operating powers, it is found that the average rise in technical operating expenses was 18.9 per cent. These stations have the necessary equipment to operate with 5 kilowatt power at night as well as during the day time. They have necessarily had to provide practically all of the prerequisites necessary for operating with 5 kilowatt power at night and on the basis of the facts reported by these same 5 representative stations, it is found that the increased cost to cover mechanical operation with 5 kilowatts power at night time would be another 2.58 per cent. This cost would be largely for power and tube replacements and like expenses.

In these inquiries information of the most exact nature was asked for and received touching the question of program expenditures. It is interesting, if not indeed heartening, to note that these five stations which were studied in detail have shown a definite willingness to increase their program expenditures materially. The average increase made by them in program expenditures when they were authorized to operate with 5 kw. day power was 12.73 per cent, and it is estimated that these program expenditures would be increased by another 17 per cent if they were authorized to operate with 5 kw. night power. These increased expenditures would be met because the stations would be more valuable to advertisers, and because they would become more valuable, the advertisers would not object to reasonable increases in rates. This is shown by the fact that regional stations operating with 5 kw. power day time could increase their day time rates and instead of losing business increase their revenues. It is only reasonable to expect like results from 5 kw. night time operation.

Experience of Regionals

Based on the experience of regional broadcast stations in general, and more particularly upon the specific information which has been furnished by stations having experience in operating regional stations with 5 kw. day time power, there can be little if any question but that the increased volume of business would easily offset the relatively small increased cost of operation which would arise out of regional stations operating with 5 kw. night time power.

That reasonable increases in station rates may be made is also shown from the most reliable estimate of radio receivers now in operation, as compared to the number in use in 1930. This increase in the number of radio sets in use has increased the potential audiences so that more valuable results accrue to the advertiser. The official 1930 census showed that there were 12,078,000 radio families in the country. The Joint Committee on Radio Research (maintained by the National Association of Broadcasters, the Association of National Advertisers, and the American Association of Advertising Agencies) in its report issued July 2, 1936, showed 22,869,000 radio families in the United States in 1936, or a gain of 94.2 per cent over the number shown by the official census of 1930.

Compared to 1931, station rates in 1934 had declined 8.6 per cent. This decline has probably been made up since then, but it is doubtful if the 1931 rates have been exceeded. (*Harvard Business Review, Autumn* 1935, p. 24.) With the potential radio audience almost doubled, it would seem fair to assume that regional stations would be able to increase their rates to meet any added cost of operation growing out of their being authorized to use 5 kw. power at night.

With the increased and constantly increasing number of families having radio receiving sets, the reliability of radio signals should increase at least to the same extent. The technical evidence which has been adduced on behalf of the regional Association shows what vast improvements would be made in the reception from regional stations if the commission should authorize their operation with 5 kw. at night. This is so conclusively shown by the technical evidence, and from this irrefutable evidence it appears with such complete certainty that the percentage of listeners who could receive reliable service from regional stations is so great that when all the evidence as to effect and result is taken into account it is hard to find any logical argument which can be used against such an increase in power for regional stations. We have tried to anticipate what, if any, reasoning could be interposed against the proposed increase in power, and we have frankly been unable to find any disadvantage which would result from such an increase that approaches anywhere near in importance the great improvements which such an increase would bring about.

Argument in Opposition

The only argument which has been advanced in opposition to granting 5 kw. power at night to regional stations is the argument that at some time in the future the commission might find it desirable to authorize the construction and installation of a new regional broadcast station in some small city which does not now have such a regional station, and the argument that such a small city might not be able to afford commercial support for a 5 kw. regional station, although it might support a 1 kw. station. We have already shown from actual experience of representative stations that the cost of technical operation incident to a 5 kw. regional station so far as daytime costs are concerned is, on the average, only 18.9 per cent. We have also shown that on the basis of the actual experience of these same representative stations it is estimated that if those stations which are now authorized to operate with 5 kilowatts power during day time and licensed to operate with 5 kw. at night, the increase in the cost of mechanical operation will be only 2.58 per cent. From this it is deduced that if those stations are permitted to operate with 5 kw. both day and night the additional mechanical and technical cost of operation will be 21.48 per cent greater than was their average technical and mechanical cost of operation before they began operating with 5 kw. day power. While this increase in cost of operation by 21.48 per cent might be considered great if that percentage was based on a basic cost of operation which ran into the hundreds of thousands of dollars, yet the fact remains that this increase in cost of operation, in dollars and cents, and from a practical viewpoint nowhere near approaches the practical effect if like increases in power should be made in some other station class. To say the most which can be said in support of such argument, in the final analysis, leads to the simple conclusion, on a practical economic basis, that if a city can not support a regional broadcast station operated with 5 kw. power both day and night, there is the gravest doubt that such a city could or would support a regional station which operated with only 1000 watts power.

Although we have, as already stated, tried to ascertain and determine what, if any, logical reasons or argument could be offered in opposition to the proposal that regional stations be authorized to operate with 5000 watts power during night as well as during daytime. the one mentioned is the only argument we have heard advanced and the reasoning used in support of such an argument fails of its own weight.

Increased Power

The National Association of Regional Broadcast Stations in asking that the upper limit of permissible night time power for regional stations be changed so that the rule will fix the maximum night time power at 5 kilowatts instead of the lower powers now provided. It is clear from the commission's notice calling this hearing and the thought which runs through it that what the commission is interested in is in ascertaining what general policy should govern and what general rules should be applied to broadcasting in the future. It is just as definite from the notice that the commission is not interested in having presented at this hearing evidence in support of any individual station or small group of licensees which may be operating regional stations. In keeping with what we understand the notice to mean, we respectfully submit that the commission's rule fixing 1 kilowatt as the maximum night time power with which any regional station will be permitted to operate should be changed and with just as much sincerity we urge that the rule which limits the power of regional stations operating on Canadian-shared channels to even less power should be changed so that the maximum power permitted will be uniform and that all regional stations may come within a single rule so far as the maximum authorized power is concerned.

We believe that so far as stations operating on exclusive American regional frequencies are concerned, there is no good reason why this change should not be made and every reason why it should be made.

Although the United States has a gentleman's agreement with Canada and is a party to the Madrid Treaty of 1932, we still cannot see any reason for fixing the power limits for stations operating on Canadian-shared channels as they are in the existing rules and regulations of the commission. Should the Canadian authorities find it desirable to increase the power of Canadian stations operating on regional frequencies shared with this country, it would be necessary for American stations operating on these frequencies to make like increases in their operating powers. To fix the maximum power permitted uniformly for all regional stations does not mean that the commission would automatically permit all of them to operate at such maximum powers. To keep a rule in force when this possibility points to becoming a probability serves no good purpose.

Ask General Rule

As we have already tried to make clear, this Association is asking that the general rule fixing the limit on power which a regional station may use be changed not for the benefit of any individual licensee or small group of licensees. We submit that to pick out and set aside a limited number of regional channels and to authorize them to operate with 5 kw. power day and night on the basis of engineering or technical considerations only is to lose sight of the two controlling factors which should, and we are sure will, guide the commission in this matter. The economic and social considerations involved, as already emphasized, must be first considered and determined. If only a small number of regional stations should be permitted to increase their night time operating power to 5 kw. on the basis of technical considerations only, it might be and probably would be found that many other regional stations are so located that the economic and social demands are such as to require an increase in operating power and this requirement for the latter might exceed in importance the benefits which would come from increasing the power of a limited number of regional stations without regard to the social needs and economic demands of the listening public.

Change in Rules

The National Association of Regional Broadcast Stations takes the unqualified position that the change in the rules should be made general and should apply to regional stations as a class, and that individual applicants should be permitted to apply for authority to increase their respective operating powers and the commission in turn should decide such individual applications on the basis of the economic, social and technical questions involved in considering them. Can the commission, without inquiry or other knowledge except the separations involved between stations and without knowing the needs and demands of the public which are served by them, pick out at this great distance on the basis of technical considerations and nothing more, the most meritorious cases for increasing operating power of regional stations? We submit that to ask this question makes impossible the giving of but one sensible answer, and that answer is most certainly in the negative. This, to this Association, appears conclusive that the change should be made so as to apply generally and so as to permit individual applicants or groups of applicants operating stations on common frequencies to come in and urge the merits of their respective cases. It appears just as conclusive that to pick out a few without regard to their merits and without considering the social and economic questions involved and to give them authority to increase their operating power without giving it to others would be most unfair, both to the regional station licensees and even to a greater degree to the American public.

Opposition to 500 kw. Station Menace

Consideration of any basic radio policy, including the proposal to establish 500 kw. stations, must begin with an investigation to determine what are the fundamentals which govern the development and operation of a broadcasting system. Unless such fundamentals are considered and carefully weighed in the light of the results to be expected in the future, it will be impossible to evaluate the effect of the policy being studied or contemplated.

We begin with the axiomatic assumption that the sole reason for the existence of a broadcasting system is the fact that people listen to radio programs The listener is the sole excuse for broadcasting and the service the listener receives, together with his viewpoint, must dominate all radio policy

Listening to a broadcasting system or any of its component units implies two things: (1) The ability to receive and hear the signal of one or more stations and (2) the desire to listen to the programs conveyed by the radio signal or signals in question. Both the technical and program aspects of service to the listener, therefore, are to be considered as fundamental in the development and determination of radio policy and they are controlling factors which must guide the commission in formulating regulations to govern the future of radio broadcasting.

Providing an adequate signal and program service requires the expenditure of large sums of money, which must be raised from some source before it is disbursed for either purpose. Economic laws and economic aspects of listener service therefore are as fundamental, as important and as controlling as are the program and technical questions involved.

These fundamental facts with respect to economics, program service and technical operation lead inevitably to this conclusion: Any system of allocation must be able to be justified on three bases:

(1) Any station or class of stations included in any such system of allocation must render unique and fundamental listener service.
(2) It must be economically practicable.
(3) It must be technically feasible.

We do not believe that these fundamentals or the fact that they must be considered as fundamental in determining policy to guide and govern future broadcasting will be challenged.

In the light of these fundamentals and the dominating and controlling influence which they should exert, we submit that the proponents of super power stations who would have the commission authorize the operation of stations with 500 kw. power must show three things:

(1) That 500 kw. clear channel stations will render unique listener service which is not available and which cannot be provided under the existing broadcasting structure.
(2) That such stations will be economically practicable as a group, and the economic practicability of super power stations must be judged on the basis of a large number of 500 kw. stations and not on the isolated existence of one or two.
(3) That the creation of such stations will in no way impair or disturb the fundamental service rendered by important classes of existing stations.

Tests Fundamental

We maintain that 500 kw. stations can meet none of these three tests. These three tests standing separately are each fundamental.

The principal argument which has been advanced from the allocation of 1928 to this day to justify the necessity for this type of station has been the service which it was alleged such stations would render to rural listeners. This claim has been based largely upon the theory and conjecture, and more recently on a post card and interview survey made public by the commission in its allocation of September 1, 1936, although we know they do render a very worthwhile service to rural listeners.

Allocation Survey

We respectfully suggest and urge that those references in the allocation survey released on September 1, 1936, dealing with listener behavior be wholly disregarded in any determination of future policy having to do with the allocation of radio facilities. This sincere request is based on the fact that the post card and interview survey in question, both in basic technique and in the presentation of results, follows few if any of the principles of sound research and is of no practical value.

To be more specific, the short-comings of this survey may be summarized as follows:

1. The questions asked on the post card are of such a nature and are stated in such a way as to be completely invalid as a means of collecting information for use in determining what principles should govern the allocation of radio facilities.

2. The sample gives indication of being entirely too small to allow for the drawing of any final conclusions from the information secured. The number of post cards returned to the commission constitute but a small fraction of 1 per cent of the radio homes of this country.

3. The units used in the tabulation and summarization of the information collected are such as to make a detailed scientific analysis, and therefore, deduction of sound conclusion impossible. The survey refers only to states and the returns are not broken down into any units smaller than the states.

4. Such conclusions as have been drawn appear superficial and some of them at least are open to serious question.

Post Card Survey

While these faults and objections relate principally to the post card survey, they hold with equal, if not greater force, in the case of the listener interviews conducted by the commission's field inspectors.

Considering first the post card, we find the questions asked are not valid means of securing any fundamental information worthy of consideration. The desired information might be of two kinds: It might be desired to determine (1) which stations rural listeners in various parts of the country *could hear* most satisfactorily. The stations should preferably be listed in the order in which their signals were acceptable from the viewpoint of strength, clarity and reliability. Or else, the information requested might be designed to determine (2) which stations rural listeners in various specific parts of the country *listen to regularly*, the stations preferably being listed in the order of the amount of time which each of them was used on the average. If a large enough and sufficiently representative group of questionnaires was returned on the first of these points, one might be able to derive from them a general idea of where various stations and classes of stations *could be heard*. A similar representative sample on the second point would give a general idea of the habitual use of stations.

It should be noted with emphasis that habitual *use* and *ability to receive* signals are two different matters. Listening to a radio station is compounded by (1) the ability of the listener to hear its signal and (2) the desire of the listener to hear the programs broadcast by that signal. Habitual listening is therefore the result of signal *and* programs. Listening by no means varies directly with quality and reliability of signal alone; listeners, if necessary, being willing to put up with a certain degree of inferiority of signal if this is compensated for by program superiority. The listener survey referred to should have secured information on both the reception and use if the public service aspects of various classes of stations were to be studied and analyzed.

The questions asked on the post card reveal neither type of information accurately. The basic question is: "Name your favorite radio stations by call letters in order of your preference," and this question is followed by four blank spaces numbered 1 to 4 for convenience in listing the listeners' favorite stations.

Measure of Reception

The word "favorite" is so vague and indefinite as to have little, if any, practical value. It most certainly is not a measure of reception. Moreover, there is a sufficient connotation of *desirability* as against *accessibility* to make the question a most dubious measure of habitual listening. One may have a favorite station, the programs of which one always selects when they are available, but unfortunately reception conditions may make it impossible to hear the station for more than a small fraction of the time, and this unfortunate inability to receive the favorite station may exist during a major portion of the whole time and may co-exist during the same time that other stations are delivering reliable signals which could be received satisfactorily.

This aspect of desirability is further intensified by the phrase "Order of preference." Preference is a very different thing from use. One may prefer a station but reception conditions may be such as to make reception from it impossible and these conditions likewise may co-exist over the vast majority of the time when the listener could receive service of a satisfactory order from other stations.

Experience in research by sampling, we are informed, has shown time and again that defects in the wording of questionnaires are sufficiently serious to destroy the entire value of a survey, since they either mislead the reader as to the information desired or may induce an element of confusion which will cause different people to answer the same question in various ways.

We do not assume to know the perfect manner in which these questions should have been asked, but we do believe and we are in fact sure that the inadequacy of the question used can be clearly

illustrated by presenting a type of question which would have been more desirable and much more fruitful. "List the stations which you can hear most satisfactorily, in the order of the strength and regularity with which you can receive programs broadcast by them," and follow as in the case of the post card survey with blank spaces numbered from 1 to 4.

The suggested question should most certainly be asked separately for day and nighttime reception and careful check should be made of results in various areas to ascertain whether the questions were answered accurately.

If further information is desired to indicate the habitual use of stations, then the following question might be asked, again separately for day and night, "List the stations to which you listen regularly in the order of the amount of time to which you listen to each of them. (Put the station you listen to most first, etc.)" and follow with spaces as before.

Allocation Survey

Comparison of the questions asked on the post cards which were returned and formed the basis for that portion of the allocation survey released on September 1, 1936, which refers to this data with these suggested questions clearly indicate the total inadequacy of the questions asked on the cards which were used. The post cards which were used were therefore not designed to secure any reliable information on station coverage.

The second factor which raises grave question as to the value of the listener survey being considered is the relatively small number of returns secured. The sample of 32,671 returns, when scattered over nearly 3,000 counties—as it should be if it is to cover all counties having a rural population, is indeed a small sample. If the information desired is general enough, it may be an adequate sample if no specific data is wanted. But if detailed information is desired or if detailed breakdowns of the information are needed, then a much larger sample is essentially required. In this instance, as we shall show, detailed breakdowns are required if any sound analysis or interpretative work is to be made possible.

Another important question in securing representative rural sample, and which must be investigated in a case such as this, is the fact that "rural" and "urban" in spite of attempts at definition, are relative terms. It is estimated that nearly one-half of our total population lives within a 20 to 50 mile radius of the 96 cities and metropolitan centers of 100,000 or more population. This one-half includes among its numbers more than 8 per cent of the population of the country which is classified as rural. It is safe to say that this so-called "rural" population is much more urbanized in every way than is the urban population of a small town of 2500 to 3000 situated far away from any other center.

The important thing here is, that if we measure "rural" listening we must make certain that it is neither too much nor too little rural —that it is a real cross section.

These questions have been raised to indicate the problems involved in making an adequate rural survey. Since no information beyond state-breakdowns has been made available as to distribution of sample, and has confined its presentation of material to state data, it is impossible to judge the soundness of the survey or to appraise the value and the exact nature of its results. This not only makes impossible the use of the data in an intelligent manner by the outsider, but robs the summaries and attempted interpretations of any value which they otherwise might possess.

Defect of Survey

This brings us to the third defect of the survey, namely, that the units used in presenting summaries are of such a nature as to preclude intelligent use of the results. For the reasons mentioned previously, state data are of little significance. This is all the more true because of the number of important stations situated sufficiently close to state lines to affect important portions of more than one state. Detailed analysis of county information would make possible the determination of the exact location of a station's principal influence within a state. Where smaller size stations are being considered—regional and local stations—their relatively more restricted coverage areas make such county analysis especially important. Exactly what stations rural listeners in counties adjacent to regional stations listen to is a highly important consideration in determining future policy toward classes of stations. This lack of county analysis is the most serious defect in the presentation of results.

Station Preference

The presentation of station preference, granting that they are at all significant when based on a question such as the one used, also has been made in a way to make impossible their practical evaluation. There is even grave question as to whether the classification of stations as "clear channel" is correct. On page 2 of the allocation survey it is found that in arriving at the percentages given, 95 stations are listed as "clear channel." This number includes many stations of regional and local power, some of which operate limited time and some of which operate daytime only. As will be pointed out, it is impossible to arrive at the percentages given by states in favor of clear channel stations without including these limited time and daytime stations. Everyone knows that there are not 95 "clear channel" stations operating in this country, and it seems elementary to us that if all the votes cast for daytime and limited time stations operating on frequencies used by some dominant clear channel station are credited to clear channel stations, the result will be highly exaggerated, if not indeed very much bloated. The summaries on pages 2 and 3 of the study do not say whether the percentages set forth are merely the first choice or a summation of all four choices. If percentages are for first choice alone, and we understand they are, they are of particularly doubtful significance. One may assume in this study, that ability to hear the station is the most basic fact to be determined; to borrow a phrase from the report (top of page 4), "the relative effectiveness of stations of the various classifications in rendering rural coverage in different states."

First choice is the least desirable measure which could be used for such a purpose. If it has any meaning, it connotes the most popular station. Popularity is especially dependent upon programs as contrasted to coverage.

First Choice

In addition, first choice is a highly relative matter. If more than one station can be heard with any degree of satisfaction whatsoever, the listener is almost certain to habitually utilize the service of more than one transmitter. The degree to which he utilizes or prefers his first choice station more than his second choice may vary from a hairline distinction to a much more pronounced partiality.

For this reason, first, second, and third choices, at least must be considered. They must be considered first separately and individually, and then probably cumulatively. Only by following this general type of procedure can habitual listening and true measure of service be analyzed to any degree at all. This information must be studied on a county basis to be significant.

This brings us to our final reason for believing that the listener survey portions of the allocation study as released possesses little practical value, namely, that the results which have been drawn from the data and the results possible on the basis of the data as presented, are seemingly so superficial as to be of little, if any, value.

The foregoing statement regarding the type of analysis which should have been made in itself indicates the superficiality of the summary and interpretation which was presented. A few additional examples may suffice to further indicate this point. The editorial matter on page 4 indicates that even in the highly populated eastern states "though there are many broadcasting stations of the regional and local classification operating, a high percentage of the rural listeners preferred service from clear channel stations."

In the first place, we should like to know the location of the rural listeners in question. In the second place, we venture to predict that if urban listeners were taken in a number of these states, this still would be true.

As we have said previously, programs determine listening as much as signal. Notwithstanding the splendid local service rendered by regional and local stations and the importance of that service to listeners, it is the network presentation-sustaining programs and even more especially the big sponsored shows, which have the greatest popular appeal. They will weigh largely in station popularity; so that the network affiliated station enjoys an advantage over the independent at the present time in securing a large habitual audience. An examination of a number of the highly populated eastern states reveals some interesting information. In New York State, of the stations affiliated with the networks of NBC or CBS, five are clear channel, one is high-powered regional station, five are regional stations and one local. The clear channel stations in the state also are located in the most populous areas, viewed from the rural as well as the urban angle. It is only natural that large numbers of listeners should turn to them for network programs. It is probably the program which exerts the major influence.

Network Stations

In New Jersey two stations, WOR and WPG, are the only network affiliated stations in the state. The highly populated areas

of North Jersey range no more than 50 miles from New York City and even include the transmitters of two of the New York clear channel stations. South Jersey, including rural as well as urban population, is immediately adjacent to Philadelphia, where two of the three national network affiliated stations are clear channel. If listeners in these areas want network programs they must turn to clear channel stations. Do they turn to them because they are clear channel stations or because they carry network programs?

In other states the same general situation prevails.

There is evidently more to this pronounced preference of clear channel stations than signal or the stations' own home programs. Except in some remote areas, network service is a deciding factor in all probability. One might ask whether the coverage of the Rhode Island regionals is the answer to the Rhode Island preference for regional stations, or the fact that two out of three are national network affiliated and the third is a member of the Yankee network.

Examination of states in other sections gives rise to the same question. In Illinois 87.4% of the listeners preferred clear channel service and 6.8% regional service, according to the table on page 2. Amazingly, 5.6% preferred local stations. In Illinois, there are six clear channel stations all affiliated with national networks, and one regional, WMBD, Peoria. If an Illinois citizen, farmer or otherwise, wants a network program, he must listen to a clear channel station.

In Iowa, enjoying excellent coverage from at least one clear channel station, only 64.3% preferred clear channel service and 34.1% preferred regional service. Within that state, there is one clear channel national network affiliate and five regionals, only one of which is on a low frequency—WMT on 600 kilocycles.

We do not wish in any way to draw final or all-embracing conclusions from the aforementioned instances. We merely wish to indicate that there is more to a practical, layman's analysis of the situation than can be found in the scant summaries presented. And these are things which the layman can easily understand, and I speak as a layman on research of this character.

Interviews by Inspectors

No record so far released shows the total number of interviews made by field inspectors and which are referred to and taken into account in arriving at the percentages shown in the first portion of the allocation survey released on September 1st. The only way the number could be ascertained would be by making guesses. It is apparent that all of the objections to the post card survey obtain with respect to these interviews, but we cannot and do not propose to guess what the degree of such objections are.

The regional group which I represent most certainly does not take the position that clear channel stations are not operating in such a way as to render a high order of service to the public. On the contrary we realize full well that as the most of them are now operated the clear channel stations of the country are rendering a most meritorious service. Any survey such as the post card survey referred to, however, which attempts to show such a great preponderance of service by the clear channel stations as compared to the regional stations of the country cannot go unchallenged in the light of the facts.

To determine just what the post card survey referred to did show, we made detailed studies of the post cards returned from certain states which we were informed might be regarded as typical. To go into all of these would serve no good purpose, but to give the Commission the benefit of the actual facts from at least one of these typical states is essential.

We went over the individual post cards returned from the State of Nebraska and at the time these post cards were examined a count was made of both the first and second choices or preferences as to station on each. These preferences were kept by counties and by stations preferred by those responding from each county.

Our count of the individual post cards from Nebraska which showed such station preferences totaled 814. Since our study was completed information has been released to the effect that 868 such responses were used in tabulating the post card survey from Nebraska in connection with the allocation survey released September 1, 1936. The cards have been in the Commission offices for many months and it is probable that our study may have missed the 54 cards which represents the difference between those we examined and those considered in the beginning.

Based on a tabulation of the 814 cards which we had occasion to study, it is impossible to credit 65.4% of the first choices or preferences to clear channel stations. Only 46.2% of the 814 choices were for clear channel stations. If every one of the additional 54 cards taken into account in making up the September 1st release should be credited as having given clear channel stations as their first choice and not one of them counted for a regional, limited time or daytime station, the first choices which would be thus credited to clear channel stations would be *only 48.33%*. (The last percentage based on 868 cards.)

Examination of Post Cards

In view of this it is apparent that the 65.4 percentage of first choice returns credited to clear channel was by no means based on clear channel stations. The difference must have been made up by adding to the first choice returns which actually mentioned clear channel stations, a large number of first choices or preferences for daytime or limited time stations. On the basis of our examination and tabulation of the 814 cards, it is found that a very large portion of this number actually showed a daytime station to be their first choice. These daytime station choices were for two 500-watt, two 1 kw., one 2½ kw. and one 5 kw. daytime stations. It is obvious therefore that the 65.4% credited to clear channels was so credited on the basis of the daytime stations in question being licensed to operate during daytime hours on a channel occupied by some distant, dominant, bona-fide clear channel station.

The impression one gets from the percentages of preferences shown by states for clear channels is that these preferences were for clear channel stations. This positively is not true in the Nebraska case. Not only does one get this impression, but since the release of the figures in question they have been widely publicized to this effect. This is not giving credit to regional stations as should be the case, and produces an exaggerated picture of the relative popularity of clear channel stations against that of regional stations.

Who would ever claim that a daytime station operating with 500 watts, regardless of what frequency it might occupy, is more akin to a clear channel station than to a regional station? This Commission has classified stations into four general groups. The public has become accustomed to referring to them as clear channel, regional, high-power regional and local stations. The public has come to think and in fact the Commission has considered that a 500-watt daytime station, a 1 kw. daytime or a 2½ kw. daytime station are, during the daytime, merely nothing more nor less than counterparts of regional stations. They have done this regardless of frequency for the very good reason that power has been the determining factor in this manner of thinking. We most respectfully submit that stations which operate during daytime hours only with from 500 to 5,000 watts, and especially since two of them here in question operate with only 500 watts, two with only 1 kw., one with 2½ kw. and only one of them with 5 kw. day power, if they are to be included in such tabulations along with either clear channel stations on the one hand or regional stations on the other, should have been included with and credited to regional station popularity. A better way and one which would have made this tedious job wholly unnecessary, would have been to have shown the responses received which showed daytime stations as the favorites in a separate classification from either clear channel or regional stations.

Question of Importance

This question is of grave importance to regional stations. It means much to them economically and the manner and character of service which they shall continue to give depends more upon their economic status than on any other thing. If the percentages shown on pages 2 and 3 of the portions of the allocation survey referring to station popularity were taken as final and without the necessary explanation which has been made, the effect on business done by regional stations would be tremendous and that effect would most assuredly be adverse to them.

It may be said that the percentages represent rural popularity and that they do not indicate the relative popularity of classes of stations among urban listeners, yet the all-important fact remains that it is the easiest thing in the world to forget to use the qualifying word "rural" in connection with them.

We are at the same time fully cognizant of the fact that regional stations for years have been and still are the backbone and mainspring of the broadcasting system enjoyed in this country. And when we consider that nearly half the total population of this country is located within a radius of 50 miles of the 93 cities having a population of 100,000 or more; that these centers are all served by regional stations; when we stop to consider that the majority of regional stations in this country are located in cities of less than 100,000; when we stop to consider that a large number of daytime and limited time stations are likewise located in centers where they can and do serve large rural audiences, we are sure the Commission realizes that this class of station is serving an in-

dispensable need. Add to this the fact that in the State we have gone into in detail—Nebraska—32.7 per cent of all the returns tabulated and taken into consideration in making up the allocation survey referred to, showed regional stations as their preference or first choice, the social importance of regional stations is definitely shown to be of unsurpassed importance. Add to these the further fact that a very large proportion preferred day time stations of regional powers and it at once becomes apparent that any step taken which might adversely affect them would upset the most important sectors of our broadcasting system.

Economic and Social Considerations

To justify themselves socially, 500 kw. stations must show that they will provide listeners with program service which is not available to them at the present time.

The Commission is thoroughly familiar with the affiliations of the various clear channel stations and knows that every one of them, since the acquisition of KNX by the Columbia Broadcasting System, that operates any appreciable amount of time, is affiliated with and carries the programs of the National Broadcasting Company, the Columbia Broadcasting System or the Mutual Broadcasting System. Had we had sufficient time we might have prepared data and tables showing the portion of time devoted by clear channel stations to carrying network programs. Because of the lack of time this was impossible but we realize that the Commission is fully acquainted with the facts. An examination of the Commission's own records will reveal that clear channel stations are devoting as much of their time to broadcasting network programs as are regional stations carrying such network programs. Further examination will disclose that the percentage of time devoted to carrying chain programs by clear channel stations has not decreased on clear channel stations as a group since the Federal Radio Commission established the policy of permitting them to operate with 50 kw. Clear channel stations devoted most of their time to network programs before they were authorized to operate with 50 kw., they have devoted most of their time to the carrying of such programs since and they are still doing this. It has been said that "By their fruits, ye shall know them," and if this test is applied to clear channel stations this Commission can make no other finding than that clear channel stations will continue to devote the greatest portion of their time to broadcasting network programs in the future. It is therefore obvious that the service which the public will receive from tuning and listening to clear channel stations in the future will be as it is today and as it was yesterday—network programs.

In view of these facts this Commission should give consideration to the present coverage by network programs. The networks and the stations, including practically all classes of stations affiliated with these networks, have done this job for the Commission and have done it well. Both the National Broadcasting Company and the Columbia Broadcasting System have conducted thorough and painstaking surveys to determine coverage of their respective networks. The thoroughness with which these surveys were conducted and the results analyzed cannot be compared with the post card survey which we have discussed. The networks have done a much more thorough job.

Results of Survey

The survey and the results of the survey made most recently by the Columbia Broadcasting System are set out at great length and in detail in their publication "Day and Night." In this will be found a description of the thorough manner in which the Columbia Broadcasting System went about making and analyzing the coverage its programs get. Maps for individual outlet stations affiliated with it and a map of the United States showing the composite coverage by the combined stations carrying Columbia programs show definitely what the night time primary listening areas of this total network are and what the national area is.

We have taken this survey and, based on it and facts disclosed in it, we have prepared two tables. The first of these (Table I) shows a breakdown of coverage by states and opposite each state we have shown in the first column the percentage of population of the whole United States which is located in any given state and in the primary night time listening areas of Columbia outlet stations. In the second we have shown for each state the percentage of the total United States population in that state which is outside the primary night time listening areas of Columbia stations, and have then shown the total percentage the population of each state as compared to the population of the whole country. These three columns are all under the main heading "Population". The population figures shown are from the U. S. Census of 1930. In a like manner we have shown in three columns under the main heading "Radio Families", first, the percentage of radio families of the whole United States in the respective states which are in the primary night time listening areas of Columbia outlet stations; second, we have shown like percentages of radio families for the respective states outside such primary night time listening areas of Columbia stations, and third, have shown the state total percentage of radio families, such percentages being percentages of the whole United States. These figures are based on the Estimates of the Joint Committee on Radio Research as of January 1, 1936, already referred to. Under the main heading "Retail Sales" we have shown the same kind of information on retail sales for the respective states divided between retail sales in counties which are within the primary night time listening areas of Columbia stations and those which are outside such night time primary listening areas, and finally, have shown the percentage of national retail sales for each of the respective states.

Breakdown by States

In addition to the breakdown by specific states for Columbia coverage, we have grouped the states by divisions and have prepared a table (Table II) showing like information for the nine divisions of the United States and totals for the whole country on this same table. The result of this investigation shows that 90.2339% of the total population of the United States is within the primary nighttime listening areas of stations affiliated with and carrying the programs of the Columbia Broadcasting System, and shows that only 9.77661% of the population of the country is not included in some night time primary listening area served by a Columbia station. This breakdown also shows that 94.7992% of the radio families in the United States are included in the night time primary listening area of one or more Columbia stations and only 5.2008% of them are not so included. Based on retail sales from the 1933 Census of Business, it is found that 95.9118% of such retail sales are included in the nighttime primary service areas of Columbia stations, and onlv 4.0882% of such retail sales are outside the Columbia nighttime primary listening areas. Since making the survey, WJR has changed from NBC to CBS but still serves as many listeners.

Following methods differing in detail as to mechanics but conducted for the same purpose and with like thoroughness to the survey made by the Columbia Broadcasting System, the National Broadcasting Company has determined the population and has published data showing the nighttime primary listening areas of stations affiliated with both the Blue and Red Networks of that Company.

Coverage

Coverage maps for the individual affiliated stations and a composite map showing the combined coverage of stations affiliated with each of the networks of the National Broadcasting Company were prepared and published along with the supporting and explanatory data in the National Broadcasting Company's "Aireas".

In making up tables from the individual maps and the composite map showing combined coverage of the stations carrying programs of the Blue and Red Networks, it was found possible but at the same time a most inconvenient task to eliminate from the coverage that which is credited to WLW. As in the making up of the tables showing coverage by the Columbia Broadcasting System, we have picked this coverage up county by county and state by state with the result that we have prepared a table showing the same information as to coverage in population, radio families and retail sales for both the Red and Blue Networks of the National Broadcasting Company. Table III shows the coverage of the Red Network by states and the information referred to. It *does not* include any coverage by WLW. The coverage of WLW was carefully eliminated so that no question of 500 kw. station operation would in any way affect the results which are shown on the table. As was done in the case of the Columbia survey, we prepared a table showing population, radio families and retail sales for the nine divisions of the United States and the totals for the whole country. This data is shown in Table IV and refers only to present coverage by stations carrying the Red Network programs of the National Broadcasting Company at night without including, but specifically excluding, coverage by WLW.

Primary Listening

Information made up in the identical manner was prepared to show the population within the primary nighttime listening areas of stations carrying the Blue Network programs of the National Broadcasting Company, the number of radio families and the retail

sales in these nighttime primary listening areas. As was done in connection with the data prepared on coverage by stations carrying the Red Network programs of the National Broadcasting Company, WLW is not included, but is specifically eliminated for the reason stated. This information on coverage by stations carrying Blue Network programs is shown in Table V for the various states and the information for the nine divisions of the United States and the totals for the country are shown in Table VI.

Had we been able to secure information as to the nighttime primary listening area of WLW while it operated with 50 kw. power, we would have included it, but not being able to secure this data it is impossible to give any specific figures in that connection. These figures would most certainly have increased the percentage of population, the percentage of radio families and the percentage of retail sales included within the primary nighttime listening areas of the National Broadcasting Company. WLW was well and favorably known while it operated with 50 kw. Had the figures for that station based on 50 kw. operation been available I am sure that both the National Broadcasting Company and the management of WLW would heartily agree that if they were added to the coverage by the National Broadcasting Company exclusive of WLW, tbey would at least equal the coverage which the Columbia Broadcasting System has.

Here let us emphasize that the coverage figures for the Columbia Broadcasting System and for both the Red and Blue Networks of the National Broadcasting Company are intended to show and do show coverage by primary listening areas. We have not dealt with nor attempted to show what the secondary nigbttime listening areas of these networks are. Both of them claim almost complete coverage of the remaining portion of the country as coming witbin their respective secondary nighttime listening areas. If any appreciable percentage of the small portion of the population and families having radio receivers who are not included in the primary nighttime listening areas of these three networks receive secondary service from them, it certainly leaves almost no population and few families who have radio receiving sets outside their present coverage.

CBS and NBC

The Columbia Broadcasting System and the National Broadcasting Company have evidenced such faith in and have put such reliance on their respective surveys that they have given them general circulation. They cannot, and I am sure they will not, question the accuracy of the facts as we are presenting them. Not only have they made use of this data, but it is common knowledge that the management of stations affiliated with both the National Broadcasting Company and the Columbia Broadcasting System have made extensive use of the survey of their particular stations. To question the accuracy of the composite survey is to question the accuracy of its individual units, the individual station's coverage. Since it is shown that the data collected on and forming the basis for arriving at the coverage of individual outlet stations was done in the same way for all of the stations affiliated with either of the networks in question, it must be said that all are accurate or none are accurate. We are therefore likewise convinced that no individual station, be it a clear channel or a regional station, the coverage of which is reflected in the surveys mentioned, can question the accuracy of such survey. The individual stations having made use of the individual coverage surveys, and this is common knowledge, adds to the standing of the survey as a whole and to the credit which each of the surveys should be given. The individual stations must, and we are sure they will, agree that the surveys are accurate and reflect the true conditions as to present coverage by the three networks discussed.

The coverage shown for Columbia stations in the composite coverage for all stations affiliated with that network were based on and determined from 700,000 returns. The details of how these returns were secured will not be gone into. The fact that the results are based on 700,000 returns shows that the reliability of the survey is as many times as good as that number compares to the number of post card returns tabulated in connection with the allocation survey of September 1st.

The coverage of the stations affiliated with the National Broadcasting Company and the composite coverage shown for its Red and Blue Networks are based on a combination of field intensity and the analysis of one and one-half million pieces of mail. This ought to give a fair cross-section and representative picture of listening habits and accessibility of signals. We believe it does this.

Computing Areas

Engineers employed by the National Association of Regional Broadcast Stations have spent many days computing the areas and preparing maps to show coverage of the country by clear channel stations. The technique and results of these studies have already been fully covered by the testimony of Mr. Pickard. He has not, however, covered a most important phase of this coverage, and that is the population breakdown by counties and by states so that the number or percentage of families having radio receiving sets could be determined. We have made these investigations and have the computations. This data shows that 90.2% of the families having radio receivers would receive signals from clear channel stations if operated with 50 kw. with the minimum intensity of .414 MV/M. Without counting or in any way considering the population served by any other class or classes of stations, it is therefore found that 90.2% of the entire radio population of the United States is within the areas in which the several clear channel stations would deliver a minimum signal of sucb order as to give the character of rural service in signal intensity referred to in the allocation survey. As has already been pointed out and as is common knowledge, the reason which has always been given the greatest weight in supporting clear channels has been their service to rural listeners.

We submit that it is fundamentally unsound to permit the operation of clear channel stations with 500 kw. power and thus to give them only a ten percent increase in population which they could serve, if in granting this authority it might in any way tend to disturb the status of other important classes of stations.

Reliable Survey

Another, and what we consider to be the most important as well as the most reliable survey of all with respect to the population served by clear channel stations has been made, using as a basis therefor the testimony of Mr. Pickard and the exbibits which he has prepared showing the coverage of 35 clear channel stations under present allowable conditions and showing what the coverage of these stations would be if they were authorized to operate with 500 kw. As was carefully pointed out by Mr. Pickard, tbe contours within which service by clear channel stations is now received is limited to the .414 MV/M line. The contours within which a .414 MV/M signal would be delivered if tbese stations should increase their operating powers to 500 kw. is likewise shown on the exhibits introduced by him.

Using these areas it is found that 99.78% of the radio homes of the United States could receive at least one and 98.41% two clear channel network services based on a minimum signal intensity of .414 MV/M and counting present clear channel stations alone, if they are operated with 50 kw. power.

The areas within which two, three or four clear channel services would be received with a minimum signal of .414 MV/M have been carefully studied and the counties which would receive these various numbers of clear channel services have been determined, together with the total population of each based on the 1930 Census figures and the number of radio homes in each based on the estimate of the Joint Committee on Radio Research which has lready been referred to. So that the Commission may see the population by states which is within the areas thus receiving two, three or four clear channel services with a minimum signal of .414 MV/M, we have prepared Table VII. This table shows, alphabetically, each of the states of the Union, its 1930 population and the number of radio homes estimated to be therein as of January 1, 1936. The table also shows both the population and estimated number of radio families which could, based on 50 kw. power, receive two, three or four clear channel services of the order described. As already pointed out, it shows that nearly all of the radio homes and population of the United States would receive a minimum of two clear channel services. It also shows the portion of the population and radio homes within each state which would receive three or four such clear channel services. The fourth service is, of course, limited to services from the two clear channel stations affiliated with the Mutual Broadcasting System and not affiliated with any other network, viz., WGN and WOR.

Radio Homes

The table shows the population and number of radio homes for each of the states which would receive service from clear channel stations if these stations should all be authorized to operate with 500 kw.

The final tahulation or recapitulation set out in the table shows the composite figures for the United States as a whole. Under present policy governing operating conditions in addition to 99.81% of the population and 99.78% of the radio homes of the country which would receive a minimum of one clear channel service, it also shows that 98.41% of the population and 98.35% of the radio homes of the country would receive two such services, 97.25% of the population and 90% of the radio homes of the country would receive three of these services. It emphasizes the small percentage of additional radio homes which would he served if not a few but if all of the 35 clear channel stations should be authorized to operate with 500 kw., and although this is emphasized it nevertheless is the true picture based on recognized engineering standards and data which were described and testified to by Mr. Pickard.

This Association is convinced and respectfully submits that the installation and operation of equipment for stations with an operating power of 500 kw. is economically unsound. After intensive study of the questions involved the engineers employed by the Association have advised that the cost of mechanical or technical operation of a 500 kw. station would be slightly more than two and a half times and less but closely approaching three times the technical or mechanical cost of operating a 50 kw. station. To determine a close approximation of the mechanical or technical operating cost of a 500 kw. station is therefore relatively easy. Such a determination has heen made relatively easy hecause a group of well known radio engineers have determined and reported what the *minimum* cost of operating a 50 kw. station would be. These gentlemen constituted the Advisory Committee on Engineering Developments of the National Advisory Council on Radio in Education. The Committee making the report was headed by Dr. Alfred N. Goldsmith, Vice President and General Engineer of the Radio Corporation of America, and Messrs. C. W. Horn, Chief Engineer of the National Broadcasting Company; E. K. Cohan, Chief Engineer of the Columhia Broadcasting System; Lloyd Espenschied of the American Telephone and Telegraph Company; John V. L. Hogan, Consulting Engineer; C. M. Jansky, Consulting Radio Engineer; O. H. Caldwell, former member of the Federal Radio Commission, and others. The Committee referred to, without dissent, reported that the cost of maintaining and operating the plant of a 50 kw. station including depreciation and ohsolescence on transmitter and other equipment, buildings, furnishings, taxes and insurance on land and buildings, salaries, power, maintenance of equipment, but excluding wire lines and all other costs incident to studios and offices, would be $194,750.00. These figures are based on the operation of such a station only twelve hours per day and, as already stated, the Committee reports that they are to he "regarded entirely in the light of approximations of the minimum costs involved." If consideration is given to the fact that full time clear channel stations operate sixteen to eighteen hours per day these *minimum* costs would have to be increased to cover the additional power consumed in the operation of a 50 kw. station. The minimum cost of current to operate a 50 kw. station twelve hours per day is given as $30,000. If sixteen hours daily operation is considered this figure will be increased $10,000 and become a total operating cost of $40,000. Our engineers advise that under such operation the costs of tube replacements would be increased. The Committee composed of the eminent engineers mentioned give the annual cost of tuhes, etc., necessary in the operation of a 50 kw. station only twelve hours per day as $50,000. Without increasing these costs in direct radio to the increase from the twelve hours per day operation on which these figures are based to the sixteen hours per day operation, hut increasing this figure by only one-fifth it is found that an additional $10,000 must be added for this item alone. If these two $10,000 items, one covering additional power and the other tuhe replacements, etc., are added to the $194,750 taken from the Committee's report, it is found that the annual technical cost of operating an efficient 50 kw. clear channel station will be a minimum of $214,750.00.

Difference in Cost

Our engineers after investigating the difference in cost of operating a 500 kw. station as compared to the cost of operating a 50 kw. station, advise that the cost of operating a 500 kw. station will he more than two and one-half times and slightly less than three times as much as the cost of operating a 50 kw. station. If we take the minimum difference and multiply the cost of operating a 50 kw., which is $214,750 by two and one-half it is found that the minimum cost of operating a full time 500 kw. station will he $536,875, or $322,125 more than the minimum annual cost of operating an efficient 50 kw. station.

Late last Saturday afternoon, after the preparation of this statement had been completed, I received a new edition of the report. The figures have been changed and the cost of operating a 50 kw. or a 500 kw. station have heen, according to the same committee, somewhat reduced. The amazing disclosure that comes from the new report of the committee is that in 1936 it cost only $10,000 to cover all the power needed to operate a 50 kw. station 16 hours per day whereas the report of the same committee showed that the power bill in 1932 to operate a 50 kw. station would he $30,000. This means that power rates have been reduced 75% and that they are now only 25% as much as they were in 1932. Does anyone believe that such reductions have heen made in power rates? If you do not believe that power rates have been reduced 75% since 1932, you cannot take the new report as being accurate. The new report on page 1 is dated July, 1936, and on page vi it is found that the foreword is dated August 1, 1936. Is it a mere coincidence that this report should he brought out *after* the Commission called this hearing, and *after* the question of 500 kw. operation was being considered? This new report does more than support certain other figures given to you on the necessary *new* investment if stations are to be operated with 500 kw. power. The figure is given by us at half a million dollars and the new report referred to hy the committee of eminent engineers gives the figure of $582.000 as the cost of those items incidental to the transmitting plant only without accounting for one penny to cover studios or other necessary investments. It has heen necessary to add this paragraph to our original statement as prepared but in deference to the Commission and its right to all facts we could find, we have added it here.

Costs

The only factor open to question is the information which has been given by our engineers to the effect that it will cost more than two and one-half times and slightly less than three times as much for technical and mechanical operation of a 500 kw. station as it would cost to operate a 50 kw. station. We do not believe that this ratio is open to question. It was arrived at after the engineers had made painstaking investigations to determine what the difference in cost of operating the two classes of stations would be.

No additional expense for improved programs or other expenses incidental to the operation of a 500 kw. station with the sole exception of the items mentioned are included in the figures given.

In view of these facts it becomes necessary to look to the present operating revenues of stations so that it may he ascertained whether there is sufficient clear channel business to support 500 kw. stations; whether the rates charged hy them must be increased; whether any additional advertising will he necessary to cover the increased cost of operation, or whether the increase will come from business now held and carried by regional stations.

To ascertain what clear channel stations of the country are doing in the way of business, during the month of August we went over the sworn statements contained in the renewal applications of the clear channel stations of the country, with the exception of clear channel stations owned and operated by the National Broadcasting Company and the Columhia Broadcasting System, and took from the last six renewal applications of each station then on file the sworn statements made by them as to their average monthly revenues and arrived at averages on the basis of these figures. When the averages were arrived at it was found that the average monthly revenues reported in the last renewal applications filed by the clear channel stations were higher than the average and because those figures are higher and because they are more recent, it is helieved that they are, having heen sworn to by the stations, representative of the average monthly revenues received by clear channel stations.

On the basis of the sworn statements as to monthly revenues just referred to, it is found that one clear channel station operates in a city having a population of less than 50,000 and that its monthly revenue reported was $3,055. Five clear channel stations located in cities having populations hetween 50,000 and 99,000 reported total gross average monthly revenues of $94,000.23, or an average monthly gross revenue per clear channel station in such cities of $18,800.05. There are six clear channel stations located in cities having a population of 100,000 and less than 200,000 and these six clear channel stations reported total average gross monthly revenues of $132,763.65, or an average of $22,127.17 per clear channel station in cities of this size. Twelve clear channel stations operating in cities of 200,000 to 499,000 population showed total average gross revenues per month of $357,259.21, or an average gross monthly revenue of $29,754.93 per station. In cities having

a population of 500,000 and over, thirteen stations reported a total average gross monthly revenue of $800,678.68, or an average gross monthly revenue per clear channel station in the largest cities in the United States of $61,590.67.

Monthly Revenue

The average gross monthly revenue of all the stations mentioned in various size cities as reported under oath by the various stations is found to be $37,506.93.

The same stations classified in the same way by population of cities with one exception (a station operating in a city having a population of more than 100,000 and less than 199,000) showed the following: The station which operates in a city having a population of less than 50,000 reported an average expenditure for talent for the last six renewal application periods up to the time the investigation was made and the data collected in August of $762.50. The five stations located in cities of 50,000 to 99,000 show an average report for the same periods of monthly talent expenses averaging $2,379.21 per station. The six stations located in cities of 100,000 to 199,000 showed average monthly talent expenditures for the same periods of $4,804.59 and stations in cities having a population of 200,000 to 499,000 showed for the same periods average monthly expenditures for talent of $4,221.14 per clear channel station. For the same periods the thirteen stations located in cities of 500,000 and over reported average monthly expenditures for talent of $13,947.95. The average for all of tbe clear channel stations in cities of various sizes showed that their average monthly expenditures for talent during the periods mentioned was $7,307.48.

(The station not included in accounting for talent expenditures located in a city having a population between 100,000 and 199,000 showed average monthly expenditures for talent of $95,000. This is obviously so far out of line that it was necessary to eliminate it and we believe we were justified in eliminating it on the theory that the statement was a typographical error.)

It will probably be said that these figures include some time-sharing stations who do not operate full time on a clear channel. They do include such part-time clear channel stations, but regardless of how much time a station operates it must have a transmitter to operate at all. It is therefore necessary tbat all of them be included or the resulting picture would be wholly incorrect. Moreover, if average figures on expenditures for talent include part-time stations this will result in a lower final figure on the cost of operating a clear channel station. This is to the benefit of the clear channel stations and is ultra-conservative on our part. To be conservative and fair to the clear channel stations in arriving at whether or not the operation of such stations would be economically sound, we have, as clearly indicated, taken the average monthly expenditures for talent over the six last renewal periods and in doing this the cost of operation is less than if we had taken the most recent average monthly expenditures for the same purpose. Again we have leaned backwards in favor of the clear channel stations.

Chain Programs

We have already indicated that the major portion of the time used by clear channel stations is consumed in broadcasting chain programs. This the Commission can find easily from its own records. If stations should be permitted to go to 500 kw., are they to continue merely as outlets for network programs in the future as they have in the past, or will the Commission expect and demand that they do something original to merit their place on such a high pedestal in the broadcast spectrum? If they render any different service or any service that is unique, their talent expenditures will soar far above what they are or what they have ever been in cities where sufficient talent is available to produce high quality programs. It is common knowledge that the number of cities which afford sufficient talent to perform such a job is very small. The cost of talent in cities other than talent centers will be even higher, or else those stations will continue in the future as in the past as outlets from which network programs are broadcast. We have already shown that this country is now being served by network programs and that there is no justification for increasing the power of clear channel stations to 500 kw. to afford coverage by Columbia and NBC programs. It follows, therefore, that there is no excuse for a 500 kw. station unless that station will do something original and render a unique service not now available to the listening public.

An examination of the figures already given on average monthly revenues most recently reported, and these averages are higher than if the last six renewal periods bad been taken into account, show that the average monthly gross revenue of clear channel stations in cities of 500,000 and over is $61,590.67, or an average annual gross revenue of $739,188.01. If the cost of operating a 500 kw. station, wbich we have found to be $536,875.00, is subtracted from this average gross annual revenue, it shows that stations in such cities now have an average annual gross profit of only $202,313.01 more than the annual cost of mechanical operation. If from this the average annual talent expenditure referred to is subtracted, it leaves only $34,575.53 to cover any return on investment in plant and studios, to cover all sales expense, rental of studios and all other expenses incident to the operation of the business and offices except the specific items mentioned. It bas been stated time and time again that a 500 kw. station would entail a minimum new investment of half a million dollars. In a business such as broadcasting, the remaining $34,575.53 represents less and certainly not more than a reasonable return on the actual new investment in the station. It is found, therefore, that if good business practices are followed, 500 kw. stations are economically unsound even in cities of 500,000 and more. If good business practices are not followed the station will not continue in operation.

Costs of Operation

If the cost of operating a 500 kw. station is compared witb the hope for profit if operated in a city with a population of less than 500,000, based on these averages taken from sworn statements as to revenues and talent costs, it is found that no such station can operate except at an extremely great loss. Figuring tbe average monthly revenues, average monthly expenditures for talent, the cost of mechanical or technical operation of a 500 kw. station for these cities and taking into account the same consideration, exclusive of any return on investment, it is found that the average 500 kw. station if operated in such cities would be so operated at an average annual loss of $230,269.44. As figures are developed for cities of less than 200,000 population the annual out-of-pocket loss from the operation of such 500 kw. station increases in substantial amounts.

What will be the result of clear channel stations operating after this fashion?

It will mean the financial ruin of such stations or else it will mean that these stations must increase the amount of business done by them to offset these losses. This brings up a practical question. Will this necessary amount of additional business done by them come from new business, from increased advertising budgets, or will it come from regional stations, and if from regional stations, what effect will the depletion of their revenues have on them?

We bave been unable, after diligent search, to find where the vast amount of new business will come from. This question is of such momentous importance that the Commission should never authorize the operation of 500 kw. clear channel stations until it has been satisfactorily answered and to date no such satisfactory answer has been made, nor is such satisfactory answer being attempted. The facts are that until this question is definitely and conclusively answered, this Commission cannot assume to say that such new business will offset these extraordinary out-of-pocket losses and it must necessarily conclude that if such clear channel stations secure enough business to offset these heavy losses, it must come from increased rates, greater participation in advertising budgets and from regional stations. No facts have been pointed out and none have been found by us indicating that advertisers are going to increase their budgets by anything like the percentage necessary to leave their existing business on regional stations and add a sufficient sum to take care of the losses incident to the operation of 500 kw. stations and pay a reasonable return on the investment of the owners of these stations.

Must Make Decision

In the final analysis the question of what to do about 500 kw. stations is to make a decision that such stations will not be permitted, or else to look for a fight to the death and finally for the survival of the fittest as between regional and clear channel stations. Such a fight will not help either. Moreover, if the 500 kw. stations are authorized and they increase their rates to such an extent that their present business at the new rates will make it possible for them to operate without loss, and if the advertising budgets from which these revenues come are not increased, this means that enough business will be taken from the regional stations of the country to put them all in the red. This is especially true of national spot advertising. If 500 kw. stations are authorized, these stations are going to do their dead level best to sell the

national spot advertiser on the theory that the coverage which he will get from using these 500 kw. stations is so great that they can afford to pay the increased cost and that they do not need regional stations now used by such national spot advertisers to reach the American public. If 500 kw. stations continue in the future as they have in the past to carry chain or network programs, it follows as a matter of course that the rates for carrying these by 500 kw. stations must be severely increased, and if the advertisers using chain programs having fixed budgets determine, as many if not the majority of them will, to use 500 kw. stations as outlets to broadcast their programs, these increases in rates by the clear channel stations will absorb and eat up the entire budgets of such advertisers, leaving nothing for the regional stations.

This is further supported by the fact that the management of 500 kw. stations will be going to the advertiser and to the agency to sell them on the idea that their coverage is so great that regional stations within their service areas will not be necessary to secure complete coverage. The exhibits which have been prepared by the engineers for the National Association of Regional Stations show this possibility clearly. Take Chicago, Illinois, as an example, and within the areas of the stations in Chicago and if the power of the clear channel stations is increased to 500 kw. it will be found that the signal of these 500 kw. Chicago stations will be just as strong, if not indeed stronger, in cities now served by regional stations than these regional stations deliver in those cities themselves. Milwaukee, Wisconsin, is a good example of this. In this city one regional station serves as the outlet for NBC programs and another regional serves as the outlet for CBS programs. It will be relatively easy to make field intensity measurements of the stations in Chicago operating with 50 kw. and compare them with the intensities delivered in and about the Milwaukee area by the Milwaukee stations, and if this is done it will show that these Chicago stations have invaded the Milwaukee area and the result will be that national spot advertisers and chain advertisers will be shown that the 500 kw. station in Chicago is all he needs and that the use of a Milwaukee station is unnecessary.

Typical Examples

These are but typical examples. Philadelphia, Bridgeport and others could be pointed out. One case of a regional station already proves this so far as chain programs are concerned. There is a high class regional station, the area of which is covered by a 500 kw. station. The regional station was affiliated with the National Broadcasting Company and because the chain advertisers would not use this regional station sufficiently, although it is a very high class station, the regional station no longer serves as the NBC outlet but has affiliated itself with the Columbia Broadcasting System. The facts with respect to this case have become common knowledge and if this has happened in this case, who will say that it will not happen to all regionals whose areas are covered by 500 kw. stations located in distant cities?

Reverting to the Milwaukee stations, it is essential that the high status of the stations be maintained and that they continue to receive the patronage of the chain and the national spot advertiser. If they should lose these or any appreciable portion of them it would be extremely costly to the regional station to build comparable programs to take the place of those which they lose and they would therefore not only lose the revenues received for carrying the program, but they would lose the additional amount necessary to produce comparable programs to take the place of those which they lost. If large amounts are not spent to produce high class programs to take the place of programs lost by the regional stations, it is elementary and merely common sense which leads us to know that the listening audience of that station would be severely reduced. Its value in carrying local advertising programs would be materially lessened. Its value to the community in furthering civic projects, civic movements and in publicizing and supporting the educational, religious, charitable and general community services, institutions and organizations would be lessened even more.

Spot Business

If half the national spot business and half the chain business now carried by regional stations should move over to 500 kw. stations, and this percentage of movement and more would probably take place in short order, it is seriously doubted that it would offset the losses incident to the operation of 500 kw. stations. What is more important, our investigations disclose that if anything approaching this percentage of chain and spot advertising should move from regional stations to 500 kw. stations, it would destroy the economic status of regional stations and cause them to operate at a loss if their continued operation could be carried on at all in many places.

This question of opposition to 500 kw. stations is not founded on some flimsy pretext. The facts indicate that the stake of the regional stations in this question is great and that it may mean life or death economically to them, and death to them economically means the destruction of their service in a social way to the important communities in which these stations are located.

There are other questions which should be considered by the Commission before it authorizes the operation of 500 kw. stations. It should be remembered that broadcasting is, relatively speaking, a new industry and that no one can tell what tomorrow may bring in the technical advancement and development of the art of radio broadcasting. If the Commission should authorize the operation of 500 kw. stations and they are constructed, the investment in each of them and in the group will have the practical effect of freezing development along current lines and will act as a positive and important impediment to future progress along such technical lines. Such investments will be so great that even though great and important advances may be made and may come from the laboratories ready for practical use, it will be impossible to use them. With knowledge on the subject of radio increasing by leaps and bounds, it seems to us that any step by the Commission which might freeze future broadcasting to present developments and preclude the inclusion of the advances which may come later would be dangerous.

There is another question, and it is in important consideration. Everyone knows that radio broadcasting in its influence over the land has come to rival and many claim surpass in power the influence of the press. We do not believe that this powerful and probably most powerful medium for swaying public opinion and directing public thought should be concentrated in the hands of so small a number as would be the case if the operation of 500 kw. stations is permitted. To state this proposition brings up at once numerous facts to support it which are self-evident.

Technical Evidence

As part of the technical evidence introduced by Mr. Pickard, it is clearly shown that if 500 kw. stations are licensed they will set up interference in foreign countries. The information and the exhibit showing this international angle and complication is based on interference to foreign stations 20 percent of the time, or twice the amount of time the Commission has heretofore adhered to as the time interference could be received without being objectionable and intolerable. It is therefore safe and ultra-conservative to say that if 500 kw. stations are licensed they will interfere with stations in foreign countries over twice as much time as the Commission has heretofore permitted to exist in the way of interference as a standard for stations in this country. If this testimony and the exhibit illustrating the interference which 500 kw. stations in the United States would do by way of interfering with foreign stations had been prepared on the basis of interference only 10 percent of the time instead of the ultra-conservative 20 percent, the resulting degree of interference would have been much greater and more severe than that shown by Mr. Pickard's testimony or the exhibit illustrating this point.

The testimony of Mr. Pickard and the exhibit referred to show that interference to foreign stations operating on frequencies occupied by 500 kw. stations if permitted to operate in the United States would be objectionable in Europe and in both North and South America. It may be argued that the time difference between European stations and American stations may compensate somewhat for this. The fact remains, however, that European stations like American stations have the right under international agreements, to which this country is a party, and as a matter of common sense and right, to operate twenty-four hours per day. If European stations should do this the time differential must be entirely eliminated as an excuse for operating 500 kw. stations in America and delivering an interfering signal in European countries.

The Central and South American nations are in the same time zones with the United States. No time differential can be injected here, and the testimony of Mr. Pickard based on the 20 percent time-interference and based on the standards which this Commission has followed in establishing the standard of 20 to 1 of the desired over the undesired signal for stations on the same channel to give satisfactory service, his testimony and the exhibit showing the contours of interference, show conclusively that during 20 percent of the time American stations operating with 500 kw. would interfere with stations on the same channel at night operating in practically every Central and South American country. If these contours of interference had been based on field intensities which would be delivered in these distant foreign countries only

10 percent of the time, they would have shown and his testimony would likewise have proven that interference to foreign stations would be still worse and more severe.

Aware of Facts

This Commission is not unmindful of the delicacies involved. It is fully aware of the facts and the precarious condition into which American broadcasting in general could be thrown by foreign stations if we do unto them as we have sought to prevent them doing unto us. The United States cannot have its cake and eat it. The establishment and operation of 500 kw. stations in this country, knowing the severity of the interference they would set up in foreign countries, would be tantamount to making an attempt to do just this. This question of international interference is loaded to the guards with dynamite. If this Commission would license 500 kw. stations and authorize their operation with that power, it might well be, and most likely would be. the force which would set off this charge and result in such a conflagration as would be embarrassing and adverse in effect to the whole American system of broadcasting. The National Association of Regional Broadcast Stations sincerely entreats this Commission not to set off this explosion in this manner.

If any 500 kw. stations are established, and this Association opposes the establishment of any of them, and if the facts which we have given are considered insufficient to prevent their operation, then the facilities must be granted upon the following bases:

Bases

1. The stations must be located where they will actually render unique service which cannot be duplicated by any other means—if such areas exist.

2. Consideration must be given to all applicants possessing the requisite capital and general qualifications to operate a 500 kw. station. Authorizing the operation of such stations by the present licensees of clear channel stations only without making inquiry into their past operations and like inquiry of many regional licensees who have done a much better job than many clear channel stations have, would be to license these 500 kw. stations without regard to the ability of the licensee to carry on in the highest and most commendable fashion. We do not need to remind this Commission that numerous regional stations are today rendering just as good service as are the clear channel stations, nor do we need to remind this Commission that many regional station licensees are doing a superior job to many licensees of clear channel stations. Many regional station licensees would welcome a comparison of their performances and service rendered to the performance and service rendered by many of the clear channel stations. We believe that such a comparison should be made and that if any 500 kw. stations are established, the fact that someone now operates a clear channel station should not give him any preference over other station licensees, and this is especially true if the other licensees can show that they have heretofore performed a higher degree of service than some of the clear channel stations. This is also true because many regional station licensees are better able to make the necessary investment to operate an efficient 500 kw. station than some clear channel station licensees, and the fact that the investment in such a station must be made anew by whoever constructs it should place all licensees on an equal footing.

The National Association of Regional Broadcast Stations reiterates, however, its unqualified opposition, for the reasons already given, to the regular licensing of any 500 kw. stations.

Duplication of Stations on Clear Channels

We have proposed that the Commission's rules be amended to permit and to license the operation of more than one station, unlimited time, on the so-called clear channels.

The fundamental facts and conditions surrounding this question are stated in connection with other classes of stations already discussed. The technical or engineering evidence of Mr. Pickard not only explains the mechanics and engineering facts to be considered but shows definitely what the effect of such operation would be. His testimony shows that interference to other stations would not result and to prove this has prepared exhibits and produced them here showing concrete cases. His testimony and exhibits are so clear-cut and conclusive that there can be little, in fact no doubt that such stations may be operated without interference. This evidence shows that large areas and large populations would receive service in addition to those now receiving service from a given frequency on which only one full-time station operates. It proves that stations now operating alone on such frequencies, regardless of power, are not serving and cannot serve the areas which would be added and that they cannot and do not serve the thousands upon thousands of listeners who could receive additional service if these stations are authorized to operate in addition to those now operating full time on the clear channels. The only conclusion which can be reached as to the best use to be made of these frequencies is that such duplication should be permitted and if not permitted the waste growing out of the partial use of such frequencies will be extremely great.

Fundamental Factor

We have already stated as a fundamental factor that social and economic needs and demands should control the proper solution of these problems. Without going further into cold statistics, suffice it to say that, as this Commission knows full well, there are many regional stations in this country operating on regional frequencies, the coverage and service of which could be materially improved and expanded if some of them should be authorized to duplicate the use of clear channels. The engineering testimony shows that the interference now received by regional stations is such as to limit them, on the average, to slightly less than 2 MV/M at night. This condition has been brought about by crowding regionals in too large numbers too close together geographically. If some of these regional stations should be permitted to move off regional channels and onto clear channels, a large percentage of this interference would be obviated, great improvement to the listening public would result and the stations would be generally better able to serve their audiences and be of much greater social value to them. There is nothing so sacred about a clear channel as to put it beyond being so used that it will render service based on the greatest good to the largest number. It is clear that duplication of stations on these channels will not interfere with any worthwhile service now being rendered; that such use of channels can be made to improve the regional service to a very great degree and that thousands upon thousands of listeners will be provided a much greater variety of programs and the number which would be afforded such greater latitude in program selection is much greater than the number which would be thus accommodated by being added to the present audiences through increasing the power of clear channel stations to 500 kw.

In asking that duplicate operation of stations on clear channels be permitted, stations of such powers as have been operated successfully for many years are suggested. No suggestion is made for any change in the rules except for stations on these frequencies to operate with 5 to 50 kw., depending on the comparative need for such stations in given communities, separations between stations and ability of the respective communities to make the operation of such stations commercially successful or economically sound.

Effects of Operation

The effects from operation of these stations as to social and economic facts to be considered can be definitely determined, not on one or two isolated examples but from a great mass of data and facts based on the long and successful operation of a large number of stations.

The facts we have presented indicate a great upheaval and upset in the economics affecting regional stations if 500 kw. operation should be permitted. No such disturbance would result from moving some existing regional stations to duplicate operation on clear channels. As we have already pointed out, such duplication would make possible great improvements and there would be no such exodus of business from regional stations as would, we are convinced, take place if the Commission should authorize 500 kw. stations to be constructed and operated.

Another advantage which would be found would be the fact that the service of these stations would be over the proper areas and within the sphere of influence of each where it should be. This would tend to ally them more closely with the general social and economic needs of these areas and the degree of their usefulness would be enhanced in direct proportion to this union. The natural areas which regional stations have sought to serve have been the trade territories centering in the cities where they are located. The moving of some regional stations to clear channels would assist in rendering and improving this service. It has already been pointed out that the problems of those within these trade territories are much more common than their problems are to some distant city or area.

We submit that the operation of these stations on clear channels

should be provided for in view of the facts that their operation would not limit or interfere with any worthwhile service now being rendered; would make for a greater use of facilities and less waste in their use; would tend to relieve interference to regional stations and generally expand and improve their service, and generally improve radio service by providing a greater number and greater variety of programs to a much larger population than could be done in any other way. The proposal is sound socially and economically and these are of primary importance. It is, of secondary importance, technically feasible.

Conclusion

The National Association of Regional Broadcast Stations, on the bases of the social and economic facts, which are of primary importance, and the technical facts as well, all of which we believe sincerely to have supported our proposals, once again most respectfully urges the promulgation of rules or changes in rules so as to permit the operation of regional stations with 5 kw. night power; permit duplication and operation of more than one station on the clear channels, and retain the present rules fixing 50 kw. as the maximum power with which any station will be regularly licensed to operate.

Cross Examination

Under cross examination Mr. Spearman admitted that he is neither a radio engineer nor an economist. He added that the only qualification necessary to a complete understanding of his statement was a knowledge of elementary arithmetic as taught in the grammar school. In this connection and in a facetious vein he said that he thought the engineers had been running the radio game long enough and that now lawyers and economists should have their chance.

Mr. Spearman said in connection with a direct question on the subject that local stations are undoubtedly a very important factor in radio but his group has deliberately stayed away from the subject of local stations in its presentation.

Network affiliations of the regional stations which were contained in his direct testimony Mr. Spearman stated were taken from the Commission's own records.

Regionals Serve Cities

In connection with a further question Mr. Spearman said that regionals can become associated with any network that they want to legally but not economically. He contended that many regional stations serve cities of 50,000 inhabitants which have no stations of their own. The regionals he stated want higher power to overcome city noises.

Every man, woman and child would be able to get reception clearly from 96 stations with 96 separate programs Mr. Spearman said if he had his way but this is clearly a practical impossibility.

The regional group he stated is not asking for any horizontal increase of power to 5 kilowatts. He asked that radio be not put into a straight jacket and then on interrogation from Mr. Craven said "except clear channels". Duplications on clear channels should be used he asserted to improve the regional set-up. Some part time stations he testified are not making good financially but they might make good if they were granted full time and this might be done through duplication of clear channel stations.

If regional stations went to 5 kilowatts Mr. Spearman stated it would have no marked effect on local stations; at least it would not have as much effect on local stations as the clear channel stations would have by increasing their power to 500 kilowatts on regional stations. Up to this time he said no local stations have ever complained when a regional station has increased its daytime power from 1 to 5 kilowatts.

Allocation Survey

Mr. Spearman said that in his opinion the Commission's allocation survey developed nothing on which the Commission could base an allocation plan and he made some criticism of the post card survey.

The Commission, Mr. Spearman said, should not set up standards of service, because on some channels there is much more interference than there is on others. Mr. Spearman qualified himself as a real radio fan.

He said that the association which he represents is against granting any 500 kilowatt stations and when asked specifically about WLW he called attention to the fact that this has only an experimental license and that his association has taken no specific position regarding that station. He expressed his opinion that if regional stations went to 5 kilowatts that these stations would be able to increase their rate which would undoubtedly take care of any additional expense incurred. Mr. Spearman stated that in his opinion there are several clear channel stations in the country who could not make the grade from a financial standpoint if they had to go to 500 kilowatts.

The National Association of Broadcasters
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Lohr Presents NBC Case at Allocation Hearing

Lenox R. Lohr, president of the National Broadcasting Company at today's allocation hearing before the Federal Communications Commission discussed the economic and social aspects of the case as they appear to his company. Arthur Van Dyck, engineer in charge of the RCA License Laboratory, also presented a statement on behalf of NBC in which he supplied facts concerning the performance of receivers in the home today.

Paul M. Segal, counsel, and Raymond M. Wilmotte, engineer, also appeared on behalf of the stations on the 940 kilocycle channel.

During the course of Mr. Lohr's testimony he recommended that the period of broadcast licenses be extended to three years, the maximum permitted under the law. He also suggested that the Commission take no action which would limit the existing capacity of clear channel stations "or preclude the development of a better and more extensive service by them."

Mr. Lohr recommended also that regional station power be increased to 5 kilowatts for both day and night and he further suggested power increases for local stations "whenever the engineering and economic factors warrant the use of such power."

Lenox R. Lohr

Mr. Lohr said:

It is my purpose in appearing before you today to discuss some of the economic and social aspects of the tremendously complex problems with which these proceedings deal. Before doing so I want to make clear that I speak only for the National Broadcasting Company, and the stations which the National Broadcasting Company is licensed to operate. We have not been authorized by any affiliated station to present its case to you nor have we joined with any other station or group of them. Of course, none of them have purported to speak for us.

In its preparation for this Conference the National Broadcasting Company's objective has been to express its opinions in the form of specific recommendations wherever possible. At the conclusion of the Conference, you gentlemen will have before you not only our specific proposals but many others representing widely divergent views. If you adopt some you must reject others. And, in the process, each proposal will be subjected to the test of whether its adoption will serve the public interest, convenience and necessity. Because our suggestions reflect our interpretation of the phrase "public interest, convenience and necessity" I would like to set forth, necessarily in general terms, what we conceive to be the connotation of these words.

First

We believe the term implies that *the dominating influence at this proceeding must be the welfare of the listener.* We place this requirement first, both in position and importance, because the welfare of the listener may be too easily subordinated in some of the differences of opinion existing between stations or groups represented here today, merely because the listener himself is not present and is therefore inarticulate.

Not Altruism

We would not have you believe that the National Broadcasting Company's concern for these listeners is one of pure altruism. We do want to impress upon you that National Broadcasting Company's only business is that of broadcasting; that our planning and thinking are based upon the premise that we will be in it for many years to come; and that, in the long run, he who serves best, profits most, in this business above all others.

There are two methods by which broadcasting may be conducted. One is to compel the listener to subscribe for the service and to discontinue it when he ceases to pay. That is the foreign method.

The American system of broadcasting differs in one marked respect so extraordinary as to be unparalleled in any other business or in any other country—its listeners support it voluntarily through their purchases of radio advertised products. Their good will is the National Broadcasting Company's most valued and vital asset; upon our ability to retain it depends our very existence. Their welfare cannot be an academic matter to us.

Second

We believe that the term "Public Interest" means the welfare of *all* listeners throughout the United States.

It is unnecessary to tell this Commission that, from a narrow business viewpoint, it is easier and usually more profitable to render broadcasting service to those areas where there is heavy concentration of population. Sparsely settled areas are not only more difficult to serve because they require greater power, with larger capital investment, but this service is frequently less profitable. Unfortunately these sparsely settled areas are also the areas where there are fewer theaters, newspapers, schools and other sources of entertainment and information. They are the areas where broadcasting means the most. We believe that these considerations must be accorded weight in deciding how much and what kind of service rural listeners are entitled to receive. And in this connection we ask you to note that the recent amendment to the Communications Act declares it to be the intent of Congress that all the people of the United States be given *fair, efficient, and equitable* broadcasting service. The standard is not merely one of *equal* service.

Difference of Opinion

It is no more than natural that there should be differences of opinion among the various parties represented at this Conference as to what constitutes a fair and equitable distribution of radio service to all the people of the United States. The American System is based upon competition and competition engenders divergent views. Each individual station owner competes with his neighboring stations for audience and for advertising. He competes with others more distantly located for increased power, a better frequency, or some other advantage which will permit *him* to improve *his* service to *his* listeners and thus to increase *his* net profit from operations.

We would not have you believe that National Broadcasting Company is immune to these influences. But we do want to emphasize that for many years we have supplied programs to outlying stations, frequently at a monetary loss, in order that our service might be national in scope. The National Broadcasting Company relies for its support upon *all* listeners throughout the country.

Third

The term "public interest" means high quality programs. The American audience has become accustomed to a broadcasting service which, for eighteen hours a day, day in and day out, supplies programs which could not possibly be originated in any single city. Our talent resources are, literally, those of the entire world. Programs of the character, quality and diversity which we now regard

as commonplace could not be broadcast by any single station or for any advertiser using a single station. But they can be built for release over a network of stations—and the larger the network the larger the audience and the better the program can be.

This practice of syndication not only brings a wealth of fine program material to all parts of the United States, but it has made American network programs the finest in the world. Nearly half the stations which you now license to operate receive some sort of network service either from a national or sectional network. These stations and their network programs constitute the cornerstone of American broadcasting.

Fourth

The term "public interest" means signals of sufficient intensity to permit satisfactory reception. It is not remarkable that the high quality signal of a few years ago has become the unsatisfactory signal of today. Neither is it mere coincidence that high-quality programs and high-quality reception almost invariably go together. No matter how strong its signal may be no station will retain its audience against present day competition unless it furnishes an attractive program schedule. By the same token, however, unless the station is able to deliver its programs to the loud speaker sufficiently free of interference from other stations, and sufficiently above the noise level of its community, to render an acceptable and enjoyable service its listeners are not receiving the maximum service which it is possible to give them.

Finally

The term "public interest" means an industry operating upon an economic foundation strong enough to carry these current obligations and to provide resources for the laboratory development of the radio to tomorrow.

The history of broadcasting is that of an industry existing in a hand to mouth fashion, under six month licenses, against a background of constant change and rapid obsolescence. Some stations favorably located have rendered excellent service and returned substantial profits to their owners over a long period of years. Some, particularly those having limited hours or operating at some other competitive disadvantage hang on from week to week in the hope that a miracle will eventually bring a sufficiently increased income to justify their existence.

In the long run, most of the economic problems facing this industry must be decided by the owners of stations themselves. But it is obvious that to whatever extent undue economic burdens are imposed upon the broadcaster by regulations, to that same extent must his capacity to render service suffer. Or, by exercising your regulatory power wisely, you can bring about an ascending spiral wherein the industry, built upon sound economics, supplies better programs through better stations to a better satisfied public and thus become increasingly prosperous itself.

* * * * * * *

Service to Listener

So much for our interpretation of the words "public interest, convenience and necessity." Because it is predicated upon service to the listener and is national in scope, and therefore coextensive, geographically, with the Commission's own sphere of jurisdiction, we feel that it is one with which the Commission can properly agree.

May I call to your attention the fact that next month the National Broadcasting Company completes ten years of national network operation. All that anybody knows about nation-wide network service has been gained within that single decade. We have obtained a fairly good idea, I think, of what the American listener wants and what he may reasonably expect to get from his loud speaker.

Ten years ago there were 5,200,000 receiving sets in use in the United States. By the end of this year there will be approximately 30,000,000. In proportion to population Europe has about one-fourth as many. America's six-fold increase in ten years is attributable, in a large measure, to the excellence of American network programs. At the same time there could hardly be a more persuasive indication that the policies and the fundamental engineering principles for the allocation of broadcasting stations, adopted in 1928, were sound.

Not only has the American radio audience continued to increase every year through prosperity and depression but every single year this audience has given the American system of broadcasting the finest possible endorsement—a constant and continued willingness to patronize broadcast advertisers. From time to time the size and satisfaction of our radio audience under the American system is explained away. We are told that the intellectual level of these listeners is not very high and that they lack powers of discrimination and critical analysis. We urge you not to rely too heavily upon any such explanations. In working out your problems you can still tie to one fact above all others—that it is not yet possible to fool all the people all the time.

Development of Industry

In the development of the broadcasting industry, National Broadcasting Company's interest has always been a dual one. On the one hand it operates stations some of which are clear channel stations, others regional and one a part-time station. On the other hand our networks include not only our own stations but a much larger number of stations, independently owned and operated, which are associated with us. Each, we believe, is rendering a public service of a high order within its own sphere.

We have given serious consideration to the possibility of improving service through a general reallocation of all station assignments such as took place in 1928. In many ways the prospect is more intriguing to us as a network than it can be to any single station. If it were possible to rearrange the power and frequency of all stations so as to bring about a network in which the service areas of the individual stations would fit together like the pieces of a jig-saw puzzle most of our present problems would be answered. Notwithstanding the fascination of this prospect, in the end we have been compelled to return to the point from which we started out—that there are some 680 stations and not more than 100 channels for their operation. You may divide and subdivide, shuffle and reshuffle these stations and channels in an infinite variety of combinations. In the process you may improve some stations but inevitably what you give to one must be taken away from someone else. We perceive no substantial benefit to the public as a whole or to the industry which could be accomplished by any such reallocation.

We do not mean to imply that the present system is so perfect that there is no room for progress or that we do not anticipate many adjustments in the future. We do say that it should not be changed unless the public will profit substantially thereby and that a heavy burden of proof rests upon those who advocate changes in the fundamental structure.

Increased Power

We consider that the most important single issue before all stations today is that of increased power. Since its earliest days power has been the outstanding controversial issue of the industry —there has been more misinformation available upon it than upon all other subjects combined. Your records of past conferences are filled with the fears of false prophets who deplored increases in power but who failed to stay the progress of the radio art.

There are two valid objections to increased power. One is an engineering objection—that of actual physical interference. Our engineers have already given you our views as to what should be considered serious objectionable interference.

The other is economic. In most instances increased power will necessitate substantial expenditures for new equipment. We believe that it would be unwise and unduly disturbing to the industry for you to require large expenditures for this purpose by any class of stations at this time. And in using the word "require" we mean to include not only affirmative mandatory regulations but also any action which would permanently penalize the station owner who fails or is unable to install higher power upon short notice.

Satisfactory Evidence

Your present practice is to require that each applicant who comes before you seeking increased power shall present evidence satisfactory to you that he has adequate financial ability to incur the increased operating expenses involved, including depreciation, without jeopardizing his economic ability to render service. We see no reason to change this requirement. What shall be considered adequate financial responsibility must be a question to be determined upon the facts in each case and therefore, the only standard we can suggest is that of reasonableness. We do think that the prospect of increased profit subsequently is not a complete justification for the grant. Considerable weight should be attached to the applicant's ability to prove that he has been able heretofore to do something more than merely to balance his books.

There are no valid social objections to higher power. You have been told that if you authorize higher power on some stations

it will enable tbem to deliver satisfactory signals in areas not now served by them and that, because tbeir program service is superior, these higber powered stations will attract listeners who must now be content with something less. This has not been the experience of the industry. On the contrary, it has been our experience, and that of the receiving set manufacturers, tbat wben broadcasting service improves in any community the interest of that community in all broadcasting increases proportionately. Moreover, higher power will not come over night. It will come gradually and will be assimilated over a period long enougb to give each station an opportunity to readjust its metbods of operation and to find its proper place in tbe economic and social structure. In any event, it is no answer to protect a station thus affected by depriving the listening public of a superior service. The solution is to improve the service of the smaller station. To that end within the past few years the National Broadcasting Company and otbers have undertaken to supply recorded programs of high quality at relatively low cost.

Now as to our specific recommendations:

First—We earnestly recommend in the interest of economic stability for tbe industry that in your new regulations you lengthen the license period for all broadcasting stations to tbe three year maximum permissible under the law.

Second—With respect to the continuance of clear channels your record will disclose that upon the forty frequencies designated as clear channels in 1928 fifty stations were licensed to operate, each as a dominant clear channel station. In order to bring about this result the Radio Commission required twenty stations to share time upon ten channels. On the whole the past eight years have demonstrated that part time operation of this sort is not successful eitber from the listeners' standpoint or for the station operator. In some instances the stations bave worked out their own salvation by joint use of a single transmitter, synchronization, directive antennas, or some other means. A number of the stations still operating part time on clear channels have asked that they be permitted to submit a plan to the Commission whicb will give each of these stations full time operation and they propose that a hearing be held upon such plan. We believe such a hearing should be held and an earnest effort made to find a solution to the problem.

There remain out of the original forty clear channels some twenty-five or thirty upon wbich progressive forward looking stations are being operated today. Their value as a means of service to rural listeners has been reaffirmed by the recent Clear Channel Survey. We recommend that your Commission take no action which will either limit the existing service capacity of stations of this type or preclude the development of a better and more extensive service by them.

Third—With respect to the power of clear channel stations we recommend tbat your regulations be revised to remove any limitation of maximum power to be used by the dominant station upon these channels. Having adopted regulations of this sort we recommend tbat each individual application be considered and acted upon with due regard for tbe interference problems and the economic justifications which each case presents. Following this reasoning my Company has concluded that at one station, WJZ, 500 kw power would be desirable when measured by the standards referred to previously.

Fourtb—With respect to power on shared channels we recommend increases in power for regional stations to 5 kw, day and nigbt, and we recommend increases in power for local stations whenever tbe engineering and economic factors warrant tbe use of sucb power.

Fifth—Witb respect to differentiation in the maximum power permitted in the daytime and at night we see no objection if the benefit to be derived from the greater power justifies the expense of maintaining the added equipment.

I want to add just a few more words upon the possible future use of frequencies in the band above 30,000 kc for aural broadcasting and for television.

For tbe past several months the National Broadcasting Company has been operating a transmitter at the top of the RCA Building in New York City with power of 100 watts on a frequency of 42,000 kc. Tbe details of these experiments have been made known to you in the reports whicb we have submitted. I want to add to those reports the general comment that for the most part the results of this operation have been highly gratifying. However, our engineers have encountered some difficulties with which we do not have to contend in the present broadcast band. They have found that while ultra high frequency signals are relatively free of natural static, man-made noise, from automobile ignition and diatbermy machines for example, is much more objectionable. We think it very probable that sometime we will be rendering a service of greater fidelity than at present to urban audiences through stations operating in that part of tbe spectrum above 30,000 kc. Before we can do so it will be necessary for all these listeners to purcbase receivers designed for the new service. Obviously, this will not come about over night.

Television

The National Broadcasting Company's views with respect to television are derived from experience which we have gained through operating experimental television stations continuously since 1928. For the past several months we, in cooperation with other RCA Companies, have been operating a new television transmitter from the top of the Empire State Building in New York City as part of a practical field test. We now have in daily use some seventy receivers of standardized design most of which have been placed in homes and are operating under service conditions. We have designed and built tbe first studios for the production of television programs. Not only has there been substantial progress within the past few years in television and facsimile, but that there is likely to be greater progress in the next few years. Here again, however, it will be necessary to re-equip tbe public with entirely new receiving facilities.

High Frequencies

We have discovered notbing in our investigation of ultra high frequencies, either with respect to sound broadcasting or television, wbich would militate against the recommendations which we have made here for stations operating between 550 kc and 1600 kc. We believe that the American audience is going to continue to receive its aural broadcast service upon present frequencies for several and perbaps for many years. Our proposals have been made with a view to giving the best service that it is possible for this audience to receive.

In conclusion may I repeat for the purposes of the record in this proceeding, the announcement which was made when the National Broadcasting Company was organized:

> "Any use of radio transmission which causes the public to feel that the quality of the programs is not the higbest, tbat the use of radio is not the broadest and best use in the public interest, that it is used for political advantage or selfish power, will be detrimental to the public interest in radio, and therefore to the Radio Corporation of America."
>
> * * * * * * *
>
> "If others will engage in this business the Radio Corporation of America will welcome their action wbether it be cooperative or competitive."
>
> * * * * * * *
>
> "The necessity of providing adequate broadcasting is apparent, the problem of finding the best means of doing it is yet experimental. The Radio Corporation of America is making this experiment in the interest of the art and the furtherance of the industry."
>
> * * * * * * *

Stumps To Be Pulled

That announcement dates back ten years—to a time wben there was still many stumps to be pulled and many rocks to be blasted in the field of broadcasting. The industry has now reached a point where there is plowed land available for cultivation. And the paramount issue before this Commission is wbether we shall continue the process of clearing new acres.

On this issue the National Broadcasting Company takes tbe same position that it took in 1926—its purpose is still to develop and not to exploit broadcasting. If ten years of experience bave proven anything to us they have proven that the public interest is also the best interest of tbe National Broadcasting Company, its advertisers and its associated stations. If higher power, which is one of tbe problems before us today, means better service to the public tben let tbere be bigher power. If it produces hazards to our present methods of network operation then let us adjust our methods to meet the public interest. The art must be allowed to develop along progressive lines and always in the fullest measure for the best interests of the public. No responsive Government agency can do more than tbis—none dares do less.

Lohr Cross-Examination

At the conclusion of Mr. Lohr's testimony he was given a short cross-examination by T. A. M. Craven, chief engineer of the Commission. Answering questions of the chief engineer, Mr. Lohr stated his experiences up to the time he went with the NBC and indicated that he had only been president of NBC for something less than two years. However, he stated that he thought he was beginning to understand some of the problems of the broadcast industry.

Mr. Craven during the course of the cross-examination several times referred to the possibility of thirty 500 kilowatt stations but Mr. Lohr doubted he said whether there would be that many in the near future. However, he said that in his opinion the effect of the creation of high power stations would be beneficial to the country. Mr. Craven called his attention to the fact that there are now pending before the Commission 14 applications for 500 kilowatt stations and be suggested that there might be more; possibly 20. Mr. Lohr said that undoubtedly each application should be decided on its own merits. The broadcast industry, said Mr. Lohr, can certainly take care of 500 kilowatt stations as well as new developments in the industry.

Answering further questions of Mr. Craven, Mr. Lohr said that the chain renders a national rather than a local service and it should cover as many people in the United States as possible. If thirty high power stations were in existence he said that he was informed by his engineers that the primary coverage would be extended only 25 to 30 miles. In his opinion, said Mr. Lohr, use of 500 kilowatts would be a technical advance and if thirty 500 kilowatt stations were constructed that the NBC would undoubtedly keep substantially its same network.

Interference With Locals

In connection with the effect which 500 kilowatt stations might have on locals Mr. Lohr said that there probably would be a few cases in which the local stations would be affected but he contended that the matter should be looked at from a long range standpoint and the greatest good to the greatest number. He said of course in his opinion there must be local means for local self-expression.

Mr. Lohr admitted that there is an international problem in connection with high power stations and in answer to questions by Commissioner Stewart he contended that the Commission would have to decide for itself the number of 500 kilowatt stations which any one person should own or control; that he believed 500 kilowatt stations should not be required to originate their own programs; and that the question of overlapping programs by high power stations must be decided by the Commission.

Arthur Van Dyck

During the caurse of Mr. Van Dyck's testimony today he took up the receivers now in use, a discussion of general considerations of broadcast receivers, and classes of interference. Mr. Van Dyck also discussed at some length the method of measurement and entered into a discussion of various kinds of interference. In summarizing his conclusions Mr. Van Dyck said:

Identifying subjects by the same numbers used in the Commission's Notice of Hearing, the following summarized conclusions are submitted.

6 (a) *Frequency Separation*

From the quantitative conclusions tabulated above it is seen that the most serious interference limit resides in the 10 kc. heterodyne beat condition, and it is the determining 10 kc. factor rather than the 10 kc. cross talk. At lesser separations than 10 kc. this factor becomes increasingly worse and intolerably limiting.

6 (b) *50 Kilocycle separation between stations in same community.*

From data presented it appears that the improved receiver selectivity existing today could be used to advantage in either reducing separation of stations in the same community to 40 kc, or by maintaining the 50 kc. separation and permitting higher field intensities. From the results of the clear channel survey conducted by the Commission, the latter alternative is obviously preferable, since it gives improved service in rural areas without causing objectionable interference close to the transmitter.

6 (c) *Mileage frequency separation tables.*

In spite of the fact that the broadcast system determination of overall performance involves consideration of numerous factors, it is possible to set up tables showing relations between essential factors, which will take satisfactory account of the great majority of allocation problems. There will of course be special cases where general, average condition tables are not suitable, but in the main, and used with discretion, averaged tables can be highly useful.

We therefore believe that suitable tables may be set up if appropriate standards are utilized for their preparation. The standards must include those for wave propagation, including factors of attenuation, transmitter power, antenna efficiency and directivity, and those for receiver performance including selectivity, fidelity, percentage of receivers which may experience interference, and the lower limit of field intensity from desired station necessary to protect.

It is believed that the frequency separation tables now used by the Commission can be reviewed and revised with advantage, in view of the additional and later data submitted herein, which was not available at the time when the present tables were set up.

6 (d) *Permissible disparity in power between stations on adjacent frequencies.*

This is merely one particular case of the general problem of allocation as influenced by frequency separation and relative field intensities. The data which has been given herein, together with propagation data, can be used to determine the performance of stations on adjacent frequencies with any disparity in power, and the permissible disparity determined therefrom for any given case.

7 *Blanketing Signal.*

The present Commission definition blanketing signal is believed to be satisfactory in general, except that where it is expressed in terms of area and an average broadcast receiver, it might be expressed more usefully in terms of signal intensity and receiver percentages as used in the data presented herein. In these terms, and imposing the reasonable conditions that the desired signal intensity be five millivolts per meter, and frequency separation be fifty kilocycles, a blanketing signal is one which causes interference in more than 20% of existing receivers, as determined from standard performance curves.

From this fundamental definition it results that for receivers existing in homes today, a blanketing signal is one having field intensity of 1,000 millivolts, or one volt, per meter.

Mr. Van Dyck will be cross-examined at the opening of tomorrow's session.

Paul M. Segal

Mr. Segal on behalf of the stations on the 940 kilocycle channel said that they would offer no specific amendments to the Commission's regulations.

Mr. Segal said:

I want to begin by saying that the 940-kc. stations, whom I represent in this matter, are proposing no specific amendments to your regulations as to any named frequency, nor is it our purpose to discuss individual stations or frequencies. Rather we intend to confine ourselves to general considerations.

Paragraph 120 of the Rules and Regulations establishes a classification of regional frequencies allocated for use by regional stations. It designates the frequencies so classified and prescribes that the operating power of such stations shall not be less than 250 watts nor, during nighttime, greater than 1000 watts.

Among the matters to be considered at the present conference is the question whether or not some change is desirable in this classification so as to permit greater power during nighttime upon some or all of these frequencies.

I assume that anything in the character of an engineering study of this question which has been conducted with care, and which can be presented in detail would be acceptable as helpful to the commission in its labors.

For some years there has been a unique cooperation among the stations assigned for nighttime operation to the 940-kc. frequency, to the extent that they have acted in cooperation in matters affecting their allocation, have exchanged technical information among themselves, and have from time to time appeared before the Commission under common legal representation.

Asked 5 Kw.

Six years ago these stations jointly initiated consideration of 5 kw power for a regional frequency and filed and prosecuted appli-

cations requesting authority to use 5 kw nighttime. Those applications were denied by the Federal Radio Commission on August 12, 1932, hy a divided vote, Commissioner Lafount dissenting. In the Commisisoner's dissenting opinion he urged the soundness of the technical considerations for 5 kw power on this frequency.

I think it is fair to say that the principal reason for the denial of the applications was the then-prevailing quota system.

Since that date, and from time to time, the 940-kc. stations have renewed their request and have made cooperative studies of the problem.

Our purpose here today is to present to the Commission the results of those studies.

We do not appear to urge consideration of the merits of any station on 940 kc., or demand any specific regulations for any one or more frequencies.

Our presentation is for the purpose of indicating the general considerations to he horne in mind on the 5 kw question and when examples are given, they are given for illustrative purposes.

We hope that our studies may be of assistance to the Commission in its determination whether or not there are regional frequencies which permit horizontal increases in power, and if there are, then the determination of the standards which may he used in selecting such frequencies from the whole group of regional frequencies.

I wish to offer the testimony of Mr. Raymond M. Wilmotte.

Raymond M. Wilmotte

My name is Raymond M. Wilmotte. I have a First Class Honors Degree (M.A.) from Cambridge University, England.

I have worked on radio propagation prohlems at the National Physical Laboratory in England. This Lahoratory is the British equivalent of the Bureau of Standards. In the course of this work I was connected with the British Post Office in the design of its long distance radio transmission service.

In this country I was in charge of the research work of the Aircraft Radio Corporation, and am now a consultant with offices in New York City.

In 1931 I designed and built the first directional antenna for a hroadcasting station to be approved hy the Commission. I have published some thirty papers in the technical press, dealing with propagation prohlems, allocation and design of equipment.

Introduction

In this discussion, I intend to consider the possihilities and limitations of the service that may he provided hy regional hroadcast stations. Before considering the engineering prohlems involved, the difference in the service required of stations on clear channels, regional channels, and local channels must be reasonahly well agreed upon.

Clear channels are ideally suited to provide service over large areas, areas that may be so large that programs of national interest may and should be broadcast from them. Local stations serve only restricted areas. These areas are so small that these stations are suitahle for service for towns or cities. The purpose of regional stations is to provide a type of service lying somewhere in between these two extremes. There is room in the United States for programs which are of interest over rural as well as urhan areas, and which are not necessarily of national interest. A kind of service is desirahle, therefore, which will serve large local areas comprising hoth urban and rural communities. It is with this service in view that the regional station differs in its purpose from that of the clear channel and local station. In certain cases, the regional station may have a further special reason for existence. In large centers of population, the noise level is high. There it hecomes essential to provide strong signals to overcome this form of interference. It is frequently impossihle to allow local stations sufficient power for this purpose, for they would interfere with other stations on the same frequency, or adjacent frequencies, for which an increase in power may he neither desirahle nor economically possihle. Clear channel and regional stations may provide this service satisfactorily.

In this discussion I am assuming, therefore, that the main purposes of regional stations are:

a. To provide programs of local interest, which should not and cannot he satisfactorily provided hy clear channels.

h. To serve reasonahly large centers of population.

c. To serve as much of the surrounding rural area as possible.

The engineering prohlem is, then, to allocate sufficient, but not too much, power to the stations on regional channels, and space them a sufficient distance apart in order to obtain this desirable service in the best possible manner.

Station Separations

The separation hetween stations limits the possible service area free from interference. Having once settled on the location of the stations on one frequency, there is a certain radius around each station heyond which the ratio of its signal to the interfering signals from the other stations on the same frequency is too small, and the programs from the interfering stations become ohjectionable. Since the interfering signals are on the same frequency, this radius is independent of the type of receiver used. It is also independent of the general power level of the stations; the power of the stations could he increased ten or a hundred times without affecting this radius, provided that the power of all the stations was increased in the same ratio.

What, then, is the advantage of a horizontal increase of power? The advantage is a reduction in the apparent noise level at the receiver; the effect of power lines, of telephone dials, refrigerators, etc., will be less noticeable to the listener when the power is increased. With the present trend of the art toward higher fidelity in hoth receivers and transmitters, the need for overcoming extraneous noise is gradually increasing for two main reasons: first, the trend of receiver design is toward the reception of a hroader audio-frequency band, and consequently toward receiving more of the undesirable noise; and second, the trend toward high quality of transmission is leading the hetter stations to adjust their normal operation to a lower average modulation percentage than was common a few years ago. Still another trend is the increasing use of so-called midget sets. Many of these sets now on the market have very poor sensitivity, and even in quiet surroundings are unable to pick up weak signals satisfactorily. All these factors seem to lead in the same direction, that as the art progresses, more power will be required.

Adjacent Channel

The effect on adjacent channels limits the extent hy which the power of all stations on a singie frequency may he increased horizontally. If the power is so increased, the interference which these stations will cause to the stations on adjacent channels will he also increased. If it is desired to retain a *status quo* of interfering patterns, the power on the adjacent channels would have to he increased in proportion. This argument may be applied from channel to channel, until finally a situation will he reached in which an increase in power on a single channel would lead to a horizontal increase in the power of all broadcast stations. The development of a receiver design may he of assistance, however. Modern receivers are much more selective than they used to be some six or seven years ago, and with the gradual elimination of tuned radio frequency sets and the substitution of superheterodynes, the discrimination hetween stations on adjacent channels is gradually improving. Broadcast channels are therefore gradually hecoming more nearly independent of each other.

Fundamental Difference

There is a fundamental difference hetween the engineering problem of the proper allocation of stations on a single frequency, and the allocation of these stations relative to stations on adjacent frequencies. The separation and power required hy stations on a single frequency to provide good service is practically independent of the design of the receiver. The allocation of stations within a single frequency is therefore entirely wtihin the control of the Federal Communications Commission. The separation between stations on adjacent frequencies is only indirectly controlled by the commission. In this case, there are two forces acting toward each other. One is the effort of the commission to adjust the separation of stations in adjacent channels to fit the selectivity of the receivers in use, and the second is the efforts of manufacturers of receivers to design receivers which can satisfactorily meet the interference which the commission thinks proper.

I am therefore going to consider separately the two problems of the interference hy stations on the same channel, and the interference hy stations on adjacent channels. I shall first of all consider the coverage possihle on a single frequency, assuming that there is no need to meet the prohlem of interference with adjacent channels. I will then consider what are the limitations introduced by these adjacent channels. In the first section, when considering the service area limited only by the interference caused by stations on the same frequency,, I shall analyze four cases:

A. A single isolated station.

B. Two stations 2,000 miles apart.

C. A few fairly spaced stations.
D. A few closely spaced stations.

I will then compare these cases (Section E) and consider whether different operation of the stations could improve their service (Section F).

940 Channel

For the fairly spaced stations, I have selected an actual case—the 940-Kc. channel. This channel is convenient as an example because it is near the middle of the broadcast range, and the stations operating on it are reasonably well spaced. For the more closely spaced stations, I have selected an arbitrary situation. The arrangement selected approximates and may be considered typical of a number of regional channels as they exist at the present time.

In making the calculations, I have made much use of the information gathered by the Engineering Division of the commission. The Division is to be congratulated on the material it has recently gathered in the field strength surveys of the clear channel stations. The analysis of the results is already extremely valuable. If the variables, such as time of night, direction of transmission, nature of the ground at the receiver and the transmitter, are segregated, it is possible that the variations shown in the published curve may disappear. We will then have a far more complete and accurate picture of radio transmission within the broadcast band than we have ever had before.

Possible Coverage Without Interference from Adjacent Channels

When there is no interference, the area which can be satisfactorily served depends upon the power of the station and the noise level at the receiver. Exhibit I and Table I show the service area in square miles during the day and the night, at selected power levels.

TABLE I.

Service area of a single station on 1000 kc. with a ground conductivity of 5×10^{-14}

	Service area for a minimum signal of									
	−20 db.		−6 db.		0 db.		+6 db.		+20 db.	
Power of station	Radius miles	Area sq. miles	Radius miles	Area sq. miles	Radius miles	Area sq. miles	Radius miles	Area sq. miles	Radius miles	Area sq. miles
0.5 kw. regional	55	9,000	29	2,700	21	1,500	15	800	7	150
1 kw. regional	63	13,000	33	3,600	24	1,900	17	1,000	8	200
5 kw. regional	750	1,800,000	49	8,000	35	4,000	27	2,300	13	500
10 kw. regional	850	2,200,000	150	70,000	41	5,000	32	3,500	15	800

I have used decibels instead of millivolts per meter as the unit for signal strength, taking 1 mv/m=0 db. In making calculations it is frequently easier to use decibels instead of millivolts per meter. Decibels are proportional to the logarithm of the signal strength measured in millivolts per meter. The convenience for calculations of signal levels lies in the fact that, when they are measured in decibels, in order to find the ratio between two signals, it is only necessary to subtract their value. If one is not accustomed to this unit, it can be very readily transferred back to millivolts per meter after the calculations have been made. I have assumed a frequency of 1,000 Kc., and a conductivity for the ground of 5×10^{-14}. Throughout this discussion, I have used for the strength of the sky ray the average value obtained by the Engineering Division in their recent survey on clear channel stations. The curve used was that corresponding to two hours after sunset. If a later time were taken, the numerical results would be changed, but the general deductions would remain substantially unaltered. In making these calculations, the curve for the sky ray has been assumed to indicate the strength of the signal as definitely as though it were a ground ray. It must not be forgotten, however, in interpreting the results of these calculations that the value of the signal from the sky ray varies up and down over a considerable range from day to day, season to season, and year to year.

The lines in Exhibit I show the service area for signals of −20, −6, 0, 6, and 20 decibels. These figures are equivalent to 0.1, 0.5, 1, 2, and 10 mv/m respectively. There are two charts in Exhibit I. The only difference between them is a difference in scale. The right hand chart shows the service areas down to a signal of −20 db., while in the left hand chart, the minimum signal is −6 db. The scale of one chart is five times that of the other.

Large Change

It will be noticed that there is an extraordinary large change in the area covered by signals greater than −6 db. when the power is increased from 5 to 10 kilowatts. Exhibit II gives the explanation of this effect. This exhibit shows how the signal varies with the distance for a 1-kilowatt regional station. It will be seen that at a distance of about 60 miles, the mean value of the sky ray is equal to the ground ray. Up to 60 miles, then, the ground ray predominates. At further distances, the sky ray does. It happens that the attenuation of the sky with distance is very slight; in fact, the strength of the signal remains practically constant up to about 200 miles. Consequently, as soon as the sky ray becomes strong enough to be used for service, the area covered is enormously increased. The broadcast band of frequencies and the frequencies immediately above and below it are particularly well suited for this sky ray to be used. If it is not used, this excellent property of having an unusually low attenuation at comparatively short distances (100 to 400 miles) is not only lost, but actually causes trouble by interfering in the service area of other stations. It happens that the sky ray 60 miles away from the 5-kilowatt station has an average value of −10 db., corresponding to .33 mv/m, so that a power of 5 kilowatts is just on the verge of having a large potential service area with a signal of −6 db.

Possible Coverage of Two Stations 2,000 Miles Apart

Exhibit III and Table II show the day and night coverage of two equal stations 2,000 miles apart at selected power levels. The horizontal lines are the lines of interference for different modes of operation.

TABLE II.

Interference in the case of two equal stations on the same frequency 2000 miles part.

Ground conductivity = 5×10^{-14} Frequency 1000 kc.

Degree of synchronization		± 50 cycles	± 5 cycles	Synchronism
Ratio desired to undesired signal in db.		26	20	12
Service radius in miles		55	200	700
Service area in square miles		9,000	120,000	1,500,000
Minimum signal free from interference with				
	0.5 kw	−20 db.	....	....
	1 kw.	−17	....	....
	5 kw.	− 9	−11	−19
	10 kw.	− 6	− 8	−16

The interference begins at a distance which is independent of the power, provided the power of the two stations remains the same. The area free from interference may therefore be represented hy a horizontal line of interference, cutting all diagrams, corresponding to different powers on the same level. Such interference lines are shown dotted. The level of the lines depends on the mode of operation of the two stations: the top dotted line, for instance, in Exhibit III is the interference line corresponding to the operation of the two stations within ± 50 cycles. If the stations were operated within ± 5 cycles, the ratio of the desired to undesired signals at the interference line could be reduced from 20:1 to 10:1. The line corresponding to this mode of operation is the second dotted line on the diagram. The third dotted line corresponds to synchronous operation.

In order to make full use of the available service area free from interference, it is necessary to increase the power so that the signal at the interference line is high enough to be of use. For instance, a one kilowatt station has a signal well helow –20 dh. at the interference line corresponding to operation within ± 5 cycles. Evidently much of the potential service area of this station is not used hecause its power is too low. What power should he used in any particular case will depend on the noise level which it is intended to overcome.

Limits of Service Area

In calculating the limits of service areas due to interference, the limiting ratio of the desired to undesired signals has heen taken as that suggested hy the commission in Tahle 6 and Figure 1, page 20, of its Seventh Annual Report, 1933. In this report, it was suggested that the limiting ratio of desired to undesired signals should decrease with the distance of the interfering station. An important reason for suggesting this decrease with distance was paucity of the experimental results availahle, on which an estimate of the strength of the interfering signal could he hased. With the recent work of the Engineering Division of the commission, it seems no longer necessary to make such an allowance for lack of accurate information. I have not used, therefore, the so-called allocation factor suggested in Figure 2 of the same Annual Report. The value I have used for the limiting ratio of the desired to the undesired signals is the one given by the dotted curve BD in Figure 1 of the Seventh Annual Report.

In making the calculations on the interference hetween stations, I have also assumed that satisfactory reception will he obtained, if objectionahle interference occurs less than 10 per cent of the time. The analysis made hy the Engineering Division of the Commission has proved very useful in estimating the percentage of time during which interference is ohjectionable between two signals. This ratio is different if the interference is caused hy a sky ray on a ground ray, or by a sky ray on another sky ray. In the case of two sky rays, the ratio should he ahout 4 db. (equivalent to 1.6 times) greater than in the case of the interference between a sky ray and a ground ray. The difference is due to the fact that the strength of the ground ray remains constant at any given location, while that of a sky ray is continually varying. I have also assumed in these calculations that the interfering signal was constant over the whole service area. Actually, the signal is generally greater in that part of the service area which is nearest to the interfering station. When the area is very large, an appreciable and sometimes large error may he introduced by this assumption, hut it will not affect the conclusion materially. Some diagrams showing coverage of many hundreds of thousands of square miles, must not he considered as accurate, they merely indicate that the coverage is very large.

Possible Coverage of a Few Fairly Spaced Stations

As an example for the study of the coverage possihle by several stations operating on the same frequency when they are spaced a fair distance apart, a channel in actual operation has been selected. The channel chosen is near the middle of the hroadcast band. It is the regional channel on 940 kc. The stations on this channel are: KOIN, located in Portland, Ore.; WDAY, in Fargo, N. D.; WAVE, in Louisville, Ky.; and WCSH, in Portland, Maine. Their relative location is shown in Exhibit IV. On the present method of operation, with the stations within ± 50 cycles of each other, the service area free from interference of each is shown hy the middle section of Exhibit V, and in Table III.

TABLE III.

Interference in the case of four fairly spaced stations on the same frequency.

Conductivity 5 x 10^{-14} Frequency 940 kc.

Station	Interfering station	Separation miles	Strength of interfering signal db.	Minimum signal free from interference dh.	Service Radius miles	Service Area Sq. miles
KOIN	WDAY	1,230	—40	—6	33	3,600
WDAY	WAVE	810	—30	+4	19	1,200
WAVE	WDAY	810	—30	+4	19	1,200
WCSH	WAVE	880	—32	+2	24	1,900

Possible Coverage of a Few Closely Spaced Stations

For the purpose of the discussion of the coverage possible with a few closely spaced stations operating on the same frequency, an arbitrary case has heen taken as an example. The selected locations of the stations in this case are shown in Exhibit VI. There are three stations, A, B, and D, having one kilowatt each, and a fourth smaller station, C, with half a kilowatt. On this Exhibit, the location of the stations of 940 kc is also given for purposes of comparison. The minimum spacing on the 940 kc channel is ahout 50 per cent greater than that hetween the one-kilowatt stations in the arhitrary case chosen. This arbitrary case was picked after considering a numher of regional channels in actual operation. While the separation is admittedly small compared with the standards advocated by the Commission, there are in existence a number of channels operating under somewhat similar conditions. The possihle areas free from interference around each station are shown in the right hand section of Exhibit V, and in Tahle IV.

TABLE IV.

Interference in the case of four closely spaced stations on the same frequency.

Conductivity 5 x 10^{-14} Frequency 1,000 kc.

Station	Power kw.	Interfering station	Separation miles	Signal free from interference dh.	Service Radius miles	Service Area sq. miles
A	1	B	550	10	14	600
		C	450	9		
B	1	C	400	10	14	600
		D	650	8		
C	0.5	B	400	10	12	500
D	1	B	650	8		
		C	480	9	15	800

The half-kilowatt station C has heen located to produce about the same degree of interference with the other stations as they produce on each other. Station C does not, therefore, increase appreciahly the mutual interference between the stations.

Possible Coverage of Several Stations of the Same Frequency

Exhibit V shows the relative service areas possihle in the case of two stations, of four fairly spaced stations, and of four closely spaced stations. The calculations assume that sufficient power is economically possible to make use of the full area free from interference. The reduction in the service area as the separation hetween the stations is decreased is very marked. From 9,000 square miles around each of the two stations in the first case, the service area falls to around 600 square miles around each station in the arhitrary case selected of four closely spaced stations. The total area which may he served without interference in the case of two stations 2,000 miles apart, is 18,000 square miles. The area covered hy all four stations on 940 kc. is 8,000 square miles, and the total area covered hy the four closely spaced stations in the arbitrary case is less than 2,000 square miles. It is surprising how large is the difference hetween these three cases, more especially hetween the 940 kc channel and the arbitrary case selected, since in these two cases the separations hetween the stations are not enormously different.

Coverage of Stations on a Single Channel by Modification of Their Mode of Operation

There are several ways in which stations on a single frequency may cooperate to increase their service areas. One of the simplest ways is to operate more closely in synchronism. In the Seventh Annual Report of the Commission, page 20, the Engineering Division suggested that the ratio of the desired to undesired signals need only be 10:1 when the synchronization was within ± 5 cycles, instead of 20:1 when the synchronization was within ± 50 cycles. When the carriers of the two signals were in perfect synchronism, the ratios could be still further reduced to 4:1. For the present calculations, I have assumed that these ratios are satisfactory, keeping in mind, however, that further experience may lead to changes in these standards.

Besides improved synchronism, there is the possibility of the stations protecting each other by using partially directive antennas. A station like WAVE, for instance, would permit a greater service area to WCSH, if it built a directional antenna to reduce the signal in the direction of WCSH. The interference from WAVE at WCSH would then occur at a greater distance from WCSH than if no directional antenna were used.

In making a comparison of the increase in service area possible by means of improvements in operation, I have taken a typical station from each of the three cases considered previously. These cases are: two stations 2,000 miles apart; four fairly spaced stations on the 940 kc channel; and four closely spaced stations in the arbitrary case.

The combination of improved synchronization and directional antennas allows of many possibilities. It would involve more careful study than I have given to the cases under consideration to find what combination was the most effective and the most economical. As a guide, I have calculated the improvement possible with some of these combinations arbitrarily chosen, on the assumption that these improvements could be installed without raising other difficulties.

Increases in Service Area

These increases in service area possible under different conditions of operation are shown in Exhibit VII and Table V. In the case of the two stations 2,000 miles apart, the change from operation within ± 50 cycles to within ± 5 cycles brings the sky ray into service with a corresponding enormous increase in the possible service area from 9,000 square miles to some 120,000 square miles. Synchronous operation increases this area still further.

TABLE V.

Possible increase in coverage of stations on the same frequency by modification of their mode of operation.

Conductivity 5 x 10^{-14} Frequency 1,000 kc.

A. Two 1 kw. stations 2000 miles apart.

Types of operation	Minimum signal free from interference. db.	Service Radius miles	Service Area sq. miles
± 50 cycles	−17	55	9000
± 5 cycles	−19	200	120,000
Synchronism	−27	....	....

B. Four fairly spaced stations (WCSH)

Type of operation	Minimum signal free from interference. db.	Service Radius miles	Service Area sq. miles
± 50 cycles	+2	24	1900
± 5 cycles	−4	30	2400
Synchronism	−12	44	6000
± 5 cycles with 7 db. directional	−11	42	5500
Synchronism with 7 db. directional	−19	200	120,000

C. Four closely spaced stations (Station D)

Type of operation	Minimum signal free from interference. db.	Service Radius miles	Service Area sq. miles
± 50 cycles	9	15	800
± 5 cycles	3	20	1300
Synchronism	−5	31	3000

In the arbitrary case of the closely spaced stations, improving synchronization still does not allow the sky ray to be of use to provide service. The service area of about 800 square miles available when the synchronization is within ± 50 cycles, is increased to only 3,000 square miles with perfect synchronism. Major improvements by the use of directional antennas are almost impossible, for it would be difficult to build a directional antenna at any one of the stations to protect a second without damaging the service area of the third or fourth. Directional antennas may produce minor improvements that may be worth while, but no great increase in service area can reasonably be expected for all the stations.

Four Stations

In the case of the four fairly spaced stations on 940 kc., I have selected WCSH as typical of this channel. Operation within ± 5 cycles increases the service area of this station from 1900 square miles to 3700 square miles, and synchronous operation increases it still further to 7400 square miles. If a directional antenna is installed at WAVE, so that the interfering signal is reduced by slightly more than one-half, compared with the average signal transmitted in other directions, and the stations are operated within ± 5 cycles, the possible service area will be roughly equal to the service area with synchronous operation but without directional effects. In none of these cases, however, does the sky ray come into service. As a source of service, it is wasted. It can become useful, however, if synchronous operation is combined with the directional effects. The service area would then be enormously increased.

These increases in service area depend, of course, on the stations having sufficient power to make use of gains permitted by improved operation. In the present state of the art, it is difficult to obtain perfect synchronization, but there is no reason to assume that future developments will not permit such operation to be applied economically.

In suggesting directional antennas, I have no intention of advocating them for all cases. Although I was the first to build and have approved by the Commission a directional antenna to protect one broadcast station from another, I think that there are definite limitations in their application, and I would like to take this opportunity to list broadly the cases where, in my opinion, they are useful, and the cases where they may appear as an ideal solution to a particular problem, but may lead eventually to difficulties.

Directional Antennas

The principal objection to the use of directional antennas is that they limit future changes in allocation. For instance, turning to Exhibit VI, if a station were located at P, halfway between WDAY and WAVE, in order to prevent interference with either of these two stations, a directional pattern approximating a figure eight would have to be used, with the zeros in the directions of WDAY and WAVE. Such a station would effectively prevent any appreciable increase in the service areas of WDAY and WAVE by improved operation, such as have been discussed above. Station P would also tend to freeze the allocation of stations of the 940 kc. channel to the present arrangement, for any major changes, however desirable they might seem, would be likely to involve radical changes in the antenna, and such changes might make the location and even the existence of the station undesirable. This station would also prohibit the erection of a new station in the direction of Southwestern New Mexico, except at a great distance, because in that direction the interfering signal from P would be very large. Against these disadvantages would have to be balanced the advantage of the service provided around the Station P. The service area would be very limited, however, because of the strong interference from WDAY and WAVE, and that service, moreover, would be weak in two directions. While a directional antenna would appear ideal for a station at P, it would produce disadvantages which might not be balanced by the special service provided around P.

Generally speaking, it is dangerous to permit the erection of a directional antenna which suppresses the signal in one or more directions fairly completely, because it tends to freeze the allocation of stations on that particular frequency. There are some special cases where a substantial decrease in signal in some particular direction is desirable. For instance, in the case of WFLA in Clearwater, Florida, the antenna substantially prevents transmission into the rest of the United States, and pushes the signal toward the south of Florida. This station serves Florida without causing appreciable interference in the rest of the country. Even in this case, however, it was found desirable to allow a small signal in the direction of suppression in order to serve a town a few miles away from the station in that particular direction.

Where directional antennas are particularly valuable are in such cases as have been discussed above, in which it is possible to increase the coverage of stations spaced a considerable distance apart by giving to each other partial protection from interference.

Another valuable application of directional antennas is to provide a sufficiently loud signal in densely populated areas where the noise level is high, provided, of course, that the service to the rural community is not unduly reduced.

Directional antennas may be used with good effect on channels where stations are so close that improvements in service can hardly be expected through technical developments such as improved synchronization or better allocation. The stations on these channels are inherently limited to provide only local service. There does not seem to be any harm in building additional stations fitted with directional antennas, and locating them in such a way that the service provided to the cities served by the other stations on the same frequency is not materially impaired. It is often comparatively simple to achieve such results because the service area of the stations is so limited.

Generally speaking, we may conclude that a directional antenna is desirable, if it improves service without prohibiting developments either in allocation or in better conditions of operation. It is undesirable in cases where its erection would reduce flexibility of allocation and improvements. On those channels where stations are located close together, much of this flexibility is already lost. There may therefore be comparatively little harm in reducing it still further by introducing directional antennas.

There have been many applications of directional antennas to solve certain problems of individual stations. Their application by stations on the same frequency to improve each other's service areas is not yet common, yet directional antennas could prove to be a valuable weapon to increase these service areas. A limiting factor in the use of directional antennas is the location of the station relative to the town being served. The town should not lie in the direction of minimum signal. In granting a license it may, therefore, be worth while for the Commission to consider carefully the location of the new station relative to the nearest town, and to the other stations, in case it should be found at some later date desirable to give them greater protection because of some new technique or other reason.

Interference With Adjacent Channels

As explained in the introduction, it is more difficult to make any broad generalization on the problem of the interference between stations on adjacent channels than it is between stations on the same channel, because, in the case of the interference of stations on adjacent channels, the selectivity of the receiver is one of the most important factors. There is little available information on the selectivity of receivers in general use.

A single case will be taken as an example of the problem of interference between adjacent channels. I have taken for this example the case already used of the stations operating on 940 kc. This case is comparatively simple because the interference created with adjacent channels is unusually low, and is negligible, to all practical purposes, on all channels more than 10 kc distant. The fact that the case selected as an example is unusually simple does not change the general principle involved.

Interference

The interference produced is depicted in Exhibit VIII and Table VI. The interference caused by the stations on 930 and 950 kc with each other was calculated, giving the maximum possible service area under normal conditions of operation. This area is shown in Exhibit VIII by the closely shaded sections. The interference caused with these stations by the stations on 940 kc was also calculated. This interference also limits the service area of the station. This area is shown in the same exhibit by the lightly shaded sections. It is seen that in no case is the interference by the stations on 940 kc. in the service area of the station on adjacent channels greater than the interference of these stations with each other. Under present conditions of operation, therefore, the stations on 940 kc. do not interfere with any stations on adjacent channels.

(See Exhibit VIII)

TABLE VI.

Interference on adjacent channels to 940 kc.

A. Interference from station on the same frequency.

Station			Nearest station on same frequency			Service	
Call Letters	Power Kw.	Frequency	Call Letters	Separation Miles	Strength of signal free from interference	Radius Miles	Area Sq. Miles
WDBJ	1	930 kc.	WBRC	430	12	12	500
KROW	1	930 kc.	KMA	1140	−4	30	2900
KMA	1	930 kc.	WBRC	660	7	16	900
WBRC	1	930 kc.	WDBJ	430	12	12	500
WRC	0.5	950 kc.	KMBC	900	1	18	1100
KFWB	1	950 kc.	KMBC	1200	−5	31	3000
KMBC	1	950 kc.	WRC	900	−2	27	2300

B. Interference from stations on 940 kc.

Station	Nearest station on 940 kc.	Separation miles	Strength of signal free from interference	Service Radius miles	Service Area Sq. miles
WDBJ	WAVE	320	−6	33	3,600
KROW	KOIN	540	−10	40	5,000
KMA	WDAY	420	−7	35	4,000
WBRC	WAVE	340	−6	33	3,600
WRC	WCSH	480	−9	38	4,600
KFWB	KOIN	830	−17	55	9,500
KMBC	WAVE	470	−8	36	4,000

Ideally, the best allocation would be one in which the stations on adjacent channels produced exactly the same degree of interference as the stations on the same channel. From an allocation point of view, therefore, the lightly shaded areas in Exhibit VIII represents a waste. It would be possible, and theoretically beneficial, to increase the power of all the stations on 940 kc uniformly by 6 db (four times) without causing interference to adjacent channels. At this point, the interference caused by WAVE on 940 kc with KMBC on 950 kc would be effectively equal to the interference by the other stations on 950 kc. At the same time, the interference by KOIN on 940 kc with KROW on 930 kc would also be effectively equal to the interference by other stations on 930 kc. Such an increase in power would reduce the lightly shaded areas on all the stations shown in Exhibit VIII, and thus eliminate some of the wasted facilities of allocation. In the case of KMBC and KROW, these wasted areas would be reduced to zero.

If it were possible to use a partial directional effect to protect KROW from KOIN and KMBC from WAVE, to the extent of 4 db (which corresponds to reducing the signals in those particular directions by one-third, relatively to the average signal transmitted in the other directions) it would be possible to permit a horizontal increase of power of all the stations on 940 kc by as much as 10 db (which corresponds to increasing the power 10 times), without

interfering with any of the stations on adjacent channels to an extent greater than they already interfere with themselves.

Conclusion

There are many possibilities available with the development of the art which would allow considerable increase in the service areas of certain stations, an increase which in some cases may lead to the use of the sky ray for service. When the sky ray can be used, the possible service area is tremendously increased. The full use of the area free from interference can only be made, if the power is sufficient to produce a reasonable signal strength at the boundary of this area.

When the separation between stations is small, the advantages possible by improved operations are also small. This is clearly shown in Exhibit VII. Reducing separation will therefore tend to limit the possibilities of improvement with the development of the art, and will indirectly tend to retard them. Moreover, when the stations are close together, the service area becomes very small. Only local service can be provided, and practically no rural area can be covered. By far the greatest part of the signal goes to create interference instead of service. The sky ray, with its astonishingly low attenuation at broadcast frequencies, is completely wasted. From a purely engineering point of view, without giving any consideration to the economic problem, such local service would be provided most satisfactorily by broadcasting at such high frequencies that no sky ray returned to the ground to create interference with other stations. If the only economic consideration was the extra cost of the receivers, such a high frequency broadcast service would not seem, off-hand, to be outside the realm of possibility.

If, however, the broadcast band is retained as it exists at present, when there are many stations on a single frequency, their usefulness will be limited to serving densely populated areas where the interfering noise level is high. They should, therefore, produce a sufficient signal in such areas to overcome this noise. On the other hand, there is no use in producing a signal which is unnecessarily high, for the service area is not increased by allowing all the stations a proportional increase in their power.

A happy compromise may be made for the purpose of providing local service to rural areas of a reasonable size, with a number of well spaced stations on the same frequency. In this case, at the limit of their service area, where interference begins to become objectionable, the signal should be well above, but not excessively above, the probable or possible noise level. These stations, by cooperating with each other and protecting each others' service areas (with directional antennas, better synchronization of their frequencies, etc.) may adjust their operations so that the area within which they do not interfere with each other is greatly increased.

Interference Problem

On the problem of interference with adjacent channels, the ideal conditions occur when the interference to the service area of a station by stations on adjacent channels is effectively equal to the interference by the nearest station on the same frequency. To the extent that stations on adjacent channels do not create interference with stations on the same channel, there is a theoretical waste of allocation facilities. On the sole basis of interference, therefore, all stations on one channel could have their power increased or decreased until the interference they cause with one or more of the adjacent channels was effectively equal to the interference caused by other stations. In the example considered of the 940-Kc. channel (see Exhibit VIII), it is possible, with partial directional effects, to increase the power horizontally ten times, without causing more interference on adjacent channels than exists already. We have also seen that this power could be effectively used by these stations and their service areas considerably increased with suitable operation and cooperation among themselves.

It seems a pity that regional stations do not make more use of the low attenuation of the sky ray at broadcast frequencies, for, if this ray could be used, the service area of the stations would be enormously increased and real local service provided to rural areas.

In final conclusion, I would like to urge the commission that, in granting licenses, it give careful consideration to the location of stations, not only relative to other stations, but relative to the nearest town, so that better synchronization, directional effects, etc., may be used when wanted to the best possible advantage. Our present knowledge and future developments (to the extent that we can forecast them) should be allowed full opportunity and as much latitude as possible so that our total knowledge may be useable to provide the best service possible.

I make a special plea that future engineering developments and the progress of broadcasting be not endangered by freezing the space available on the basis of our present knowledge and technical skill. There should be room, much room for evolution.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

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IN THIS ISSUE

RECOMMENDS WMFF BE GIVEN UNLIMITED TIME

Broadcasting station WMFF, Plattsburg, N. Y., operating on a frequency of 1310 kilocycles, 250 watts daytime, applied to the Federal Communications Commission that it be allowed to operate unlimited time with 100 watts at night.

Examiner R. H. Hyde, in Report No. I-294, recommended that the application be granted. He found that there is a need for nighttime service in the area covered by the station. He states further that the proposed nighttime operation "would not materially change the present interference conditions on the frequency of 1310 kilocycles."

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

Wellington Foundation, Inc., Philadelphia, Pa. (2-2492, Form C-1)
American Airlines, Inc., Chicago, Ill. (2-2493, Form A-1)
Great Northern Gold Mines, Inc., Pittsburgh, Pa. (2-2494, Form A-1)
Cannon Shoe Company, Baltimore, Md. (2-2495, Form A-2)
New Britain Machine Company, New Britain, Conn. (2-2496, Form A-2)
Best Drug Stores, Inc., Los Angeles, Calif. (2-2497, Form A-1)
Tampax, Inc., New York City. (2-2498, Form A-1)
L. F. Serrick, Inc., Defiance, Ohio. (2-2499, Form A-2)
Pearson Company, Inc., Indianapolis, Ind. (2-2500, Form A-2)
State Loan Company, Mount Rainier, Md. (2-2501, Form A-2)
Equity Fund, Inc., Seattle, Wash. (2-2502, Form A-1)
American Carrier-Call Corp., New York City. (2-2503, Form A-1)
Hilton-Davis Chemical Co., Cincinnati, Ohio. (2-2505, Form A-2)
Mock, Judson, Voehringer Co., Newark, N. J. (2-2506, Form A-2)
Harris-Seybold-Potter Co., Cleveland, Ohio. (2-2507, Form A-2)
Loomis-Sayles Second Fund, Inc., Boston, Mass. (2-2508, Form A-1)
Menasco Manufacturing Co., Los Angeles, Calif. (2-2510, Form A-1)
Huttig Sash & Door Co., St. Louis, Mo. (2-2511, Form A-2)
Fuller Manufacturing Co., Kalamazoo, Mich. (2-2513, Form A-1)
Bath Iron Works Corporation, Bath, Me. (2-2514, Form A-2)
Eason Oil Company, Enid, Okla. (2-2515, Form A-2)
Sterling Aluminum Products, Inc., St. Louis, Mo. (2-2516, Form A-2)
Union Sugar Company, San Francisco, Calif. (2-2517, Form A-2)
Lexington Foundation, Inc., New York City. (2-2518, Form C-1)
Enterprise Manufacturing Company, Augusta, Ga. (2-2519, Form E-1)
Beech Aircraft Corporation, Wichita, Kans. (2-2520, Form A-1)
J. W. Carter Company, Nashville, Tenn. (2-2522, Form A-2)
Salt Dome Oil Corporation, Houston, Tex. (2-2523, Form A-1)
Frederick Pierce et al., Philadelphia. (2-2524, Form F-1)

INCREASED DAY POWER RECOMMENDED FOR KSO

Broadcasting station KSO, Des Moines, Iowa, applied to the Federal Communications Commission to increase its day power from 1,000 to 2,500 watts. The station operates unlimited time on 1430 kilocycles.

Examiner Melvin H. Dalberg, in Report No. I-299, recommends that the application be granted. The Examiner states that with the increased power the station not only would expand its service area but would supply a stronger signal in the area now served. He states also that granting of the application would not cause mutual objectionable interference with respect to any existing or proposed stations and it would be in the public interest.

POLITICAL BROADCASTS

John B. Reynolds, acting secretary of the Federal Communications Commission, has sent identical letters to Mrs. Archibald E. Stevenson, general counsel of the National Civic Federation of New York City, and Mrs. Ralph M. Easley, chairman of the Committee on National Defense through Patriotic Education, Manhattan Chapter, National Society of the Daughters of the American Revolution, at Rye, N. Y., in connection with the alleged refusal of Station WCAE, Pittsburgh, to broadcast a talk of Earl Browder. Mr. Reynolds says:

Permit me to acknowledge receipt of your letter of September 14, 1936, addressed to the Chairman regarding a newspaper report concerning the Commission's investigation of the alleged refusal of Station WCAE, Pittsburgh, to broadcast the August 28th address of Earl Browder, Communist candidate for President.

In reply your attention is invited to Section 315 of the Communications Act of 1934 (copy enclosed) providing among other things that if any licensee shall permit any person who is a legally qualified candidate for any public office to use a broadcasting station, he shall afford equal opportunities to all other such candidates for that office in the use of such broadcasting station and that the Commission shall make rules and regulations to carry this provision into effect.

Upon receipt of a complaint against Station WCAE filed by William Z. Foster, Chairman, National Campaign Committee, Communist Party, the Commission directed both the complainant and the station licensee to submit statements under oath setting forth all facts in order that the Commission might be fully informed in the matter for the purpose of performing its duty under Section 315 of the Communications Act of 1934.

In your letter you state that other offenses are being committed, making particular reference to Section 6, Title 18, of the United States Criminal Code. Your courtesy in offering voluntary legal assistance is appreciated. This Commission, however, has no jurisdiction over the enforcement of the provisions of that section of the law. It is suggested, therefore, that you may wish to present full information concerning any evidence of violations of the United States Criminal Code to the United States District Attorney in the appropriate district, who may prosecute delinquents for crimes and offenses cognizable under the authority of the United States.

RECOMMENDS DISMISSAL OF CASE

The Duluth Broadcasting Company applied to the Federal Communications Commission for a construction permit to erect a new

broadcasting station at Duluth, Minn., to use 1200 kilocycles, 100 watts, and unlimited time on the air.

Examiner P. W. Seward, in Report No. I-297, recommended that the application be dismissed with prejudice for want of prosecution. The Examiner states that at the hearing "the applicant did not appear nor did any person representing the applicant appear in support of said application, whereupon the attorney representing the Commission moved that the case be dismissed for want of prosecution."

FREQUENCY AND POWER CHANGE RECOMMENDED FOR KUJ

Broadcasting station KUJ, Walla Walla, Wash., applied to the Federal Communications Commission to change its frequency from 1370 to 1250 kilocycles, and to increase its power from 100 to 250 watts. The station asks to continue its unlimited time operation.

Examiner Robert L. Irwin, in Report No. I-300, recommends that the application be granted. He found that the station operates the only primary service in that area and that there is need for such improvement as the use of the frequency applied for. The proposed change would not cause interference, the Examiner states, and it would be in the public interest.

RECOMMENDS DISMISSAL APPLICATION TO TRANSMIT PROGRAMS TO FOREIGN COUNTRIES

The Ogdensburg Advance Company, Inc., of Ogdensburg, N. Y., applied to the Federal Communications Commission for authority to transmit programs to foreign countries.

Examiner George H. Hill, in Report No. I-298, has recommended that the application be dismissed with prejudice. The applicant filed an application for a permit to locate, maintain, or use a studio or apparatus for broadcasts of programs to be transmitted or delivered to foreign radio stations. The applicant planned to construct and maintain a studio at Ogdensburg at which programs would be produced and transmitted by remote control to CFLC located at Prescott, Ontario, Canada.

It appears from the opinion that the Canadian Radio Commission filed a protest whereat the applicant withdrew its application. The Examiner states that "in view of this request and since a respondent appeared and participated in the hearing of this matter, the Examiner is of the opinion that the application should be dismissed with prejudice."

DISMISSAL WITH PREJUDICE RECOMMENDED

The Magnolia Broadcasting Company applied to the Federal Communications Commission for a construction permit for a new broadcasting station to be erected at Jackson, Miss., to use 1420 kilocycles, 100 watts power, and unlimited time.

Examiner P. W. Seward, in Report No. I-296, recommended that the "application be dismissed with prejudice for want of prosecution." The Examiner states that the applicant appeared by counsel and presented a motion for continuance, predicated upon the withdrawal of one of the parties constituting the applicant partnership. Opposition to the granting of this motion was offered by other parties to the hearing, predicated on the fact that at least one respondent had brought two witnesses to Washington from Jackson for the purpose of the hearing.

RECOMMENDATION TO DENY CALIFORNIA STATION

A. Tornek, operating under the trade name of the Metro Broadcasting Company, applied to the Federal Communications Commission for a construction permit to erect a new station at Los Angeles, Calif., to use 820 kilocycles, 250 watts power, and using limited hours with WHAS.

Examiner P. W. Seward, in Report No. I-295, recommends that "the application of A. Tornek, operating under the assumed name of Metro Broadcasting Company, for a construction permit, be dismissed with prejudice for the reasons assigned," or that the application for the construction permit be denied.

The examiner states that the applicant "has not shown by evidence adduced at any one or all of the three hearings on this application that she is a citizen of the United States, as required by section 310 of the Communications Act of 1934, or that she is legally, technically, financially, or otherwise qualified to construct or operate the proposed station." The Examiner found that the operation of the proposed station "would cause objectionable interference to existing stations within the good service area of such stations."

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2938. Pike-Hansen, Inc., 1113 North Franklin St., **Chicago,** engaged in the sale of men's clothing, is respondent in a complaint charging unfair methods of competition in violation of Section 5 of the Federal Trade Commission Act.

The respondent corporation allegedly represents that it will make and deliver to purchasers tailor-made garments fashioned from material of the color, weave and quality selected from samples exhibited by its salesmen, who number about 500 in various parts of the country. According to the complaint, the delivered garments, in many instances, are not tailor-made, as that term is understood by the purchasing public, and do not fit properly, either because the salesmen lack skill and experience in taking measurements or because the respondent's workmen are not skilled in making the garments.

In some cases, the complaint alleges, the respondent corporation delivers a garment made from a material other than that selected by the customer, and of inferior quality. Salesmen are said to represent that they will make personal delivery of garments so as to afford customers an opportunity to inspect their purchases, but, according to the complaint, the merchandise is shipped by parcel post, cash on delivery for the balance of the purchase price, and no inspection is permitted.

No. 2940. Alleging unfair competition in the sale of spirituous beverages a complaint has been issued against **E. O. Jackson Distilling Co.,** 8440 South Chicago Ave., **Chicago.**

Through use of the word "Distilling" in its corporate name, in advertising matter and on labels, the respondent company is said to represent that it manufactures through the process of distillation the whiskies, gins and other liquors it sells in interstate commerce, when, the complaint charges, it is not a distiller and does not own or operate a plant where its products are distilled, but is engaged in the business of rectifying, blending and bottling liquors.

To promote the sale of its "Cotton Club" whiskey, the company allegedly represents that this brand is "Kentucky's Best," of high quality, and was distilled at Distillery No. 17, 5th District of Kentucky, which, between 1903 and 1935, was favorably known by reason of the production there of high grade whiskey.

According to the complaint, the respondent company leased Distillery No. 17 from July 1, 1935, to January 1, 1936, and there produced at high proof by the "charred chip process" 5000 barrels of whiskey of a quality inferior to a good grade of Kentucky Bourbon and not of the high quality indicated by the claims made for "Cotton Club" brand.

No. 2941. A complaint alleging collusive bidding and fixing and maintenance of uniform prices, in violation of Section 5 of the Federal Trade Commission Act, has been issued by that Commission against 9 companies engaged in the manufacture and sale of turbine-generators and condensers. **The Heat Exchange Institute,** a trade association with headquarters in **New York,** also is a respondent. The respondent companies are:

General Electric Company, Schenectady, N. Y., manufacturing turbine-generators; **Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.; Allis-Chalmers Manufacturing Company, Milwaukee;** and **Elliott Company, Jeannette, Pa.,** manufacturing both turbine-generators and condensers; **Worthington Pump & Machinery Corporation, Harrison, N. J.; Ingersoll-Rand Company; Jersey City, N. J.; Foster-Wheeler Corporation, New York; C. H. Wheeler Manufacturing Company, Philadelphia,** and **Ross Heater & Manufacturing Company, Buffalo,** dealing only in condensers.

The respondents, who allegedly entered into their price-fixing agreement in 1933, are said to constitute a group so powerful that they are able to control the turbine-generator and condenser business in the United States. The complaint sets out that the principal purchasers of these products are public utilities, either publicly or privately owned, and municipal, state and federal governments.

For the purpose of eliminating competition among themselves, the complaint charges, the respondents, under their agreement, fix and maintain uniform prices as well as uniform performance guarantees for their products; adhere to pricing sheets compiled

by one of their number, although such pricing sheets bear no relation to the individual costs of the respective respondents in the manufacture of their products; submit identical bids, not only for turbine-generators and condensers. but for the "extras" necessary for their installation, and take disciplinary action against any of their group who fail to abide by the prices in accordance with their agreement.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 2762. The **American Mint Corporation,** 114 East 13th St., **New York City,** and **Mack R. Keshen** and **Oswald Freund** have been ordered to discontinue selling candy so packed and assembled that sales to ultimate purchasers are made by means of a lottery, gaming device or gift enterprise.

Under the order, the respondents also are prohibited from packing in the same assortment pieces of candy of uniform shape and size, some of which have coins concealed within them, and from furnishing dealers with display cards bearing statements informing purchasers of that fact.

No. 2923. M. & J. Becker, Inc., 2961 Atlantic Ave., **Brooklyn,** has been ordered to discontinue representing, directly or by implication, that certain of the hats and caps it sells and which are manufactured from old, discarded and second-hand felts, are made from new and unused felts.

It is the practice of the respondent corporation, according to the findings, to sell to wholesalers and retailers baseball caps made from old and discarded felts which have been cleaned, shaped and refitted with new bands and trimmings, but without disclosing to purchasers that the caps have been worn previously, renovated and made over.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, October 19

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Tribune Printing Co., Jefferson City, Mo.—C. P., **1130 kc.,** 100 watts, daytime.

Tuesday, October 20

HEARING BEFORE AN EXAMINER

(Broadcast)

KFPM—Voice of Greenville, Greenville, Tex.—Renewal of license, **1310 kc.,** 15 watts, specified hours.

KFPM—Dave Ablowich, tr/as The New Furniture Co., Greenville, Tex.—Voluntary assignment of license, **1310 kc.,** 15 watts, specified hours.

KFPM—Voice of Greenville, Greenville, Tex.—C. P., **1420 kc.,** 100 watts, daytime. Present assignment: **1310 kc.,** 15 watts, specified hours.

NEW—WREC, Inc., Youngstown, Ohio.—C. P., **890 kc.,** 1 KW, unlimited time.

Wednesday, October 21

HEARING BEFORE AN EXAMINER

(Broadcast)

WHBI—May Radio Broadcast Corp., Newark, N. J.—Modification of license, **1250 kc.,** 1 KW, 5 KW LS, shares with WMEW. Present assignment: **1280 kc.,** 1 KW, 2½ KW LS, shares with WMEW.

WHAT—Independence Broadcasting Co., Inc., Philadelphia, Pa.—C. P., **1220 kc.,** 1 KW, unlimited time. Present assignment: **1310 kc.,** 100 watts, shares with WTEL.

NEW—Orrin P. Kilbourn, Albany, N. Y.—C. P., **1240 kc.,** 250 watts, unlimited time.

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Modification of license, **1280 kc.,** 1 KW, shares with WTNJ and WCAM. Present assignment: **1280 kc.,** 500 watts, shares with WTNJ and WCAM.

Thursday, October 22

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-223

NEW—Wilbur H. Havens, Chas. H. Woodward, Calomb B. Jones, Wilfred H. Wood, d/b as Petersburg Broadcasting Co., Petersburg, Va.—C. P., **880 kc.,** 500 watts, daytime (requests facilities of WPHR).

WPHR—WLBG, Inc., Petersburg, Va.—Renewal of license, **880 kc.,** 500 watts, daytime.

WPHR—WLBG, Inc., Petersburg, Va.—C. P., **880 kc.,** 500 watts, daytime (requests to move to Richmond, Va.).

Examiner's Report No. I-229

WHB—WHB Broadcasting Co., Kansas City, Mo.—C. P., **1120 kc.,** 500 watts, 1 KW LS, unlimited time. Present assignment: **860 kc.,** 1 KW, daytime.

Examiner's Report No. I-233

KFOX—Nichols & Warinner, Inc., Long Beach, Calif.—C. P., **1250 kc.,** 1 KW, 5 KW LS, unlimited time. Present assignment: **1250 kc.,** 1 KW, unlimited time.

Examiner's Report No. I-234

NEW—B. A. Thompson, Santa Cruz, Calif.—C. P., **1310 kc.,** 100 watts, 250 watts LS, unlimited time.

NEW—Wm. B. Smullin, Sacramento, Calif.—C. P., **1310 kc.,** 100 watts, 250 watts LS, unlimited time.

NEW—Howard N. Mitchell, Sacramento, Calif.—C. P., **1310 kc.,** 100 watts, unlimited time.

NEW—The Press Democrat Pub. Co., Santa Rosa, Calif.—C. P., **1310 kc.,** 250 watts, daytime.

Examiner's Report No. I-222

WMBG—Havens & Martin, Inc., Richmond, Va.—C. P., **1350 kc.,** 500 watts, unlimited time.

NEW—Century Broadcasting Co., Richmond, Va.—C. P., **1370 kc.,** 100 watts, daytime.

Examiner's Report No. I-285

NEW—The Times Dispatch Publishing Co., Inc., Richmond, Va.—C. P., **1500 kc.,** 100 watts, unlimited time.

Friday, October 23

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Walker Jamar, Duluth, Minn.—C. P., **1200 kc.,** 100 watts, unlimited time.

APPLICATIONS GRANTED

WLBZ—Maine Broadcasting Co., Inc., Bangor, Maine—Granted C. P. to install new transmitter.

WKOK—Sunbury Broadcasting Corp., Sunbury, Pa.—Granted C. P. to install new equipment.

WSAJ—Grove City College, Grove City, Pa.—Granted C. P. to change equipment.

KFRO—Voice of Longview, Longview, Tex.—Granted C. P. to make changes in equipment and increase day power from 100 to 250 watts. (**1370 kc.**)

KFRU—KFRU, Inc., Columbia, Mo.—Granted C. P. to install new transmitter.

KMMJ—KMMJ, Inc., Clay Center, Neb.—Granted C. P. to install new transmitter.

WGL—Westinghouse E and M Co., Fort Wayne, Ind.—Granted C. P. to install new transmitter.

KOMO—Fisher's Blend Station, Inc., Seattle, Wash.—Granted C. P. to make changes in equipment, move present licensed auxiliary transmitter to 28th Ave. S. W., and Fla. Sts., West Waterway, Seattle.

KGGM—New Mexico Broadcasting Co., Albuquerque, N. Mex.—Granted C. P. to move transmitter locally; install new equipment and vertical radiator; increase night power from 250 watts to 1 KW, and day power from 500 watts to 1 KW.

KLS—S. W. Warner & E. N. Warner, d/b as Warner Bros., Oakland, Cal.—Granted C. P. to install new transmitter.

KFAC—Los Angeles Broadcasting Co., Inc., Los Angeles, Cal.—Granted C. P. to install new transmitter.

KFVD—Standard Broadcasting Co., Los Angeles, Cal.—Granted C. P. to install new transmitter.

WNLC—Thames Broadcasting Corp., New London, Conn.—Granted license to cover C. P.; **1500 kc.,** 100 watts, daytime.

WCAO—Monumental Radio Co., Baltimore, Md.—Granted license to cover C. P. for auxiliary transmitter; transmitter move locally; **600 kc.,** 250 watts for emergency purposes only.

W3XEX—WTAR Radio Corp., Norfolk, Va.—Granted license to cover C. P. and modification, new high frequency broadcast, experimental; frequencies **31600, 35600, 38600** and **41000 kc.;** 50 watts. Also granted modification of C. P. to change site of transmitter to Virginia Beach Boulevard, 1.7 miles from Norfolk, Va.

WMMN—A. M. Rowe, Fairmont, W. Va.—Granted license to cover C. P. as modified authorizing changes in equipment, increase in power 500 watts night, 1 KW day, **890 kc.,** unlimited and move transmitter.

WDBJ—Times World Corp., Roanoke, Va.—Granted license to cover C. P. which authorized installation of new equipment, increase in power to 1 KW night, 5 KW day, unlimited, **930 kc.**

WDBJ—Times World Corp., Roanoke, Va.—Granted authority to determine operating power by direct measurement of antenna power.

KGFF—KGFF Broadcasting Co., Inc., Shawnee, Okla.—Granted license to cover C. P. as modified for new equipment, increase in power to 100 watts night, 250 watts day, **1420 kc.,** unlimited and move transmitter.

WSIX—Jack M. Draughon, Louis R. Draughon, d/b as 638 Tire and Vulcanizing Co., Nashville, Tenn.—Granted license to cover C. P. as modified for removal of studio and transmitter, install new antenna.

KANS—Charles G. Theis, Wichita, Kans.—Granted license to cover C. P. for new station; **1210 kc.,** 100 watts, unlimited.

WQDM—E. J. Regan & F. Arthur Bostwick, d/b as Regan & Bostwick, St. Albans, Vt.—Granted modification of C. P. to move transmitter and studio locally, change frequency, install new equipment, increase power, change specified hours, **1390 kc.,** 1 KW night and day, S. H. (subject to Rules 131, 132 and 139).

KNX—Western Broadcast Co., Los Angeles, Cal.—Granted modification of license to change name from Western Broadcast Co. to Columbia Broadcasting System of Calif., Inc.

WJBC—Arthur Malcolm McGregor & Dorothy Charlotte McGregor, a partnership, Bloomington, Ill.—Granted authority to make changes in automatic frequency control equipment.

WPAD—Paducah Broadcasting Co., Inc., Paducah, Ky.—Granted authority to make changes in automatic frequency control.

World Broadcasting System, Inc., New York City, N. Y.—Granted extension of authority to transmit programs from World B/C System, Inc., to the Northern Electric Co., Ltd., of the Dominion of Canada, in accordance with provisions of Section 325 of the Act.

WNYC—City of New York, Dept. of Plant & Structures, New York City, N. Y.—Granted extension of temporary auxiliary license pending final action on license for main transmitter; **810 kc.,** 1 KW day and night, emergency purposes only.

WDBO—Orlando Broadcasting Co., Inc., Orlando, Fla.—Granted modification of C. P. for authority to install new equipment.

NEW—Radio Air Service Corp., Portable-Mobile, Cleveland, Ohio—Granted C. P. for new experimental relay broadcast station; **frequencies 38900, 39100, 39300** and **39500 kc.** on an experimental basis; 100 watts.

NEW—The Crosley Radio Corp., Portable-Mobile, Cincinnati, Ohio (2 Applications)—Granted C. P. for new experimental relay broadcast station; frequencies **31100, 37600** and **40600 kc.;** 2 watts.

WGAL—WGAL, Inc., Lancaster, Pa.—Granted C. P. for authority to move transmitter locally, make changes in frequency control equipment and erect approved type of antenna system.

KOVC—George B. Bairey, Valley City, No. Dak.—Granted modification of C. P. approving transmitter and studio locations and installation of new equipment and vertical radiator.

KABC—Alamo Broadcasting Co., Inc., San Antonio, Tex.—Granted C. P. to install new transmitter.

KFEQ—KFEQ, Inc., St. Joseph, Mo.—Granted amended C. P. for authority to make changes in equipment.

KORE—Frank L. Hill & C. G. Phillips, d/b as Eugene Broadcast Station, Eugene, Ore.—Granted C. P. approving transmitter and studio sites, changes in equipment and vertical radiator.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted license to cover C. P. to install new transmitter.

WBNX—Standard Cahill Co., Inc., New York City, N. Y.—Granted license to cover C. P. and modifications thereof, authorizing new equipment, move transmitter and approval of directional antenna, 1 KW day and night; **1350 kc.,** S-WAWZ.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted license to cover C. P. authorizing equipment changes, increase in power and change in name; **1310 kc.,** 100 watts night, 250 watts day, Simul-D WLBC, share night WLBC.

WEW—The St. Louis University, St. Louis, Mo.—Granted license to cover C. P. authorizing changes in equipment.

WFIL—WFIL Broadcasting Co., Philadelphia, Pa.—Granted modification of C. P. approving transmitter site and extension of commencement date from 7-12-36 to 30 days after grant and completion date to 180 days hereafter.

WJBK—James F. Hopkins, Inc., Detroit, Mich.—Granted modification of C. P. authorizing installation of new equipment and extension of commencement date to 60 days after grant and completion date to 180 days hereafter.

WROK—York Broadcasting Co., York, Pa.—Granted authority to make changes in automatic frequency control equipment.

WDEL—WDEL, Inc., Wilmington, Del.—Granted authority to make changes in automatic frequency control.

WAZL—Hazleton Broadcasting Service Inc., Hazelton, Pa.—Granted authority to make changes in automatic frequency control.

KFXD—Frank E. Hurt, Nampa, Idaho—Granted C. P. to install new transmitter.

KGKB—East Texas Broadcasting Co., Tyler, Texas—Granted license to cover C. P. authorizing move of transmitter, installation of new equipment and vertical radiator; **1500 kc.,** 100 watts night, 100 watts day, unlimited time day, specified hours night.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted temporary authority to operate simultaneously with station WSMK from 10 to 11 P. M., EST, Sept. 30, Oct. 7, 16, 21, 1936, in order to broadcast football games.

WHLB—Head of the Lakes Broadcasting Co., Virginia, Minn.—Granted special temporary authority to operate without an approved frequency monitor during program test period, for a period of 30 days, pending repair to frequency monitor.

WBAA—Purdue University, W. Lafayette, Ind.—Granted special temporary authority to operate from 4 to 8 P. M., CST, Oct. 10, 1936 (provided WILL remains silent), in order to broadcast football games.

KNET—Calvin Welch, Wm. M. Keller & Bonner Frizzell, d/b as Palestine Broadcasting Assn., Palestine, Texas—Granted special temporary authority to operate from 5:45 to 10:30 P. M., CST, Oct. 16 and 30, 1936, and from 5:30 to 10:30 P. M., CST, Nov. 20, 1936, in order to broadcast football games.

KSOO—Sioux Falls Broadcast Assn., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate station on Oct. 9, 1936, from 6:30 to 7:15 P. M., CST, for the purpose of broadcasting President Roosevelt's speech by remote control from station KSTP; and from 9 to 9:30 P. M., Oct. 9, for the purpose of broadcasting a political speech by remote control from station WCCO.

WTCN—Minn. Broadcasting Corp., Minneapolis, Minn.—Granted special temporary authority to remain on the air after 7 P. M., CST, the night of Oct. 9, 1936 (provided WLB remains silent), until the conclusion of President Roosevelt's address at St. Paul, Minn.

WDGY—Dr. Geo. W. Young, Minneapolis, Minn.—Granted special temporary authority to remain on the air after 6:30 P. M., CST, Friday, Oct. 9, 1936, for the purpose of broadcasting President Roosevelt's speech *only*.

WMC—Memphis Commercial Appeal, Inc., Memphis, Tenn.—Granted license to cover C. P. authorizing changes in equipment and directional antenna system; increase in day power from 2½ KW to 5 KW, and change transmitter site locally, **780 kc.**

WJBY—Gadsden Broadcasting Co., Inc., Gadsden, Ala.—Granted authority to make changes in automatic frequency control equipment.

WJAY—Cleveland Radio Broadcasting Corp., Cleveland, Ohio—Granted C. P. to move transmitter to Pleasant Valley Road, Village of Seven Hills, Ohio, adjacent to present site of WHK; install vertical radiator and new equipment.

KOBH—Black Hills Broadcast Co. (Robert Lee Dean), Rapid City, S. Dak.—Granted modification of C. P. for change in type of equipment.

WDWS—Champaign News Gazette Inc., Champaign, Ill.—Granted modification of C. P. for approval of transmitter and studio sites, equipment and antenna, amended to correct transmitter site for 600 feet south of Kirby Ave., Champaign, Ill.

KRMD—Radio Station KRMD, Inc., Shreveport, La.—Granted C. P. for changes in equipment, install vertical radiator and increase day power from 100 watts to 250 watts, **1310 kc.**

KMO—KMO, Inc., Tacoma, Wash.—Granted C. P. to install vertical radiator, exact site to be determined with Commission's approval, increase power from 250 watts to 1 KW.

WTMV—Miss. Valley Broadcasting Co., Inc., E. St. Louis, Ill.—Granted amended C. P. for installation of new equipment, increase day power to 250 watts, **1500 kc.,** unlimited.

WKBN—WKBN, Broadcasting Corp., Youngstown, Ohio—Granted C. P. to move transmitter site locally from Y. M. C. A. Building to 3120 Sunset Boulevard, and install vertical radiator.

WOI—Iowa State College of Agriculture & Mechanic Arts, Ames. Ia.—Granted special authority to rebroadcast over WOI the emergency programs of station KGHO licensed for emergency police service in Des Moines, Ia.

KFJR—Ashley C. Dixon, KFJR, Inc., Portland, Ore.—Granted voluntary assignment of license to KALE, Inc. (**1300 kc.,** 500 watts night, 500 watts day, S. H.).

WJIM—Harold F. Gross, M. B. Keeler and L. A. Versluis, d/b as Capital City Broadcasting Co., Lansing, Mich.—Granted voluntary assignment of license to Harold F. Gross (**1210 kc.,** 100 watts night, 250 watts day, unlimited).

NEW—Ben S. McGlashan (Portable), Los Angeles, Cal.—Granted C. P. for new station (low frequency relay broadcast); frequencies **1622, 2058, 2150, 2790 kc.,** 100 watts.

APPLICATIONS DENIED

WINS—Hearst Radio, Inc., New York City.—Denied special temporary authority to operate 8:15 p. m. to 12 midnight, EST, 9-30-36, and from 7:30 to 12 midnight, EST, 10-7-36, to broadcast professional football games of new Professional Football League.

WCOP—Massachusetts Broadcasting Corp., Boston, Mass.—Denied special temporary authority to operate from local sunset to 8 p. m., EST, from 10-3-36 to November 1, 1936, inclusive, in order to broadcast civic programs and events of national importance connected with national election.

WINS—Hearst Radio, Inc., New York City.—Denied special temporary authority to operate from local sunset (October, 5:15 p. m.) until 12 midnight, EST, October 21 and 28, 1936, in order to broadcast professional football games, and from local sunset, November 3, 1936 (November, 4:45 p. m.), until 2 a. m., EST, November 4, 1936, in order to broadcast election returns.

WPHR—WLBC, Inc., Petersburg, Va.—Denied special authority to operate from local sunset to 7:30 p. m., EST, October 10, 17, 24, 31, and November 7, in order to broadcast football games.

APPLICATIONS DISMISSED

The following applications, heretofore set for hearing, were dismissed at the request of applicants:

NEW—Palmer Broadcasting Syndicate, Inc., Portland, Me.—Applied for C. P., **1210 kc.,** 100 watts, unlimited.

WSMK—WSMK, Inc., Dayton, Ohio.—Applied for modification of license, **1380 kc.,** 250 watts, unlimited.

KRKO—Lee E. Mudgett, Everett, Wash.—Applied for voluntary assignment of license, **1370 kc.,** 50 watts, shares KVL.

Detroit National League Football Club, Inc., Detroit, Mich.—Applied for authority to transmit description of certain football games from University of Detroit Stadium, Detroit, Mich., to Station CKLW, Windsor, Ontario, Canada, through the facilities of the Michigan Bell Tel. Co.

SET FOR HEARING

NEW—Lawrence K. Miller, Pittsfield, Mass.—Application for C. P. for new station to operate on **930 kc.,** 250 watts daytime, site to be determined.

NEW—Knoxville Journal Broadcasting Co., R. R. Spilman, Ira A. Watson, Roy N. Lotspeich, R. H. Claggett, Knoxville, Tenn.—Application for C. P. for new station to operate on **1200 kc.,** 100 watts night, 250 watts day, unlimited time, site to be determined.

WILM—Delaware Broadcasting Co., Wilmington, Del.—Application for C. P. to install vertical antenna, move studio and transmitter approximately 9 miles to Chester, Pa., site to be approved. (Present assignment: **1420 kc.,** 100 watts, S-WAZL.)

WMMN—A. M. Rowe, Inc., Fairmont, W. Va.—Application for C. P. to install new equipment, increase night power from 500 watts to 1 KW and day power from 1 KW to 5 KW. (Present assignment: **890 kc.,** 500 watts night, 1 KW day, unlimited.)

WGAR—WGAR Broadcasting Co., Cleveland, Ohio.—Application for C. P. to install new transmitter and increase power from 500 watts night, 1 KW day, unlimited time, to 5 KW. (To be heard before the Broadcast Division.)

NEW—Rev. Edward Warren Cromey, Rector, Church Wardens & Vestrymen of St. Michael's P. E. Church, Brooklyn, N. Y.—Application for C. P. for new station to operate on **1130 kc.,** 1 KW daytime only, site to be approved. Desires facilities of WOV. Amended to change antenna. To be heard November 16, 1936.

WOV—International Broadcasting Corp., New York City.—Application to transfer control from John Giustina B. and Mariannina G. Iraci, to Arde Bulova, 766 shares of common stock. Present assignment: **1130 kc.,** 1 KW, daytime. To be heard November 16, 1936.

NEW—Daily News Corp., St. Paul, Minn.—Application for C. P. (amended 8-31-36) for new station to operate on **580 kc.,** 1 KW, daytime only. Transmitter site to be determined with Commission's approval.

NEW—Walter H. McGenty, Rice Lake, Wis.—Application for C. P. (amended 8-8-36) for new station to operate on **1210 kc.,** 250 watts, daytime only. Exact site of transmitter to be determined with Commission's approval.

NEW—WRBC, Inc., Cleveland, Ohio.—Application for C. P. (amended 8-13-36) for new station to operate on **950 kc.,** 1 KW, unlimited time, using directional antenna for day and nighttime operation.

NEW—The Trenton Times, Trenton, N. J.—Application for C. P. for main transmitter of 3 new synchronized special broadcast stations; **1570 kc.,** 250 watts, unlimited, site to be determined subject to Commission's approval.

NEW—The Trenton Times, Trenton, N. J.—Application for C. P. for one booster transmitter of 3 new synchronized special broadcast stations, to be located near Burlington, N. J.; **1570 kc.,** 250 watts, unlimited, transmitter site to be determined subject to Commission approval.

NEW—The Trenton Times, Trenton, N. J.—Application for C. P. for one booster transmitter of 3 new synchronized special broadcast stations, to be located near Princeton, N. J.; **1570 kc.,** 250 watts, unlimited, transmitter site to be determined subject to Commission approval.

WNBC—State Broadcasting Corp. (Wm. J. Sanders), New Britain, Conn.—Application for C. P. amended to make changes in equipment; install directional antenna for day and night operation; increase power from 250 watts daytime to 250 watts night, 1 KW day; increase hours of operation from daytime to unlimited.

WHAT—Independence Broadcasting Co., Inc., Philadelphia, Pa.—Application for C. P. (amended 9-12-36) for approval of new transmitter site; authority to make equipment changes; install directional antenna system; change frequency from **1310 kc.** to **1220 kc.;** increase power from 100 watts to 1 KW; change time of operation from sharing with WTEL to unlimited. (Now operates on **1310 kc.,** 100 watts night and day, S-WTEL.)

KOOS—Pacific Radio Corp., Marshfield, Ore.—Application for modification of C. P. to change equipment and time of operation from 250 watts daytime to 250 watts unlimited; extend commencement date to 60 days after grant and completion date to 6 months thereafter. (Original C. P. authorized change in transmitter site, installation of new antenna, change in frequency to **1390 kc.**)

NEW—Sharon Herald Broadcasting Co., Sharon, Pa.—Application for C. P. for new station to operate on **780 kc.,** 250 watts day only, transmitter site and antenna system to be determined subject to Commission's approval.

WBNS—WBNS, Inc., Columbus, Ohio.—Application for C. P. to install new equipment, increase night power from 500 watts to 1 KW and day power from 1 KW to 5 KW.

WTBO—Associated Broadcasting Corp., Cumberland, Md.—Application for modification of license to increase power and time of operation from 250 watts daytime only to 250 watts unlimited. (To be heard before the Broadcast Division.)

WKZO—WKZO, Inc., Kalamazoo, Mich.—Application for modification of license to change time of operation from daytime to local sunset at Kalamazoo to daytime to local sunset at Omaha, Nebr.

NEW—J. D. Keating, Harvey Wells, L. J. Keating, Joe M. Meyer, L. C. Keating, d/b as Vancouver Broadcasting Co., Vancouver, Wash.—Application for C. P. for new station to operate on **1500 kc.,** 100 watts, daytime.

WEDC—Emil Denemark, Inc., Chicago, Ill.—Application for modification of license to make change in specified bours for additional operating time from midnight to 6 a. m.

WHKC—Associated Radiocasting Corp., Columbus, Ohio.—Application for C. P. to install new transmitter; make antenna changes; increase night power from 500 watts to 1 KW and day power from 500 watts to 5 KW, unlimited time. (To be heard before the Broadcast Division.)

WEEI—WEEI Broadcasting Corp., Boston, Mass.—Application for modification of C. P. to increase power from 1 KW, 5 KW LS, to 5 KW day and night; **590 kc.** (To be beard before the Broadcast Division.)

WAIM—Wilton E. Hall, Anderson, S. C.—Application for modification of C. P. to install directional antenna system for nighttime use; change hours of operation from 1 KW, daytime, to 1 KW, unlimited.

NEW—Julius Brunton & Sons Co., San Jose, Calif.—Application for C. P. for new station to operate on **970 kc.,** 250 watts, daytime (contingent upon KQW's application to move to Sacramento).

KQW—Pacific Agricultural Foundation, Ltd., San Jose, Calif.—Application for C. P. to change equipment, increase day power to 5 KW, and move station to Sacramento (present assignment: **1010 kc.,** 1 KW, unlimited).

NEW—Staunton Broadcasting Co., Inc., Staunton, Va.—Application for C. P. for new station to operate on **1500 kc.,** 100 watts night, 250 watts day, unlimited, site to be determined.

NEW—William Avera Wynne, Wilson, N. C.—Application for C. P. for new station to operate on **1310 kc.,** 100 watts, daytime.

NEW—World Publishing Co., Tulsa, Okla.—Application for C. P. (amended 9-15-36) for new station to operate on **940 kc.,** 1 KW night, 5 KW day, unlimited, using directional antenna system for nigbttime.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KCRC, Enid, Okla.; KGA, Spokane, Wash.; KGB, San Diego; KGER, Long Beach, Calif.; KGHF, Pueblo, Colo.; KGIR, Butte, Mont.; KGNO, Dodge City, Kans.; KHBC, Hilo, Hawaii; KID, Idaho Falls, Idaho; KIEM, Eureka, Calif.; KLO, Ogden, Utah; KLS, Oakland, Calif.; KOH, Reno, Nev.; KOMA, Oklahoma City, Okla.; KRNT, Des Moines, Iowa; KSO, Des Moines, Iowa; KSTP, St. Paul, Minn.; KTBS, Shreveport, La.; KTUL, Tulsa, Okla.; WAAB, Boston, Mass.; WADC, Village of Tallmadge, Ohio; WALA, Mobile, Ala.; WAWZ, Zarephath, N. J.; and WBCM, Bay City, Mich.

WRDO—WRDO, Inc., Augusta, Maine.—Granted renewal of license for the period ending January 1, 1937.

KPLM—John B. Cooley, Minot, N. Dak.—Granted renewal of license for the period ending April 1, 1937.

WIBA—Badger Broadcasting Co., Inc., Madison, Wis.—Granted renewal of license for the period ending April 1, 1937.

ACTION ON EXAMINER'S REPORTS

NEW—Ex. Rep. No. 1-108: Robert K. Herbst, Moorhead, Minn.—Granted C. P. for new broadcast station to operate on **1310 kc.,** 100 watts day, unlimited, share night with Robert MacNab Co. (site to be determined subject to Commission's approval). Examiner P. W. Seward sustained in part. Order effective November 24, 1936.

NEW—Ex. Rep. No. 1-153: Roberts MacNab Co. (Arthur L. Roberts, R. B. MacNab, A. J. Breitbacb, Gen. Mgr.), Jamestown, N. Dak.—Granted C. P. for new broadcast station to operate on **1310 kc.,** 100 watts, unlimited time day, sbare night with Robert K. Herbst (site to be determined subject to Commission's approval). Order effective November 24, 1936. Examiner M. H. Dalberg sustained.

NEW—Ex. Rep. No. 1-213: Edwin A. Kraft, Fairbanks, Alaska.—Denied C. P. for new broadcast station to operate on **950 kc.,** 250 watts, unlimited time (site to be determined subject to Commission's approval). Examiner Geo. H. Hill sustained.

NEW—John A. Stump, Fairbanks, Alaska.—Denied C. P. for new broadcast station to operate on **1210 kc.,** 100 watts, 250 watts LS, unlimited time (site to be determined subject to Commission's approval). Examiner Hill reversed. Order effective December 15, 1936.

NEW—Ex. Rep. No. 1-219: J. Laurence Martin, Tucumcari, N. Mex.—Denied C. P. for new broadcast station to operate on **1200 kc.,** 100 watts, unlimited time, site to be determined subject to Commission approval. Examiner P. W. Seward reversed. Order effective December 22, 1936.

WOL—Ex. Rep. No. 1-247: American Broadcasting Co., Washington, D. C.—Granted C. P. (Commissioner Case dissenting) to make changes in equipment; move transmitter and studio; change frequency from **1310 kc.** to **1230 kc.;** increase power from 100 watts to 1 KW, unlimited time. Examiner M. H. Dalberg reversed. Order effective December 1, 1936.

WJAC—Ex. Rep. No. 1-290: WJAC, Inc., Johnstown, Pa.—Granted C. P. to make changes in equipment; move transmitter from 101-111 Main St., Johnstown, Pa., to 429 Locust St., Johnstown, Pa.; and increase power from 100 watts to 100 watts night, 250 watts day; **1310 kc.,** sbare with WFBG. Examiner M. H. Dalberg sustained. Order effective November 17, 1936.

NEW—Ex. Rep. No. 1-297: Duluth Broadcasting Co., Duluth, Minn.—Dismissed with prejudice application for C. P. for new broadcast station to operate on **1200 kc.,** 100 watts, unlimited time. Examiner P. W. Seward sustained.

SPECIAL AUTHORIZATIONS

WLB—University of Minnesota, Minneapolis, Minn.; WTCN—Minnesota Broadcasting Corp., Minneapolis, Minn.—Granted special temporary authority to conduct a joint broadcast between 1:45 to 4:30 p. m., CST, on Saturdays, October 10, 17, 24 and 31, 1936, and November 7, 14, 21 and 28, 1936, using tbe 5 KW transmitter of WTCN in order to broadcast University of Minnesota football games.

KYW—Westingbouse Electric & Mfg. Co., Philadelpbia, Pa.—Granted special temporary authority to rebroadcast a program from tbe zeppelin "Hindenburg" over radio station KYW and also carry on two way communication with the Hindenburg on October 9, 1936, while zeppelin is on special chartered fligbt over Pbiladelphia and vicinity.

KGDM—E. F. Peffer, Stockton, Calif.—Granted special temporary authority to operate from 9 p. m. until 12 midnight, PST, November 3, 1936, in order to broadcast election returns.

WPRP—Julio M. Conesa, Ponce, Puerto Rico—Granted special temporary authority to operate station without an approved frequency monitor for a period beginning Oct. 7, 1936, and ending in no event later than Nov. 5, 1936.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted extension of special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for period beginning Oct. 10, 1936 and ending in no event later than Oct. 24, 1936, pending installation of repaired monitor.

KFRO—Voice of Longview, Long View, Texas—Granted special temporary autbority to operate from local sunset (5:45 p. m.) to 12 midnight, CST, Oct. 23 and 30, 1936 in order to broadcast football games.

WKP-WQW-WQP—R. C. A. Communications, Inc., Rocky Point, N. Y.—Granted special temporary autbority for point to point Telegraph stations in addition to the authorization contained in present licenses covering the operation of these stations, to communicate with tbe aircraft radio station DEKKA on Dirigible "Hindenburg" to provide contact control communication service to facilitate reception of program material through the Riverhead, N. Y. receiving sta-

tion for delivery to the National Broadcasting Co. This authorization for period of three days beginning Oct. 8, 1936.

WEST—Associated Broadcasters, Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with station WKBO from 8 p. m. to 8:15 p. m. EST, Oct. 8, 15, 22, 29; from 8:30 p. m. to 10 p. m., EST, Oct. 31, 1936; from 9 p. m. to 9:15 p. m., EST, Oct. 21, 28; from 9 p. m. to 9:30 p. m., EST, Oct. 26; from 9:30 p. m. to 9:45 p. m., EST, Oct. 13, 20, 27; from 10:15 p. m. to 10:30 p. m., Oct. 12, 13, 19, 20, 26, 27; from 4:45 p. m. to 5 p. m., EST, Nov. 1; from 9 p. m. to 9:45 p. m., 10:15 p. m. to 10:30 p. m. and 11 p. m. to 12 midnight, EST, Nov. 2, 1936, in order to broadcast Democratic state and national committee programs.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted special temporary authority to operate simultaneously with station WLBC from 7:30 p. m. to 9 p. m., CST, Oct. 8, 9, 12, 13, 14, 15 and 17, 1936, in order to broadcast evangelistic services from Zion Mennonite Church of Elkhart.

KPDN—Pampa Daily News, Inc., Pampa, Texas—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period beginning Oct. 5, 1936, and ending in no event later than Oct. 19, 1936.

WKBV—Knox Radio Corp., Richmond, Ind.—Granted special temporary authority to operate 1 p. m. to 5:30 p. m., CST, Oct. 10, 24, and 31, 1936, in order to broadcast Earlham College football games.

KBTM—W. J. Beard (Board's Temple of Music), Jonesboro, Ark. —Granted special temporary authority to operate simultaneously with station KGHI between the hours of 8 p. m. and 10 p. m. on the following Fridays: Oct. 9, 16, 23, 30; Nov. 6, 1936, in order to broadcast local football games.

WNAD—University of Oklahoma, Norman, Okla.—Granted special temporary authority to operate from 2 p. m. to 4 p. m., CST, Oct. 12, 13, 14, 15, 19, 20, 21, 22, 26, 27, 28 and 29, 1936 (provided station KGGF remains silent) in order to broadcast special educational programs.

WELI—City Broadcasting Corp., New Haven, Conn.—Granted special temporary authority to operate unlimited time on Oct. 10, 1936, in order to celebrate first anniversary of station WELI.

WLBC—Donald A. Burton, Muncie, Ind.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period not to exceed 30 days.

WNYC—City of New York, Dept. of Plant and Structures, New York, N. Y.—Granted special temporary authority to use auxiliary transmitter located at 29 Ft. Greene Pl., Brooklyn, N. Y., as main transmitter, while moving, in accordance with C. P. B1-MP-307, for a period not to exceed 60 days.

KMTR—KMTR, Radio Corp., Los Angeles, Calif.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period not to exceed 30 days.

KALB—Alexandria Broadcasting Co., Inc., Alexandria, La.— Granted special temporary authority to operate from local sunset (5:45 p. m., CST) to 11 p. m., CST, Oct. 10 and 17, 1936, in order to broadcast football games.

WRAK—WRAK, Incorporated, Williamsport, Pa.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period beginning Oct. 15, 1936 and ending in no event later than Oct. 28, 1936.

KWTO—Ozarks Broadcasting Co., Springfield, Mo.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period beginning Oct. 1, 1936, and ending in no event later than Nov. 1, 1936.

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—Granted special temporary authority to use auxiliary transmitter as the main transmitter for a period not to exceed 30 days.

WHBF—Rock Island Broadcasting Co., Rock Island, Ill.—Granted extension of special temporary authority to maintain the main studio of WHBF at 1630 5th Avenue, Moline, Ill., instead of 102-18th St., Rock Island, Ill., for a period beginning Oct. 4, 1936 and ending in no event later than November 2, 1936.

KLPM—John B. Cooley, Minot, N. Dak.—Granted special temporary authority to operate from 7:30 p. m. to 9 p. m., MST, Oct. 10 and 30, 1936 (provided KGCU remains silent).

WATL—J. W. Woodruff & S. A. Cisler, d/b as Atlanta Broadcasting Co., Atlanta, Ga.—Granted special temporary authority to operate a 100 watt portable transmitter on **1370 kc.** in the vicinity of Atlanta, Ga., between the hours of 12 midnight and 6 a. m. CST, for period not to exceed 10 days, in order to make field intensity survey tests.

WRGA—Rome Broadcasting Corp., Rome, Ga.—Granted special temporary authority to operate station without plate voltmeter for period not to exceed 30 days.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Granted extension of special temporary authority to carry programs of station WDAH for period beginning Oct. 12, 1936, and ending in no event later than November 10, 1936. Effective as of Oct. 10, 1936.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.— Granted special temporary authority to operate from 8 p. m. to 10 p. m., EST, Wednesday, Oct. 14, 1936, in order to broadcast a Republican Rally, featuring Justice William Bleakley, Republican Nominee for Governor of New York State.

WAIR—C. G. Hill, George D. Walker, and Susan H. Walker, Winston-Salem, N. C.—Granted special temporary authority to operate test transmitter with power not over 50 watts for the purpose of testing for proposed site, between the hours of 12 midnight to 6 a. m. for the period beginning Oct. 12, 1936, and ending in no event later than Nov. 10, 1936.

WELI—City Broadcasting Co., New Haven, Conn.—Granted special temporary authority to operate from 6:15 p. m. to 6:30 p. m., EST, October 17 to Nov. 3, 1936, inclusive, in order to broadcast speeches of the Republican State Central Committee of Conn.; also from 7:45 p. m. to 8 p. m. EST, Oct. 17, 19 to 24 inclusive, 26 to 31 inclusive, and Nov. 2 and 3, 1936, in order to broadcast speeches of the Democratic State Central Committee of Conn.

WRC—National Broadcasting Co., Inc., Washington, D. C.— Granted special temporary authority to rebroadcast voice communication exchange between municipal police station WPDW, Washington, D. C., and its associated experimental mobile station W3XEI, on Wednesday, Oct. 14, 1936, in order to participate in a special feature broadcast demonstrating to the listening public in Washington the efficiency of radio-communication as an aid to public security.

American Broadcasting Corp. of Kentucky, Lexington, Ky.— Granted special temporary authority to operate portable-mobile (High Frequency Relay Broadcast) transmitter for the period beginning Oct. 15, 1936, and ending in no event later than Oct. 25, 1936, to broadcast the first meeting of the Keeneland Race Association.

American Broadcasting Corp. of Kentucky, Lexington, Ky.— Granted special temporary authority to operate portable-mobile (High Frequency Relay Broadcast) transmitter for the period beginning Oct. 15, 1936, and ending in no event later than Oct. 25, 1936, to broadcast the first meeting of the Keeneland Race Association.

KVOO—Southwestern Sales Corp., Tulsa, Okla.—Granted special temporary authority to operate simultaneously with station WAPI, using power of 1 KW, from 9 p. m. to 9:30 p. m. CST, Saturday, Oct. 17, 1936, in order to broadcast National Democratic program.

WAPI—WAPI Broadcasting Corp., Birmingham, Ala.—Granted special temporary authority to operate simultaneously with station KVOO, using power of 1 KW, from 9 p. m. to 9:30 p. m. CST, Saturday, Oct. 17, 1936, in order to broadcast National Democratic Committee Program.

WSYB—Philip Weiss, t/a Philip Weiss Music Co., Rutland, Vt.— Granted special temporary authority to operate from 9 a. m. to 10 a. m. EST, for the period beginning Oct. 17, 1936 and ending in no event later than Nov. 15, 1936, inclusive, in order to broadcast Rutland County Community programs; also operate from 9 p. m. until 12 midnight EST, from Oct. 17, 1936 and ending in no event later than Nov. 3, 1936, inclusive, in order to broadcast Democratic and Republican rallies and election returns.

WHAS—The Courier-Journal Co. & The Louisville Times Co., Louisville, Ky.—Granted extension of special temporary authority to operate a 50 watt portable test transmitter from 12 midnight to 6 a. m. CST, for the period beginning

Oct. 17, 1936 and ending in no event later than Nov. 15, 1936, in order to determine new transmitter site.

WHDF—The Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 7 p. m. to 9 a. m. CST, Oct. 18, 1936, in order to broadcast inauguration of World Service program.

WAAB—Bay State Broadcasting Corp., Boston, Mass.—Granted special temporary authority to measure the antenna efficiency of WEAN antenna system located in the Biltmore Hotel in Providence at a frequency of **720 kc.,** using power between 10 and 50 watts, between the hours when station WGN in Chicago shuts down and 5:30 p. m., MST, for a period not to exceed 15 days.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted extension of special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for the period beginning October 10, 1936, and ending in no event later than October 24, 1936, pending regrinding of crystal for **1450 kc.**

WIOD-WMBF—Isle of Dreams Broadcasting Corp., Miami, Fla.—Granted special temporary authority to use old composite transmitter for period beginning October 30, 1936, and ending in no event later than November 3, 1936, in order that RCA Type 1-D transmitter may be moved to its new location.

KPAC—Port Arthur College, Port Arthur, Tex.—Granted special temporary authority to operate from 5:45 p. m. to 12 midnight, CST, Friday, October 30, 1936, in order to broadcast local high school football games.

WFBG—The Gable Broadcasting Co., Altoona, Pa.—Granted special temporary authority to operate simultaneously with station WJAC from 11 p. m. to 12 midnight, EST, Monday night, November 2, 1936, in order to broadcast the Democratic Committee Grand National Rally.

KALB—Alexandria Broadcasting Co., Inc., Alexandria, La.—Granted special temporary authority to operate from 5:45 p. m. to 10 p. m., CST, October 18, 22, 27 and 31, 1936 and from 5:15 p. m. to 10 p. m., CST, November 2, 1936, in order to broadcast one hour paid political talk.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Granted special temporary authority to operate from 5:30 p. m. to 6 p. m., PST, October 17, 24, 31, 1936, and from 5 p. m. to 6 p. m., PST, November 7, 14, 21 and 28, 1936, in order to broadcast football games; also from 5 p. m., November 3, 1936, to 1 a. m., PST, November 4, 1936, in order to broadcast election returns to the Coos Bay area.

WTBO—Associated Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 9 p. m. to 10 p. m., EST, Wednesday, October 14, 1936, in order to broadcast speech of President Roosevelt and Senator Tydings.

WRJN—Racine Broadcasting Corp., Racine, Wis.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period not to exceed 30 days.

WCPO—Continental Radio Co., Cincinnati, Ohio.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period beginning October 15, 1935, and ending in no event later than October 29, 1936.

KPAC—Port Arthur College, Port Arthur, Tex.—Granted special temporary authority to operate from 5:45 p. m. to 12 midnight, CST, Thursday, October 15, 1936, in order to broadcast football games.

WCBD—WCBD, Inc., Waukegan, Ill.—Granted extension of special temporary authority to use studio located at Zion, Ill., as main studio, for period beginning October 21, 1936, and ending in no event later than November 2, 1936.

KSTP—National Battery Broadcasting Co., St. Paul, Minn.—Granted special temporary authority to use the transmitter of WLB for a period beginning November 1, 1936, and ending in no event later than November 14, 1936, in order to permit the removal and reinstallation of the KSTP transmitter.

WLB—University of Minnesota, Minneapolis, Minn.—Granted special temporary authority to broadcast the programs of WLB over transmitter of WCAL during the period beginning November 1, 1936, and ending in no event later than November 14, 1936.

WAPI—WAPI Broadcasting Corp., Birmingham, Ala.—Granted special temporary authority to operate simultaneously with station KVOO, using power of 1 KW, from 8:30 p. m. to 9 p. m., CST, Wednesday, October 14, 1936, in order to broadcast Democratic Committee program.

KVOO—Southwestern Sales Corp., Tulsa, Okla.—Granted special temporary authority to operate simultaneously with station WAPI, using power of 1 KW, from 8:30 p. m. to 9 p. m., CST, Wednesday, October 14, 1936, in order to broadcast Democratic Committee program.

KFRU—KFRU, Inc., Columbia, Mo.—Granted special temporary authority to operate simultaneously with station WGBF, with reduced power of 250 watts, from 8:45 p. m. to 9:30 p. m., CST, October 15, 1936, in order to broadcast the National Republican Rally.

WGBF—Evansville on the Air, Inc., Evansville, Ind.—Granted special temporary authority to operate simultaneously with station KFRU, with reduced power of 250 watts, from 8:45 p. m. to 9:30 p. m., CST, October 15, 1936, to permit KFRU to broadcast National Republican Rally.

WTEL—Foulkrod Radio Engineering Co., Philadelphia, Pa.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period not to exceed two weeks.

KSOO—Sioux Falls Broadcast Association, Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 5:45 p. m. to 6:30 p. m., CST, October 15, 23, 31, and 7:45 p. m. to 9 p. m., CST, October 26 and 28, in order to broadcast political speeches; also from 8:15 p. m. to 10 p. m., CST, October 20, 1936, in order to broadcast State Democratic Rally in Sioux Falls.

WTBO—Associated Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 8:30 p. m. to 10 p. m., EST, October 31, 1936, in order to broadcast National and Pennsylvania State Democratic Rally; from 11 p. m. to 12 midnight, EST, November 2, 1936, in order to broadcast National Democratic Rally; and from 8 p. m. to 12 midnight, EST, November 3, 1936, and from 12 midnight, EST, November 4, 1936, to 6 a. m., EST, in order to broadcast election returns.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Granted special temporary authority to operate from 9:30 p. m. to 10 p. m., EST, Tuesday, October 13, 1936, in order to broadcast speech by Governor Lehman.

WSVA—Shenandoah Valley Broadcasting Corp., Harrisonburg, Va.—Granted special temporary authority to operate from 5 a. m. to 6 a. m., EST, on **550 kc.,** 500 watts, Sunday, October 18, 1936, in order to broadcast a special non-commercial DX program.

WMAS—WMAS, Inc., Springfield, Mass.—Granted special temporary authority to operate station without plate voltmeter for period not to exceed 30 days.

KPAC—Port Arthur College, Port Arthur, Tex.—Granted special temporary authority to operate from 5:45 p. m. until 12 midnight on October 23, 1936, in order to broadcast local high school football game.

WKAR—Michigan State College, East Lansing, Mich.—Granted special temporary authority to rebroadcast Naval Observatory time signals over WKAR, provided station complies with requirements of Naval Observatory station, for period not to exceed 30 days.

KALB—Alexandria Broadcasting Co., Inc., Alexandria, La.—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period beginning October 1, 1936, and ending in no event later than October 30, 1936.

KGEK—Elmer G. Beehler, Sterling, Colo.—Granted special temporary authority to operate from 8:45 p. m. to 12 midnight, EST, November 3, 1936, in order to broadcast the local country election returns.

KSOO—Sioux Falls Broadcast Asso., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 7:45 to 8:45 p. m., CST, October 7, in order to broadcast a political address by Hon. Wm. Lemke.

RATIFICATIONS

The Broadcast Division ratified the following acts authorized on the dates shown:

KGFF—KGFF Broadcasting Co., Inc., Shawnee, Okla.—Granted authority to extend test period 30 days from September 21, 1936. (Action taken 9/19.)

W8XEO—Capitol City Broadcasting, Lansing, Mich.—Granted authority to operate as licensed on October 7, 9, 10, 12, 14,

16, 17, 18, 19, 21, 23, 24, 25, 26, 28, 30, and November 2, 1936, to broadcast street interviews polling November election. (Action taken 10/6.)

KIIQ—KMTR Radio Corp., Los Angeles, Calif.—Granted authority to operate as licensed October 9 to broadcast dedicatory services from Griffith Park, October 11 and 12, from Southern Pacific train, Los Angeles to Colton; also October 12 to 19 from Los Angeles County Poor Farm. (Action taken 10/7.)

WHER—Westinghouse Electric and Manufacturing Co., Chicopee Falls, Mass.—Granted extension of authority to operate as licensed until October 15 in connection with test flight by Commander Hawks. (Action taken 10/6.)

W3XEL-W3XEM—WTIE Broadcasting Co., Philadelphia, Pa.—Granted authority to operate as licensed October 12 to broadcast program man in the street; October 13 to broadcast program fire prevention day. (Action taken 10/10.)

W8XAZ—Buffalo Broadcasting Corp., Buffalo, N. Y.—Granted authority to operate as licensed October 12 to 20, inclusive, to broadcast Man in Street program. (Action taken 10/10.)

W4XD-W4XMB—WPTF Radio Co., Raleigh, N. C.—Granted authority to operate as licensed October 12 to 17, inclusive, to broadcast North Carolina State Fair. (Action taken 10/10.)

WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Granted extension of special temporary authority to operate with 50 watts power from local sunset to 11 p. m., EST, on Tuesdays, Thursdays, Saturdays and Sundays during month of October, pending compliance with Rule 131 on modification of license requesting this authority. (Action taken 10/6.)

KGDY—Voice of South Dakota, Huron, S. Dak.—Granted special temporary authority to operate from 8 to 11 p. m., EST, October 7, 21, 24, 29 and 30, November 2 and 3, 1936, to broadcast political programs. (Action taken 10/6.)

W9XPE—WDZ Broadcasting Co., Tuscola, Ill.—Granted special temporary authority to operate high frequency relay broadcast transreceiver on **31100, 34600, 37600, 40600 kc.,** 10 watts, on October 9, 17, 31, and November 19, at Tuscola High School football field for the purpose of relaying accounts of football games to nearest wire line to be broadcast over station WDZ. (Action taken 10/8.)

WEMC—Westinghouse Electric and Manufacturing Co., Chicopee Falls, Mass.—Granted extension of special temporary authority to operate portable-mobile (low frequency relay broadcast) transmitter for period October 9 to October 15, aboard Commander Hawk's plane NR-1313, when flying conditions warrant a flight to test said plane, for purpose of broadcasting accounts of test flight over stations WBZ and WBZA; frequencies **1606, 2022, 2102, 2758 kc.,** 15 watts. (Action taken 10/8.)

WJAC—WJAC, Inc., Johnstown, Pa.—Granted special temporary authority to operate simultaneously with WFBG from 9 to 9:30 p. m., EST, October 10, and from 9:30 to 10 p. m., EST, October 14, 1936, in order to broadcast speech by President Roosevelt. (Action taken 10/10.)

WEST—Associated Broadcasters, Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with WKBO from 9 to 9:30 p. m., EST, October 10, and from 9:30 to 10 p. m., EST, October 14, in order to broadcast a Democratic national network program featuring speeches by President Roosevelt. (Action taken 10/10.)

The Broadcast Division granted request of Southwest Broadcasting Co. for authority to take depositions in support of its application for a C. P. to erect a new station at La Junta, Colo., Docket 4077. (Action taken 10/10.)

The Broadcast Division granted the request of W. H. Marolf for authority to take depositions in support of his application for a C. P. for new station at Escanaba, Mich., Docket 3898. (Action taken 10/6.)

The Broadcast Division waived requirements of Rule 104.6(b) and permitted the filing by the United States Broadcasting Corp., the Voice of Brooklyn, Inc., and Kings Broadcasting Corp. of answers to the appearance of the New England Radio Corp. in connection with the hearing on that company's application for C. P.; Docket 3480. (Action taken 10/6.)

The Broadcast Division denied the petition of Leon S. Packard, Louis H. Stebbins and Alden C. Packard, d/b as Valley Broadcasting Co., Pomona, Calif., requesting that the Commission remand to hearing docket for further hearing its application for C. P., Docket 3159. (Action taken 10/7.)

KIDO—Frank L. Hill and C. G. Phillips, d/b as Boise Broadcast Station, Boise, Idaho.—Granted extension of test period for 30 days from October 2, 1936. (Action taken 10/1.)

WJEP—The Stromberg Carlson Telephone MFG. Co., Rochester, N. Y.—Granted authority to operate as licensed October 5 to 10, 1936, inclusive, for relay broadcast of WHAM special events in connection with fire prevention campaign in Rochester. (Action taken 9/29.)

KABF—James McClatchy Company, Sacramento, Calif.—Granted authority to operate as licensed October 1 to 15, 1936, inclusive, for relay broadcast of orchestra music from Twingardens to Station KFBK nightly. (Action taken 9/29.)

KLZ—KLZ Broadcasting Co., Denver, Colo.—Granted special temporary authority to operate Western Electric Type D-96021 transmitter as specified in license dated February 8, 1936, at S. Pecos and Jewell Sts. (outside city limits), Denver, Colo., as main transmitter for period not to exceed 30 days, due to severe snow storm paralyzing power company which serves 5 KW transmitter. (Action taken 9/28.)

WEST—Associated Broadcasters, Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with station WKBO from 9 p. m. to 9:30 p. m., EST, September 29; from 8:30 p. m. to 9:30 p. m., EST, October 1; and from 9:15 p. m. to 10 p. m., EST, October 30, 1936, in order to broadcast speeches by President Roosevelt and Governor Earle of Pennsylvania and a Republican Party banquet. (Action taken 9/29.)

KMA—May Seed & Nursery Co., Shenandoah, Iowa.—Granted extension of special temporary authority to operate unlimited time for a period beginning 3 a. m., EST, October 1, 1936, and ending in no event later than October 30, 1936, pending completion of construction as specified in application, file No. B4-MP-346, in order to comply with Rule 131. (Action taken 9/30.)

KGU—Marion A. Mulrony and Advertiser Publishing Co., Ltd., Honolulu, Hawaii.—Granted special temporary authority to operate from 11 p. m. to 12:30 a. m., local standard time, on the nights of October 2 and 3, 1936, and from 10:45 p. m. to 12:15 a. m., local standard time, on nights of November 2 and 3, 1936, in order to broadcast election returns and rallies. (Action taken 9/30.)

WEMC—Westinghouse Electric and Manufacturing Co., Chicopee Falls, Mass.—Granted special temporary authority to operate portable-mobile (low frequency relay broadcast) transmitter for period beginning October 1, 1936, and ending in no event later than October 8, 1936, aboard Commander Frank Hawks' plane NR-1313 when flying conditions warrant a flight to test said plane for the purpose of broadcasting accounts of this test flight over radio stations WBZ and WBZA. (Action taken 9/30.)

WHDF—The Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 6:30 p. m. to 10:30 p. m., CST, October 5, 1936, in order to broadcast address by Senator A. H. Vandenberg, and on October 14, 1936, in order to broadcast address by James Thompson. (Action taken 10/1.)

KAST—Abraham Shapiro, Astoria, Ore.—Granted authority for voluntary assignment of license to the Astoria Broadcasting Co. (Action taken 10/2.)

WJRD—James R. Doss, Jr., Tuscaloosa, Ala.—Granted modification of C. P. Approval of transmitter site at Greensboro Rd. opposite Jug Factory RD., Tuscaloosa, Ala.; studio site in basement of First National Bank Bldg., corner Greensboro Rd. and University Ave., Tuscaloosa, Ala.; vertical radiator provided tower is marked in accordance with Rule 131 (d); and new equipment. (Action taken 10/2.)

The Broadcast Division granted the request of the Advertiser Publisher Company, Ltd., Honolulu, Hawaii, for an order to take depositions in support of its application for construction permit, File No. B-P-1040, Docket No. 3970. (Action taken 10/2.)

The Broadcast Division granted the petition filed on behalf of the Iowa Broadcasting Company for an order to take depositions in connection with the hearing on the application of Stanley Reid and Charles Withnell Bogel, Jr., d/b as the Rapids Broadcasting Company, for construction permit to erect a new broadcast station at Cedar Rapids, Iowa, Docket No. 3392. (Action taken 10/1.)

The Broadcast Division granted the request of the Independence Broadcasting Company (WHAT), Philadelphia, Pa., for an order to take depositions in support of its application for construction permit, File No. B2-P-904, Docket No. 3798. (Action taken 9/28.)

The Broadcast Division granted the request of the Voice of

Corsicana Association for an order to take depositions in support of its application for a construction permit for the establishment of a radio station at Corsicana, Texas, File No. B3-P-921, Docket No. 4055. (Action taken 9/25.)

The Broadcast Division granted the request of Fred J. Hart for an order to take depositions in support of his application for construction permit for the establishment of a broadcast station at Honolulu, Hawaii, File No. B-P-1119, Docket No. 3983. (Action taken 9/28.)

The Broadcast Division granted tbe motion of Packard, Stebbins and Packard, d/b as Valley Broadcasting Company, requesting an extension of time within which to file exceptions to Examiner's Report No. I-286, and directed that tbe applicants be granted until October 7, 1936, within whicb to file said exceptions. (Action taken 9/23.)

The Broadcast Division granted the request of the Interstate Broadcasting Corporation (KLO), Ogden, Utab, that the oral argument on its application, Docket No. 2976, now scheduled for October 1, 1936, be continued until after November 5, 1936. (Action taken 9/28.)

The Broadcast Division granted tbe motion of Harmon LeRoy Stevens and Herman LeRoy Stevens, d/b as the Port Huron Broadcasting Co., Port Huron, Micb., to remand tbeir application for C. P. to construct new station to operate on **1370 kc.**, 250 watts daytime, site to be determined, to the bearing docket for further hearing. (Action taken 9/30.)

The Broadcast Division denied the motion filed by the Independence Broadcasting Company (WHAT), requesting that the Commission withhold its decision on the application of Eastern States Broadcasting Corporation, File No. B1-P-529, Docket No. 3012, until the Commission has heard and determined tbe issues raised by the application of the petitioner under File No. B2-P-904. (Action taken 9/30.)

WAYX—E. F. Sapp and S. F. Sapp, d/b as Waycross Broadcasting Co., Albany, Ga.—Granted extension of equipment test period from Oct. 3 to 7, 1936, incl., and Oct. 15 to 19, 1936, incl. (Action taken 10-2.)

W2XKI—National Broadcasting Co., Inc., New York, N. Y.—Granted extension of a test period for 30 days beginning Sept. 17, 1936. (Action taken 9-26.)

W9XNW-W9XNX—WHBY, Inc., Green Bay, Wis.—Granted authority to extend test period for 30 days beginning Oct. 2, 1936. (Action taken 9-26.)

WHER—Westinghouse Electric & Mftr. Co., Cbicopee Falls, Mass.—Granted authority to operate low frequency relay broadcast station WHER at intermittent intervals between Oct. 1 and Oct. 8, 1936, in connection with the flight of Commander Frank Hawks to test the new high powered speed plane NR-1313; frequencies and power to be used as licensed. (Action taken 9-26.)

MISCELLANEOUS

NEW—Ex. Rep. No. 1-103: Pacific Acceptance Corp., San Diego, Cal.—Effective date in Docket 2968, posponed from Sept. 22, 1936 to Oct. 20, 1936.

CKLW—Essex Broadcasters, Inc., Detroit, Mich. (Licensee of Station CKLW, Windsor, Canada)—Denied temporary authority to broadcast football games of the Detroit Lions, Oct. 11, 18 and 25, and Nov. 1, 8, 15, 22, 26 and 29, and Dec. 6, 1936.

WIP—Ex. Rep. No. 1-187 in part: Penna. Broadcasting Co., Philadelphia, Pa.—The Broadcast Division, on September 22, 1936, reconsidered its action of July 2, 1936, in granting modification of license to increase daytime power only, from 500 watts to 1 KW, **610 kc.**, unlimited time, and directed tbat application be granted for unlimited time. Effective Sept. 22, 1936. The Broadcast Division directed that an order be entered accordingly and forwarded to all interested parties.

NEW—George P. Allison and Thomas R. Waters, Jr., d/b as Skagit Broadcasting Association, Whitney, Wash.—Permitted to file appearance and statement of desire to be heard in connection witb his application for new broadcast station at Whitney, Wash., to operate on **1420 kc.**, 100 watts, unlimited. Hearing set for Nov. 19, 1936.

NEW—Ted R. Woodward—Permitted to file answer to be part of record as respondent in hearing of application of Lancaster & Birdwell for new station at Johnson City, Tenn., to operate on **1200 kc.**, 100 watts night, 250 LS, unlimited time.

KGIW—Leonard E. Wilson, Alamosa, Colo.—Permitted to file answer to become part of tbe record as a respondent at bearing of application of Mile High Radio Corp. for new station at Denver, Colo. to operate on **1210 kc.**, 100 watts night, 250 watts day, unlimited time. Hearing scheduled for Nov. 18, 1936.

WTAL—Florida Capitol Broadcasters, Inc., Tallahassee, Fla.—Permitted to file answer to be made a part of the record as respondent to the hearing of the application of tbe Metropolis Company, for a permit to erect a new broadcast station at Jacksonville, Fla., to operate on **1310 kc.**, 100 watts, unlimited time.

NEW—Southwest Broadcasting Co.—Denied petition asking Commission to reconsider action in setting for bearing application to erect new broadcast station at La Junta, Colo. to operate on **1370 kc.**, 100 watts unlimited time. Hearing scheduled for Oct. 30, 1936.

NEW—Stanley Reid and Withnell Boegel, Jr., d/b as Rapids Broadcasting Co., Cedar Rapids, Iowa—Denied petition filed for partial cancellation of order to take depositions issued to Iowa Broadcasting Co. and sustained demurrer filed on behalf of Iowa Broadcasting Co. Granted petition of Stanley Reid, et al., for autbority to take depositions in connection with tbeir application for new station at Cedar Rapids to operate on **1310 kc.**, 100 watts, unlimited time. Granted petition filed for continuance of date of further hearing now scbeduled for Oct. 26, 1936.

NEW—Escanaba Daily Press Co., Escanaba, Micb.—Granted continuance of hearing scheduled for October 23, 1936, until the last week in November, 1936, on application of Escanaba Daily Press Co. for C. P. to erect new broadcast station at Escanaba, Mich., to operate on **1500 kc.**, 100 watts, daytime only. W. H. Marolf has on file application for authority to erect a broadcast station at Escanaba to operate under a similar assignment. Both applications are scbeduled to be beard at same time and counsel for Mr. Marolf has agreed to tbe continuance asked by Escanaba Daily Press Co.

KFPM—Dave Ablowicb, t/a Tbe New Furniture Co., Greenville, Tex.—Denied petition of Dave Ablowich, t/a The New Furniture Company, and of the Voice of Greenville, Inc., to reconsider and grant renewal of license of KFPM and assignment of the license to the Voice of Greenville, Inc., without hearing. License of KFPM was voluntarily surrendered by licensee and Commission accepted the surrender on April 2, 1935 and cancelled tbe license. On April 8, 1935, applications were filed for renewal of license and for assignment. Application for C. P. was filed (in the name of the assignee) requesting authority to install new equipment, change frequency from **1310 kc.** to **1420 kc.**, increase power from 15 watts to 100 watts and change time of operation from specified bours to daytime. Hearings on these applications are now scbeduled for October 20, 1936.

WSPD—Toledo Broadcasting Co., Toledo, Obio—Granted petition to intervene in proceeding upon application of L. Martin Courtney for a C. P. to erect a new broadcast station at Toledo, Ohio to operate on **1420 kc.**, 100 watts, unlimited time, bearing on whicb is scbeduled for November 25, 1936.

NEW—Jobn S. Braum, Waco, Tex.—Granted petition requesting the Commission to accept his written appearance and statement of desire to be heard in his application for C. P. to establisb broadcast station at Waco, Texas to operate on **1500 kc.**, 100 watts daytime only. Also granted respondents an additional 10 days within which to file their answers. Hearing on application is scheduled for November 11, 1936.

NEW—Earle Yates, Las Cruces, N. M.—Granted 10 days within which to file amended application for C. P. to erect broadcasting station at Las Cruces, N. M. Original application was for facilities, **930 kc.**, 1 KW, daytime only. To amend application so as to seek facilities, **1500 kc.**, 100 watts night, 250 watts day, unlimited time.

KNOW—KUT Broadcasting Co., Austin, Tex.—Granted petition to intervene in hearing of application of State Capitol Broadcasting Association for C. P. to erect broadcasting station at Austin, Texas to operate on **1120 kc.**, 500 watts night, 1 KW day, specified bours.

WMEX—Northern Corporation, Boston, Mass.—Granted petition to intervene in hearing on application of Bay State Broadcasting Corp. (WAAB) Boston, Mass. for modification of license so as to operate on **1410 kc.**, 1 KW, unlimited time.

KGFX—Red River Broadcasting Co., Inc., Moorhead, Minn.—Granted regular renewal of license. U. S. Court of Appeals for D. C. has issued mandate affirming Commission's action in authorizing removal of station from Moorhead to Duluth, Minn. Station operates on **1500 kc.**, 100 watts, unlimited time.

NEW—Richard M. Casto, Johnson City, Tenn.—Granted petition to intervene in hearnig of application of W. Hanes Lancaster and J. W. Birdwell, d/b as Johnson City Broadcasting Co., Johnson City, Tenn., for C. P. to erect new broadcasting station at Johnson City, Tenn., to operate on **1200 kc.**, 100 watts night, 250 watts day, unlimited time.

The Broadcast Division granted authority to J. L. Statler, M.D., d/b as Baker Hospital, to take depositions on Oct. 23, 1936, in re the application of J. L. Statler, M.D., d/b as Baker Hospital, for authority to transfer programs to stations located in Canada and Mexico. Docket 3497.

The Broadcast Division granted Edwin A. Kraft authority to take depositions in re the application of Edwin A. Kraft, Juneau, Alaska, Docket 4048, on November 2, 1936.

The Broadcast Division granted The Golden Empire Broadcasting Co. (KHSL), authority to take depositions on Oct. 21, 1936, in re application of Golden Empire Broadcasting Co., Chico, Cal. for modification of license. Docket 3291.

The Broadcast Division granted request of the Ashvelle, N. C. Daily News for authority to take depositions in re their application for C. P. for a new station to operate on **1370 kc.**, 100 watts, unlimited time. Docket 4002, on Oct. 19, 1936.

WGPC—Americus Broadcasting Corp., Albany, Ga.—Permitted to file answer to become part of the record as respondent at hearing of application of H. Wimpy, to erect a new station at Albany, Ga., to operate on **1420 kc.**, 100 watts night, 250 watts day, facilities of WGPC.

W. Hanes Lancaster & J. W. Birdwell, d/b as Johnson City Broadcasting Co., Johnson City, Tenn.—Granted permission to take depositions in re application for new radio station at Johnson City, Tenn.

ORAL ARGUMENTS

NEW—Ex. Rep. No. 1-279: Eastern States Broadcasting Corp., Bridgeton, N. J.—Granted request for Oral Argument. To be held December 17, 1936.

NEW—Ex. Rep. No. 1-283: Gomer Thomas, Bellingham, Wash.—Granted request for Oral Argument. To be held January 7, 1937.

NEW—Ex. Rep. No. 1-251: Voice of Marshall Assn., Marshall, Tex.—Oral Argument scheduled for November 6, 1936, postponed to January 7, 1937.

APPLICATIONS RECEIVED

First Zone

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—Construction permit for a new high frequency relay station on **31100, 34600, 37600, 40600 kc.**, 500 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—Construction permit for a new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.**, 500 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

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NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—Construction permit for a new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.**, 50 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—Construction permit for a new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.**, 50 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

NEW—Hearst Radio, Inc., Washington, D. C.—Construction per-
1230 mit to erect a new broadcast station to be operated on **1310 kc.**, 100 watts power night and 250 watts day, unlimited time. Facilities of WOL, contingent upon granting of WOL's application to change frequency to **1230 kc.**

WSAY—Brown Radio Service & Laboratory (Gordon P. Brown,
1210 owner), Rochester, N. Y.—License to cover construction permit (B1-P-1180) for new station on **1210 kc.**, 100 watts power, daytime operation.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—Construction permit for a new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.**, 50 watts power.

NEW—Westinghouse Electric & Manufacturing Co., Chicopee Falls, Mass.—License to cover above.

Second Zone

WDBJ—Times-World Corporation, Roanoke, Va.—Modification
930 of license to change power from 1 KW night, 5 KW day, to 5 KW night and day.

WBLK—The Exponent Co., Clarksburg, W. Va.—Modification of
1370 construction permit (B2-P-1127) for a new station, requesting changes in transmitting equipment, approval of vertical antenna, and transmitter site at 5th and West Virginia Ave., Clarksburg, W. Va.

WSMK—WSMK, Inc., Dayton, Ohio.—Authority to install auto-
1380 matic frequency control.

WBCM—James E. Davidson, Bay City, Mich.—Modification of
1410 license to change power from 500 watts night and day to 500 watts night and 1 KW daytime.

Third Zone

KARK—Arkansas Radio & Equipment Co., Inc., Little Rock, Ark.
890 —Modification of construction permit (B3-P-197) for new equipment, increase in power, and move of transmitter, requesting authority to make changes in power from 500 watts night and 1 KW day to 1 KW night and day.

KPRC—Houston Printing Corp., Houston, Tex.—Modification of
920 license to increase power from 1 KW night and 5 KW day to 5 KW day and night. Amended to change name from Houston Printing Co. to Houston Printing Corp.

NEW—St. Petersburg Chamber of Commerce, St. Petersburg, Fla.
1050 —Construction permit to erect a new broadcast station to be operated on **1050 kc.**, 5 KW, limited time.

NEW—The Metropolis Co., Jacksonville, Fla.—Construction per-
1290 mit to erect a new broadcast station to be operated on **1310 kc.**, 100 watts power, unlimited time. Amended to change frequency from **1310 kc.**, to **1290 kc.**, power from 100 to 250 watts, and make changes in antenna.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Au-
1310 thority to install automatic frequency control.

KRRV—Red River Valley Broadcasting Corp., Sherman, Tex.—
1310 License to cover construction permit (B3-P-999) as modified for new station on **1310 kc.**, 100 watts power, daytime operation.

NEW—J. H. Allison, Rhea Howard and B. D. Donnell, d/b as
1380 West Texas Broadcasting Co., Wichita Falls, Tex.—Construction permit to erect a new broadcast station to be operated on **1380 kc.**, 1 KW power, unlimited time, using directional antenna at night.

NEW—H. A. Hamilton, Spartanburg, S. C.—Construction permit
1420 for a new broadcast station to be operated on **1420 kc.**, 100 watts night and 250 watts day power, unlimited time.

Fourth Zone

WIND—Johnson Kennedy Radio Corporation, Gary, Ind.—Modi-
560 fication of license to change power from 1 KW night, 5 KW day, to 5 KW day and night.

WHA—University of Wisconsin, Madison, Wis.—License to cover
940 construction permit (B4-P-887) for equipment changes and increase in power.

KSOO—Sioux Falls Broadcast Association, Inc., Sioux Falls, S. Dak.
1110 —Authority to make changes in automatic frequency control apparatus.

KFJB—Marshall Electric Co., Inc., Marshalltown, Iowa.—Modifi-
1200 cation of construction permit (B4-P-1054) to make equipment changes, install vertical antenna, move transmitter,

requesting further changes in equipment and extension of commencement and completion dates from 6-3-36 and 12-3-36, respectively, to 30 days after grant and 60 days thereafter.

WHLB—Head of the Lakes Broadcasting Co., Virginia, Minn.—
1370 License to cover construction permit (B4-P-329) for a new station.

NEW—Aberdeen News Co., Aberdeen, S. Dak.—Construction per-
1390 mit to erect a new station to be operated on **1390 kc.,** 1 KW power, unlimited time.

WROK—Rockford Broadcasters, Inc., Rockford, Ill.—Construc-
1410 tion permit to make changes in equipment, install vertical antenna, increase day power from 500 watts to 1 KW.

NEW—Curtis Radiocasting Corp., Indianapolis, Ind.—Construc-
1500 tion permit to erect a new station to be operated on **1500 kc.,** 100 watts night, 250 watts day, share with WKBV (request facilities of WKBV, unused or equal division of time). Amended: Change requested time from shares with WKBV to specified hours (time not used by WKBV).

Fifth Zone

KFPY—Symons Broadcasting Co., Spokane, Wash.—License to
890 cover construction permit (B5-P-332) as modified for new equipment, increase in power, move of transmitter.

KFVD—Standard Broadcasting Company, Los Angeles, Calif.—
1000 Construction permit to make changes in equipment, install directional antenna, increase power from 250 watts to 1 KW. Amended to change type of antenna from directional to vertical.

KSL—Radio Service Corporation of Utah, Salt Lake City, Utah.—
1130 Construction permit to make changes in transmitting equipment, install vertical antenna, and increase power from 50 to 500 kilowatts.

NEW—Mile High Radio Corp., Denver, Colo.—Construction per-
1210 mit to erect a new station to be operated on **1420 kc.,** 100 watts power, unlimited time. Amended to change frequency from **1420 kc.** to **1210 kc.,** power from 100 watts to 100 watts night and 250 watts day.

KRKO—Lee E. Mudgett, Everett, Wash.—Construction permit to
1370 install new transmitter and vertical antenna, change frequency from **1370 kc.** to **1420 kc.,** power from 50 watts to 100 watts night and 250 watts day, time from share with KVL to unlimited, move studio and transmitter from 2814 Rucker Ave., Everett, Wash., to site to be determined, Everett, Wash.

KUJ—KUJ, Inc., Walla Walla, Wash.—Authority to make changes
1370 in automatic frequency control apparatus.

KWYO—Big Horn Broadcasting Company, Inc., Sheridan, Wyo.—
1370 License to cover construction permit (B5-P-1114) for equipment changes, install vertical antenna, increase power, and move transmitter.

KOY—Nielsen Radio & Sporting Goods Co., Phoenix, Ariz.—Vol-
1390 untary assignment of license from Nielsen Radio & Sporting Goods Company to Salt River Valley Broadcasting Company.

NEW—Harold M. Finley and Mrs. Eloise Finlay, La Grande, Ore.
1420 —Construction permit for a new station to be operated on **1500 kc.,** 100 watts power, daytime operation. Amended: Change requested power from 100 watts to 100 watts night and 250 watts day, frequency from **1500 kc.** to **1420 kc.,** time from daytime to unlimited.

KVOE—Voice of the Orange Empire, Inc., Ltd., Santa Ana, Calif.
1500 —License to cover construction permit (B5-P-912) for changes in equipment and move of transmitter.

The National Association of Broadcasters
NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.
JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★
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Further Testimony at FCC Allocation Hearing

A number of witnesses appeared today before the Federal Communications Commission at the allocation hearing and at adjournment Judge Sykes, chairman, announced that tomorrow morning engineers for the Columbia Broadcasting System would begin their testimony. He stated that at the conclusion of Friday's hearing adjournment would be taken until next Monday. There is no definite indication as to how long the hearings will continue but it is not expected that they will run for more than two or three days next week.

Among witnesses heard today were: William B. Way, Vice President and General Manager of KVOO, Tulsa, Okla.; D. A. Read, Station WTIC, Hartford, Conn.; Charles W. Horn and Dr. C. B. Jolliffe, engineers, appearing on behalf of the National Broadcasting Company.

William B. Way

Mr. Way during the course of his testimony told the Commission that his station believes that it is inadvisable for clear channels to be forced into sharing time arrangements and requested that stations of that type be allowed to utilize "their equipment, justify their investments, and above all, to protect the consumer in his right to uninterrupted reception."

Mr. Way said:

Our principals own and operate radio station KVOO in Tulsa, Okla., which is a cleared channel sharing time with station WAPI of Birmingham, Ala. In our testimony before this Honorable Commission, in keeping with the informal hearing docket No. 4063, we desire to present our contentions with respect to certain phases of the present allocation and future allocation of radio frequencies.

We are of the opinion that the present allocation of radio frequencies, as now maintained and supervised under and by virtue of the authority of the Federal Communications Commission, with respect to radio broadcasting, in an effort to serve the public interest, convenience and necessity, is inadequate to keep pace with the developments which have been brought about by the recent past, but which must eventually evolutionize radio broadcasting.

As brought out in the statement of Honorable John W. Kendall, associate counsel of certain licensees on shared time cleared channel assignments, KVOO-WAPI, WOWO-WWVA and KEX-KOB, have been permitted to operate simultaneously during daytime hours. KVOO, however, did not appear with the group above mentioned because we felt that our station stands in a unique position as compared with the other four sharing time stations operating simultaneously during daytime hours. The importance of this peculiar and difficult situation was in effect recognized by the Clear Channel Group when Mr. Edwin W. Craig, chairman of the group, stated, "Such, for example, is the case where two clear channel stations are dividing time and are located at substantial distances from each other. We can readily appreciate and sympathize with the economic hardship imposed on them."

Experiments

Many years of experiment have been consumed by all phases of the radio broadcasting industry, in an effort to determine the reaction of the public to the utility of radio. To a great degree, natural and man-made interferences have been conquered as a result of surveys and technical improvements in reception and transmission. While we have not made a comprehensive survey of certain economic problems which might indirectly bear upon the ultimate solution, nevertheless, our research has disclosed that very little attention has generally been given by the industry as a whole to the consumer or "listener-in" as an indispensable factor in the equation which proves to us that radio broadcasting must have clear channels in the true sense of the term. We are of the opinion that the consumer's place in the industry is of equal importance with that of the advertiser. A careful study of the periodicals devoted to radio broadcasting convinces us that the attention given to the commercial picture far outweighs the consideration due to the consumer. The consumer's annual investment in new receiving equipment in order to obtain the maximum reception, together with the consumer's cost of operation of his receiving set, is of major importance, since without the consumer, radio broadcasting would have no outlet. The consumer, then, must be considered in connection with the retention of clear channel stations. This consideration would yield to the consumer the greatest utility of his receiving set prior to the obsolescence period which is bound to come with respect to his receiving equipment; especially is this true when we consider the future developments which are certain in radio broadcasting. When television is added, the situation will again be different, but for the moment radio broadcasting is in effect a vocal art and as such is undergoing rapid development. I think that in principle, the use of radio should increase public enlightenment, encourage responsible citizenship, and enhance interest, intelligence and tolerance in our world of today.

Proposition No. 1

> The retention of "Clear Channel Stations" as defined in Section 72 of the Federal Communications Commission Rules and Regulations, with certain exceptions as may be necessary to provide the millions of consumers in America with a maximum of service.

In this connection we recommend reallocation of a sufficient number of stations in such a manner that east-west duplication will be secured. This we believe is necessary in order to relieve the allocation congestion in the center of the country.

Proposition No. 2

> Power increases on Regional and Local stations, but with less protection to their secondary coverage; by Regional stations we mean "regional station" as defined under Rules and Regulations of the Commission, section 73, to-wit: A station licensed to operate simultaneously with one or more stations assigned to the same frequency designated for such use, and with an authorized power of not less than 250 watts nor more than 1,000 watts at night, and not more than 2,500 watts during daytime. By "local station" we mean, as defined in section 74 of said rules, to-wit: A station licensed to operate with other stations assigned to the same frequency designated for such use, and with an authorized power of 100 watts at night and not more than 250 watts during the daytime.

It is our opinion that, by giving less protection to secondary coverage, the result would be considerable further duplication in the stations of each of the classifications listed, namely, regional and local.

Proposition No. 3

The utmost of service, efficiency, utility and convenience should be maintained on all radio stations, with the proper preservation of clear channels in order to meet national emergencies.

It is our belief that in the event of a national emergency, such as war, all radio facilities, broadcasting, point to point, amateur, police, etc., might be subjected to governmental service. This should make it imperative that the United States take advantage of all technical advances to have available the most efficient mass communications system possible. This is especially important in view of the fact that neighboring countries may not be, in fact have not been, limited to a maximum of 50 kilowatts power. We have no assurance that nearby high-power stations will not be built and operated in such manner as to deliver a comparatively usable signal to a large portion of the United States, blanketing or making useless some of our most consistently serviceable channels. These usable signals from foreign stations would create a grave potential propaganda hazard. We should therefore take every reasonable advantage of technical progress, through private initiative, to build for our national physical and morale protection the most efficient broadcasting transmission system of which our nation is capable; a system on a par with the technical advances we have made in all branches of science and industry.

Proposition No. 4

Immediate steps should be taken to eliminate the necessity of stations sharing time on clear channels.

We are of the opinion that there should be a change in the present policy of allowing clear channels to be operated as sharing time channels. According to section 79 of the Rules and Regulations of the Federal Communications Commission, Part III, the term "sharing time station" means "a station, the operating hours of which are so restricted by the station license as to require a division of time with one or more other stations using the same frequency in the same geographical area."

It has been our uniform experience that the consumer is constantly complaining because of his inability to have what we choose to call *constancy of radio* convenience.

To illustrate our proposition, we must necessarily be governed by our own experience, which, in our opinion, is largely true where "sharing time" situations exist; for example:

KVOO at Tulsa, Oklahoma, divides time with WAPI, in that on Monday, Tuesday and Wednesday KVOO goes off the air after 9:00 P.M.; Thursday, Friday and Saturday in October, KVOO goes off the air from 5:45 P.M. to 9:00 P.M. and on Sunday off at 8:15 P.M. KVOO is a station with operating power of 25,000 watts, on 1140 kilocycles, whereas WAPI at Birmingham, Alabama, has an operating power of 5000 watts, on 1140 kilocycles, which divides night time with KVOO as heretofore pointed out.

They both are designated as operating on a nationally *cleared* channel. The consumer or "tuner-in" does not take time to become fully informed as to why this condition exists, nor as a layman would he understand the situation. Most consumers are not able to grasp the times of operation and silence of stations. They are interested in tuning in on their favorite station and they expect an *uninterrupted reception*. We have found, by our contact with our listeners, and by reason of numerous surveys which have been made, that there is a tendency for the consumer to tune his receiving set to his favorite radio station for his evening radio broadcasting reception.

Case of KVOO

In the case of KVOO, a specific example of what we term interrupted reception is illustrated by the broadcast of the Fleishman Yeast Hour, which features Rudy Vallee. The consumer in the coverage area of KVOO turns his dial to 1140 kilocycles at 6:00 P.M., to enjoy an hour of one of the oustanding programs on the air. At exactly 6:30, he hears a station announcement, advising him that KVOO is signing off until 9:00 P.M. At the time of this announcement, the Fleishman hour is only one-half completed. The listener's clear, uninterrupted reception is immediately blocked, and he is forced to go prospecting across the band, in an effort to retrieve the program to which he was listening. He then endeavors to pick up the program over some other station with less favorable reception as a result of either man-made or natural interferences. This illustration does not have a hypothetical origin, since we receive complaint after complaint, wanting to know why reception is interrupted over KVOO, but nevertheless KVOO, as well as WAPI, is designated as a high powered clear channel station, which, of course, is in name only.

We also direct your attention to the fact that, where a sharing time station is forced off the air, as illustrated above, the consumer rarely returns to the station which has signed off, for the remainder of his radio reception for the evening; however, if he should do so, in radio broadcasting parlance, the renewed transmission is "cold" to the listener.

It can be seen, therefore, that where clear channel stations operate on what is known as sharing time as defined above, that there will naturally be created, from the evils of the system, an antagonized and dissatisfied consumer. There are many other matters which naturally affect the public service, necessity, and convenience by reason of the present sharing time arrangement of allocation on clear channels.

Economic Questions

One of the major economic questions deserving careful consideration in connection with sharing time stations on clear channels is the operating cost to the effectual station. The original investment and the actual operation of the station are substantially the same when that station is located in a sparsely settled area or when a similar station is located in a heavily populated area, and this would hold true to a great extent where the station located in a heavily populated area operates on full time and the other station located in a sparsely populated area operates on a sharing time basis.

We have found that on account of being on the air only part of the time, our program expense is substantially as great, even greater than a station in continuous operation, as we need just as many announcers and just as much paid talent available, but can only utilize a part of their services. Of course, our power bill will be somewhat less, although we must have just the same connected load as a transmitter operating on full time, and furthermore, being on a clear channel we must maintain the same high standard of program service as any full time station on a clear channel. Our depreciation item, our engineering costs, and other costs are substantially the same.

Speaking entirely of our own situation, records on file with the Commission will show that since 1930 this sharing time clear channel station has operated at a loss and has endeavored to render high class service, and has in fact done so strictly as a communication company and not as a subsidiary of any other enterprise. Through all of the period we have continuously improved our program service and equipment so that even with all of the losses sustained we have still been willing and financially able to improve our service to the listeners. Considering the enormous investment of our company we believe that KVOO, or any other sharing time station similarly situated, should be given an opportunity to at least recover its investment and off-set depreciation charges by being permitted to operate as a full time station in the true sense of the term. In this connection KVOO has a 50 kilowatt Western Electric transmitter, and the total investment is in excess of $300,000.

Summary

Summarizing, we direct this Honorable Commission's attention to the fact that our section of the country has been referred to in the past, by certain spokesmen in radio circles, as the hinterland of the United States, and said statement has doubtless been prompted by ignorance of existing conditions in what we choose to term the area with the most prolific opportunities in radio broadcasting. The Midwest, from Ohio to Colorado, is the radio center of the United States, Tulsa being almost in the geographical center.

Without the uniform rules and regulations heretofore adopted by the Federal Communications Commission, detrimental policies and harmful practices would result; therefore, we feel that the propositions we have herein submitted will be of assistance to this Honorable Commission in determining that it is inadvisable for clear channels to be forced into sharing time arrangements. We hope that our suggestions will assist this Honorable Commission in its policy of serving the public interest, convenience and necessity, and therefore give to the affected stations an opportunity for them to utilize their equipment, justify their investments, and above all, to protect the consumer in his right to uninterrupted reception.

Cross Examination of Mr. Way

Mr. Way was subjected to a short cross examination by T. A. M. Craven, chief engineer of the Commission, during the course of which he told of the difficulties of sharing time on a clear channel

as experienced by his station. He said that undoubtedly, while he had no special knowledge of the facts, regional stations sharing time had similar difficulties.

He spoke especially of the difficulty of reception for listeners when KVOO goes off the air and the fact that there is no continuity of service. At that time, namely when KVOO is silent, there is practically no radio reception in the rural area for from 85 to 90 miles around Tulsa. He stated that his station did make a little money last year and made a profit in 1930 but generally has been unprofitable.

D. A. Read

Mr. Read on behalf of WTIC gave an early history of that station, spoke of its operation as a part-time clear channel station and of the difficulties which it had experienced, and then told of experimental simultaneous operation. He took up also the benefits of duplicate operation.

Mr. Read said:

Early History

Station WTIC, located in Hartford, Connecticut, licensed originally in the name of Travelers Insurance Company, and more recently in the name of the Travelers Broadcasting Service Company, a wholly owned subsidiary of the first-named company, was originally constructed December 13, 1924. The station began regular broadcasting on February 10, 1925, the original plant consisting of a 500 watt transmitter and the necessary appurtenances thereto. The station operated on several frequencies at a power of 500 watts until at or about the time of the general reallocation of 1928, at which time the station was granted an authorized power of 50,000 watts on the frequency of 1060 kc., sharing time equally with Station WBAL of Baltimore, Maryland.

During the first year of the station's operation it did not enjoy any chain affiliation and did not broadcast any commercial programs. It was conducted purely on an institutional basis by our company with a view that the good will to be derived from such operation would enure to the benefit of our company. This method of operation continued until the commencement of the year 1926. The total expenses of operation from the date of the station's establishment until the end of the year after it acquired a clear channel status (February 10, 1925, to January 1, 1930) were $359,782.39.

Operation as a Part-Time Clear Channel Station

The expansion of our broadcast activities and the increase in authorized power and change in assignment which gave Station WTIC a part-time clear channel status was preceded by numerous conferences between representatives of our company and members of the Federal Radio Commission and its staff. At that time the Commission was engaged in a general reallocation and the question of allotting clear channel assignments is largely a matter of finding persons or organizations who were willing to assume the financial and other responsibility necessarily incident to such an undertaking. From our conferences with the Commission and its personnel, we were led to believe that if our company undertook a program of expansion and accepted a clear channel status with the financial outlay necessarily incident to the erection of what was then known as a "super-power" station, we would receive the exclusive use of a clear channel frequency. It was upon this understanding that our company decided to undertake this step.

After this decision was arrived at, and subsequent to the ordering of equipment and a large part of the actual construction work, we were advised that legislative and other developments at the Commission had brought about a situation where WTIC could not have exclusive use of the clear channel frequency, but would be required to divide time with Station WBAL at Baltimore. We mention these facts, not as a criticism of the Commission or of its personnel, but merely as an explanation of why our company, comprised we believe of ordinarily prudent and conservative business men, undertook an expansion program of this magnitude at this time, particularly in view of developments which I shall hereinafter relate.

With the commencement of the year 1926, Station WTIC began operating as an outlet on the Red Network of the National Broadcasting Company, and at this time began broadcasting other programs of a commercial nature, which, we believe, not inconsistent with our institutional policies and practices. From the outset we believed that an institution such as ours had much to lose and little to gain by putting on programs of an inferior class or advertising of a nature which seemed to conflict with other policies and practices of our organization. Moreover, we thought it necessary to equip ourselves from a technical and a programming standpoint in line with our general company policies and in line with what we believe to be the best current practices of the period employed by other high-power clear channel stations.

Under Handicap

It goes without saying that from the very outset we operated under a very severe handicap. Under our time-sharing agreement with WBAL, it was necessary for us to broadcast only on alternate days, coming on the air one afternoon at 4:00 o'clock p. m., and signing off the next afternoon at the same hour, except on Sundays, at which time a slightly different arrangement was followed. Under the circumstances it was practically impossible to retain our listening audience or to build up an audience of regular listeners. Radio listening is more or less a habit, and persons will necessarily become accustomed to tuning to particular stations and listening to particular programs, namely, those stations and those programs which they regularly received at the hours of the day during which they are accustomed to listen. Moreover, we found that our station was not attractive to national advertisers and that the National Broadcasting Company sold it with great difficulty, not only because of our inability to build and retain a listening audience for the reasons heretofore stated, but also because broadcast advertisers frequently desired to book programs such as "Amos and Andy" and other popular features "straight across the board" or for a given period on each broadcast day. Being able to broadcast only on alternate days, our station was necessarily eliminated from such business, and also from such other regular business as was offered for broadcasting on the days when we were scheduled to remain silent. It is interesting, as well as painful, to note that the results of our operation under this arrangement through the years 1930 to 1934, inclusive, resulted in a net aggregate loss of $1,509,191.99, or a loss in 1930 of $305,888.74; in 1931 of $306,256.97; in 1932 of $325,997.53; in 1933 of $361,009.71, and in 1934 of $294,041.04.

Experimental Simultaneous Operation

Being faced year by year with these tremendous operating losses and with the fact that even if these losses could or should be disregarded, the station was not really performing adequate public service due to the interruptions in its operating schedule, we made consistent and repeated efforts to secure some relief from the handicaps under which our operating schedule placed us. Our first step along this line consisted of extensive research in the possibilities of synchronous operation, conducted not only by the regular employees of our technical staff, but also with the assistance and guidance of Professor W. J. Williams of Rensselaer Polytechnic Institute. With the cooperation of the National Broadcasting Company, and its technical staff under the direction of Charles W. Horne, we finally made application for and received authority to undertake such operation with Station WEAF, a clear channel station located in New York, New York, licensed in the name of NBC, and which also carried the Red Network program of that company. After considerable expenditure of time, effort and money, we were doomed to disappointment in this venture, because we found that the complaints from listeners in the area between New York and Hartford were such that the Commission felt compelled to cancel this authorization. This authorization was granted on the 1st day of October, 1931, and cancelled on the 14th day of June, 1932.

Possibility of Duplication

As our situation was in no sense improving, we then began a study of the possibility of duplicate operation with some station located at such a distance from Hartford as would permit both stations to render an acceptable program service. In this matter our choice of stations was necessarily limited, since stations of comparable power which were enjoying full time clear channel assignments were not desirous of duplicate operation, and WBAL, the station with which we were sharing time, was so located as to make such a type of operation unattractive either to it or to us. It so happened that stations KTHS, at Hot Springs, Arkansas, and KRLD, at Dallas, Texas, were confronted with a problem somewhat similar to that which confronted WTIC and WBAL. In other words, the Hot Springs station and the Dallas station, although both classed as clear channel stations, were each enjoying only part-time operation, being forced to share time upon a common frequency, namely, the frequency 1040 kc. In this state of affairs, and after extensive negotiations between representatives of these stations, a plan was evolved whereby Station WTIC and

KTHS were to switch frequencies, thus permitting the simultaneous full-time operation of KRLD and WTIC on the frequency 1040 kc. and duplicate day and divided night-time operation between KTHS and WBAL. This plan was presented to the Commission in the form of appropriate applications. After extensive study and hearings before the Commission en banc, the Commission on May 8, 1934, granted experimental authority for such operation, which authorizations have been successively renewed down to date.

Benefits of Duplicate Operation

As heretofore stated, the Commission authorization for simultaneous operation became effective May 8, 1934, and by such operation during the balance of that year we were able to reduce our losses rather substantially. The loss for the year 1933 amounted to $361,009.71, whereas, in the year 1934, it amounted to $294,-041.04, or a difference of $66,968.67. In the year 1935 we were able still further to reduce our losses, a loss for that period amounting to $203,897.44. For the year 1936, we show, up to October 1, an operating profit of $17,577.93, the first profit which we have derived from the operation of our station throughout the approximate twelve years since its inception. We anticipate that our profit for the entire year, taking into account our existing contracts and anticipated business, will amount to approximately $35,000.00.

Benefits to the Listening Public

Inasmuch as we had once been required to discontinue our experimental synchronous operation because of the dissatisfaction of the listeners we were somewhat apprehensive of the listeners' reaction to our experimental duplicate operation. Although we had conducted certain extra hour tests which convinced us that the simultaneous operation of KRLD and WTIC under this plan would be acceptable to a degree, we were not sure that these conditions would be obtained throughout the hours before midnight or throughout an entire year's operation. We were, therefore, very much pleased to find that operation during regular broadcast hours throughout the summer months of 1934 resulted in no objections from our listeners and were extremely gratified to find that such operation during our first winter resulted in no objection. As heretofore stated, we have continued to operate on this basis since May 8, 1934, and to my personal knowledge only two complaints of interference have been received at WTIC. One complaint came from a listener located at a little town in the Province of Saskatchewan, Canada, and the other complaint from a listener located at Detroit, Michigan.

Some indication of the increase in the popularity of the station since our full-time operation can be gathered from the fact that in the year 1933 before our simultaneous operation the National Broadcasting Company received 4,676 letters from listeners concerning programs broadcast over Station WTIC; in the year 1934, during the latter part of which we enjoyed simultaneous operation, this letter response increased to 9,605; for the year 1935, during all of which time we enjoyed full-time operation, this letter response has increased to 32,112; and for the portion of this year for which we have records, namely, January through August, this letter response has increased to the figure of 56,114. It must be remembered that these are letters sent either directly or indirectly to the National Broadcasting Company and concerning network programs. They do not include letters sent to the station concerning non-network programs.

I do know from my own personal observations and from reports made to me by my engineering staff, that we are now serving, and have throughout the duration of this experiment served an area which would approximate the primary service area of a clear channel station operating on a frequency such as ours without duplicate operation. I also know that we furnish some degree of secondary service throughout a relatively wide area. Mr. McNary, who will follow me on the stand, will give you the details concerning the nature and extent of the present service, the technical steps which have been taken and are now being taken to make this type of operation possible, and the technical conclusions to be drawn from our experience.

Conclusions

For my own part, I desire to conclude my remarks by saying that the beneficial results of this operation have, to my personal knowledge, been two-fold. It has permitted WTIC to give a well-rounded uninterrupted program service to a rather large and heavily populated area which heretofore had been served in only a very unsatisfactory manner; and, secondly, it has permitted our company to reduce our already tremendous operating losses to the vanishing point, and now, after twelve years of uninterrupted operation, we realize for the first time a slight benefit.

Statement on Behalf of KRLD

It is hardly necessary for me to state that WTIC and KRLD have been closely associated in connection with the experiment whereby they are operating simultaneously on 1040 kilocycles. I have been authorized by Station KRLD to make the following statement:

Simultaneous operation with WTIC has proved most satisfactory. KRLD is regularly licensed (and has been since April 30, 1929) to operate simultaneously with Station KTHS during the day, and to share time with that station at night. Although the relationship between KRLD and KTHS has always been very harmonious, the time-sharing arrangement inevitably resulted on many occasions in preventing KRLD from carrying programs of national importance which were features of the Columbia Broadcasting System or, oftentimes, of carrying important programs in their entirety. It also seriously handicapped the purely local activities of the station. Furthermore, it was found that many advertisers objected to the use of a station which was not on the air continuously during its broadcast day and, therefore, did not have the advantage of a continued and sustained audience.

Since the inauguration of simultaneous operation with WTIC on an experimental basis, KRLD has enjoyed an increase in the number of its listeners and a resulting increase in revenue, all due to the regular use of its assigned frequency. During the entire period of experimentation KRLD has received no complaint of any interference from its listeners, and has received much satisfactory comment from a radius of approximately 100 miles. This would indicate that the listeners who depend upon KRLD for their radio service have no objection to the presence of WTIC on the same channel, and probably know nothing whatsoever of the simultaneous operation. It would therefore appear that such operation is an advantage both from the standpoint of the station and of the listeners, and that its continuation on a permanent basis should be encouraged both from an engineering and a commercial standpoint, and in the furtherance of an economic use of a desirable frequency.

Cross Examination of Read

Mr. Read was subjected to a short cross examination during the course of which he said that his station gives secondary service in Vermont, New Hampshire and Maine. In connection with the losses which his station has sustained over a period of years Mr. Read explained that there had been included in those losses a write-off for experimentation.

Charles W. Horn

Mr. Horn, on behalf of the National Broadcasting Company, advocated (1) an additional classification calling for 50 millivolts for metropolitan areas as a minimum signal necessary for good service, (2) that the power measurements of a station be made by the so-called direct method of antenna measurement and (3) that field strength measurements be made of all stations.

Mr. Horn said:

One of the most difficult problems facing the broadcasting industry and the Federal Communications Commission is that of determining accurately the service areas of individual stations. Because of the varying conditions which exist, such as fading, changes in Heaviside Layer, different ground conductivities, adjacent channel interference, and made-made static, no one has yet been able to devise a yardstick which will permit us to answer this question with any degree of mathematical certainty.

I propose to discuss today the efforts which the National Broadcasting Company has made toward finding an answer. With the variables that exist there may never be a fixed and final formula applicable to all stations everywhere and I want to make it clear that we do not go so far as to recommend our method as a standard to be adopted by the Commission. However, we do believe that the efforts we are making along these lines will be of interest both to the Commission and to other broadcasters.

First, I want to discuss some of the varying influences which effect radio wave propagation. This discussion will also constitute National Broadcasting Company's comments on items listed in the Notice of Hearing.

Propagation Characteristics of the Various Frequencies in the Range 550-1600 KC.

The Engineering division of the Federal Communications Commission has available in existing literature a considerable quantity

of material concerning wave propagation. The curves and data prepared for the coming meeting of the C. C. I. R. next year is of this type. The data obtained from the recent Clear Channel Survey is also of value. The only additional material I might offer is a paper by Mr. William A. Fitch of the National Broadcasting Company explaining a simplified method of using the Sommerfeld formula. This article is complete with curves and is herewith offered.

The curves and technical information referred to above are the result of many measurements made over a considerable period of years. The industry now has available suitable instruments as well as competent and experienced engineering services to carry on such measurements with the result that we have removed a great deal of guess work and are depending more upon measured data. The Engineering Division of the Commission has likewise been alert and taken advantage of additional information whenever it became available and is to be commended for its share in developing higher standards and thus helping to improve radio conditions.

Prevailing Attenuation

I am presenting herewith a map prepared by our engineers on which are shown the ground conductivities in areas in which we have made measurements of stations. This map shows the conductivity calculated from surveys of sixty stations in different cities. Lines are drawn in several directions from each location and the figure on each line indicates average conductivity in that particular direction and out to the distances to which measurements were carried. In some cases where there was a decided difference in conductivity the attenuation factor is shown for different portions of the line. It is hoped that the information on this map will be helpful to the Commission engineers and that it may be added to data which they already possess. Accumulation of data of this type will make possible the preparation of maps so that we shall know in the future what the radio conditions are in all localities and with considerable accuracy.

Proper Ratio of Desired to Undesired Signal

The proper ratio of desired to undesired signal is something which is dependent to a great extent upon the general receiver characteristics. As Mr. Van Dyke has analyzed this subject and presented some tables, it is not necessary that it be repeated here. In the large experience that we have had, and including the experience of an innumerable number of listeners as expressed in their mail, I can substantiate the results obtained by Mr. Van Dyke in his measurements and studies of receiver characteristics.

Interference due to natural static varies with the seasons and is more prevalent in the southren part of the United States, especially in the summer. A paper on this subject by Mr. R. K. Potter appeared in the Proceedings of the Institute of Radio Engineers foi September 1932. The effect of interference from natural static is now much less than it was during the earlier days of broadcasting because of the use of higher transmitter powers, and a continued improvement may be expected by still further increasing the ratio of signal to static by the use of higher powers. Those of us who are old timers in this industry will remember the difficulties we encountered due to natural static because of the extremely low powers then employed by the transmitting stations. Here again, we are dealing with engineering factors which are well known and which are expressed in our signal-to-noise ratios so definitely a part of radio engineering.

Static

In the more built-up sections and particularly the larger cities we experience a considerable amount of so-called man-made static which is due to electrical devices. Most man-made static is due to either defective electrical equipment or such apparatus as the older style X-Ray machines which are inherently noise-producing and which must be installed with proper shielding. New devices such as diathermy machines are emitting radio frequency waves that have been found to travel great distances. Apparatus of that ype should be filtered or shielded and we must look to the manufacturers of these devices for help and cooperation. It is pleasing to note that railways in many localities have made efforts to reduce interference caused by their apparatus. Trackless trolleys, using the two-wire overhead system and equipped with pneumatic tires, present a problem that needs serious attention. A recent report by manufacturers indicates that something like two thousand such trolleys will be put in service in the United States during 1936. There are quite a number of such trolleys in use in London and the combined efforts of the transportation people and the broadcasting interests in England have resulted in a reduction, but not complete elimination, of the interference.

Interference due to electrical apparatus has engaged the attention of such organizations as the National Electrical Manufacturing Association and others responsible for electric design standards. Both in Europe and America there has been cooperation between manufacturing companies and radio engineering committees in an effort to reduce interference from this source. Credit is due the power and electrical companies for their efforts and it is safe to say that interference by man-made static is much less in the United States than in other countries which are comparable to us in electrification.

Satisfactory Service

In radio reception the governing factor is always the ratio of the strength of the desired signal as against the intensity of the interfering signal or static. The required ratios for satisfactory service are given in Mr. Van Dyke's presentation. For some years engineers have been using the standard published by the Engineering Division of the Federal Communications Commission which shows that for good reception receivers in cities require 10 millivolts, in residential sections 2 millivolts and rural localities .5 millivolts per meter of signal intensity. These figures are based on the fact that electrical noises are greater in cities than in residential and rural parts of the country. These have proven quite satisfactory except in the case of metropolitan areas where a great deal of electrical disturbance and other factors are present. Our experience indicates that we must add another classification to this table to take care of conditions in metropolitan areas.

Because antennas in metropolitan districts pick up a greater amount of electrical noise, it is necessary that the desired signal strength be greater in order to maintain the proper signal-to-noise ratio. However, in these areas, an additional obstacle is encountered because of the shielding effect of steel structures which causes a reduction in the amount of radio signal energy which arrives at the average antenna. While there may be 10 millivolts of signal intensity in the atmosphere above such a city the antenna may receive but a fraction of this energy because of such shielding. Therefore, the average antenna in a metropolitan district not only suffers from increased electrical noise but generally receives less than its share of radio energy with consequent poor results. The only solution possible is a higher signal strength over such territories and our observations and measurements indicate that in metropolitan areas the signal intensity must not be less than 50 millivolts in order to render acceptable service. Even with this signal strength there will be spots that will not obtain adequate service due to exceptionally deep shadows cast by steel structures, but these may be classed as extreme cases.

Heaviside Layer and Sun Spot Cycle

The Heaviside Layer is usually considered as being a conducting, and therefore a reflecting, layer in the upper atmosphere approximately 100 kilometers or so above the surface of the earth. There are a number of layers having varying effects on different frequencies. Considerable investigating work has been done by such organizations as the United States Bureau of Standards, the Carnegie Institution and others and reports of this work have been published.

Long distance transmission is obtainable because of the so-called sky wave which is reflected back from the Heaviside Layer. That wave which leaves the antenna and travels along the surface of the earth is known as the ground wave and is eventually absorbed and falls to such a low value as to be useless for service. Between the ground wave area and the secondary area we have the so-called fading band which is a point where the sky wave returns to earth and has sufficient strength to seriously interfere with the ground wave. We generally term the area within the fading band as the primary service area although where unusually strong interference exists from other stations, either on the same channel or on neighboring channels, the primary area is in this case much more restricted. In other words, the primary service area of a broadcasting station is that territory in which it places a sufficiently strong signal and free from interference in order to render good service. We refer to the territory beyond the fading band as a secondary area in which some service is rendered but of a much less reliable type. In this territory slow fading takes place and there are variations in the strength and steadiness of the signal. Also on shared channels this area experiences a great deal of interference due to the low ratio between the desired signal and one or more interfering signals.

Seasonal Variations

Seasonal variations have a marked effect upon the sky wave, which furnishes this secondary service, but has little effect upon

the ground wave. During certain periods of sun spot cycles certain reactions are noted. The sky wave may come back to earth with greater intensity nearer the station and cause the fading band to move inward. This was noted at two particular stations during the past few years. Also the service rendered the secondary area has been found better during periods when the sun spots are less prominent. The secondary area receives less service in summer due to the longer daylight periods as compared with the winter as these Heaviside reflections take place after dark. The secondary area is also influenced in the summertime by a higher static level especially in the southern half of the United States.

From the above it will be noted that the best service rendered the public is, of course, in the primary service areas which are less affected by atmospheric and cosmic changes. The Federal Radio Commission prepared a map, together with some statistics, under date of December 14th, 1933, on which was shown "Calculated Night Primary Coverage of All Broadcast Stations Based Upon Interference, Propagation and Frequency Characteristics." A glance at this map will show that the greater portion of the area of the United States is in the secondary service area and not in the primary area of broadcasting stations. The statistics which came with the map indicate that of a total of 119,636,708 United States population, the number of people that resided within the primary coverage of the broadcasting stations was 76,662,000 or 64.2 per cent. There were approximately 43,000,000 people living within the secondary coverage area or 35.8 per cent of the total population. Receivers in this secondary area, which by the way happens to be 70.6 per cent of the total area of the country, are solely dependent upon the sky wave or secondary area signals of stations which have sufficient power and are free from interference.

Little Change

While this map is dated December 1933, we will find that there has been relatively little change in the number of stations since that time and while some of these stations may have increased their power they have not materially increased their primary service area because of the fading limitations. It is safe to estimate that the percentage of population in the secondary area is still as great as it was at the time the map was prepared. (I offer this map for your consideration.)

Long distance transmission or service to the secondary area is possible only on channels which are free from interference. The system we have adopted, that of using high power on clear channels and lower power on shared channels, is universally recognized and is in use in Europe as well as other parts of the world.

Synchronization

In order that there may be no misunderstanding I would like to give my definition of this term. I consider two or more stations to be operating in synchronism when the carrier waves are not only of the same frequency but their phase relationship is maintained to within a few degrees. Such precise frequency control plus the necessity of transmitting the same program are absolute requirements if two stations are to operate in synchronism with their ground wave service areas adjoining or near to each other but not overlapping. To maintain this precise frequency control requires some common frequency standard or source—I have found that a connecting wire line supplying the stations in question with a standard frequency is best, plus equipment at each station to prevent line changes from causing variations in the phase of the radio wave. This equipment is in the nature of a flywheel which prevents any rapid line fluctuations from affecting the output frequency.

Using such specifications a reasonably good signal may be expected in areas where the signal strength of the desired station does not drop to less than five or possibly four times the intensity of the station with which it is synchronized, providing the identical program is broadcast simultaneously. In areas where the signals are nearly of the same intensity, say less than 4 to 1 in ratio, difficulties are encountered due to the carrier frequency being partially, and frequently even greatly, suppressed which results in distortion.

Signal Ratio

There is a belief in some quarters that stations can be synchronized and different programs broadcast. This does not hold true until the separation between the station is great enough to provide a signal ratio of 20 to 1, desired to undesired. This is because the factor which then causes the greatest interference is not the carrier wave conflict but the modulated portion of the wave, or cross talk. Even with all conditions under control in the case of synchronized operation, care must be taken to see that the telephone line connecting the stations is not of such a length or characteristic to introduce lag in the audio signal, which can cause serious loss of quality. Synchronizing a whole chain of stations is at present impractical, both technically and economically. One reason is that the networks do not furnish programs regularly from only one fixed location but switch to different cities for various programs and sometimes even insert selections originating at a point distant from where the main program takes place. Another reason is that while I know of some time delay circuits I do not know of any which covers the whole music range. Even if they could be built it would be impractical to readjust and change such devices even between programs.

We have the benefit of the experimental work being done on the several installations of this type which has given us a clearer understanding of the problem together with some quantitative results. In other words, we know what can or cannot be done at the present state of the development.

I would like to state that synchronization of radio stations is still in an experimental stage. I have kept myself informed of what is going on in Europe by personal contact, and find that they have the same views I have expressed.

Standards and Methods of Measurement

In the earlier days of broadcasting it was somewhat difficult to measure the power radiated from a transmitter. The best we could do was to estimate the efficiency of the apparatus and arrive at some approximate values. This led to a number of methods of determining the power radiated. With the information which we now have available, the only logical engineering method is a direct measurement of the antenna resistance and the amount of current flowing in that antenna. With complicated antenna design, in order to obtain directional effects, it is possible to make the measurements in the main transmission line feeding the antenna array. It is urged that the direct method of measuring power be adopted as the standard. With the measuring instruments available today accuracy within ten percent is easily obtained.

Field intensity measuring sets are now readily available as well as engineering organizations equipped to do this work. Field intensity measurements should be made at one mile from the antenna plus a sufficient number of measurements on radials out to the limit of the good service area. From these data, curves can be drawn to show the efficiency of the radiator, ground system, conductivity of soil and the signal intensity in the area surrounding the station. With the equipment available today, an accuracy within ten percent is possible.

Determination of Service

The satisfaction a listener can obtain from his receiving set is dependent upon a number of factors, the principal ones being:

(a) The field strength of the desired signal.
(b) The strength of interfering signals from undesired stations.
(c) The noise level in his particular locality.
(d) Fading and distortion due to fading.

Early in 1933 the engineering department of the National Broadcasting Company undertook the work of making field strength measurements of over one hundred stations throughout the United States as well as a couple in Canada. This was the largest undertaking of its kind ever attempted and while the cost was very large it was considered necessary as we wanted to know how well we were serving the country. On this one survey alone we made 21,316 measurements which entailed 232,218 miles of traveling by the measuring units. Eighteen crews of engineers were engaged in this work. In addition to our own Company engineers we engaged the services of recognized consulting engineers and their methods and measurements were compared with those made by our own men. In all cases the latest types of measuring equipment was used.

Accurate Measurements

With more accurate measurements of power radiated and resultant field contour maps, we begin to have some evidence of coverage. However, as field strength measurements are necessarily made in the daytime and do not show the night phenomena, such as fading and interference from distant stations on the same or adjacent channels or the noise levels existing in a territory, and since it is not possible to determine the effect of these except over a very long period of time and at an exorbitant cost, the National Broadcasting Company turned to its audience for a more immediate

answer. The method we adopted has been to analyze more than 15,000,000 pieces of mail received by our stations from their listeners. Part of the information we thus obtained has already been made available to the industry through the publication known as "NBC Network Areas", copies of which I will be glad to submit for the record.

Every letter received from listeners is carefully checked as to point of origin and the station to which it is addressed. The point of origin is noted in order to determine the county from which it came. We use counties as the smallest sub-division of territory because that system coincides with U. S. census information which includes the number of homes having radio receivers. Our method depends upon percent of mail received from counties as compared with the number of homes having receiving sets in those counties. Please note it is not based upon population but upon the number of homes having receiving sets and for that reason gives more accurate information. In this survey work we are not so much concerned with the contents of these letters as we are concerned with their points of origin. Because of the tremendous volume of mail, in the first seven months of 1936 we have already received 4,237,000 such letters, any small discrepancies are averaged up. Also as you will note, this in no way can be confused with so-called popularity contests as we obtain our information from postmark and address and as we have been continuing this survey over the last several years it is also not subject to territorial or local errors because stations retain the letters referring to their own local programs and only forward those concerning network programs. The information thus obtained is tabulated and the number of letters from each county, per unit of time and per thousand radio homes gives us an index figure for that county. Taking those counties as par which are within the good service area of the station under survey, as determined by field strength measurements, and noting their mail response per 1000 radio homes, we have a basis of comparison with which to judge the response from all counties.

Survey Individually

Each station is surveyed individually and in each case its own par rating is determined. It is possible that people in different sections of the country may have different habits when it comes to writing letters. Also it would be unfair to use an index figure per 1000 radio homes of one station, or even an average figure, to rate another station.

This survey we are conducting is a continuous process. We have a staff which varies between 30 and 35 people to take care of this work which is handled in New York, Chicago and San Francisco.

These measurements took many months and after all the information had been assembled we compared the signal field strength contour maps with our letter surveys. There was general agreement between the two results and in those cases where there were any marked differences we found we could determine the reasons for the deviations. In some cases it was traceable to interference from some other station on the same channel, or from an adjacent channel and sometimes even to man-made static.

As we have been conducting this method of surveying the service areas of the stations on the National Broadcasting Company network continuously for over three years and as we are constantly checking results, we feel we have demonstrated the reliability of the system. Its great advantage over other systems is that it shows the response of millions of listeners living in every State and County of the United States and over a long period of time. It truly is the expression of the American public although they do not know that they are participating in a survey, which, in our opinion, is also desirable.

Summary

Gentlemen, in summarizing I wish to repeat the three recommendations I have made—they are:

1. An additional classification calling for 50 millivolts for metropolitan areas as a minimum signal necessary for good service.
2. That the power measurements of a station be made by the so-called direct method of antenna measurement.
3. That field strength measurements be made of all stations.

Horn Cross Examination

Signal intensity of 50 millivolts in cities was advocated by Mr. Horn under cross examination. He said that in his opinion this is needed because of steel buildings and noises over such territory. He indicated that of course 50 millivolts would not be needed over every place. He stated that his company had made surveys indicating that New York City showed decided shadows.

Mr. Horn testified that there are certain variables in modern antennas. NBC, red network, he said, covers the entire country but this does not necessarily mean that it gives good service. At least, he said, the listeners can understand the station to which they are listening.

Dr. C. B. Jolliffe

Dr. Jolliffe said that the standards of allocation must of necessity be kept abreast of modern engineering practice. Interference from unwanted radio stations, said Dr. Jolliffe, is a problem of allocation and "your Commission has a primary responsibility for the solution of this problem."

Dr. Jolliffe said:

Allocation of Frequencies to Broadcast Stations

The basis of an engineering determination of a proper allocation of frequencies and classification of broadcast stations can be reduced to three factors:

(1) Standard of service,
(2) Characteristics of receiving sets,
(3) Relation between field intensity and distance.

Theoretically, given these three factors any problem of broadcast allocation can be worked out. Unfortunately none of the three factors is capable of exact definition and the proper ones to use in a given case are either matters of technical judgment or protracted studies in particular locations. We have presented in this hearing data obtained from studies made over a period of several years upon which engineers can base technical judgment.

The re-allocation of broadcast facilities made in 1928 was developed without definite standards or quantitative measurements. Primarily it was the combined experience of a group of engineers who had been closely identified with the early development of radio broadcasting. Since that time quantitative studies have been made by various engineers and engineering groups which confirm this early experience. In the Fifth Annual Report of the Federal Radio Commission, published in 1931, there appeared for the first time definitions of standards of service for various classifications of stations and their application to allocation problems. It was then stated, "Since many of the standards are also based on the present-day average receiving sets, average standards of listeners, present design of antennas, and so forth, they will, of course, be changed as the art progresses." Revisions and extensions of these standards appeared in the Sixth and Seventh Annual Reports of the Federal Radio Commission and the First Annual Report of the Federal Communications Commission.

Survey

The clear channel survey conducted by your Commission and this hearing are logical continuations of the study of these standards in order to obtain the most accurate and most modern data available at this time. As stated in the hearing on June 15 before the full Commission, the research and engineering staffs of RCA and its affiliated companies are available to your Commission for the study of technical problems which will assist your staff in solving the allocation problems.

The standards of allocation must of necessity be kept abreast of modern engineering practice. They must, however, be sufficiently stable and changes made gradually so that the public, which has many millions of dollars invested in receiving sets and the largest stake in broadcasting, may adjust itself to the new standards.

The receiving set industry is built around the set of standards which is reflected in the allocation to broadcast stations. Since changes in allocation will have their repercussions in the factories of the receiving set manufacturers, the service organizations of these manufacturers and the homes of persons using present day receiving sets, it is of the utmost importance that changes in allocation or re-allocation of frequencies to broadcast stations proceed on the basis of evolution and experimentation rather than by radical and sensational changes.

The basic standard from which to study all allocation problems is the technical standard of the program which is delivered by the loud speaker of the radio set installed in the listener's home. You have been told that there will be at the end of this year approximately 30,000,000 receiving sets in use by the public in the United States. I submit that the technical excellence of the programs which come out of the loud speakers of these sets is the engineering measure of public interest, convenience and necessity.

Program Marred

The program delivered by a receiving set can be marred by receiving set noises, man-made electrical noises, and interference from radio stations. The receiving set manufacturers take every precaution to reduce receiving set noise well below an objectionable value. The Commission, receiving set manufacturers and electrical manufacturers can cooperate to reduce the interference caused by electrical machinery, flashing signs, diathermy machines and other sources of man-made electrical interference. The existence of this interference can also be recognized and proper allocation of power to transmitting stations can submerge it by producing sufficient signal strength at the receiving set so that the interference is below an objectionable value.

Interference from unwanted radio stations is a problem of allocation. Your Commission has the primary responsibility for the solution of this problem. There have been numerous observations, measurements and studies made to determine the maximum amount of interference which can be tolerated in the output of the receiving set, all of which agree very closely with the present standards of your Commission.

The good service area of a station has been defined by your Commission as "that area in which reception free of interference is obtained at least 90 per cent of the time." This is reasonable and the first definition of standard of service. To make this quantitative a second definition is necessary and must relate to the OUTPUT of the receiver. Our data have shown that a signal at the OUTPUT of a receiver can be defined as "free of interference" when the power ratio of the signal to interference is greater than 30 db for crosstalk or 37 db for 10 kc heterodyne. These two definitions define the MINIMUM standard of service.

Allocation Problems

To obtain the relationship of this standard of service to allocation problems it is necessary to reflect the standard back through the receiving set to the receiving antenna and determine the maximum field intensity produced by interfering stations operating on the same and adjacent frequencies which can be tolerated without exceeding the maximum of interference at the output of the receiving set. To do this a typical receiving set is necessary.

Data have been presented to you which represent the composite performance of modern broadcast receiving sets from which a typical receiving set can be evolved. The proper typical receiving set to use is one of engineering judgment and we have suggested what our engineers believe is the proper interpretation representative of receiving sets in use today. This gives a reasonable basis for this phase of allocation.

The third factor, relation between field intensity and distance, has been one concerning which your Engineering Department has done much work. The intensity of the field produced by a radio station at any point distant from the station can be determined from the propagation curves which engineers have developed. The propagation of radio waves along the ground has been a subject of much study, both by theory and measurement. If the attenuation factor is known in a particular area it is not difficult to calculate the field of intensity which will be produced in the vicinity of a station. Data available are not conflicting when properly interpreted and a full and complete answer as to the ground wave propagation of radio waves in the broadcast spectrum is available in the radio literature and in the studies which have been made by engineers of the Commission. Further studies will undoubtedly change these curves in some minor particulars, but for the purpose of allocation the data now available are sufficiently accurate.

Field Intensity Records

The analysis of the field intensity records in the clear channel survey, which have been published in your report, correlated with the work of others such as the International Broadcasting Union and the Bureau of Standards, gives an excellent basis for determining the proper propagation curve to use to determine the field intensity produced by a station beyond the limit of the ground wave. The field intensity at a distance from a radio transmitter varies from minute to minute, hour to hour, day to day, season to season and position in the sunspot cycle. It is not proper to use the maximum value to which a signal might rise, and the prevailing practice of using a "quasi maximum" above which the signal does not rise more than a given percentage of the time is reasonable and consistent with the definition of good service area of a station. The standard which has been used for the "quasi maximum" by the Commission as that signal above which the value does not rise more than 10 per cent of the time appears to be satisfactory and consistent with the definition of standard of service. Whether this value should be 10 per cent, or 5 per cent as is used in international documents, is immaterial since at the present time under the conditions of application the tolerance is greater than the difference between the 5 per cent "quasi maximum" and the 10 per cent "quasi maximum" curves. The experience and opinions of engineers all over the world certainly indicate that the value of 10 per cent interference time is the MAXIMUM that should be considered as satisfactory.

Sunspot Cycle

The position in the season or sunspot cycle which can be considered as proper to use is, again, a matter of engineering judgment. The same tolerance, namely, a standard transmission curve above which the signal does not rise throughout the entire transmission cycle more than 10 per cent of the time, would appear reasonable. To determine this curve accurately would require that measurements be made through a period of eleven or more years. The time of the clear channel survey was not at the peak of good transmission with respect to the sunspot cycle or with respect to the maximum for the seasons but somewhat after the peak had been reached. The curves which were developed as a result of this series of recordings could be used as the standard of transmission for a period of years until it is possible to accumulate a greater amount of transmission data.

There are available, therefore, data which permit setting up definitions of the three factors which form the fundamental basis for the determination of allocation. From these data numerical values or curves can be set up as a part of your Regulations which will determine, under a given set of conditions, whether or not the listeners who are entitled to obtain reception "free of interference" from a given station will receive that to which they are entitled.

In order to apply these standards of allocation it is necessary to set up definitions of classes of stations based on the limit to which each station is entitled to give service "free of interference."

Two Classifications

There are only two general classifications of broadcast stations: (1) stations operating on frequencies on which a single station is permitted to operate at night (clear channels), and (2) stations operating on frequencies on which more than one station is permitted to operate at night (duplicated channels). Other classifications are sub-classifications of those two.

Consider first the classification of frequencies on which more than one station is permitted to operate at night. This general classification contains what has been called in the past "regional," "high power regional," "local" and, for lack of a better name, "duplicated clear channel" stations. It is well known that the range of interference of a station extends far beyond the range at which it is capable of giving satisfactory service. When two stations are operating on the same frequency there is surrounding each station an area in which the receiving stations receive signals from the nearer station at a sufficient field intensity so that the output of the loud speaker reproduces the program on that signal "free of interference" from the distant station based on the definition of the standards of service given above. The extent of this area depends on the relative power and geographical separation of the stations on the same and adjacent channels. Under a given set of conditions the standards of service will define this area.

Engineering Judgment

It is a matter of engineering judgment and allocation policy to determine how far from the station receiving sets are entitled to receive signals "free of interference" on the basis of the standards of service. In the standards at present used by the Commission averages are used over widely variable conditions.

In the final analysis the standard of protection should be set up for each frequency based on interference caused by stations operating on the same and adjacent frequencies, natural and man-made interference in the localities where the frequency is used, propagation characteristics of the frequency and distribution of population in the areas served. This composite picture is the one which determines the area which is to be given reception "free of interference" for any station. Conditions vary throughout the spectrum and the present allocation of frequencies to different types of stations is so widely different that it appears to be essential to apply the standards of service to each frequency and set up its protection separately and definitely in each case. General names and general specifications are no longer sufficient and are, in fact, misleading.

There is no difference between the fundamentals for determining the service of a 100 watt station operating on the same channel with other 100 watt stations and the service of a 5 kw. station operating on the same channel with other stations of the same or different power. The principles of calculation remain the same, and the standards of allocation apply.

Turning now to the consideration of frequencies on which only one station is permitted to operate at night, this subject was discussed very ably in "The Clear Channel in American Broadcasting", a report of the Institute of Radio Engineers which was submitted to the Federal Radio Commission. The results of the clear channel survey conducted by your Commission, the data which have been prepared by the Commission and submitted in hearings and data presented by engineers show the value of clear channel stations to the listeners of the United States.

Primary Service Area

Without clear channels some 40,000,000 people of the United States who live outside the primary service area of broadcast stations would be without any type of radio reception. The inauguration of service to these people in 1928 when the Federal Radio Commission adopted the principle of clear channels was in response to a very insistent demand for service by non-urban listeners. For more than two years prior to the re-allocation in 1928 there was no clear channel service as we know it today. The experience, observations and measurements which have been made since that time show that this type of station is the only type of station capable of giving a reasonably satisfactory service to rural communities. Your clear channel survey is an additional piece of evidence to bear out this statement. No technical development has been made since 1928 to reduce the necessity for clear channels to serve rural listeners and there are no such developments in the laboratory.

The allocation problem with respect to the primary area "free of interference" of clear channel stations is the same as with respect to stations operating on duplicated channels. The PRIMARY SERVICE area which it is designed to protect "free of interference" can be calculated on the same principles as the primary service of a so-called "regional station." The only difference in the calculation is that one source of interference has disappeared, namely, interference on the same channel. Adjacent channel interference presents the same problem as far as the definition of primary service is concerned.

Secondary Service

In addition to protecting the primary service area the principle of assigning a single station to a frequency and permitting it to operate at a higher power, is to give SECONDARY SERVICE to those people who have no primary service or whose primary service is severely limited. This service is not ideal but it is the only type of service which it is possible to give to a scattered population. Fortunately, the electrical noise level in rural districts and small communities is quite low and signals of low field intensity can be used for service. These low field intensities are susceptible to all types of interference, the signals vary in intensity and the intensity of signals on adjoining channels likewise change. Consequently a listener may have freedom of interference for a short time and then experience inter-channel interference for a period of time due to changes in relative values of signals which are received at that point. The modern receiving set with automatic volume control acts both to help and to complicate the problem. It keeps the wanted signal at a constant level but may, in doing so, accentuate side channel interference.

Selectivity of Sets

The possibility of changing the selectivity of receiving sets by means of variable selectivity controls makes it possible to receive service through much inter-channel interference. Such high selectivity may reduce the quality of the reproduced signal, but it does produce an interference-free signal. Signals in the secondary area of clear channel stations are usually not free of interference as defined by the standard of service. They do provide a service, however, which provides a large amount of enjoyment for those people who are not close to entertainment centers. Higher power on such stations will increase the average level of the received signal and reduce the number of times that the signal becomes entirely unusable and increase the amount of time it is "free of interference" not only from other stations but also from man-made and natural interference (static). In those cases where clear channel stations are serving large centers of population increased power on the stations will improve the service in the primaary service area, and in all cases will extend and improve the secondary service signal to outlying rural communities. Consequently it is logical and desirable to permit the use of adequate power by all stations holding clear channel assignments. What the upper limit of this power is we do not know; certainly not 50 kw. and probably not 500 kw. Developments will demonstrate what is engineeringly practicable and feasible. Duplicate assignments should not be made on these channels even though they may now appear technically possible. Certainly such assignments will impede progress and limit future use of all developments to provide better service to the rural population. It is a sure method of stopping progress.

Technical Problem

The number of clear channels which should be provided is a combined technical and policy problem. From the technical standpoint it must be recognized that there are daily and seasonal differences in the long distance transmission of radio waves. Stations which are satisfactory one day may not be useful at all at other times and consequently a number of stations must be available to provide continuity of service. To maintain continuity of a given program day in and day out, season by season, it is highly desirable that the listener have available the same program on several widely distributed stations. If a listener could provide himself with an elaborate antenna arrangement and widely separated receiving systems to provide diversity reception such as is done in commercial receiving stations, then a single transmitting station of sufficient power would be adequate to provide a given program. This is not possible. It is possible, however, through the multiple transmission of the same program from several stations to give each listener a multiplicity of possibilities of reception, thus reversing the process and giving diversity of transmission rather than diversity of reception, and thus assuring a greater percentage of time for the reception of a particular program.

The number of clear channels now actually clear and used as clear channels is the minimum number which can give adequate service to rural communities scattered over the vast area of the United States.

With respect to the suitability of various bands of frequencies for the various services, it is possible to submit data to show that practically any frequency in the broadcast band is most suitable for a particular classification of station. The difference between the propagation characteristics of the ground waves of stations on different frequencies in the broadcast band is well known and the technical radio literature is freely used by the engineers of your Commission. This hearing has brought forward further data which I do not believe are in conflict with any data which were previously available. All the stations in the country cannot use the low frequencies and consequently certain stations will, under certain classifications, have a larger service area than other stations in the same classification. These differences are well known and if every case is studied carefully the best solution for the area can be determined.

Maximum Power

The question of the maxium power to be permitted to be used by stations on duplicated channels is one which can usually be determined by the amount of electrical interference from non-radio sources which are encountered in the outer edge of the area which is entitled to be "free of interference." If, for example, the outer limit of this area is 1 mv/m and it includes urban communities where noise level can be expected to be high, the output of the receiver may not be "free of interference" due to non-radio interference. If the power of the station is raised from 1 kw. to 5 kw. the signal strength at the outer area would be raised from 1 mv/m to 2.2 mv/m. This might be sufficient to submerge the level of non-radio interference to less than an objectionable value or at least approach more nearly to this condition. In other cases the limit of the area "free of interference" may be, for example, 5 mv/m. Increasing the power of such station five times would increase this signal strength from 5 mv to 11 mv/m. It is probable that 5 mv/m is sufficient to override local electrical interference at all points within the protected area and consequently the increase to 11 mv would not result in any better service, but would simply increase the strength of the interference in the area outside the good service area and make it more objectionable. Since each frequency must be considered with reference not only to stations operating on that frequency but also on adjacent frequencies, the power to be permitted must be determined by all the conditions. These are known in any case and so the problem can be solved in each case if referred back to the one criterion, output of the receiving set.

Overcome Interference

The power necessary to overcome interference in the protected service area of the station must be permitted or it is useless to protect this area. The power on adjacent channels must be balanced in such a way as to provide the maximum of service. Arbitrary limitation may be restrictive, intelligent analysis based on maximum service to listeners is necessary and in the public interest.

The number of stations on a duplicated channel must be based on the type of service which the station is intended to render to the public. Regional and local stations play an important part in American broadcasting. Their service areas and established audiences have been built up on the basis of service and should not be destroyed or reduced. If a station is permitted on a regional or local channel with less geographical separation from the existing stations than is at present maintained it will reduce the service of the existing stations. In such cases it can usually be shown that public interest will be better served by the improvement in the service of existing stations rather than the establishment of a new station.

New Re-allocation

It might be possible to have a complete new re-allocation such as was done in 1928 and change stations from one frequency to another and classifications of stations from one group of frequencies to another. But you will still have, when this is done, a status which is similar to the present except that the picture will be changed with respect to individual stations. Some will gain; others will lose, but the net gain to the listeners of the United States as a whole would be zero. Such a disturbing upset of the listening habits of the United States might be in the private interest of some stations but would not be in the public interest of the listeners. The present allocation over a period of years has given a large measure of satisfaction. It is not perfect, but it does provide service of some kind to all the people of the United States.

Directional antennas have been applied in many installations and under various conditions. The use of directional antennas has a place in the allocation structure. They are not, however, the solution to all allocation problems. A directional antenna can be built with practically any type of characteristic and to meet practically any condition of protection to other stations on the same channel. It provides no protection for its own service area. How far directional antennas can enter into the allocation problem is a question of policy and economics. From an engineering standpoint it is not a wise policy to permit the installation of a station using a directional antenna to protect other stations on the same channel and at the same time receive interference from these other stations inside the area which it is primarily designed to serve. For example, if a station is to serve a particular city and the interference received from other stations on the same or adjacent channels is so severe that a section of the city which is densely populated receives severe interference, it will result inevitably in severe criticism of a regulatory body which permits such installations and it is not good engineering practice.

Standards of Service

Here again the standards of service can be applied. Calculations on the basis of logical engineering assumptions which give the distribution of service can be made and information can be obtained to show the distribution of population. There are some distributions which would permit very severe directivity with satisfactory service. There are others which will not. Whether or not a station will be permitted to operate or to be installed with the use of a directional antenna must be answered in each individual case. There can be no generalization on this subject. In every case of use of a directional antenna the conditions of use and area of protection of service should be specified by the Commission at the time of authorization.

The same situation exists with respect to synchronization of broadcast stations. It is possible to operate two or more stations exactly on the same frequency. The problem of application is both an engineering and economic one. It is not a "cure-all" solution. Each application must be studied and the best solution arrived at in the public interest. Technical data to apply are known and each case must be given individual attention.

Adherence to sound engineering principles must result in distribution of broadcast facilities to geographical areas. Proper decisions in individual cases can provide fair and equitable distribution to communities within a geographical area. A mathematical system for evaluating facilities is not necessary to comply with Section 307 (b) of the Act and experience has shown that the application of such a system results in an inefficient use of the broadcast spectrum. Radio waves do not respect artificial boundaries and a wise and intelligent allocation of the frequencies available for broadcasting will make use of the known factors to give the best service possible to all the population of the United States.

Ultra High Frequencies

There have been some suggestions that the development of high and ultra-high frequency broadcasting would reduce the congestion in the standard broadcast bands. The broadcast frequencies between 6000 kc. and 20,000 kc. give long distance service but cannot replace the service of clear channels. They are subject to international interference and wide variations in propagation characteristics. If all the frequencies between 6000 and 20,000 kc. available to broadcasting were used in the United States there still would not be enough frequency space to provide a full and complete competitive service to rural communities.

With respect to frequencies for broadcasting above 30,000 kc. there was much discussion at the time of the hearing in June. These frequencies are capable of giving a better and more satisfactory service to a local area than are the standard broadcast frequencies. Signals from stations operating on these frequencies are steady, substantially free of interference and capable of giving high fidelity service. If your Commission will authorize the commercial use by broadcasters of an adequate band of frequencies above 30,000 kc. you will take a step toward the eventual reduction in the congestion in the standard broadcast band. Receiving sets for these frequencies will come into use when frequency allocations are stabilized and local service will be greatly improved.

In conclusion, all topics under Item I can be answered by the application of existing data which are available and the answers to the questions may be summarized as follows:

Summary

(1) Specify by regulation standard of service "free of interference" on basis of OUTPUT of receiving set.

(2) Specify by regulation a "typical receiving set," including all factors which influence the output of this receiver.

(3) Specify propagation curves to be used in allocation problems to relate field intensities to output of transmitting stations.

(4) Classify by regulation each frequency on which duplicated operation is permitted on the basis of a protected primary service area in which a station is entitled to reception "free of interference" permitting use of sufficient power to provide field intensity sufficient to overcome man-made interference to the limit of this area.

(5) Provide clear channels without limit of power in order to give the best possible secondary service to persons outside primary service area of stations specifying standards of protection for primary service area.

(6) Set up mileage-frequency separation tables which relate all factors of standards of service, receiving sets and propagation for each classification of stations and for all frequencies capable of producing interference.

(7) Specify basis on which standards can be replaced by field observations of existing conditions.

(8) Make application of devices such as directional antennas, synchronization, etc., only if such application results in improved service in areas without adequate service and where it is possible to give complete service to the population of the area, specifying standards of service and all conditions at time of such grant.

Data have been submitted which can be used to set up and measure all those factors. If these data are not sufficient to meet your need and you believe that more data are required, the problem is so important to the American public that the data necessary must be obtained before you make decisions that will change the fundamentals of allocation. Technical facts are known now or can be measured; they should be applied accurately and at all times.

Jolliffe Cross Examined

Under cross-examination by Mr. Craven, Dr. Jolliffe said that it is absolutely essential to have flexibility of the Commission's regulations. He agreed he said with the announced policy of the Commission in this regard. Dr. Jolliffe discussed the international situation and explained that he had attended all of the international radio conferences with the exception of one. He admitted that there are international interference complications in North America including Central America but he expressed the opinion that they

are not very serious. At the Madrid Conference he stated that the engineers did not expect any serious interference from 500 kilowatt stations.

South American Situation

In connection with the South American situation he called attention to the fact that the population there is very sparse. He said that in South America they could obtain good radio service from their own stations without any interference from a limited number of 500 kilowatt stations in the United States. The situation there he said has not become acute. Detailed data relative to interference in South America from the United States is being collected by the UIR and will be available at the meeting next year of the C. C. I. R. at Bucharest.

Answering a specific question Dr. Jolliffe said that in his opinion 500 kilowatts stations can not serve the whole country. He called attention to the fact that high power stations might deliver a better signal 1,000 miles away from their location than they would 250 miles away because of fading. In his opinion he stated that a high powered New York station could not give a good service to the West Coast under present development of radio. If a station were placed on the same frequency on the West Coast and the dominant station on the East Coast had its power increased the West Coast station would have its service very materially reduced, he stated. In limiting the power of stations Dr. Jolliffe said that it would tend to impede progress in radio. Questioned about the duplication of 790 kilocycles by WGY with 50 kilowatts and KGO with 7½ kilowatts, Dr. Joliffe said that each station renders a good service in their primary area.

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CBS and Hearst Radio Testify Before FCC at Allocation Hearing

Representatives of the Columbia Broadcasting System and Hearst Radio, Inc., appeared today at the allocation hearing before the Federal Communications Commission and completed their testimony.

Hearings were adjourned today until next Monday when they will again be resumed. While members of the Commission would not express a definite opinion it is generally understood that the hearings will be completed either Tuesday or Wednesday of next week.

Harry C. Butcher, vice president and Washington representative, Dr. Frank N. Stanton, E. K. Cohan and William B. Lodge, all of Columbia Broadcasting System, testified, and E. J. Gough, vice president, and J. L. McCarthy, Director of Marketing of Hearst Radio, Inc., also presented their case to the Commission today.

E. J. Gough

Mr. Gough during the course of his testimony recommended that the collection of up-to-date information as to the number and distribution of radio families in the United States and pertinent data related to it be again undertaken by the government in view of the fact that present governmental information is obsolete.

He told the Commission that the principles which he would discuss are fundamental "to the successful social and economic functioning of American broadcasting."

Mr. Gough said:

In coming to this hearing, Hearst Radio does not appear in the favor of any particular class of station or service.

The ten stations comprising Hearst Radio embrace all classes of transmitters as at present defined. They are widely scattered throughout the country and are located in sections which vary greatly as to social and economic characteristics as well as with regard to technical broadcast service required.

Though Hearst Radio is one of the varied Hearst interests, it is operated independently and strictly as a broadcasting business.

Present Information

The purpose of Hearst Radio in appearing before this Commission is to present certain information, principally in the economic field, which we believe will be of assistance in the determination of fundamental policy regarding the allocation of broadcasting facilities in the public interest.

We present this information in response to the Commission's express desire, when it stated in its original notice of hearing that it wished "to obtain the most complete information available with respect to this broad subject of allocation, not only in its engineering but also in its corollary social and economic phases, to the end that such regulations and standards as it may retain or adopt will make possible such use of the band 550-1600 kc. as will provide maximum service (both transmission and reception) in the public interest."

Our testimony will concern itself principally with the economic factor as it relates to American broadcasting and broadcast regulation. We have done this for one reason.

The more we have studied the problems involved in this hearing and the proposals advanced for their solution, the more we have become convinced of the fundamental and even dominant part which must be played by economic considerations in the development of sound constructive policy for the future growth of broadcasting in the public interest.

ALLOCATION HEARINGS BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WERE ADJOURNED TODAY UNTIL NEXT MONDAY SO THAT THE NEXT DAILY BULLETIN WILL BE DATED OCTOBER 19.

Sound Technical Development

We are firmly convinced that sound technical development in the public interest can result only if adequate scientific study is given to the economics involved.

The economic testimony which we will present undoubtedly will have a bearing upon a number of phases of this hearing as these were outlined in the original notice of the Commission.

Among these are included the possible desirability of establishing new classes or of subdividing, modifying or abolishing any existing class of station; the question of the proper definition of each class of station with respect to its purpose and character of service; the weight which should be given to such factors as area, population and economic support in the allocation of facilities; and the desirability of establishing a system for evaluating facilities so that a fair, efficient and equitable distribution of radio service may ensue.

We shall not attempt to advance any detailed and specific recommendations on particular points such as the aforementioned.

Fundamental Principles

Rather we shall confine our discussion to a consideration of the fundamental principles and information in fields such as the aforementioned which constitute the raw materials out of which detailed regulations or policies necessarily must be constructed. We have confined ourselves to this purpose partly because we wished to avoid every possibility of bias in our discussion and partly because we believed further detailed study of fundamental data might be required before specific regulations could be formulated.

If our testimony has any specific purpose it is this: To indicate as clearly as possible the fundamental relationship which exists between broadcasting economics and the public interest so that adequate and scientific consideration of the economic factor may be incorporated in any future regulation which may be developed; and to emphasize the need of sufficient elasticity in specific regulations, when, as and if promulgated, to allow a reasonable and scientific combination of the economic and technical factors in broadcasting to the end of greater listener service.

Features

In presenting our testimony we shall deal with the following features:

We shall show, first, the close and varied relationship which exists between the economic aspects of American broadcasting and its operation in the public interest.

We shall show, secondly, that consideration of the economic factor as a fundamental one is in the public interest.

We also will show that the economic factor as it affects broad-

casting is measurable, so that it can be included in regulatory theory and practice.

Following this, we will indicate that the consideration of the economic factor as a fundamental one in broadcasting regulation is not incompatible with sound engineering.

Finally, we will indicate that its inclusion in regulatory theory and practice will not result in radical changes in the present broadcasting structure but will furnish a basis for the constructive evolutionary development of broadcasting facilities in accordance with the public interest.

Before discussing our first point, I should like to make one final comment regarding the manner in which Hearst Radio will present its case.

Relationship

It is my intention as a business man long associated with radio to outline the relationship which exists between broadcasting economics and operation in the public interest and to deduce, possibly, some fundamental principles in this field.

However, I am not an economic expert. Though I may forecast in theory what he will deal with in practical detail, I have asked Mr. J. L. McCarthy, Director of Marketing of Hearst Magazines, Inc., to discuss the marketing aspects of our presentation. I mention this so that you may address your questions as to marketing details to him.

We had originally planned to have our consulting engineer, Mr. J. C. McNary, discuss the technical phases, but, having heard the engineering testimony presented in the last few days, we came to the conclusion that anything he might say would be repetition.

We will therefore confine our presentation to economic matters and if this proves helpful in the solution of any of your problems it will be because you will be enabled to coordinate the economic factors to the technical factors which have already been thoroughly discussed.

In emphasizing the economic aspects of broadcasting service and allocation we are by no means unmindful of its basic reason for existence. Radio broadcasting exists fundamentally for the purpose of serving listeners. All other purposes are secondary to this.

Listeners

It may seem elementary to ask what constitutes listeners, but it is nevertheless important to do so. Listeners are persons possessing sets or having reasonably regular access to sets for purposes of use. For practical purposes one can consider the number of families possessing one or more radio sets scattered throughout the various portions of the country as the measure of the number and location of radio's listeners.

Here we are faced with a social problem which has its roots in economics. I have here a chart prepared for me by my economic expert. This chart shows the percentage of U. S. population located within the borders of each state. Population data have been taken from the 1930 Census. The chart also shows the percentage of total radio families of the country found in each state. This percentage is based upon the estimated number of radio families located within each state on January 1, 1936. The estimates were made by the technical subcommittee of the Joint Committee on Radio Research, which is sponsored jointly by the American Association of Advertising Agencies, Association of National Advertisers and the National Association of Broadcasters. It is the latest and most accurate information available on the subject. It is undoubtedly a conservative estimate since it represents the joint work of technical experts representing the buyers of time, the agency and the medium.

Distribution of Population

You will note from the chart that important differences occur in the distribution of population and radio set ownership throughout the several states.

The reason for the difference is obvious. Radio ownership is dependent upon purchasing power, and purchasing power varies greatly in different sections of the country. The distribution of radio ownership will continue to be conditioned by the existence of purchasing power. This is all the more so since the possession of radio receiving sets by approximately three-quarters of the families of the country already has brought set ownership sufficiently far down the income scale to tend to make the distribution of sets in various portions of the country a relatively static matter. When we introduce our expert marketing testimony, we shall deal with this matter in greater detail.

This being the case, we can establish our first principle based upon economics and social needs alike: radio regulation should be conceived in terms of radio families and not total population if *fair, efficient and equitable distribution of radio service* is to be made among the several states.

Degree of Growth

This regulation naturally should include some allowance for such degree of relative growth as may occur in the less saturated areas. However, this allowance should be based upon a scientific forecast of possible future development, and not upon either guesswork or optimism. Ample market data and tested estimating technique exist to make such a scientific forecast possible.

May we conclude our discussion of this specific point with one comment.

The county estimates of the Joint Committee on Radio Research are an excellent pioneering venture of greatest value socially and economically to broadcasting. However, these estimates do not provide all of the information which the Commission should have if it is to shape its regulation intelligently in terms of radio families. Neither is it everythng which the advertiser or broadcaster desire.

Information as to urban and rural receiving set ownership in various parts of the country; data for at least all towns of 10,000 or more in population; the relative degree of ownership of sets in different parts of the country by various income and racial groups; data regarding age of sets in different sections and among various groups—these are some of the facts which the Commission should have at its disposal for detailed and painstaking analysis. Collection of information of this type involves a task of considerable magnitude. Its social and economic importance makes it a logical function of government, just as is the conduct of the U. S. Census, which in 1930 included a radio set census.

Radio Families Increase

Unfortunately an estimated increase in the number of radio families in this country of more than 90 per cent has made this information completely obsolete.

We respectfully recommend that the collection of up-to-date information as to the number and distribution of radio families in the United States, and pertinent data related thereto, be again undertaken by the Government.

This, then, is the first and most elementary point at which economics impinge upon broadcasting in the public interest. However, it is but one point.

Let us therefore proceed with the more important aspects of the relationship which exists between broadcasting economics and public service.

It should be axiomatic that a broadcasting station is able to operate in the public interest only to the degree to which it can secure revenues adequate to render the standard of service required for this purpose. Without adequate revenues, continued operation in the public interest is impossible.

Revenues for the operation of a broadcasting station can be secured from two sources, depending upon which of the two basic forms of broadcasting organization most prevalent in the world today happen to be employed.

Government Ownership

If government ownership is resorted to, either directly or by means of a public corporation such as the British Broadcasting Corporation, then revenues for operation must be secured by taxation.

If private ownership and competitive operation under government regulation, such as prevalent in the United States, is employed, then revenues for operation must come from the sale of the station's facilities to advertisers.

These two methods, advertising and taxation, are the only practical methods of financing a broadcasting station or national system.

Analysis of Commission station lists and similar data reveals that in this country, out of 628 licensees, only 11 stations, comprising 1.7% of the total number and representing less than one-half of one per cent of the nation's total facilities, calculated on a quota unit basis, are financially supported by other than the sale of time to advertisers or indirectly by taxation as in the case of educational or municipal stations. The method of private ownership and competitive operation of broadcasting stations is firmly established in this country. This system received official

recognition and sanction when, after extensive hearings touching upon every conceivable aspect of the organization, operation and service of radio broadcasting, the Congress of the United States passed the Radio Act of 1927. The basic theory and detailed provisions of this act were unequivocally based upon a privately owned and competitively operated broadcasting system. The so-called American system again was confirmed in the Communications Act of 1934, the provisions of which continued to be predicated upon such a system.

System Justified Itself

This system has amply justified itself in the fifteen years of its operation and in the ten scant years of its recognized legal existence. During that period it has come to serve approximately 23,000,000 families representing more than 70,000.000 people. These families are scattered throughout every one of the 3,073 counties in the United States. Approximately 3,000,000 of these families consider radio sufficiently important to have more than one set in their homes while about 3,000,000 of them have sets in their automobiles.

According to the statement made by Mr. James W. Baldwin, Managing Director of the National Association of Broadcasters, at the June 15th hearings of this Commission, the ownership of radio receiving sets is more widespread than is that of any other commonly accepted standard of living factor in American life. The 23,000,000 radio families are to be compared with 11,000,000 residence telephones, 21,000,000 wired homes and an estimated 17,650,-000 families possessing one or more passenger automobiles.

Such a degree of radio set ownership can occur only where appreciative and satisfied listeners exist.

The competitive aspects of the American system have produced one of the most advanced broadcasting services in the world, both technically and from the program viewpoint. American program service has been particularly democratic, since it is based upon popular approval. Private ownership and competitive operation in this country also has fostered and maintained a degree of freedom of speech and civic discussion unparalleled in any other country.

Private Ownership

The continued existence of a broadcasting structure based upon private ownership and competitive operation in the United States has been made possible only by the financial support derived from advertisers. Service of American broadcasting in the public interest is therefore fundamentally dependent upon its economic success as an advertising medium. Eliminate advertising revenues and you eliminate the American system of broadcasting, just as you would eliminate the American press.

Let us be quite clear on one point regarding advertising support of American broadcasting. In spite of obvious shortcomings in individual instances, advertising support has been in the public interest.

Advertising, over and above its fundamental value as a source of revenue, has made constructive social contributions to the service of American broadcasting.

It has fostered technical development in that stations have exerted every effort to adequately cover their market areas so as to be able better to reach listeners and therefore to attract advertising accounts.

Advertising has fostered the development of general program service. The many and varied programs sponsored by national advertisers, ranging from the world's best symphonic music to its funniest comedians, have added greatly to the wealth of entertainment and cultural material available to American listeners. In a similar manner have the local programs of the more important individual station advertisers been of service to listeners.

Advertising Sponsorship

Possibility of advertising sponsorship and of attracting accounts has impelled stations of build programs which would win loyal audiences in their community.

Advertising also has tended to pioneer in the use of new program forms and thus enhance the variety of entertainment available to listeners. This has been definitely established by Dr. Herman S. Hettinger of the University of Pennsylvania in his authoritative study of broadcasting economics entitled "A Decade of Radio Advertising." (Table XXXIII, pages 228-229.)

Finally, radio, in common with all advertising, has been a constructive force in its own right, where properly applied. Advertising *is* a constructive force. It educates the public to new utilities, thus aiding in raising the standard of living. It stimulates demand, and therefore aids in speeding up the movement of trade. Consequently it assists in keeping the wheels of industry in motion and in maintaining employment.

One thing is particularly important to remember when considering the relationship of advertising revenues to the operation of broadcasting in the public interest.

Increased Advertising

The helpful effect of advertising support is cumulative. Increased advertising volume means added revenues. Added revenues make possible improved technical and program service to the end of attracting more and loyal listeners. Such improved technical and program service make the station even more attractive to advertisers with consequent further stimulation in advertising volume. Thus an ever widening circle of service is set up.

It is assumed, of course, the station owners will turn back sufficient portions of their increased revenues into listener service. This seems to be a reasonable assumption, at least from the experience of Hearst Radio. No sooner did we take over station KTSA than we proceeded to install a new transmitter so that we might better serve the surrounding territory. We also are taking steps to improve the general program service to the maximum degree possible in keeping with local needs and desires.

Of particular importance to this hearing is the converse of the preceding observation. If added advertising revenue exerts a cumulatively helpful influence on station listener service, then the loss of advertising revenue likewise constitutes a cumulative drag upon station service.

Broadcasting is a peculiar industry in that it is the only one of which I know where costs increase as volume of business decreases. Every hour not filled with a sponsored program must be supplied with sustaining program service.

Thus the loss of an advertising program reduces revenues and at the same time increases operating costs, if program standards are to be maintained.

Difficult to Supplant

Moreover, if the advertising program is a particularly popular one, it may be difficult to supplant it with another of like quality. Loss of any large number of such programs may reduce program quality over the station to the point where the listening audience begins to turn to other stations. Reduced listener audience tends further to reduce advertiser interest in the station, so that financial failure becomes almost inevitable.

We can now deduce a second principle from these observations as to the fundamental relationship of advertising to the public interest: Since the operation of the American system of broadcasting in the public interest is dependent upon the revenues which it secures as an advertising medium, any system of regulation, if it wishes to foster operation in the public interest to the maximum degree, must recognize, *as one fundamental factor,* the potentiality of securing sufficient advertising revenue by the station to make such service possible.

The question now arises as to how this principle may be recognized in a practical manner. Answer of this question requires a more thorough analysis of the nature of the advertiser's interest in a specific radio station. What is this interest?

Potential Purchasers

The advertiser is concerned with the potential purchasers of his product. Radio listeners are potential buyers, especially for mass consumption goods. The broadcasting station provides the advertiser with a potential contact with the listeners situated in this service area. This contact consists basically of the station's ability to deliver a signal in that area of a strength, quality and consistency sufficient to make possible regular listening. Herein lies the fundamental value of a station as an advertising medium.

Here we come to another highly important economic factor. An advertiser's interest in a station does not rest upon its indiscriminate coverage of listeners. Coverage in a distant continent or some other far-removed spot is interesting but of dubious economic value.

This does not nullify the value of coverage over wide distances on clear channel stations where sky wave reception from such transmitters may constitute the principal means of night-time listening.

But such coverage is of importance only where the advertiser has sufficiently widespread markets and where his distribution

takes in a sufficiently large proportion of possible retail outlets to give him a really close approximation of national distribution. This condition exists less frequently than is commonly supposed.

Intensive Coverage

Even then, the advertiser is first and basically interested in the intensive coverage of his primary markets: those markets in which the greatest number of people with the most buying power eitber reside or buy. Only following this, is he interested in the wider coverage of extensive areas. This is even the case with regard to national network advertising, the greatest economic value of which is that of making possible tbe simultaneous coverage of primary markets.

Viewing the nation as one great market, therefore, we can say that the advertiser's principal interest centers in those points where population and buying power tend to concentrate. He therefore makes a practice of dividing the country into a number of such areas for control purposes and in order to reduce distribution costs.

It is only natural that these areas—usually referred to either as consumer trading areas or retail trading areas—should center about important communities or key cities. Trade always has tended to concentrate where buyers and sellers have congregated, so tbat the cross roads has become the market place and the market place, drawing from the surrounding countryside, has grown into tbe town. Thus the city in itself has become one great market place, drawing trade from the territory adjacent to it.

Consumer Trading Area

Tbe city and the contiguous territory dependent upon it economically may be said to constitute a consumer trading area. Such a trading area is comprised of the dominant city and such satellite communities and portions of the countryside which habitually trade within its limits and which are economically dependent upon it. This is what constitutes the advertiser's principal interest, for it is tbrough the retail establishments located in such a market area that he can reach tbe purchasers located there. It is by means of the radio station serving sucb a consumer trading or market area that the advertiser can establish contact with prospective purcbasers and perhaps persuade them to buy his product.

On the basis of these observations we can state the advertiser's interest in a broadcasting station even more specifically than before. The advertiser finds a broadcasting station of value if it is located in a market which is economically important to him; and if the station is able to cover that market in a satisfactory manner.

From this we can deduce a third principle: Stations must be located in and guaranteed adequate coverage of markets of general interest to advertisers if potentiality of advertising revenue and consequent operation in the public interest is to be safeguarded.

Broadcast Regulation

This principle must be considered as a fundamental aspect of broadcasting regulation if economic stability, the prerequisite to public service, is to be secured.

The application of this principle raises a large number of detailed economic and technical questions which fall more properly into the category of expert testimony. I do not wish to raise them now, since our experts will deal with them in detail. I do wish, however, to anticipate some of tbe questions which undoubtedly have occurred to you at this juncture so that you at least may possess the bare outlines of the complete picture.

Allocation of stations on the basis of service to logical market or trade areas is not incompatible with the public interest. It has already been shown that such areas constitute the advertiser's principal concern and that coverage of them therefore increases the economic stability and well-being of individual stations and of the American system as a whole, with consequent safeguarding of operation in the public interest.

Moreover, as our expert testimony will show in greater detail, such market areas tend to be *social* as well as economic units, so that they comprise logical spheres of influence for broadcasting stations. They also are sufficiently varying as to contour, population, trade and similar features not to impose rigidity upon classes of stations established, but rather to impel toward even greater elasticity than now exists.

Buying Power

Finally, as I have indicated in a general manner, radio families now tend to concentrate in terms of buying power location and therefore in markets, so that coverage of markets results in reaching the great majority of listeners. These points will be developed more fully in our expert testimony.

Expert testimony also will develop the fact that these markets can be defined and evaluated with sufficient accuracy to make possible their use in any system of allocation which may be developed. It will show that advertising potentiality can be determined, at least to a relative degree, so tbat recognition of the economic factor in tbese terms is a practical consideration.

Expert engineering testimony also will develop the fact that improvements in the broadcasting art have made possible sufficient elasticity to enable the combination of the technical and economic factors in station allocation to the end of improved listener service.

Combined technical and economic testimony will show that recognition and inclusion of tbe economic factor will not result in radical and far-reaching changes in present broadcasting structure or allocation. Rather it will constitute a logical basis for an evolutionary development of service along constructive lines, and will provide a means wbereby the regulations of the Commission may be brougbt up-to-date in response to their evowed intention of bringing them to "conform to the actual practice of today."

Relationships

There is still one point regarding the relationships existing between broadcasting economics and operation in tbe public interest wbich should be raised.

It is quite true that coverage, in the technical sense, of a desirable market is the fundamental value which a station possesses for the advertiser. However, listening is the result of more than coverage. Listening is compounded of tbe ability and the desire to hear the station's programs. The probability of actual listener contact for the advertiser therefore is increased materially if tbe station has built up a loyal audience in tbe area which it serves. This loyal audience is the result of tbe quality of the station's signal, plus tbe sum total of its program service, its promotion and policies.

Programs loom especially large in this respect, and in fact are the deciding influence. Since quality of program service is a fundamental factor in operation in the public interest, it follows that operation in the public interest is what creates the value of the station as an advertising medium. Thus tbe cycle is completed.

Broadcasting Economics

This aspect of broadcasting economics and service is of marked importance in regulatory practice and procedure. Delivery of adequate signal and the prcsentation of a sufficiently high standard of program service to attract any important measure of regular listeners necessitates the possession of sufficient working capital and technical and program skill to make this possible. We can therefore state axiomatically that if a new station is to operate in the public interest or to become successful as an advertising medium, it must possess both adequate working capital and a sufficiently experienced and expert staff.

This is an old story, but it has a new angle. The amount of working capital and skill which will enable a station just to get by in the community and to provide a minimum of service is one thing, and the amount of each of these factors required to enable it to win a definite place in the community as an important force, and to grow in service and advertising value, is a highly different thing. If a station merely possesses sufficient resources and skill to provide minimum service, it probably will remain a marginal unit of the industry, socially and economically, for the remainder of its days.

Fourth Principle

We therefore can formulate a fourth principle: Progressively higher standards of working capital and broadcasting experience are desirable and necessary if the general level of broadcasting service is to be improved and if probability as well as possibility of adequate revenues from advertising to enable operation in the public interest is to be safeguarded as far as is practicable.

The determination of adequate standards with regard to working capital and similar matters is dependent largely upon the collection and compilation of financial and other data for groups and classes of stations. This then serves as a basis for evaluation in specific cases. The increased collection of such data on the part of licensees is to be encouraged, as is the keeping of station accounts in a sufficiently standard manner as to make sucb compilation possible.

A policy of requiring progressively bigher standards of working capital and skill and of encouraging the compilation of fundamental comparative data in the field of broadcasting economics sbould assist materially in further sbaping American broadcasting service in the public interest.

In the past balf bour we have traversed sucb ground, some new and some old. Before turning to our expert testimony may I summarize the principles which we have developed and which Hearst Radio feels sbould be considered by the Commission in the formulation of policy as to broadcasting regulation.

Summary

1. Radio regulation sbould be conceived in terms of radio families and not of total population if "fair, efficient and equitable distribution of radio service" is to be made among the several states.
2. Potentiality of securing sufficient advertising revenues to enable continued operation in the public interest must be considered as one fundamental factor in broadcasting regulation and in the allocation of facilities.
3. The most practical means of recognizing this principle seems to be the location of stations in markets of general interest to advertisers and the guaranteeing of stations so located of adequate coverage in tbe market to enable tbem to be of economic and social value.
4. In order to safeguard such coverage, the signal of the station located in the market should compare favorably in its logical service area witb that of any competing station of a like or comparable class delivering a signal in the territory in question. Though complete attainment of this goal is probably impossible, it should be followed as far as is technically feasible.
5. If there is any question of adequacy of coverage, it should be made to exceed rather than fall short of the market limits, though not to an unreasonable degree.
6. Standards should be imposed, as far as is practicable, which will ensure the possession of tbe requisite working capital and skill to make possible initial program service and technical operation of more than marginal quality, thus ensuring constructive future development in tbe public interest.
7. Wben once it is establisbed by careful economic analysis that a community possesses as many stations of proper class and kind as the community can reasonably be expected to support, tben tbe potentiality of advertising of tbese stations should be safeguarded by protection from unreasonable further increases in facilities and consequent ruinous competition.
8. Enough healtby and constructive competition should be fostered by every legitimate means to maintain vitality of service and incentive for furtber development and improvement thereof.

Functioning of Broadcasting

This completes the more general portion of our case. The principles wbicb bave been set forth, to our view, are fundamental to the successful social and economic functioning of American broadcasting.

Since technical considerations loom large in these hearings and in the proposals which bave been and undoubtedly will be made during tbeir course, there is one tbing wbich should be made clear.

Hearst Radio wishes to emphasize tbat it is not in opposition to any technical change of procedure or regulations whicb will result in improved listener service, viewing this term in its broadest implications.

Hearst Radio merely requests that such changes as may be contemplated be first studied most carefully from tbe viewpoint of the principles which we have set fortb.

In otber words, we ask that technical developments be fitted to and be made tbe servant of social and economic needs to the end of furtber progress in the listener interest.

Mr. Gough, under cross examination, stated that Hearst Radio is not a subsidiary of the Hearst Newspapers but is a separate organization of Mr. Hearst. He answered no to the question of whether further development of broadcasting would affect other advertising mediums. He agreed, he said, with evolutionary cbanges in radio and said that they should be "slow but sure." The same broad lines of economics, he stated, applied to broadcasting stations whether they are owned by the government or by individuals. In bis opinion, he said, tbe Commission must consider both national and local needs in any cbanges it makes in radio.

J. L. McCarthy

Mr. McCarthy, of the Marketing Division of Hearst Magazines, who stated that he had been a marketing expert for tbe past sixteen years, spoke in considerable detail of the three-year market survey made by the Hearst Magazines in the United States. He said tbat in bis opinion the economic facts of broadcasting could be ascertained by the Communications Commission by getting much data wbich are filed in otber government departments.

Mr. McCarthy spoke of the 626 trading areas which had been surveyed and said that he had not applied the trading area system to the broadcasting stations of the country. The marketing data, he thought, however, should make a good base for study by tbe Commission.

Mr. McCarthy testified that in his opinion radio sets are approaching a saturation point in tbis country and that tbey will never reach one bundred per cent.

He spoke in some detail of surveys which he bad made in the trading area of Watertown, New York, and Grand Rapids, Micbigan, and of the New York multiple trading center market. Also he made a comparison of areas of equal population which vary widely in buying power.

Mr. Butcher and Mr. Cohan made very brief statements of introduction on bebalf of tbe Columbia System.

Dr. Frank N. Stanton

Dr. Stanton, of the Market Research Department of Columbia Broadcasting System, made an elaborate presentation with lantern slides, taking up specifically a study wbich was made by that company in rural Pennsylvania.

He admitted tbat the study, which necessarily had to be made in haste, was not typical of rural conditions tbroughout tbe country. He said that the results of the study were in complete agreement with that made by the Communications Commission a year earlier. Tbe figures which were arrived at, be stated, can merely be taken as range finders. During tbe course of his testimony Dr. Stanton said that he is of tbe opinion tbat the poor reception received by farmers in various parts of the United States is not only due to the station but due to the condition of their sets.

Dr. Stanton said that the Columbia's survey of favorite stations in rural Pennsylvania showed that 86.6% are in favor of clear cbannels, compared with 82.5% shown in the Commission's survey. The Columbia's survey gave 12.3% as favoring regional and 1.1% favoring local channels, compared with 14.8% and 2.7%, respectively, in tbe Commission's survey.

Two Questionnaires

The Columbia, said Dr. Stanton, sent two separate questionnaires into the rural Pennsylvania area. The first one showed the favorite vs. the strongest station and tbe second one took up day vs. evening reception.

As a result of the first questionnaire on the relation of the favorite to the strongest stations, 47.6% voted for a favorite station whicb is not the strongest station beard on their set. On another survey of program vs. signal taken in 10 cities of the United States, including Baltimore, Maryland; Boston, Massacbusetts; Charlotte, North Carolina; Cbicago, Illinois; Erie, Pennsylvania; Evansville, Indiana; LaCrosse, Wisconsin; Lowell, Massachusetts; Syracuse, New York; and White Plains, New York, the returns showed that 64.9% selected their favorite station because of the programs it broadcasts, while 17.7% selected their favorite station because it was easy to get on tbeir sets, and 17.4% selected tbeir favorite station because it had tbe best programs and came in the easiest.

Second Questionnaire

In the second questionnaire which the Columbia sent into Pennsylvania dealing witb the relation day to evening preferences, 68.8% of the evening favorite station are not daytime favorite stations as shown by the survey.

Dr. Stanton told the Commission that two more questions might have been added to the questionnaires whicb were sent out, including (1) are you getting satisfactory radio reception? and (2) how old is your radio? He said this was not done, although the answers would have been very interesting because of the shortness of the time available for tbe surveys and because it is not satisfactory to put too many questions in such inquiries to tbe public.

He presented an interesting chart showing urban and listening

curves based on 15,650 personal interviews conducted in 304 cities and rural communities and 2,223 scattered farms.

Suggestions

Dr. Stanton made six suggestions for future research study, including:

1. A study of rural areas to determine
   a. The degree of radio ownership;
   b. The present rate of radio set sales and replacements.
2. A study of rural radio listeners to determine
   a. Their attitude toward radio;
   b. Rural opportunities to listen;
   c. Rural listening habits;
   d. Rural coverage, day and night;
   e. Rural program services.
3. A study of general audience attitudes
   a. Toward local and remote stations;
   b. Network and non-network programs;
   c. Sustaining and commercial programs;
   d. Live talent and transcription programs.
4. An analysis of general listening habits over a period of years to determine the trends toward or away from local and remote listening, DX-ing, etc.
5. Determine the size and economic status of the United States areas which would be newly served by all possible 500 kilowatt stations.
6. An analysis of the stations which would fall within the primary service areas of new 500 kilowatt stations * * * a study of the operating costs and incomes of these and other stations with regard to the possible changes in operating practice which would follow power increases.

William B. Lodge

Mr. Lodge, also on behalf of Columbia, presented charts and exhibits from the engineering standpoint. He recommended that no increase in power be made on clear channels from 50 kilowatts at this time.

Mr. Lodge suggested the re-classification of broadcast stations as follows:

1. The purpose of a CLASS A (Clear) STATION is to serve a widespread area of low population density in addition to a large metropolitan area. The association of a Class A Station with a large city should not obscure the fact that its assignment is established primarily for the listener within a radius of a thousand miles, and for whom it would otherwise be economically impossible to provide satisfactory service.
2. The purpose of a CLASS B (Dominant Zone) STATION is to serve a considerable area of low population density and a large metropolitan area. Its skywave signal is intended to provide a satisfactory nighttime rural service within a radius of 300-400 miles and in all directions from the transmitting station. A non-directional antenna is permitted.
3. The purpose of a CLASS C (Restricted Zone) STATION is to serve a considerable area of low population density and a large metropolitan area. Its skywave signal is intended to provide fairly reliable nighttime rural service within a radius of 300-400 miles but not in all directions from the transmitting station. A directional antenna is required.

   NOTE: *Combinations of either one Class B and one Class C or two Class C stations may be authorized to operate on a particular frequency. Two Class B stations will not be authorized to operate on the same frequency.*

4. The purpose of a CLASS D (Regional) STATION is to serve a city or important detached center of population, in addition to the suburban and rural areas in its immediate vicinity. In general, the night service will not extend beyond the daytime range of the station.
5. The purpose of a CLASS E (Sectional) STATION is to serve a smaller city or large town. During the daylight hours its range may include rather large areas, but after nightfall its service will include only that section in immediate proximity to the city or town.
6. The purpose of a CLASS F (Local) STATION is to serve a small town or community.

   NOTES: *A station of lower classification will be authorized to operate on a channel used by stations of higher classification, provided:*

   (1) the primary use of the channel on a national scale is not impaired thereby;
   (2) all stations involved (existing on potential) shall receive the protection specified by considerations of good engineering practice.

A Class E or Class F station will be authorized to operate in a large area which can be completely served only by a station of higher classification.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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Allocation Hearing Before Federal Communications Commission Nears Completion

A number of witnesses appeared before the Federal Communications Commission today at the allocation hearing which was resumed after a recess since last Friday. Also there was rebuttal testimony by the clear channel group.

Members of the Commission who are sitting in at the hearing indicated at adjournment today that they believed the hearings would be completed tomorrow evening or at the very latest Wednesday.

Among those testifying today were: W. J. Pape, Radio Station W1XBS, Waterbury, Connecticut; James C. McNary, on behalf of W1XBS and WTIC, Hartford, Connecticut; Ben S. Fisher, speaking on behalf of a number of west coast stations; George O. Sutton, on behalf of a group of regional, local, day-time and limited time stations and also a presentation for the National Independent Broadcasters and Louis G. Caldwell, rebuttal testimony on behalf of the clear channel group.

W. J. Pape

W. J. Pape in his statement in connection with W1XBS said that that station had found that the territory in which a satisfactory signal can be delivered on its frequency of 1530 kilocycles is very restricted.

Mr. Pape said:

I am testifying as president and treasurer of the company which owns and operates Station W1XBS of Waterbury and New Haven, Connecticut, as to our experience of nearly two years broadcasting on the 1500 to 1600 band.

Many doubts were expressed at the outset in competent circles as to whether inherent difficulties attending these frequencies would not prevent their successful operation. A preliminary survey conducted prior to the opening of the station indicated to us that approximately 70 per cent of the receivers in our immediate territory were capable of receiving 1530 kilocycles. A detailed report covering this survey is on file with the Federal Communications Commission. We recognized in advance the disadvantages of the commercial use of this band due to this receiving set condition.

Soon after W1XBS opened it became apparent that the call letters had commercial disadvantages because numerous advertisers questioned the commercial value of an experimental station as compared with a regular broadcast station.

The expected difficulty with receiving sets capable of dialing 1530 were found to actually exist shortly after the station opened. Being owned and operated by newspapers, W1XBS had publicity facilities which were used to advantage. Programs being presented were exploited generously and a desire created to listen to these programs. The fact that receiving sets not capable of getting W1XBS could be inexpensively adjusted was also publicised and the cooperation of local radio repair men obtained to make these adjustments. The result of this campaign was very clearly indicated in a second survey conducted one year after the station opened when approximately 93 per cent of the receiving sets were found capable of dialing W1XBS at that time. This survey is also on file with the Federal Communications Commission. This condition has been improving gradually ever since because of purchases of new receiving equipment.

By correcting the receiving set condition as outlined and by constant newspaper publicity on the programs presented, the disadvantages of experimental call letters have been partially reduced but we still feel that regular call letters are essential to the successful commercial operation on the 1500 to 1600 band.

Signal Restricted

We have found that the territory in which a satisfactory signal can be delivered on this frequency is very restricted. We believe that if greater coverage were allowed either through the use of more power or synchronization, greater use of the 1500 to 1600 band would be made. Our engineer will present data showing the feasibility of better coverage on these frequencies.

An excellent indication of the improvement of 1530 kilocycles for commercial broadcasting is evident in a comparison of expense and income figures now with those of the first year of operation. During the first year, net sales represented 54 per cent of our net operating expense. For the six months ending August 31st of this year, our net sales represent 79 per cent of our net operating expense. It is understood, of course, that the construction and operating cost of our high fidelity station has been greater than that of the average radio station due to the high standards maintained.

When I last appeared before this Commission, it was in the capacity of an applicant requesting the Commission to open these frequencies for use by experimental broadcasting stations. At that time I committed my company to rather heavy expenditures of money in order to carry on certain experimental work with the hope of making some developments which would prove beneficial to the Art. What real technical developments have resulted is a question for our engineers to discuss. I can say, however, that we have carried out every promise and have furnished this money willingly in the hope that we could justify the use of these frequencies. From my limited knowledge of the various phases of the business, I believe we have justified the use of these frequencies.

In conclusion, I believe, as a business man, that we have overcome most of the difficulties during the past two years and have reached the point of the future profitable use of 1530 kilocycles as a regular commercial broadcasting station provided the coverage problem which will be discussed by our engineer can be satisfactorily adjusted. I believe we have reached the era of commercial recognition and can be self-supporting if the difficulties outlined are removed.

Under cross examination Mr. Pape said that his station had found that following its establishment the radio set sales in the immediate vicinity increased considerably. Questioned regarding station profits he said that his station is not yet operating on a net profit but it hopes to be soon. In this connection also he reported that no depreciation has been marked off up to this time.

J. C. McNary

In his engineering testimony regarding this station (W1XBS), Mr. McNary said:

I shall confine this testimony to comment on the usefulness of the frequencies between 1500 and 1600 kilocycles.

A number of exhibits have been prepared for the record showing the power required to transmit 10 millivolts, 2 millivolts and ½ millivolt to various distances for the frequency range from 1200 kilocycles to 1600 kilocycles and for two values of soil conductivity, namely, 10^{-13} EMU and 2×10^{-14} EMU.

As the exhibits speak for themselves there is little need for detailed comment other than to point out that in each of the cases examined the coverage obtainable on 1600 kilocycles usually exceeds 70 per cent in radius of that obtained for the same power on a frequency of 1200 kilocycles. The rather obvious deduction is the fact that the frequencies from 1500 kilocycles to 1600 kilocycles are definitely useful for broadcast purposes even though

their transmission efficiency is somewhat reduced. For example, a power of 5 kilowatts will transmit ½ millivolt on 1600 kilocycles to a distance of 50 miles when the soil conductivity is 10^{-13} EMU and to a distance of 22 miles when the soil conductivity is 2×10^{-14} EMU.

As a matter of interest an additional exhibit is presented to show the comparison for areas within the two millivolt per meter contours for a 1 kilowatt station operating on 1600 kilocycles and three 250 watt synchronous transmitters operating on the same frequency. This exhibit shows that the three synchronized transmitters may be used to cover about the same number of square miles as a single transmitter having a higher power. The area covered differs in shape from a circular pattern, from which it may be deduced that synchronous transmitters may be useful for distorting coverage areas so as to include populated districts which may not be symmetrically placed with respect to a central point at which the transmitter is located.

In connection with the synchronized system it is suggested that research is desirable to determine the nature of the sky wave interference at night produced by two or more synchronized transmitters.

Directional antennas also furnish a means for varying coverage areas and for control of interference.

George O. Sutton

George O. Sutton testifying today in behalf of a group of regional, local, day-time and limited time stations showed the importance of giving proper consideration to the social and economic needs of the various types of areas requiring radio service in future allocations. He also indicated the basic principles on which the allocation of broadcasting facilities should be made, in his opinion, to conform more closely to the social and economic needs for radio service than are now possible.

Mr. Sutton said:

My name is George O. Sutton, I am making this presentation in behalf of a group of regional, local, limited time and daytime stations, which I represent. It is my hope that the suggestions herein contained will prove helpful to the Commission, the stations and other interested parties.

It is my purpose to present for the consideration of the Commission of various problems which are now confronting many regional and local stations and which prevent them from rendering the service to which their listeners are entitled. We wish to further show the need for a revision of the policy and procedure of the Commission in the allocation of station frequencies and I will endeavor to present a number of suggestions which I feel will prove useful in bringing about a better balance between the various kinds of services now offered by broadcasting stations.

Specifically I desire to develop the following points:

(1) To show the fallacies on which the original allocation of facilities was based in 1928, which allocation has not been changed substantially by regulation since that time.

(2) To show the importance of giving proper consideration to the social and economic needs of the various types of areas requiring radio service in all future allocations.

(3) To indicate basic principles upon which the allocation of broadcasting facilities may be made to conform more closely to social and economic needs for radio service than now possible.

In making this presentation there are several things which I most emphatically propose not to do. We shall not attempt to set forth any great mass of statistical data on economic and social aspects of broadcasting. The majority of pertinent information of this type necessary to a consideration of the issues here involved already has been presented. Therefore, we shall confine our own discussion to that of broad fundamental principles.

No Specific Recommendations

Neither shall I attempt to set forth any detailed and specific recommendations as to regulations. These can be the result only of minute study of issues, and problems. Rather I shall confine myself to setting forth the principles upon which such specific regulations should be heard.

Finally I shall not attempt to present any comprehensive and categorical case built upon the extension of a single theory to its logical conclusions. A principle or theory is merely a guide post. It is not the entire road. What can be produced in the test tube can be manufactured commercially and made available to society generally only if the theory underlying its creation can be adapted to the requirements of modern mass production technique. The perfect principle or theory—that is, perfect to the degree to which our perfect minds have mastered the truth—soon becomes imperfect when an attempt is made to apply it rigidly to the fluctuating conditions of life and activity here on earth. For this reason I shall approach the entire problem of future allocation from a purely practical viewpoint, applying the pragmatic test of "will it work" and attempting to find, if not the perfect theory, at least the intelligent compromise which will enable all classes of service to be improved progressively with the maximum net gain to the American listeners.

In making this presentation, I do not wish to enter into any long recital of allocation history. Yet the future can only be constructed out of the mistakes and accomplishments of the past. Their heritage rests alike upon the present and the future, and unless we understand what has transpired in the years which have gone, we cannot appreciate the limitations or the potentialities of the years to come. What can be done, and more important, what must be done in broadcasting today, is definitely conditioned by the accomplishments and the shortcomings of the allocation of 1928.

Only One Angle Presented

It is all the more important that you have this clearly in mind because, thus far during the course of these hearings, but one angle of this allocation, favorable to one class of station, has been presented. It shall be my purpose to complete the picture.

One additional comment: In dealing with a cold recital of what transpired and in deducing the results which emanated therefrom I do not wish to seem to criticise regulatory bodies. The task they faced was an almost impossible one, and, when all factors are considered, it is sometimes surprising that so much was accomplished. But this does not alter the fact that the solution, no matter how much better than the preceding situation, was not a perfect one.

In order to understand the defects of the present assignments as they developed out of the allocation of 1928, it is necessary first to examine the manner in which that allocation came about.

Several salient points are evident in this respect:

1. The Commission had before it in 1928 the best engineering principles then available. This, however, does not offset the fact that other principles, of equal importance, have been developed since then. Neither does it offset the fact that practically nothing was known of either the social or economic aspects of broadcasting at that time.

2. When the allocation of 1928 was set up the fatal mistake was made of attempting to apply the known engineering principles of that period in such a manner that they would be completely suitable to all allocations in the future.

That this has failed in application is evidenced by the fact that these hearings are being held at all.

Concerning this point I wish to make an additional observation: Radio is still a developing industry. Ultra-high frequency transmission, television and facsimile broadcasting are but a few of the improvements which hover on the threshold of the future. Until such a time as the social, technical and economic aspects of radio reach a point of stabilization, it will be impossible to set up rigid regulations which will suffice for all time. Unless radio differs materially from other fields of science and art, such stabilization will never occur. Consequently the rigidity of the past must be supplanted by flexibility in the future.

Davis Amendment

3. The Davis Amendment, as interpreted by the Commission, required that allocation of frequencies be made on the basis of absolute mathematical equality between zones. This was an important factor contributing to the rigidity of the present broadcasting structure.

4. Since the emphasis was placed upon engineering considerations in the 1928 allocation, with little or no regard for the social and economic factors, the needs of radio listeners in the areas in which they resided were assumed to conform to idealistic engineering theory rather than having engineering theory, as far as it was practical, adapt itself to listener requirements. In other words, the entire emphasis was placed upon the limitation of channels then existing and too little thought was given either to the needs which these channels actually should be made to fulfill, or to the fact that in any field of science, where limitations exist, means are usually found for offsetting them at least to some measure.

At this point I wish to state the following principle: Regardless of what may be said by those seemingly unaware of the basic significance of economic and social factors in the consideration of such important problems as the allocation of broadcasting frequencies, unless there is proper balance between the service functions of radio and sound engineering, we cannot hope to develop a basis of allocation which will be fair and equitable to all groups requiring radio service.

Let me show you what was the result of the 1928 allocation. The first and most important result was the setting up of a rigid and inflexible classification of channels, with insufficient and imperfect consideration of the listener requirements of the various areas which the stations operating on these different classes of channels were supposed to serve.

Four classes of channels were established: clear channels, regional channels, high powered regional channels and local channels. Of these four, it was the clear channels which dominated the entire allocation plan. It is therefore, highly important to see how they came into being and how 40 of the 90 available frequencies were reserved for their use. It also is important to note the results which emanated from this policy.

Clear Channel Establishment

Clear channels were established in this country to meet the peculiar needs of our expanding broadcasting structure. The number of high power stations was growing very rapidly and was beginning to exceed the limited number of frequencies which were available. The fact that rural areas and outlying sections of metropolitan centers, which due to high tolerances and resulting interferences, were unable to secure good reception from stations on crowded frequencies, was advanced by the proponents of the clear channel theory was an argument for devoting each of a large number of frequencies to the exclusive use of a single station.

The direct quotation of the main testimony for the allocation of stations to clear channels in 1928 is as follows:

> "If one is going to set up a reasonable approximation to an ideal broadcasting service, that is to say, one in which all the stations will be given either their full service range for the distribution of their signals or at least a fairly substantial part of their service range, then on each channel in the entire United States there must be no more than one 5,000 watt station and no more than one 1,000 watt station; that is to say, if a 1,000 watt station is put upon a single frequency, there must be no other 1,000 watt station on that channel, if the first one is to have undisturbed use of its service range or if even a substantial part of its service range is to be free for rural listening."
>
> "I cannot emphasize too strongly the desirability of using each channel for the highest power that cross talk limitations will permit, with the geographical separation needed, which I would put at a minimum of 5,000 watts per channel, with proper geographical separation, so as to develop the national transmission, the inter-state transmission, rather than the purely community or local services."

Psychology of Period

The force of this argument was speciously augmented by the prevailing psychology of the period. This was a psychology which was dominated by curiosity rather than by any conception of service as it is now understood. It was a greater accomplishment and more important to the listener to secure an execrable program from Chicago or Denver, than it was to receive regularly the best symphony orchestra from a nearby eastern community. So long as the station call letters could be identified without too great use of the imagination all was well. It was no wonder that distant listening was emphasized to the exclusion of all else and that sky wave reception in points as distant as Australia was spoken as possessing real significance. You may recall, probably with some amusement, that silent nights were maintained by most stations so that listeners in their immediate area might be permitted to fish for the signals of more distant stations located on the same or adjoining frequencies.

It was advocated by many engineers in 1928 that each of the 90 frequencies should be reserved for one high powered station and that in this manner the best national service sould be secured. The desirability of localized service of any type was not even perceived. Smaller stations were looked upon as a necessary political evil rather than a social and economic asset and actual necessity.

However, the complete adherence to such a theory would have eliminated the great majority of existing stations. This met with such violent and deep-seated opposition that it was impractical to develop a completely clear channel service. As a result, more by chance than by design, localized service of present so-called regional and local stations were preserved. It should be noted that there were a few voices crying in the wilderness. A small minority believed that twenty channels or even less would be sufficient to meet the needs for service over extended territories, but they were lost in the general stampede for distant listening.

There were certain practical and legal situations that favored the establishment of such a large number of clear channels. High power stations had developed in two principal areas: The Middle Atlantic and North Central States. The Davis Amendment further complicated the situation by requiring that facilities be equalized as between geographically and socially unequal zones. Therefore, since it was impractical to delete or to reduce the power of the numerous large stations in existence and since engineers deemed it impractical to duplicate assignments of high power stations on the same channel —in order to comply with the equality clauses of the Davis Amendment, it was decided to raise the power of numerous stations in other sections of the country and allocate clear channels to their exclusive use.

The ownership of important stations by large capital groups also increased this pressure for clear channels stations.

First Owners

Some of the first companies to own and operate broadcasting stations were the manufacturers of radio receiving sets. These companies were confronted with the problem of developing an adequate broadcasting service so that they would have a logical basis for encouraging the public to increase their purchase of radios.

Another group of companies who were prominent among the original owners of radio stations were newspaper publishing houses, insurance companies and department stores, all of whom were interested in promoting their interests over wide areas.

It was only natural that these stations should be interested in increasing the power of their respective stations so that they might reach a more substantial listening audience. Thus we find that these stations had invested a considerable amount of money in high power equipment and improved facilities before 1928.

During the allocation proceedings, the owners of these stations proved to be the most energetic proponents of the clear channel theory since they were certain in their own minds that by virtue of their ownership of high power stations, that they would derive the maximum benefits from such privileges if this type of channel were established. Once this theory had been established by regulation, these same interests have progressively advocated and promoted the use of higher power for clear channel stations.

The net result of these increases in power and the additional investment in equipment, which were made by the owners of these broadcasting stations, was to greatly strengthen the control of these companies over important clear channel frequencies.

Clear channel stations' dominance and influence has been further accentuated by the following situation. During the past eight years, the Commission has departed from its original policy and permitted certain stations to operate simultaneously with the dominant stations on certain clear channel frequencies. However, the Commission has allowed the dominant station undue authority by requiring the consent of this station as a prerequisite to simultaneous operation on its frequency.

Chains Dominate

The practical result of this policy has been to allow the chains to dominate the awarding of these privileges in desired localities, since most clear channel stations have chain affiliations. In a few cases, certain clear channel stations have taken advantage of this situation and permitted simultaneous operation on their frequency by small stations, thus completely eliminating the opportunity of other stations to use these frequencies in areas to better radio service.

Now let us see what have been the results of the dominant position given to clear channels and clear channel theory in the 1928 allocation.

The first result was the uneconomic use of the clear channels set aside at that time. The excessive number of clear channels provided for by the Commission in 1928 forced certain stations to increase their power to the minimum of 5,000 watts necessary to secure the right to operate on a clear channel frequency. In a number of cases there was neither the social need nor the desire to go to this higher power. Only the competitive station and the fear of being forced to accept the very much less desirable regional allocation

caused such stations to seek or accept clear channel status. The practical existence of this situation is evidenced by the fact that several clear channel stations are still operating upon the minimum power or at less than the maximum power of 50,000 watts.

Uneconomical use of the clear channels was further accentuated when in 1932 competitive pressure resulted in the creation of a large number of 50 kw. stations, some of which were merely defensive attempts to maintain position of favored clear channel frequencies, rather than being dictated by service needs in the areas in question.

Thus two types of uneconomical use have resulted. High power has been created where it has not been needed in some instances. In others, clear channels have been created where high power has not been able to be supported and therefore has not been utilized.

Regional Stations

Now let us turn to the regional stations. Several factors governed the allocation of regional frequencies which have a direct bearing upon the problems which must be considered by the Commission at this time. These may be stated as follows:

(1) Insufficient frequencies were provided for this class of station in the original allocations. This was due to the fact that too many of the frequencies had already been apportioned to the clear channel group and it was necessary to reserve certain frequencies for use by local stations.

(2) Regional stations were allocated to frequencies on the basis of the same maximum power regardless of the areas which these stations were supposed to cover. No provisions were made for the varying requirements of the different types of area in which these stations were located.

(3) The maximum nighttime power established by the Commission for these stations in 1928 was 1,000 watts, and a large portion of these stations were licensed to use and still continue to use less than that power at night. Since 1928, some of these regionals have been gradually moved up. first to 2,500 watts daytime and then to 5,000 watts daytime. However, at the present time there is no regional station licensed to operate at more than 1,000 watts night time power.

Allocation Procedure

The effect of this allocation procedure has been as follows:

(1) Certain regionals have been unable to adequately cover their normal area of service and are still unable to do so. This is especially true at night when the signals of other stations on the same channel tends to restrict their coverage.

(2) It has also resulted in extreme congestion of stations on certain regional frequencies. This has been due to the fact that there were more stations than this limited number of frequencies could accommodate. Therefore, we find on some channels, the distance between stations is only 350 miles, whereas on less crowded frequencies, the distance separating stations may be as high as 1,200 miles. In addition, it must be remembered that a number of regionals were forced by these congested conditions to share time on the air with other stations or to restrict their broadcasting to daytime hours. Thus regional stations in many cases have been unable to lay down a good signal in all parts of their area, and, when they have had the additional handicap of being restricted to certain hours of operation, have been prevented from rendering the complete day and night-time service to which their listeners are entitled.

(3) Stations on crowded frequencies have not been properly equalized, as to distribution. These regional frequencies, as in the case of clear channels, were apportioned on the basis of zones. As a result, there are many stations on certain eastern channels, while in the West and South this congestion does not exist to anywhere near the same degree.

(4) Today we find many regionals located in areas which require a higher signal strength than can be delivered by a 250, 500 or 1,000-watt station if adequate radio service is to be rendered. Yet due to the rigidity of the limitation of night-time power to 1,000 watts, such stations are at present powerless to meet the needs of their listeners.

(5) Due to the lack of provision for the use of the maximum regional power, certain stations whose areas require at least this power, have been compelled to either operate at lower power or to go to the added expense of building a directional antenna, to avoid interfering with the legitimate operation of other stations on the same frequency. This is another example of the inequalities growing out of the inflexible methods adopted in the assigning regionals to frequencies in 1928.

(6) Many areas which were not provided with adequate services in 1928 were forced to be content with service from a day-time or part-time station because of this rigidity.

Local Stations

We now come to the local station.

The effect of providing too many clear channels was extended into the allocation of local channels with even worse results. Here an even smaller number of frequencies were provided and they were by no means adequate for the large number of stations that had to be accommodated.

Therefore, the congested conditions characteristic of regional frequencies prevail even to a greater extent on local channels. In some sections of the United States there are instances of local stations on the same channel which do not have a separation of more than 50 miles. This means that they cannot even cover the city in which they are located, much less cover the trade area of that community.

While this congestion of stations was partly the result of having provided for insufficient local frequencies, it was also caused by the classification of channels for equal assignments in zones under the Commission's interpretation of the provisions of the Davis Amendment. For example, in 1928 we find nine local stations in the State of Pennsylvania alone assigned to 1310 kilocycles, whereas there was only one station assigned in the fourth zone to 1500 kilocycles.

Local channel stations were restricted under the regulations of 1928 to a maximum night-time power of 100 watts. In addition to that fact, some of these locals were compelled to operate on shared time or during day-time hours only. Therefore, despite the fact that a number of these stations have greatly improved the efficiency of their transmitters and adopted modern radiating systems to improve their signal strength, they have not been able to increase their signal sufficiently to render adequate service to their listeners. Regionals and other stations have been permitted to increase their power as well as employ modern radiation system, thereby raising the level of competing signal to the detriment of local stations.

Different Functions

There has not been enough consideration given to the fact that local stations, like regionals, have somewhat different functions to perform in the various areas which they serve. A 100-watt station located in a small community with a limited trade area may adequately cover the sections lying within the sphere of influence of that community. However, in larger secondary markets, this same power often proves inadequate to cover their trading areas due to interference limitations.

Thus we see the following situation developing out of, first, the rigid and arbitrary classification of channels made in 1928, and second, out of the undue prominence given to clear channel service. The balance between classes of stations was upset at the very outset of American allocation, and unreasonable congestion was produced on regional and local frequencies, with resulting impairment of existing service and of opportunity for growth and development in the legitimate fields of service for these classes of transmitters.

This brings us up to the present, and to this hearing. The purpose of this hearing is to rectify, as far as possible, the deficiencies existing in present regulations and allocations.

Several features make such a procedure both possible and advisable. The repeal of the Davis Amendment provides the potentiality of introducing an increasing degree of flexibility into the broadcasting structure of the country with resulting improvement of service and with a distribution of facilities which will be more fair and equitable than that required under a rigid formula of mathematical equality.

The fact that the Commission has been forced in numerous instances to allow common sense modification of their regulations for the purpose of meeting actual practical requirements of service in given areas points to the desirability of changing these regulations in keeping with improved practice and thought.

Improvements of Transmitters

Improvements in the operation of transmitters have reduced the frequency tolerance of stations from 500 cycles to 50 cycles, which has changed to some extent the engineering basis of the 1928 allocation. Similarly, and of much greater importance, directional

antennae have provided a means of utilizing frequencies in a manner not contemplated by the existing regulations but which now provide improved service in important areas.

The increase in the number of radio families and in the diversity of use put to broadcasting as an advertising medium and medium for local program service has placed a new light upon the various classes and kinds of listener service which are desirable in the American system.

The general trend of recent developments in the regulatory and technical aspects of broadcasting has been toward making possible a greater flexibility of structure than hitherto has existed. This, in turn, gives rise to the possibility of a closer adaptation of broadcasting structure to the many and varied requirements of service on the part of listeners throughout the country.

Since greater flexibility and consequent adaptation of structure to listener requirements is possible, it becomes more necessary than ever to develop a clear-cut philosophy of what constitutes listener service.

We may state categorically that listener service is comprised of two ingredients: the station signal, and the programs conveyed to the litsener by means of that signal. Of the two the latter is the more important, for the station signal is merely a means to an end. That end is always the same: the receipt of desired programs.

Satisfactory service must therefore be conceived in two lights. The first of these is the ability of people to receive the signals of a station or adequate number of stations. The second is the ability of these stations to render unique and distinctive program service of a type which is in keeping with the needs and desires of the listeners in the area which the station serves.

It is probable that little if anything can be done in a positive manner regarding the development of unique program service by means of broadcasting regulation. Indeed it is highly doubtful whether such a procedure would be desirable if it were practicable. Our entire legal theory, beginning with the provision prohibiting the censorship of program material, has been inclined away from the control of programs.

Control of Programs

Such a viewpoint is quite proper. Control of programs borders too closely upon impairment of freedom of speech should injudicious use be made of that control. Moreover an art lives and progresses only if it possesses sufficient freedom of experimentation—and experimentation means the right to make mistakes while finding the right way of doing things—to enable it to develop new and more satisfactory art forms. No one yet has been able to legislate or regulate progress into an art. Broadcasting is an art, an adolescent one. But it can only develop into maturity and maximum service if freedom to experiment and grow is maintained.

If nothing can be done in the way of positive regulation, something can be done, however, in a permissive way. The need for various kinds of service can be clearly recognized and the philosophy of varying needs can be utilized as one of the bases for the granting of facilities in individual cases. The need for varying types of service was recognized only in a most hazy fashion in the 1928 allocation. National service was the paramount consideration. The ability of any large number of stations to produce satisfactory programs in their own studies was still so limited that the possibility of local service was only dimly perceived, and then by but a few. Civic cooperation, the part played by radio broadcasting in the dissemination of the news and similar services was hardly conceived. The diversity of interest among different groups as to cultural and informative programs and even as to entertainment, was hardly appreciated.

Today this situation has changed, largely due to the enterprise which various classes of stations have shown in adapting their service to the particular needs of their area in an endeavor to win loyal listener audiences and to compete successfully with other stations which might be heard in the district.

I shall not enlarge on this point. The testimony presented by various classes of stations: clear channel, regional and local speaks for itself. If there is one thing which has stood out in these hearings it has been this: that there is a need and a great opportunity for localized service as well as for general and national service in American broadcasting and that this need and opportunity must be carefully fostered in every manner possible.

Principle Developed

In keeping with this philosophy, the following principle may be developed: That the allocation of facilities, in individual cases, shall include a consideration of the unique and distinctive program requirements of the area which the station in question is designed to serve.

We may also develop a second principle: that, in case general classes of service are developed, a balance must be maintained between them. Various types of service requirements on the part of groups of listeners located throughout the country must be considered in due proportion to their importance. The aim of regulation must always be to achieve the maximum net improvement in listener service, not the fostering of one class or type of service at the expense of other classes with a consequent net loss in total service. Because of limited facilities available no one class or type of service can possibly develop to its ideal proportions. But each class can be nurtured and brought along to a point where, when combined with other classes, the maximum possible service will result to listeners as a whole. The broadcasting structure of the country must be viewed as an organism, not as a group of diverse and loosely connected units.

A third principle which can be stated is as follows: That sufficient flexibility must be maintained in any classification of service requirements or facilities to make possible the adaptation of facilities to the needs and requirements of specific individual areas. This naturally connotes flexibility in regulations since these are the governing factor.

How can these principles be translated into a practical program of action?

In tackling this angle of the problem we must begin with the principle that facilities should be allocated in terms of listener needs: that is, of unique and distinctive program needs and desires of various kinds.

Can we classify these needs into definite categories? If by this we mean the development of classifications which approach mathematical exactitude, the answer is no.

Listener needs are too diverse and their bases too varying. As an example of this, even the classification of rural and urban listeners is of doubtful meaning when considered as a specific classification. The psychology, cultural background, social outlook, recreational habits and the like of portions of the rural population living near our large metropolitan centers may be more urban in nature than may be that of the citizens of a community of 5,000 or 10,000 population situated far from any other large community. It also is well to remember that urban and rural are arbitrary classifications in the Census.

Water-Tight Classifications

If we cannot develop water-tight classifications, can we establish any broad categories of service? It should be possible to do so, provided a broad fundamental study of the question were undertaken. This study should include the following features: (1) A detailed analysis should be undertaken of the location and nature of radio ownership in various sections of the country. (2) An attempt should be made to determine logical areas of station influence by dividing the country into a number of key centers and dependent territories or areas. This could be done on the basis of market research technique such as presented by Hearst Radio in its discussion of the economic factor in broadcasting regulation. (3) Areas of influence should be evaluated basically in terms of their economic potentialities and needs for diverse service.

If broad classifications can be developed, they will be certain to be discovered by recourse to such study and analysis.

Two contributions can be made to initial thought in this field even without detailed analysis. The first of these is a statement of what may be the general type of classification of needs of service which will be developed in scientific form by the suggested study.

In this respect one may begin with national program needs. This would consist of programs which would be of interest to all classes and types of listeners, to be made available over the country as a whole. These programs would consist mainly of programs and talent available only in a very few talent centers and which could not be brought to listeners except by national service. It would also include events of public interest which would be similarly limited as to method of presentation.

A second category of program needs would be sectional needs. Large portions of our country are relatively homogeneous culturally and economically. The central south, the corn belt, the German-Scandanavian sections of the wheat belt are examples. The area over which any given sectional program needs would exist would vary materially in size and contour in various por-

tions of tbe country. It would constitute, however, a type of service deserving of consideration.

A third and bighly fundamental category, would be localized program needs. These would be the needs and desires of the locality in which the station was situated, togetber with these of the territory surrounding that center which was dependent upon it both culturally and economically. Such areas tend closely to approximate consumed trading areas, as has been shown by the previous testimony of other parties before tbis Commission. These areas also vary most materially as to size and nature.

Classes of Programs

Another approach to classes of program needs is that of the need of diverse service within a given area. The varying racial, cultural, social and economic groups witbin a community may dictate a wider variety of service in one instance than in another. A large metropolitan center such as New York will have diversity of needs, in contrast to a smaller town of 100,000 or less in size and possessing a highly homogeneous population. Diverse needs also may exist on the part of radio advertisers. It is desirable and economically necessary to provide facilities which it is practical for local retailers to use as well as for larger advertisers.

A second contribution which can be made merely by deductive analysis is a listing of the factors wbich will go into determining the nature of the service or different types of service required by each area. These are as follows: (1) Size of area in question; (2) Contour of the area limits; (3) Number and location of radio families in the area; (4) Social and cultural characteristics of the area; (5) Economic potentiality.

These observations at least furnish a starting point for a classification of needs of listener service.

I have mentioned the desirability of detailed scientific study of this question. Obviously this will take some time. I do not propose that the entire program of development of new allocation practice should be held up until sucb a study was completed. It is possible to make a beginning in this direction without waiting for the completion of such analysis. This can be done by the following procedure:

1. The development of sufficiently flexible regulations to enable a sound consideration of the economic and social factor in the allocation and assignment of facilities in individual cases.

2. The setting up of procedure in determining the needs of service which will allow adequate and scientific consideration of the social and economic factor in hearings and assignments on specific cases.

3. The following of the principle that a station wherever possible, shall be given the opportunity to adequately cover the entire area or territory which constitutes its logical zone of influence economically and socially.

Listener Service Needs

Merely by following such a procedure, a great deal may be accomplished. It is even possible that all of the desired progress can be secured by recourse to this procedure and that the establishment of classes of listener service needs will merely take the form of general bases of desirable goals rather than specific regulatory categories.

Thus far I have considered listener service needs. I have started at this point because it is the fundamental approach. Technical facilities are merely the means whereby these needs must be fulfilled. We now come to the question as to what probably can be done along the lines of adapting the allocation and distribution of technical facilities more closely to needs of listener service.

The first thing which can be accomplished in the technical field is that of developing a broader and more flexible concept of classes of channels. Any classification of cbannels should begin with two basic types: (1) Unrestricted service frequencies, and (2) restricted service frequencies. Unrestricted service frequencies should be those with regard to which but one station was located on each channel so designated for night-time operation. Restricted service frequencies would be those to whicb more than one station was assigned for nigbt-time operation. Restricted service frequencies might be divided into a number of sub-groups if desired. These sub-groups should be based upon such classification of listener service needs as might be developed. In this manner sufficient flexibility of classes of frequencies and stations can be set up to allow a realistic approach to listener service needs.

A second thing which can be done in the allocation of facilities is a more realistic approach to the clear channel situation. I think we can begin that approach by stating that there is no need of covering the entire nation witb one station at night-time, even granted that it is theoretically practical to do so. I ask you to note that even tbough it is practical to accomplish this at nigbt-time, it is almost entirely out of the question to do so in the day by any conceivable means of technical development. This would mean that tbe assumption that a single station could render national service would require an application of an extremely different allocation for day and for night service, respectively. This application would be considerably more complicated than the present question of different power for day or night.

National Service

National service as we have discussed it is logically the province of network broadcasting. It is necessarily so; networks alone can tap the few important centers where outstanding talent is available for national service. It will be almost impossible for any single station to reach these few widely scattered centers. Networks also are probably the only means of securing sufficiently intensive coverage of a nation to adequately render this service to all listeners. Finally, only by recourse to interchange of programs on a network basis can tbe varying and diverse public event programs be brought to listeners throughout the country.

If so-called unrestricted or clear channels are necessary to render some unique and distinctive form of service, they undoubtedly should be maintained. However, one thing is certain: that the present number of so-called clear channels provided for in the regulations of the Commission is not essential. This is evidenced by the fact tbat full use has not been made of the facilities so designated.

In order to more effectively use a large number of the present so-called clear channels, the foregoing suggestions of flexibility in regulation may conceivably permit use of duplicated stations on the clear channels with or without directional antennas as required to bring about tbe fullest use of such channels in the public interest.

The suggestion for flexible regulations can be utilized for improvement of service on shared channels, as well as on those cbannels now designated as clear channels. For example, the expressed needs for increased night power on regional cbannels may well be considered in this light and authorized in cases where a need is shown and where detriment to other existing facilities will not be brought about.

This also applies to channels now designated as local channels. The suggestion is made that needs for increased day power, as well as night power, by local stations be considered on tbe same basis. By following this procedure, it should be possible to introduce a considerably increased measure of flexibility into the regional and local station structure.

Extreme Congestion

It should be borne in mind that where extreme congestion exists today in any given section, it will hardly be practical to allow unlimited increases of power beyond a reasonable extent, until some of this congestion is relieved by the graduation of these stations into the logical classification to which they belong.

In conclusion, may I say this: It is the hope that my testimony has at least served to emphasize three things. The first of these is the fact that only by introducing as large a measure of flexibility as possible into broadcasting structure and regulation can the resources of American broadcasting be made to fit most closely listener needs and its service developed to its maximum potentialities.

The second feature which I hope this testimony has served to emphasize is the extreme need of maintaining a balance by the various types of service necessary to a fulfillment of the public interest. The American listener does not constitute a simple homogeneous body. It represents many diverse factors in society. Each of these have a right to the type of service which most fits their requirements in accordance to their importance in the community as a whole. As far as possible, radio broadcasting service sbould be given to them on this basis.

Finally, I hope that this testimony has served to indicate the need and the advisability of an evolutionary approach to the whole problem of allocation. I hope also that it has indicated the desirability of carefully considering practical measures rather than of being enamored too exclusively with the application of a single theory. This point I can empbasize best by one quotation that appears on the cover of one of my law books: "Index learning turns no student pale, yet holds the eel of science by the tail."

If that wise and practical minded poet of by-gone century, Pope, were to be writing regarding American broadcasting today, he would probably do it this way: "Detailed study of practical considerations turns no student pale, yet holds the eel of science by the tail."

Sutton Cross Examination

Under cross examination Mr. Sutton testified that he had been on the engineering staff of the old Federal Radio Commission in 1928 when the reallocation plan was worked out. He said that of course there have been many technical developments since that time. In answer to a specific question Mr. Sutton stated that the smallness of the broadcast band is one of the many problems confronting the Commission.

In his opinion, said Mr. Sutton, both engineering and economics have to be taken into consideration in connection with the present radio problem. It is necessary, he stated, to have engineering as the basis for any new allocation plan.

Questioned concerning the use of clear channels, Mr. Sutton said that it was his opinion that many of them could be duplicated and that congestion in other classes of stations could be relieved to the extent clear channel duplication is permitted. Mr. Sutton pointed out that in 1928 the engineers insisted that WGY, because of simultaneous operation with KGO, San Francisco, would not be useable beyond the city of Albany, New York, whereas WGY can be heard satisfactorily today in Washington, D. C.

Questioned concerning the use of power on clear channels, Mr. Sutton drew a comparison with the application of a magnifying glass. It would be ridiculous, he said, to adapt the use of 500 thousand power telescopes as an ordinary aid to human vision because it was impractical. He cited this as an illustration of following a fundamentally correct theory to its extreme limits.

(Edward A. Allen appeared before the Commission several days ago as President of the National Independent Broadcasters but his testimony is printed herewith in connection with a statement made on behalf of the same interests by George O. Sutton today.)

Edward A. Allen

Edward A. Allen, Station WLVA, Lynchburg, Virginia, and President of the National Independent Broadcasters, appeared before the Commission on behalf of the local stations which are members of his association.

Mr. Allen said:

My name is Edward A. Allen. My residence is Lynchburg, Virginia. I am president of the Lynchburg Broadcasting Corporation. As such I own and operate WLVA, a local station serving Lynchburg and operating under a license granted by this Commission.

I also am president of the National Independent Broadcasters. This group is composed of local and regional stations not affiliated with networks. Its actual membership is limited almost exclusively to local stations.

The purpose of organizing this group was twofold. The immediate and limited objective was that of providing a means for the promotion of the use of local stations by national advertisers.

A broader and more fundamental purpose of the group was that of providing a means whereby the problems common to local stations might be given consideration and programs for the improvement of stations of this class developed and initiated.

I am appearing before this Commission today in behalf of this group of local stations. The owners and operators of local stations feel that it is most important that the unique service and position of their class of station in American broadcasting be thoroughly appreciated at this time.. The various proposals which have been placed before this Commission during the course of the hearings have included, almost without exception, provision for marked increase in power and extension of facilities for different classes of stations.

Service Impaired

If the adoption of one or more of these proposals should result in too great preference of any one class of transmitter, the balance between various basic types of service might be impaired or destroyed. The upsetting of this balance quite conceivably could place the local stations at a decided disadvantage in the broadcasting structure. Not only might it make further inroads into the local service now possible, but even more important, it might place serious obstacles in the way of the future development of local stations to a position of service and economic stability which will enable them to fulfill their rightful role in the broadcasting structure.

We are especially concerned at the present time, all the more because we feel that from the very beginning of broadcasting regulation, the local station has been in the position of Lazarus dependent upon the crums from the table of Dives. We say this, not in criticism of this Commission, but in realistic recognition of a situation which, in 1928, was created out of the necessity of providing room for over-extended facilities within the straight-jacket of the Davis Amendment, and out of the lack of knowledge of the technical, economic and social aspects of broadcasting which then existed. Our attorney, Mr. Sutton, will deal with the details of this matter later.

The thesis of our presentation today is this: Whatever the Commission may do in the future in the allocation of facilities or the promulgation of regulations for that purpose, they should adequately safeguard the position of the local station. Indeed, it should go farther. Where present conditions make impossible the rendering of adequate local service, steps should be taken to rectify this situation, so that the local station may be afforded the opportunity to effectively render the service for which it was designed and created.

No New Set of Rules

In advancing this thesis we shall not advocate any new set of specific regulations. Neither shall we attempt to set forth a comprehensive solution of the local station problem; for we do not delude ourselves that we know this solution. Rather, we shall confine our efforts to pointing out modifications in regulation, policy and viewpoint which at least may lay the groundwork for an improvement of the local station situation, and consequently of the service rendered the community.

The local station always has been the verbal football of the broadcasting industry. At times it has been wept over by special interests seeking to protect their own advantage by hiding under its cloak. At other times it has been damned as the cause and root of everything that was distasteful or undesirable in broadcasting. It has been patronized and looked down upon—a publican at a banquet of pharisees. It has been elevated in shining armor. But, most unfortunately, it has seldom been understood.

The nature of local station service can be appreciated particularly well when examination is made of the locations of stations in this class. There are approximately 280 local stations, on local channels, in the United States. These comprise nearly two-fifths of all of the stations of the country. More than 60% of them are located in towns of 50,000 or less in population. More than two-thirds of all local stations are situated in communities of less than 100,000 population.

In addition to this group of local stations operating in middle-sized and smaller communities, there is a second group comprising approximately 40 in number and accounting for about 16% of the total local stations, which are found in the metropolitan areas of communities of more than 500,000 in population.

Fulfills Two Needs

Thus the local station in the main seems to fulfill two needs; that of rendering basic localized service in the smaller communities, and that of rendering specialized service to portions of the population of large metropolitan centers.

There is a close parallel between local broadcasting stations and two types of newspapers which constitute highly important elements of the American press. The one is the small town or country newspaper which constitutes the backbone of local democratic and representative government, and of the social and economic life of these small communities. The other is the neighborhood newspaper in our great centers of population. This parallel may serve to emphasize the importance of the local station in the broadcasting structure.

The importance of local station service to the two groups with which it concerns itself with, primarily is usually appreciated but inperfectly. It is too often lost in the welter of spectacular national programs—especially the popular entertainment programs, which take up almost all of the evening hours of the average network affiliated station.

I wish therefore to describe this service to you, briefly, probably in a different light from which it has been addressed to you previously. I believe these examples are typical of the service being rendered by the conscientious local station.

A local station situated in a middle-sized or smaller community renders a number of highly important services, the majority of which it would be difficult to duplicate.

In the first place, the local broadcasting station is a natural channel for the discussion of local civic matters. As such it plays a highly important part in the achievement of community solidarity and cooperation.

An Illustration

May I illustrate this point? If there is a local bond issue to be presented to the voters for their consideration, if a question of municipal ownership of the local water company or power station arises, or if some similar civic question presents itself, the local station can and does take a leading part in securing a full and free discussion of the pros and cons of the issue. It is good promotion for the station to bring before its microphone the leaders of the various groups interested in the project, for it will create listeners for the station. It likewise is sound service in the public interest.

This is a service which a station situated in the community in question is in the best position to render. Regional stations, located in more distant centers and probably including a reasonably large number of these smaller towns within their service area can hardly render a service of this type, except to a limited degree. They will not be able to take sufficient time to adequately cover the varied interests of all of the towns in the area. Only the local station, concentrating upon its own community and adjacent area, can do that.

Let me show you how, from my own experience, that localized service builds for community sol-i-dar-i-ty and cooperation.

Emergency Call Service

For a number of years our station has maintained an emergency call service for blood transfusions for the local hospitals. One day the telephone rang. It was a well known doctor speaking from one of our institutions. Said he, unless a certain type of blood was immediately forthcoming, a mother would die as a result of childbirth. The word was broadcast. Within one-half hour 30 odd people had responded, the right type of blood had been found and a human life saved. This is a specialized service, particularly suited to a smaller town station.

Local stations cooperate with every community enterprise—educational, religious and civic. They not only cooperate with them, but where possible, actively cultivate these institutions and organizations. In so doing, they are being completely realistic. They realize that the most valuable thing which they have to offer the community is a signal equal or superior to competing signals from the outside and programs of particular local interest. They are dependent upon the community for program material and they hasten to become as much of a community institution as possible. Only in this way can they hold any measure of their audience against the entertainment programs broadcast by the networks and larger stations in the evening.

Advertising Medium

A local station is an important advertising medium for the merchants of the community. The larger regional station in an adjacent community probably will be out of question because of high rates and waste circulation. At the same time the advertising which it carries will threaten to draw trade from the local merchants. In the local station, the merchants possess a means of reaching the prospective buyers in their own community at a reasonable cost.

The local station will tend to be a strictly local enterprise, for the average 100 watt station has little to distract it from local advertising service. Almost 90% of local station revenues are derived from local broadcast advertising sponsors as compared to approximately 50% for the medium as a whole. It also is interesting to note that in 1935, according to the National Association of Broadcasters, nearly 15% of all non-network business in the country was carried over local stations.

The local merchants have a right to possess this type of advertising service just as much as the station has a right to render it over the natural trade area of the community which it serves. The Economic stability and well being of the community's retail trade is dependent upon its being able to hold its own with competing towns. In the case of smaller towns, this means the need of meeting competition from larger cities. Cooperation between the local station and local retailers will assist in meeting this out-of-town competition. I know of at least one instance recently where a local station refused an advertising account averaging $1,000 a month from a nearby city because it would serve to attract trade from the home town. This is a practice which small town newspapers have resorted to for many years. It makes for community sol-i-dar-i-ty and stability.

Intensive Coverage

The local station also provides intensive coverage of a given community to national and regional advertisers. That this, however, has not been resorted to in many instances, is due principally to the manner in which radio-naive advertisers unduly worship power.

Local stations entertainment programs also will reflect local needs and desires. Hill billy music and similar entertainment has its legitimate place in American radio entertainment; just as legitimate indeed as symphonic music. It is the folk-music of America and is firmly woven into the life of many communities and sections. This simpler, localized service is a particular province of the local station which is faced with the problem of meeting the many and diverse program desires of larger areas.

There is a final service which the local station renders to the broadcasting structure as a whole. It is the proving ground for talent and managerial ability. If the general level of skill and ability in the local station field may at times have fallen short of desired standards, might this not have been due to the fact that the enterprising local broadcasters had moved into the higher categories, that the local talent had moved to the larger stations if it possessed any real and lasting merit? This feeding of talent and ability to the larger stations undoubtedly will go on as long as there is radio; just as each year, it fills New York and Chicago with ambitious young people from Iowa, Nebraska and other outlying territories.

This then, in my experience is the service rendered by the local station to the community which it serves. Localized news and entertainment, civic cooperation and the discussion of civic problems, and important local economic service are its principal ingredients. It is a type of service which is being rendered today to an increasing degree by local stations throughout the country. It has only been in recent years that the local station has begun to find itself; that young men of sufficient skill and enterprise have entered the local station field, and have begun its development in an orderly manner. The local station, an unwanted child, has begun to come into its own. It should be encouraged and aided in every possible way to reach its true stature.

Mr. George O. Sutton, our counsel, will present to you the problems and the suggested solutions by which this end may be achieved.

Cross Examination of Allen

Mr. Allen was cross examined on behalf of the Commission by T. A. M. Craven. Mr. Allen said that there is no question in his mind but what many potential listeners are withdrawn from local stations because of reception of regional and clear channel stations. This, he pointed out, means a loss of profit in the end to local stations. However, he contended most heartily that the local stations of the country are today doing a grand job and as the local stations are able to throw better signals they create more listeners.

Profit and Loss

Answering specific questions of Mr. Craven, Mr. Allen stated that he believed the majority of the local stations of the country have been just about breaking even from a financial standpoint. He said some of them had made what he termed a small profit, meaning from $2,000 to $3,000 a year. He testified that there had been no organization of local stations prior to last year when his association was organized.

The principal problem of the local stations today, said Mr. Allen, is not that of getting programs but of laying down a suitable signal to cover its own urban territory. There is no question, he said, but that local stations need an improvement in the way of better signals. Most of the local stations of the country, he said, are owned and operated by men whose sole business is broadcasting.

National Independent Broadcasters

Mr. Sutton made the following presentation today on behalf of the National Independent Broadcasters:

I have been asked to present the general problems facing the local station by reason of the present allocation of facilities, the principles which should be applied to the future with regard to local stations, and the practical steps necessary for carrying out these principles.

What is the situation with regard to the allocation of facilities now facing the so-called local stations?

The first thing which becomes apparent upon an examination of the local station situation is an extreme congestion of stations upon certain local channels. This is particularly true with regard to specific portions of the country, principally in East North Central, Middle Atlantic and New England States.

This congestion arose in the following manner: The Davis Amendment required that broadcasting facilities be distributed equally among the five zones in an attempt to equalize service available to various sections of our population. The Federal Radio Commission, in interpreting the Amendment, followed a policy of securing a very close mathematical equalization of facilities between the zones. This equalization was achieved by classifying channels in accordance with preconceived engineering ideas of necessary classes of service, and of establishing a limit of maximum power to all stations located on given class of frequency.

The starting point for this classification of channels was the reservation of forty of the available ninety frequencies for so-called clear channel service designed to serve listeners in wide areas. The dominant reason for forty rather than any other number of clear channel frequencies was conceived necessity of providing room for existing high powered stations. The competitive demand of high power stations located in the same area for equal treatment was a strong force motivating for consideration of clear channel type of service.

Congestion Caused

The result of using 44 per cent of the existing frequencies for clear channel service caused a congestion on the remaining frequencies. An attempt was made to allocate existing stations of from 250 to 1,000 watts night-time power on the remaining frequencies. An attempt was made to maintain proper separation between regional stations on some channels to make possible reasonable rural service in the areas adjacent to the community in which the station in question was located. This principle could not be extended to all regional frequencies because of the large number of stations which had to be accommodated. Consequently, congestion resulted, especially on the higher frequencies.

The large number of stations of the regional category existing at the time of the 1928 allocation reduced the available channels for local service to six. This caused an even worse congestion on local channels, since approximately the same number of local stations as regionals, existing in approximately the same areas, had to be accommodated on less than one-sixth of the number of channels available for regional service.

The existence of certain clear channel and regional stations in specific areas on given frequencies, and the necessity of maintaining a proper separation between frequencies used for any class of station in a given locality, made it impossible to employ certain of the local channels in particular sections of the country. This resulted in a further congestion, especially in given regions, and continues to this time.

Thus it was necessary to allocate 100-watt stations on the same channel within 40 and 50 miles of each other and permit simultaneous operation. Though this was in 1928, the same condition has persisted since stations could not find other frequencies on which to operate.

Another example of this congestion in 1928 was the necessity of allocating nine local stations in the State of Pennsylvania upon one frequency, namely, 1310 kilocycles. In contrast to this, the 1500 kilocycle frequency only had one station allocated to it in the entire fourth zone.

Reduce Service

The practical result of this congestion was to materially reduce the effective service range of a large number of local stations at night, and thus to impair their ability to serve more than highly restricted areas. These areas often fell below the announced purpose of local stations to serve smaller urban centers and a reasonable adjoining territory.

The increased number of local stations both being applied for and granted by the Commission in recent years, if continued, may give rise to conditions which will result in further congestion and impairment of service. The rate of increase in new local stations has been most pronounced. During the entire period of 1928-1934 a total of 50 new local stations were granted licenses. During the year of 1935 and the first eight months of 1936, 68 such stations were established.

The existence of local stations on channels adjacent to clear channels raises important problems when the possibility of operation at 500 kilowatts power is envisioned. Based upon present night-time mileage separation standards which require a separation of 350 miles at 10 kilocycle separation between a local and a clear channel station, the night-time separation required between a local and a 500 kilowatt station would be approximately 800 miles. If 30 kilocycles and 40 kilocycles separation were under consideration, a mileage separation of 460 and 420 miles, respectively, would be required at night.

In the case of the 1190 kilocycle frequency now used by WOAI, there are nine local stations in existence on 1200 kilocycles within 800 miles of San Antonio. If 500 kilowatt stations are authorized, it may be assumed that competitive pressure will force WCAU to apply for 500 kilowatts. There are seven local stations on 1200 kilocycles, which are within 460 miles of Philadelphia. There are also 11 local stations on 1210 kilocycles within 420 miles of Philadelphia. Therefore, the operation of WCAU on 500 kilowatts and WOAI at the same power, might involve question of interference with 18 existing local stations. Thus approximately 10 per cent of the total local stations in the country might be involved when considering 500 kilowatts on 1170 and 1190 kilocycles.

Disadvantageous Position

The local station finds itself in a disadvantageous position in several other respects. From a regulatory standpoint, the ratio of day-time to night-time power allowed by the Commission is only half as great as in the case of regional stations. The local ratio is 2½ to 1, while the regional ratio is 5 to 1. Since congestion makes it possible for the local station only to reach its outlying rural area in daytime, the restriction of daytime power actually serves even to reduce this possibility.

The local station is further denied the possibility of bettering its position and of achieving some of the flexibility which has been secured in the regional and clear channel fields by recourse to the use of directional antenna. Though there is no regulation on this matter, the effect of the use of directional antenna in conjunction with the present congested condition of local frequencies raises questions as to the practicality of such a step. Thus there is no development in the technical field which makes possible flexibility that is at present applicable to the local station. Therefore the only way in which the local station can improve its service is by improved efficiency of the transmitter and radiating system employed. The use of efficient modern radiating systems has become widespread in recent years. Even with these modern methods of efficient operation local stations find it impossible to maintain the balance existing between their own signals and competing signals delivered by regional and clear channel stations within their service area. As an example of this, the fields of several stations were measured in 1934 and 1936 near Jackson, Michigan, with the following results:

	1934	1936
WWJ	.117	.520
WJR	.527	2.700
WTAM	.056	.180
WOWO	.176	.325
WIBM (Local)	2.400	3.900

Thus from the allocation viewpoint, from the standpoint of regulation, from the angle of the possibility of utilizing modern technical developments to solve its problems, and finally from the resulting inability to maintain competitive balance with other classes of stations and service, the local stations finds itself at a distinct disadvantage; and it is completely at the mercy of this Commission if its role in American broadcasting is to be preserved.

Useful Function

What, therefore should be done about the matter? It has been shown that the local station performs a highly useful function in the American community. It has been indicated that this function is performed at the present time under sufficiently adverse conditions to materially limit the degree to which this important local service can be rendered in an effective manner. Therefore, it is highly essential that the interests of local stations and local service be safeguarded in every possible manner by the Commission in future allocations and in its regulatory policy.

To safeguard the position and service of the local station it is necessary to maintain a proper balance between the importance accorded to various basic types of service. This implies not only protection of any essential class of service from inroads by any other class, but of greater importance, it implies the equal fostering of these various classes when improvements and extension of facilities are effected. The local stations should definitely share in any improvements in allocation or regulation which may result from these hearings to a degree at least proportionately equal to other classes of service.

In keeping with the contention that proper balance should be

maintained between basic classes of service, this association is opposed to any moves which would radically alter the existing broadcasting structure. We believe any radical or sweeping change might easily upset the desired balance with the consequent impairment of general service.

No Radical Change Desirable

If any radical change is undesirable, then any move which will strengthen a particular class at the expense of other groups will disrupt this balance. This is true of the proposal for 500 kilowatt stations. The creation of any large number of these stations will adversely affect the economic position of many regional stations. According to the testimony of Mr. Paley it will result in the elimination of a number of regional stations from present national network structures. It is idle to retort optimistically that some other network may be formed which will take in these stations. Network creation is not as simple a matter as that. Key cities as well as secondary cities, must be included in the completed network structure. If the stations located in the major key cities are 50 kilowatt or 500 kilowatt and the networks retain these stations, the probability of anyone being able to construct another successful national network out of the leavings of NBS, Columbia and Mutual is highly remote.

More important will be the effect of reduced national advertiser use of regional stations. This applies to both national network and national sport business. Network affiliated regional stations located in the service area of a new 500 kilowatt transmitter may retain their affiliation, but they will do so under highly restricted conditions. The increased costs of using any large number of 500 kilowatt stations on the part of the national advertiser undoubtedly will tend to force him to use a smaller number of stations. Consequently the regional station within the service area of the 500 kilowatt transmitter will be the one dropped. It is quite nice to state that the advertiser will still require intensive coverage in various market areas, but it is only partly relevant. However, the law of comparative advantage enters at this point, and the advertiser will tend to use those stations which, in relation to cost, will give him the most for his money. Widespread coverage of the 500 kilowatt station will still be the first choice, followed by intensive coverage of restricted areas.

This entire tendency will be intensified by the present worship of power on the part of the average radio advertiser. All due respect to him, the majority of his class are highly unsophisticated when it comes to a fundamental knowledge of radio coverage. Power and coverage are synonymous to the majority of advertisers. "The Nation's Station" is a term which they have taken with a certain amount of literalness and with little real analysis. Consequently, at the outset they will flock to the new 500 kilowatt stations. The worst of it will be that they will remain on these for sometime before greater knowledge will lead them into more constructive action.

This tendency will exist with regard to both national network advertisers and national sport advertisers.

Position of Local Stations

What does this process have to do with the position of the local station? Declining national revenues on the part of the regional stations will result in increased emphasis being placed upon local business by this class of station. Consequently, the competition for local volume will be materially increased. This will take place not only in the cities where both regional and local stations now exist, but also in any communities lying within the coverage area of regional stations which happen to have local stations located in them. The regional station undoubtedly will follow the example of the newspapers and develop special retail programs and retail promotions for the outlying communities in their area. A number of regional stations already have done this. It is an old story in the newspaper field.

The regional stations undoubtedly will follow newspaper practice in another respect. Usually the advertising placed on community promotional programs of this type is billed at special rates, often materially below the regular rate. Competition of this type will constitute a severe problem for the local station situated near a regional station whose interest must now be concentrated more than ever upon local business.

Thus the absorption of an unduly large proportion of national business by the super-power station will start a movement which, like the snow-ball rolling down the hill, will threaten the economic stability of every class of station below it. The impairment of economic stability of the other classes of stations will result in a disruption of balance between services, since effective service can be rendered only where there is adequate revenue.

This is all the more important to the local station by reason of the fact that the position which it finds itself in, even at the present, makes economic solvency, to say nothing of stability a hard won battle.

The second contention, is, that enough flexibility must be maintained, or created where necessary, to enable each class of station to perform its rightful role in broadcasting. It has been shown that the rigid classification of local service, and the congested condition of local channels make it impossible for many local stations to serve adequately the communities in which they are located; and the outlying territory which normally comes under the influence of those communities.

Local Function

And here we come upon an important thought: the difference between the rigid classification of a station of a certain power as local, and the actual *"local"* function to be fulfilled. It is a truism that a local station should render adequate service to the locality which it serves. But that has nothing to do with power, for power is not a measure of utility. What it means is that the station in question must be able to deliver its local programs over the entire area of the community; and by area I mean both the community itself and the adjoining territory coming within its influence.

In the smaller towns in which local stations tend to concentrate themselves, this means coverage in a portion of agricultural territory surrounding these towns. This is quite logical, for the farmers or suburbanites in these contiguous districts are just as much interested in the doings of this town as are the inhabitants of the community themselves. They buy their goods there. Their children probably go to the local high school, especially since the consolidated school has become so important. They seek the town for entertainment. They are interested in the life of the town. Unless the local station serves this area it is not really fulfilling the local function. If it is prevented from serving such areas by allocation or regulations, it *cannot* fulfill the local function.

This leads to another important conclusion. The difference between the average low powered and congested regional station, and the average local station is merely one of classification without consideration of social or economic function. The regional station of this type merely renders local service to a community and a dependent area of larger size. Other than that, it is indentical with a local station. Indeed the entire classification of regional and local stations is absurd when viewed from a social or an economic angle.

Regional Network Affiliations

This is particularly true where independent regional stations not affiliated with networks are concerned. A network station is somewhat different in so far as it is part of a national magazine and partly a newspaper. Its local service tends to be subservient to its national programs. It will carry very few programs of local interest at night time, indeed very little other than popular entertainment, by reason of the almost complete sale of its facilities to national advertisers. The bulk of local service therefore must come from the independent so-called local stations, and the independent so-called, and in my opinion misnamed, regional stations of the country. It is important that the interests of the 441 of these now in existence be most carefully protected.

If there is no essential difference between the so-called local station and the average low powered and congested regional station, then it is desirable that greater flexibility should be achieved, if possible, both in the classification of stations rendering local service and in their allocation. Probably it would be wise to have a larger series of classes of stations designed to render service over varying sized area, rather than to adhere to the present archaic and illogical rigid classification of regional and local channels based upon power.

To reduce this idea to more than a theoretical assertion requires that provision be made for greater flexibility of allocation in the local station structure.

In the first place the local station, no matter how classified as to power, must be able to cover the area of influence of the community in which it is located, if it is to serve the local function adequately. This means that it should be given such power as is necessary, and such assignment as may be required for this purpose, at least as far as this may be practical.

Is It Practical?

This leads to the question as to whether this is at all practical. In the first place duplication should be authorized and then be extended on certain so-called clear channels, and provision made in this manner to relieve the present congestion of regional frequencies. This would in no way impair their existing reasonable rural service, but a reasonable number of high powered stations duplicating on present clear channels is probably the best economic use than can be made of the limited number of available channels.

If regional station congestion were relieved in this manner, than deserving local stations could be moved onto certain of the present so-called regional channels. If they continued to be maintained at a reasonably low power and were allowed to make use of the benefits of directional antennae, they would be placed in a position to render more effective local service.

Relief of congestion on local channels in this manner also would make possible either horizontal increases in power or the introduction of greater flexibility in the remaining so-called local field, if it is still called that.

In this manner, and by careful study of individual allocations, the situation of the local station can be improved.

Flexibility of regulations is the thing which the local station requires—flexibility and the right to grow. If the latter exists, it is certain that provisions will be made in some fashion for the former. This may be obliged to take place mainly in the considerations of individual assignments, but we are hopeful that it will be effected once the importance of local service is fully recognized.

Ben S. Fisher

Ben S. Fisher filed a large number of exhibits on behalf of his clients, one of which requested that all stations on 620 kilocycles have their night-time power increased to 5 kilowatts. He said that KVOD on 920 kilocycles was not interfered with by any other station on that frequency or from a station on 880 kilocycles in the same city.

On behalf of KVI Mr. Fisher asked for a night-time increase of power to 5 kilowatts and also asked a similar increase in power to all regional stations.

KHQ which operates on a frequency of 590 kilocycles Mr. Fisher said is also asking for an increase of power to 5 kilowatts at night and he requested this same increase for all stations on that same frequency.

Mr. Fisher speaking with reference to KVOD, Denver, and from information which he received from stations in that area stated "it has been demonstrated that this 40 kilocycle separation existing in Denver has been a complete success and that no objectionable interference has resulted from such operation. Not a single complaint has been received by KVOD over five years' operation from its allocation." Mr. Fisher said further that "due to the improvements and the selectivity of radio receiving sets and due to the better transmission brought about by closer adherence to the assigned frequency, it is believed that the radio art has so advanced that it is now practical and feasible for the Communications Commission to adopt a separation of 40 kilocycles in the same community and it is, therefore, recommended that such standard be adopted."

WTIC Testimony

Mr. McNary today made an engineering statement on behalf of Station WTIC, the economic side of which was presented last week by D. A. Read.

Mr. McNary said:

Since WTIC and KRLD began simultaneous operation on 1040 kilocycles on May 8, 1934, there has been an opportunity for a number of observations on the coverage of the two stations. Field observations have been made at various times in New England, in Texas and in intervening states to determine the extent of coverage and interference. In accord with the terms of the Special Experimental Authority, under which these two stations operate simultaneously, most of these data have been placed on file with the Commission prior to the present date.

WTIC operates with a power of 50 kilowatts in an area having rather high attenuation, in consequence of which the primary service area is limited to 30 or 40 miles from the station. It has been observed that the limitation to service in this area at night is fading rather than intereference from KRLD, since fading becomes objectionable at distances from 30 to 40 miles from WTIC.

KRLD operates with a power of 10 kilowatts in an area having relatively low attenuation resulting in a primary service area somewhat greater than that of WTIC in spite of the disparity in power. The primary service area of KRLD at night is limited by fading to distances varying from 40 to 90 miles. This difference in range in the several directions is due to the directional characteristics of the antenna used. The primary night service area of KRLD appears to be free from objectionable interference from WTIC.

Synchronous Operation

During the past year WTIC and KRLD have been operating with synchronous carrier frequencies. The apparatus at WTIC, which was developed by engineers on the staff of WTIC, comprises a receiver for picking up signals from WLW, which operates on 700 kilocycles, and apparatus for controlling automatically the 1040 kilocycles carrier of WTIC from the received signal of WLW. This apparatus has functioned perfectly.

A manual control system issued at KRLD for controlling its frequency from signals likewise received from WLW. While the manual control has functioned with some degree of satisfaction it appears that automatic control is preferable.

The synchronized operation of WTIC and KRLD has furnished a basis for observations of interference between two stations transmitting different programs having a small carrier frequency difference. So far an exact analysis of effect of carrier synchronization with different programs has not been arrived at. Practical observations, however, indicate that there is a distinct benefit to be obtained through the use of this expedient although program cross talk is still the limiting interference factor.

Both WTIC and KRLD render some secondary service outside of their respective fading areas at night under average conditions. Observations have indicated that the secondary night service is more dependable northeast of Hartford and southwest of Dallas. In the Dallas area static appears to be more of a limitation to secondary service than interference. Observations have indicated this to be true as far west as Albuquerque.

As a result of this experimental operation it has been demonstrated that Station WTIC at Hartford, operating with a power of 50 kilowatts, and Station KRLD at Dallas, operating with a power of 10 kilowatts, separated by a distance of approximately 1500 miles can operate simultaneously on a common frequency without a common program and still render their primary service area free from hetrodyne or other types of interference. In addition to the primary service some secondary service is rendered by each station depending on transmission conditions.

Louis G. Caldwell

Louis G. Caldwell today was heard in rebuttal testimony on behalf of the clear channel group in which he called attention to the fact that that group is interested (1) in the preservation of clear channels and (2) the removal of the maximum limitation on power.

Mr. Caldwell said:

It is two weeks since this hearing commenced. The presentation of the case in behalf of the Clear Channel Group commenced on the first day of the hearing. Since the close of that presentation the Commission has heard other groups, as well as a number of individual concerns. Some of these have supported our contentions either in whole or in part; others have directed themselves to matters which do not have any direct bearing on the two issues in which the Clear Channel Group is primarily interested: (1) the preservation of clear channels and (2) the removal of the maximum limitation on power. A few has directly opposed our position on both issues.

The Commission has already been so patient and so generous with its time that it would be unfair to indulge in rebuttal evidence any further than is absolutely necessary. Some of the claims made by our opponents have, I think, been adequately met by evidence offered by others who later appeared on the stand, and no purpose would be served by repetition of what they have said.

There are a few matters, however, on which a statement in rebuttal seems justified. In order to save time, we have, so far as possible, incorporated this rebuttal presentation in exhibits in which the Commission may read the facts in detail. I shall, therefore, confine myself largely to introducing these exhibits and to describing briefly what they show.

Limited Area Service

Early in Dr. Pickard's testimony, Dr. Pickard devoted several exhibits and some time to showing that, by the use of directional

antennas, it would be possible to establish 5 kw. stations at Seattle, San Francisco and Cincinnati, and to give service over very limited areas on certain clear channels. By reference, he incorporated certain exhibits which were prepared under his direction and which were introduced in evidence at hearings held about two years ago on Mr. Shepard's applications to establish new 5 kw. stations on 640 kc., occupied by KFI, Los Angeles, and 830 kc., occupied by KOA, Denver, hoth clear channels. I think it is important that the Commission have before it the actual recordings of the signals of KFI and KOA made at Boston under Dr. Pickard's supervision, which were introduced in evidence and on which he relied in the statements he then made. I therefore offer in evidence, as Rehuttal Exhibit No. 1 of the Clear Channel Group, a folder of photostats of those recordings and of exhibits based on them. These recordings are important hecause they show both KFI and KOA as delivering a substantially stronger signal at Boston in the period 1933-1934 than they are credited with in certain exhibits introduced by Dr. Pickard at this hearing, particularly Figures 25 and 29.

Some 65 recordings were taken by Dr. Pickard's staff on KFI over the period from November, 1933, to March, 1934. He used the 90% and 10% system at that time, instead of the 80% and 20% system used at this hearing. On the 10%, or interference, basis, the exhibits show an average of 0.140 mv. at the latest hour, but they range up much higher than this for particular nights. On the 90% (or service, basis, the exhibits credit KFI with a signal of from .083 to .085 mv. in January, and of about .068 to .073 mv. in Februaary, and from .032 to .035 mv. in March. Incidentally, recordings offered in behalf of KFI in that same case showed substantially higher levels than these, but were made at other points such as on Long Island and in North Carolina.

Similar Exhibits

Similar exhibits in the KOA case show that, on the 10% basis, KOA delivered a signal of 0.510 mv. in Boston on particular nights in November, 1934, 0.430 mv. in December, 1934, with averages of 0.280 mv. in November, 0.230 mv. in December, and 0.198 mv. in January. These exhibits show that KOA's "average" curve (I am not sure just what this means) was, at the latest hour, 0.190 mv. in November, 1934, 0.160 mv. in December, 1934, and about 0.082 mv. in January, 1935.

Other matters having to do with this suggested duplication of stations on clear channels have, in the main, been sufficiently covered both in the cross-examination of Dr. Pickard and in the testimony of other witnesses. Generally speaking, we do not differ substantially with the estimates which Dr. Pickard gave on cross-examination as to the geographical extent of the interference which the proposed duplicating stations would cause to the existing clear channel stations, and as to the extent to which the clear channel station would limit the duplicating station at night. We have, however, prepared several exhibits on this subject which I should like to offer in evidence simply by description.

Rebuttal Exhibit No. 2, prepared by Mr. Chambers, shows the portion of the country over which the proposed station at Seattle would cause nighttime interference to WJZ.

Rehuttal Exhibit No. 3 shows the computed ground-wave coverage of existing Seattle stations to the 0.500 mv. line, and Rebuttal Exhihit No. 4 shows their ground-wave coverage to the 1 mv. line. These are for the purpose of affording some idea of the service already available in this city.

Rebuttal Exhibits Nos. 5 and 6 serve the same purpose with regard to San Francisco.

Unique in Contours

It is obvious from the map, I think, that both Seattle and San Francisco are rather unique in their physical contours. For the purpose of giving a graphic demonstration of this, our engineers have prepared Rebuttal Exhibit No. 7, which compares what can he done by use of a directional antenna on a 5 kw. station with what can he done with a non-directional antena. You will see from this exhibit that it is impossible with a coastal city having more or less normal contours to serve as many people with a directional antenna as with a non-directional antenna and still give protection to an eastern clear channel station.

Exhibits 3 to 7, inclusive, were prepared for us by Mr. Glenn Gillett.

Because a vigorous attack was made on the post-card survey conducted by the Commission, we have made as thorough a study of that survey as time has permitted. I am sorry that we did not do so before. Not only do the cards themselves completely refute the charges that have been made but they disclose a veritable mine of information as to listener habits, preferences, desires and complaints.

It has been impossible to examine and classify the cards from all the states, but enough has been done to indicate with virtual certainty what the results would be. In the first place, let me state positively and unequivocally that Nebraska is *not* a typical state. It is true that in Iowa, Kansas and Nebraska you will find daytime and limited-time stations operating with substantial power on clear channels and a substantial vote for certain of these stations. Generally speaking, you will not find this situation elsewhere in the entire country. Unfortunately, much of our tabulation was completed before this point about daytime and limited time stations was made and our exhibits show this only by implication, by reason of what is omitted rather than what is included. The implication, however, is, I think, convincingly clear.

Rebuttal Exhibit

We were primarily interested in determining, if we could, how much of the voting was for so-called clear channel stations operating on duplicated channels. Our Rebuttal Exhibit No. 8 is an analysis of the returns for the States of Minnesota, Iowa, North Dakota and South Dakota. The obvious leaders are WCCO, WLS, WLW, WSM, WGN and WHO, all of them operating on clear channels. WCFL, operating at Chicago with 5 kw. on a duplicated clear channel, does not have a single vote in the entire area for either first, second, third or fourth place. WBBM and KFAB, duplicating on a clear channel, have so small a vote in all four states as to be negligible.

Rehuttal Exhibit No. 9 tells the other half of the story, out at Seattle, Washington, where KJR operates in duplication with WCFL. This is a map of the State of Washington, showing, by counties, the vote for KJR. In only six or seven out of some 38 counties does KJR have the lead, or in fact any substantial vote at all, and those counties are all clustered around Seattle. The southern portion of the State and the western two-thirds of the State show only a tiny handful of votes for KJR and these votes almost never list it as first choice. There are several counties in which it has no vote and several more in which it has only one vote.

I realize that the KJR-WCFL case is not a very fair example, since each station has power of only 5 kw. For proof that interference plays an important part in keeping down KJR'S vote, it is necessary to look to the listeners' comments, which I shall return to later.

Let us turn, therefore, to Rebuttal Exhibit No. 10 which is a tahulation of preferences for the States of Arizona, California, Idaho, Oregon, Montana, Nevada, Utah, and Washington and the territory of Alaska. So far as KJR is concerned, it shows that stations at Los Angeles and Salt Lake City lead it in its own State of Washington.

Clear Channel Duplication

There are two duplicated clear channel stations at San Francisco, KPO with 50 kw. and KGO with 7½ kw. Notice that the only state in which either has a large vote is California; a detailed examination of the cards will show that most of this vote is within a relatively short distance of San Francisco. In general, the only other states in which either station receives what even approaches a suhstantial vote is directly to the north in Oregon and Washington, and there is no way of telling how much any of this reflects daytime coverage except from listener comments, to which I shall return presently.

The great inter-mountain area, comprising Arizona, Idaho, Montana, Nevada, and Utah, relies principally on four stations, the two at Los Angeles, KSL at Salt Lake City and KOA at Denver. This hrings me to the one apparent exception, namely, KNX. When we take up the listener comments, you will, I think, see that this is not an exception because of the widespread complaint of interference to KNX hy a Canadian station. The station in question is a little 1 kw. station in Quebec, Canada, operating, I am told, with less than 40% modulation.

Before turning to the listener comments, let us notice one more case of duplicated operation, WTIC with 50 kw. at Hartford, Conn., and KRLD with 10 kw. at Dallas. Rebuttal Exhibit No. 11 is a tabulation of the post-card preferences in Arkansas and Tennessee, at one end of the line between the two stations, and New York and Pennsylvania at the other. In Tennessee, KRLD gets only one vote, and that is for second place. In Arkansas it gets four votes for first place and a total of nineteen for all four

places. It is far out-ranked in Arkansas by WLW, WSM, WLS, WFAA-WBAP, and even WWL at New Orleans with only 10 kw.

On the other end of the circuit, WTIC has no vote for first place in Pennsylvania, only one for second, and only twelve votes in all. It has five votes for first place in New York, five for second place and thirty-five votes for all four places. Most of these come from the counties immediately adjacent to Connecticut. Hartford is only about 45 miles from the New York boundary and 110 miles from the Pennsylvania boundary.

Tabulations for States

Rebuttal Exhibit No. 12 is a similar tabulation for the States of Maine, New Hampshire, and Vermont. In this connection, note that Hartford is only about 20 miles from the Massachusetts boundary, 65 miles from Vermont, less than 70 miles from New Hampshire and 130 miles from Maine. WTIC has only four votes for first preference each in Maine and New Hampshire and three in Vermont. It trails far behind WEAF, WJZ, and WABC of New York City and substantially behind WBZ. WLW leads it in two of the three states. And again we must remember that some or many of WTIC votes may be based on daytime reception.

Now let us turn to the most eloquent testimony of all, the listener comments. I regret that we did not undertake this before, so as to be able to give you the voice of the rural listener from all over the country. You have, in these cards, a mine of information as to what that listener wants and needs and what, in fact, he is begging you to give him. These comments obviously come from a cross-section of the farming population, the illiterate as well as the cultured, the prosperous as well as the poor. There is hardly an important question raised at this hearing that is not answered in forceful fashion on the cards.

We have been able to copy and classify the comments from only four states, Washington, California, Nevada, Utah and Iowa. They are incorporated in Rebuttal Exhibit No. 13. These states were picked for no particular reason other than that they were among those in which the listener preferences were tabulated and we did not have time to complete the others. Some obviously irrelevant comments were not copied but, in the main, the exhibit includes all the remarks that came from the five states in question. The extent to which rural listeners have gone to the trouble to make known their needs and desires is evidenced by the fact that the comments from California alone cover closely typewritten pages.

Hard to Classify Comments

It was, of course, very difficult to classify the comments, particularly since many comments covered more than one subject. I arbitrarily selected six classifications: (1) Reception of clear channel stations and interference on duplicated clear channels; (2) Interference on other channels; (3) Local interference and static; (4) Class of programs preferred; (5) Advertising and (6) Miscellaneous. The first two of these headings were impossible to adhere to closely; they overlap and should be read together. So should the fourth and fifth headings.

Let us see what is said about interference resulting from duplicated use of clear channels, about reliance on clear channels for rural reception and about whether this daytime reception is satisfactory. I shall quote from only a few of a great many comments:

Washington

KGO should have a clear channel. Best station on the Pacific Coast. (Pierce)

Canadian station interferes with KNX. (Garfield)

The stations of the CBS should be cleared for better reception, KSL being the only station for that chain heard at night without interference. (Klickitat)

We are wondering why it is that we can at times reach stations as far east as Cincinnati but have difficulty in obtaining the coast stations of Portland, Tacoma and Seattle. (Lincoln)

1050 KNX. You have to keep turning the dial up and down and some time it is such a muddle you cannot distinguish the conversation, hope this could be remedied. (Thornton)

Some other station interferes at times with KNX Hollywood. I think there are too many stations. (King)

There seems to be interference on KNX. (Ferry)

Can not get any reception in daytime. (King)

Seattle radio reception is very poor in this area. (Douglas)

Keep stations off KNX and give them the power. (Garfield)

KOMO and KJR which should really be our clearest stations are almost impossible to listen to because of station interference. Also KFRC. (Lewis)

KNX is our favorite station but there is so much interference we have to sit by the radio and keep turning the dials. (Garfield)

Leave our clear air channels alone. The eleven western states should keep what they have for western stations. (Columbia)

KGW and KJR are strictly daytime stations. All local channels are worthless at night. After dark only cleared channels may be understood. WLW and WBT are always better than such local stations as KOIN or KEX. (Pacific)

California

There is a lot of interference on KGO between 6-8 p.m. otherwise programs are coming in fine. (Stanislaus)

Interference with KNX impossible to get it at times. (Riverside)

Interference on KGO and KYA. (Nopa)

Have a set in car and Station KPO is only one that I can get in daytime. Should be another station in Nor. Calif. with power enough to reach 90 or 100 miles north of Sacramento in daytime. (Butte)

KPO has the best programs but some nights there is interference which makes the reception blurred.

KGO and Dallas, Texas, too much interference. (Sutter)

No reception here whatsoever during the day. Fine at night, with no static to speak of. (Trinity)

Interference on KNX seriously impairs reception. This station carries a nightly weather service much desired by citrus growers. (Tulare)

KGO is interfered with badly. Some very good programs cannot be received because of this.

Interference is very great on stations KGO and KFRC after 5 p. m. (Calaveras)

Advise clearing of air channels by eliminating about 75% of low power, useless stations. Have high power stations in all widely separated, both in distance and air channels, particularly the latter. Also separate more widely in distance stations on the same chains or hook-up. (Contra Costa)

KGO and KNX have interference. (Fresno)

Too much interference on KPO at night causing garbled reception. (Glenn)

In this locality good reception does not start until evening, account distance from broadcast station. (Humboldt)

Reception usually possible at night only. (Inyo)

Nearer stations with greater power are preferred because of bringing in more noise in reaching for distant stations. There is lots of static in summer months. (Madera)

In this locality there is a lot of interference on KGO and KFRC. (Monterey)

Daylight reception is not so good here. (Modoc)

This part of Calif. and the part of Nevada near here has the poorest reception of any part of the country. Practically no reception in daytime. A more powerful station at Oakland would help. (Mono)

Some interference at night over KPO. (Placer)

Broadcast reception very poor in this locality. Only high powered stations available for clear reception. (Santa Barbara)

Daylight reception is very poor in Shasta county though from 6 p. m. on it is OK. We class KNX as a favorite as well. (Shasta)

Iowa

KFAB interferes with WBBM daytime reception.

WLS does not have enough power. Market reports by Jim Poole are very important to all midwest cattle and hog feeders. (Wright)

A few more high power stations on a clear channel in various parts of the country without a local low power on the same band or frequency. (Wright)

With the 500,000 watts WLW is using we get them any time of day or night—recommend more 500,000 watts be authorized for more efficiency. (Wright)

Reception from above stations is excellent during the day *only*. Much interference and fading from WBBM during day. (WCCO, WMT, WHO, WOI) (Worth)

Why is it we have trouble getting programs over CBS? Have never been able to get the Will Rogers programs without other stations coming in and crowding the programs out. Had the same trouble with the Eddie Cantor program last night. Would suggest some channels be cleared to lessen interference. Very few stations on CBS are satisfactory after night. (Wayne)

We listen to stations all over the U. S. We like WLS on Sat. nights. Dallas, Denver and Nashville are other stations we are in on regular. Give the little stations more power in daytime and cut them off at night. (Lyon)

We need a station belonging to the "Blue" Network on a cleared channel somewhere in this region. Otherwise I believe our region is served splendidly. (Jasper)

Reception very good here with the exception of WBBM and KFAB 770. Both on in the daytime cause bad interference. (Benton)

Utah

KSL is only station we get in daytime. We get many stations better than KSL in evening. We often get clear reception from Dallas. (Duchesne)

Interference on KDYL, Salt Lake City, Utah, station. Interference on KNX, Hollywood, California station.

We listen to KSL in the day. It is the only one which comes in clear. (Emery)

KSL is our nearest broadcasting station but reception is poor. It is up one minute and fades off next. There is some station that interferes with KNX at times. (Piute)

Lots of interference on KNX. Drifting away on KOA. Strong KFI. (Cache)

KSL is only station we can get during the day. (Wasatch)

Nevada

We are unable to get any stations in the daytime. (Pershing)

All stations come in clear in the evening and early morning but during the day—not so clear. (Nye)

Daytime reception very poor. KLX being about the only station coming in satisfactorily until 4 or 5 p.m. (Elko)

Unable to get CBS or KHJ and some interference on KSL. No clear channel for CBS in this part of the country. (Clark)

I have only read a fraction of the complaints relating to interference on the KNX channel. Some of it, in the northern part of Washington, is due to station separated from it by only 20 kc. but most of it, I think, must be ascribed to the little 1 kw. station with less than 40% modulation at Quebec, 2600 miles away.

What have the listeners to say with regard to regional channels? On this subject there are almost innumerable comments, of which the following are typical:

Interference on Other Channels

Washington

Remove WOW from KHQ's channel. Allow Western Columbia chain stations more power. (Pend Oreille)

The popularity of radio is at stake and if stations are not separated so a person can get what is wanted without interference it will be too bad. The Mexicans are the worst on our radio. KHQ, our main station, is about out in the evening. (Lincoln)

A lot of trouble with Omaha, Neb., interfering with KHW. (Whitman)

There are too many small stations that give no reception but interfere with stations of same wave length. (Whitman)

Too many stations on the same wave length. (Walla Walla)

Eliminate that Mexican station which interferes with KHQ of Spokane. (Lincoln)

If ½ of stations were off air we would get real reception. (Wahkiakum)

Why not eliminate some of stations with same wave length. We have a lot of trouble by getting too many stations at same time. Cannot listen to radio very much on that account. (Thurston)

The main trouble with radio broadcasting, there are too many stations. (Whitman)

Stations are coming in better. Less interference than a month ago. I believe that there should be a law against stations broadcasting under same frequency. (Adams)

Cut down Omaha. It interferes with KHQ. (Whitman)

California

Too many small stations. (San Luis Obispo)

Too many small stations close together that interfere with each other. (San Diego)

Memo—Reception of KHJ not good after 6:00 p.m. (San Bernardino)

Fewer stations and better agricultural programs needed. (Riverside)

Too many stations—causing one station to interfere with another. (Merced)

Should be less stations and better quality of programs. (Monterey)

Yours for fewer and better stations. (Napa)

Too many stations on each wave causing muchiness. (Lancaster)

Kill perhaps 90% of broadcasting stations. Have a few powerful stations properly located and kill this rotten advertising. (Tehama)

Iowa

There are too many stations broadcasting at the same time. Resulting in interference. (Woodbury)

Less stations with more power. (Winnebago)

WOW ruined at night by some station. I think Mexico station. KOIL has a great deal of interference. (Montgomery)

WOW is interfered with by a Mexican station in the evenings. I think the call letters are XENT—but am not sure. Anyhow it is a decided nuisance. (Mills)

There is too much interference on quite a number of stations. Their wave length being too close together. (Jackson)

Entirely too many stations using identical wave length in the evening. (Johnson)

Too many stations. (Van Buren)

Too many stations. One half the stations would do better work. (Scott)

Too much interference between 1100 and 1500 kilocycles in the evening. (Plymouth)

We think there are too many stations; causing interference. (Muscatine)

Suggest a change of some kind between 1200 and 1500 kc. bands. (Muscatine)

There are too many broadcasting stations. (Buchanan)

Utah

There is too much interference on KDYL. (Summit)

From 1190 to 1400 kc. the stations are so numerous they cannot be separated. (Beaver)

Fewer stations—more power. (Millard)

Too much interference from small stations. (Utah)

Nevada

"Less broadcasting stations and better programs." (White Pine)

There are other stations we like to hear but most of the time too much interference from other stations. There should be more margin between stations. Cut out about half of them. (Churchill)

Can anyone justly say that these farmers have not given a fairly correct analysis of their radio troubles, or that they are not pretty well aware of what is necessary to cure them?

Program Preference

Now let us turn from the rather dry and technical subject of interference to the very human subject of program preferences. For the sake of the industry, I am going to pass over what is said on the subject of advertising. It is all in the exhibit.

The striking thing about these unsolicited comments on programs is not the occasional criticisms of too much jazz and crooning, too much grand opera and classical music, too much speaking, too little speaking, and so on. These comments more or less balance each other out. It is the virtual unanimity on what the rural listener wants and needs to the point of actual necessity. Over and over again he stresses his desire for news, market reports, weather reports, discussions of current events, and the like. From the State of Washington alone, there are 32 comments of this character out of 107 that relate to programs. They express deep appreciation of this sort of program and ask for more. Many of them stress their isolation, their desire to keep in touch with the outside world, and their inability to get newspapers in time. These people are really relying upon radio in scheduling their daily lives, as well as looking to it for entertainment, education and religious services. Incidentally there are not a few that indicate that they want such programs in the evening since they are too busy in the daytime to listen. No greater mistake could be made than to say that these rural listeners are asking merely for local news and local markets. They are asking for the sort that they have been receiving over clear chan-

nel stations, which they frequently name by call-letters and commend for their services in this direction.

Wealth of Information

In behalf of the Clear Channel Group, I urge you not to let this wealth of information contained in rural listener comments go without study and analysis. We have been able to make a hurried survey of the cards from only five states. Except for this, we have no idea what you will find when the comments proceeding from the other forty-three states and Alaska will show. We are inclined to believe, however, that these comments are a much more trustworthy indication of the merits and defects of our present broadcasting service to rural communities than all the statistics, graphs and charts that an expert economist can devise.

One or two relatively minor points remain to be covered. Dr. Pickard laid considerable stress on the fact that regional stations now serve a daytime population of 245,292,649 persons and a nighttime population of 175,206,988 persons, counting duplications of regional assignments in the same area. I do not think he made it quite clear how he arrived at these figures. We have examined the tabulations that he submitted in evidence in support of his calculations and find that to a certain extent these totals require explanation. For example, there are in Brooklyn four 500 watt stations that divide time on 1400 kc. Each one of the four is credited with serving 7,130,446 persons by day or a total of 28,521,784 persons on this one assignment. Each is credited with serving 6,962,246 persons at night, or a total of 27,848,984 persons. The same process was followed with the three 1 kw. regional stations dividing time on 1300 kc., to which is also added the population coverage of a fourth station at Troy, New York, dividing time with the three New York stations. Altogether these eight stations dividing time on two frequencies account for nearly 51,000,000 of Dr. Pickard's day population served by regionals, and over 49,000,000 of his night population. We have been unable to determine how he arrived at his calculation of the rural population served by these stations. Following his general method of reasoning, I suppose we would be entitled to claim that the daytime rural audience not receiving primary coverage in this country is not merely some 40,000,000 but forty times that, since there are, on the books, 40 clear channels on which they do not receive such service.

This concludes the rebuttal case for the Clear Channel Group. I should like at this point to make acknowledgment, in the name of the Group, of the invaluable technical assistance we have had, not only from Mr. Chambers, who has testified, but his partner, Mr. McNary; also Mr. Glenn D. Gillett, a consulting radio engineer at Washington, and an engineering committee composed of the chief engineers of three members of the Group, Mr. J. H. De Witt, Jr., WSM, Chairman, Mr. Carl J. Meyers, WGN, and Mr. R. J. Rockwell of WLW. They in turn have had the advice and cooperation of the chief engineers of all members of the Group. On the legal side, we acknowledge the helpful advice and counsel of the Honorable Swagar Sherley, who will argue the case in behalf of the Group.

In closing, I express the Group's appreciation of the fairness and patience with which this important hearing has been conducted.

William B. Lodge

William B. Lodge of Columbia Broadcasting System who presented engineering data to the Commission on last Friday as already noted in the Daily Bulletin, suggested engineering standards for reclassification of broadcasting stations as follows:

Designation		Suggested	Maximum Number	Night Mileage	Power (KW)		Groundwave Protection (MV/M)[i]	
Proposed	Present	Name	Night Stations	Separation	Night	Day	Night	Day
A	Clear	Clear	1	Unduplicated	50	50	.5[e]	.1
B	Clear	Dominant Zone	1[b]	B-C 1500	5-50	5-50	.5[f]	.1
C	Clear and H. P. Regional	Restricted Zone[a]	2	B-C 1500 C-C 600	5-50	5-50	3[g]	.1
D	Regional	Regional	5[c]	900	5	5	3[h]	1
E	Regional	Sectional	10	d	1	1-5	8[d]	1
F	Local	Local	60	d	.25	.25	4[d]	2

NOTES:

a—In some cases, when a power less than 50 kw is used, directional antennas may be unnecessary to provide the specified protection to another Class C Station.

b—This does not preclude addition of a Class C Station.

c—This does not preclude addition of Class E Stations if required protection is provided all stations.

d—Night separation to be determined by daytime groundwave interference.

e—Except for an adjacent-channel Class A Station, for which suitable mileage separations must be developed.

f—Protection to a Class B Station from a Class C Station.

g—Protection to a Class C Station from either a Class B or a Class C Station.

h—For 5 kw operation.

i—Based on F.C.C. skywave curves (second hour after sunset) of allocation survey and these assumed antenna efficiencies: A, B, C 200 mv/m per kw; D 175 mv/m per kw; E, F 150 mv/m per kw.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

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Allocation Hearing Completed Today With Argument by Sherley on Behalf of Clear Channel Group

The allocation hearing which has been held before the Broadcast Division of the Federal Communications Commission almost continuously since October 5th was completed today when oral argument was made by Swagar Sherley on behalf of the Clear Channel Group.

Mr. Sherley told the Commission that the problem before it is to determine the broad policy to be pursued so that listeners may enjoy the utmost benefits from radio both in its present state and from future development.

Only by a clear concept of unique ability of radio among all forms of energy, said Mr. Sherley, can a proper approach be made to the problem. He pointed out the fact that by radio alone can space be conquered in terms of time. Area over which it may be used is limited he told the Commission only by the power employed.

Mr. Sherley argued that public interest demands that this power be not wasted or dissipated and he said that "necessarily its proper use is a national one". He contended that the Clear Channel Group have several things in mind including the fact that none of the existing clear channels should be lessened or broken down and that the power increase should not be limited. Super power he said is a phrase that is really contrary to the facts. He told the Commission that if he recalled correctly during the early days of point to point radio five hundred thousand watts were used for transcontinental transmission. He said that this so-called super power is much of a bug-a-boo and he said that this much power or more is used for the lighting up of the front of New York theatres each night, more than that is used for the presses of daily papers and each power house of the country uses more power than five hundred kilowatts. He referred to super power as "a tyranny of phrase."

Populated Areas

Mr. Sherley said that the use to be made of radio "presents conflict between those in the thickly populated areas of this country and those in more sparsely settled areas." The allocation of frequencies has been made he stated with an effort to compromise the claims of population alone and area to be served.

"In testing public interest" said Mr. Sherley "by the greatest good to the greatest number, greatest number should not be emphasized at expense of greatest good". The greatest good he said is to be found by ascertaining the greatest need.

Those whose need is greatest should have no lesser right he contended "than those more fortunately situated and consequently with less true need". The benefits of radio he contended should be available to all.

Mr. Sherley said that a quality of service has always been recognized by the radio law. Congress he said intended social consideration to outweigh economics.

"Clear channel stations have no desire to disparage the social service rendered by any class of stations" said Mr. Sherley and "approve increased power to regionals and locals to improve this service. However, clear channels serving wide areas do render the primary social service contemplated by the radio law."

Although United States radio reception said Mr. Sherley is superior to that of any other nation, it is admitted by all that the art has advanced so that greatly improved service can and should be rendered to listeners.

"In both city and country," he contended" the listener does not enjoy as good reception as knowledge of the art now renders possible. In both city and country increased power will not only improve reception of those who now enjoy it, but will give reception to many now without it.

"More power is the only real remedy which will afford better service to both city and rural listener. Progress in listener service has always been opposed by the timid and the fearful." Mr. Sherley said that satisfactory service for the whole country can be obtained only by the preservation of clear channels and an increase of power to stations assigned to them. The engineering data he said shows that no possible arrangement of regionals and locals can produce this national coverage if all clear channels are abolished.

Limitation of Power

"Though not openly advocated as such" Mr. Sherley said "a limitation to 50 kilowatt power and permissive duplication will lead to elimination of all clear channels and as shown by engineering data prevent covering the entire area of the United States.

"Regionals have practically no secondary coverage at night and this secondary coverage of clear channels is the only method whereby truly national coverage is at all possible."

Discussing the question of the number of clear channels necessary Mr. Sherley pointed out that it is impossible for one clear channel station regardless of its power to serve the entire United States because of fading and the fact that the sky wave service is not constant.

To afford any variety of program service to the rural listener outside of the primary service area of other stations Mr. Sherley contended there must be still a greater number of high powered clear channel stations. The question of international complications from high power stations in the United States said Mr. Sherley is out of the picture. He contended that while this country wants to be a good neighbor it should not shackle the radio art. Our neighbors are not doing it he said.

On the question of monopoly Mr. Sherley said that the Clear Channel Group is highly individualistic and independent as evidenced by their ownership and the granting of 500 kilowatts would accentuate this individuality by decreasing dependence on the chains.

Can Prevent Duplication

The radio law he said is sufficient to prevent any undue duplication of programs and monopoly and he called attention to the fact that the advertiser will not pay for unnecessary duplication of his own program.

Mr. Sherley stated that increased power to these independent stations will create a bargaining power able to deal with both broadcasting companies. The prevention of concentration of ownership he said eliminates monopoly.

He said that the Clear Channel Group are not subservient outlets for the chains but they are independent and he suggested that the Commission should see that separate ownership is preserved and called attention to the fact that the Commission has power of control over contract relationship.

"Graphs showing overlapping areas served by respective stations" he said "do not necessarily prove any real duplication of programs to all listeners within the overlapping areas."

The radio listener he contended must have more than one station available for uniformly good reception. He said that in his opinion the data of the regionals overlook the fact that inability to get good service rather than financial limitations accounts for the absence of radios in many homes. Obviously he said 90 per cent of our citizens are not now receiving satisfactory radio service. If so, there would be no need for the increased power now sought by the regionals.

Dealing with the question of duplication Mr. Sherley said that while duplication is feasible the resulting benefits do not compensate for the loss.

Signal Strength

"In the narrow area lying between two stations" he said "it is possihle by directional antenna to so suppress the signal strength as to protect the dominant station within the narrow area. As the width of the area is enlarged the protection hecomes less."

If clear channels go to higher power said Mr. Sherley the condition as to feasibility of duplication changes rapidly. Such increase he said makes duplication impractical which may account for the opposition to the higher power. It is practically impossihle he contended to again clear a channel that has been broken down. Clear channels he stated "should not be forced to repeatedly defend the exclusive use of their frequencies simply because from a strictly engineering viewpoint duplication is feasible in certain few areas."

There is no valid technical objection Mr. Sherley told the Commission to increase the power of clear channel stations. The opponents insistently urged he said "(1) that clear channels can not survive economically and (2) that they will so successfully survive as to drive regionals out."

Mr. Sherley contended that great weight should be given to the opinion of men who are willing to risk their money in the venture of 500 kilowatt stations. The question he said as to who should be allowed to increase their power can only properly he determined upon the hearing of individual application.

Service Limited

What radio stations have to offer to advertisers is limited in quantity said Mr. Sherley which presents inherent limitation in broadcast advertising regardless of the demand for a station's time. National advertising today he contended is extremely small compared to potential national advertisers. He admitted that if power is increased rates will have to be increased, based on increased circulation.

Mr. Sherley said that the ratio of radio advertising to other forms of advertising is constantly increasing and that there is now a steady growth in radio receipts. Stations he told the Commission can not exhaust or even satisfy the demand of advertisers with only 18 hours per day to sell.

"That regionals may no longer carry the same chain programs that clear channels carry," he said, "does not mean that there will be no chain programs availahle to them, since expansion of chain programs is not at an end."

Discussing the question of flexibility Mr. Sherley said that "it is well to consider what is meant by flexihility of regulation. If by it we mean that this plastic art should not be put into a straight jacket, I would say 'Amen.' If it means that all regulations are to be so elastic as to give no repose or security as to the basic character of different classes of stations, then I emphatically say 'No.'

"Let me illustrate: The clear channel group have recommended a minimum requirement of 50 kilowatt power for all clear channel stations and are opposed to any maximum limitation on power. Why? For the reason that if a station is to have a frequency for its exclusive use, a very high grant, it should be required to make such use of it as to justify the grant, and if it cannot or will not, then it should have the grant revoked. There you have a proper rigidity, one necessary in the interest of the public in order that the all-too-scarce frequencies shall be put to a satisfactory use.

Better Service

"On the other hand, if a maximum on power is left open so that a station may progressively better serve the puhlic, you have the flexibility necessary to growth. Again I can illustrate by the distance tahles of separation of stations. Such a regulation is one of a working standard subject to be disregarded in the light of facts pertaining to particular frequencies and particular stations. To make such tahles absolutely rigid, never to be departed from, would be to hobble the art.

"If I should undertake to formulate a rule as to when a regulation should be rigid and when flexible, I would say it was this: Let the regulation be rigid whenever it relates to a basic determination necessary to protect a desired and determined status; let it be flexible when within that classification or status a rigid application would prevent adaptahility to actual facts in an instant case, and by all means let the flexihility he an aid to progress and not an invitation to retrogression.

"Perhaps another misnomer that has grown up in radio nomenclature is the expression 'secondary service area' as applied to clear channels. A truer description would be '*exclusive* clear channel service area,' for as this Commission knows full well, that coverage comes chiefly from clear channels, and is a truly primary service to many dependent almost solely upon it.

"But I must not pursue this suhject. A book could be written on the harm that has come from the use of phrases that take the place of real thought."

Monopoly

On the question of monopoly Mr. Sherley discussed the likelihood of any possihility of that if clear channel stations are given increased power as professed hy some.

"The stations in the clear channel group which I represent are highly individualistic," said Mr. Sherley.

"Consider the ownership of these stations and you will see how truly independent and individualistic they are. Financial ownership is entirely distinct; their relation to the national hroadcast companies is separate and distinct and can be changed, and douhtless will be from time to time. While they carry in large part, chain programs, they exercise individual choice as to what sponsor or sustaining program they will take and the choices they make in these respects are frequently quite different.

"If all these stations went to 500 kilowatt power, this individuality would not only still remain, but he accentuated, for with the increased power would come a lesser dependence on the chains.

"Overlooking this individuality, critics of increased power insist that there will be an undue duplication of programs and a monopoly of the air by the chains and a few stations. A sufficient answer lies in the radio law itself.

"Control over programs of chains, particularly as to undue duplication of stations with overlapping areas, lies within the expressed power of this Commission. That such control will need to be exercised I seriously doubt, hut that that power exists and if necessity arises can and will be exercised, is plain."

Duplication of Programs

Mr. Sherley said that monopoly will not be endured, either in programs, ownership of stations or otherwise. "But I think," he said, "it is fair to say that the advertiser will see to it that he does not pay for unnecessary duplication of his program. I vision in the future not a monopoly of radio broadcasting hy the existing chains, hut rather a multiplication of chains, not alone by the existing companies but by alliances between stations themselves."

Mr. Sherley said that "monopoly of chain hroadcasting is made infinitely more likely by denying growth and strength to independent stations such as compose the clear channel group. By giving these independent stations sufficient power to cover large areas whereby four or five of them joined together can assure consistent nation-wide coverage throughout the entire year, you will create a strength of bargaining power able to deal on somewhat equal terms with either or hoth broadcasting companies. These stations will have resources sufficient to originate programs of equal merit with those furnished hy the chains. It is even likely that in such a situation program creation will in considerahle degree divorce itself from chain and station ownership and booking of such programs with groups of stations he the rule.

"The law gives you and you exercise control over change of ownership. You can and should prevent ownership of many stations in a few hands. You must prevent monopoly resulting from single ownership of all stations in any limited area. Prevent that concentration of ownership and you need have no fear of monopoly.

Contract Arrangement

"If it be thought that contract arrangement between stations and the chains gives control over ownership into the hands of the broadcasting companies, you have power to cause any necessary changes in such contracts. I know as to some of the Clear Channel Group for whom I speak, and it may he true as to a numher of others, that the stations have notified the chain with which they are affiliated that the station will exercise its own judgment at any time it considers it proper to substitute its own or another program for chain programs that may have been contemplated.

"These stations are not simply subservient outlets for the chains. They are independent in the true sense of that term. They would not become less so, hut just the contrary, hy an increase of power and the ability to serve over larger areas. There is no danger of a monopolistic combination between such stations.

"Can you visualize a comhination hetween WGN, the Chicago *Tribune* station, and WHAS, the *Courier Journal* and *Louisville Times* station? My imagination is not so facile or vivid. And

the same is true of any other combination of the stations in the group. Preserve separate ownership. Control if need be contract relationship and you will certainly prevent monopoly."

Dealing with the duplication of program Mr. Sherley said that the Commission must not let the talk of duplication of chain programs mislead it. "I am sure this Commission," he said, "will not overlook the need for some duplication, no matter how great the power that may be given to clear channel stations. It is one thing to show overlapping areas by graphs, depicting the areas served by respective stations. It is quite another thing to prove thereby that there is in any true sense a duplication of all listeners within the overlapping areas.

Advertising Claims

"This is apparent if we consider the matter from an angle other than the advertising claims of the broadcasting companies. The exhibits and data which have been assembled by regional associations as bearing on this question are on the basis of the ability to hear a single station and to hear it with a single strength .4141 millivolts." Mr. Sherley said that there was no use in refuting the statement that 90 per cent of the citizens of the United States are now receiving satisfactory radio service. "Were this true," he said, "the regionals situated in all the large cities and towns of the country would not now be seeking additional power. This Commission knows that static and man made noises make necessary increase of power if service is to be truly satisfactory in the city, town or country.

"Monopoly is not to be prevented by denial to a station of any class of power sufficient to adequately perform the service expected of a station of that class. This Commission is not so impotent in its power and control of stations as to need to keep them inefficient in order to preserve independence in broadcasting."

In connection with objections urged to the elimination of any maximum of power for clear channels Mr. Sherley said:

"Those who have opposed the elimination of the present maximum upon power permissible for clear channels and who in particular strenuously object to any grant of 500 kilowatt power to any of these stations, if I understand their position aright, urged in substance four reasons: (1) engineering objections; (2) economic objections, as applied to the clear channel stations themselves; (3) economic injury to regional and local station; and (4) international complications that will result. Let us examine these objections in order.

Engineering Opinion

"I think I am warranted in the statement that there is a unanimity of engineering opinion that in the light of the selectivity of present day receivers, there is no valid technical objection to the increase of power and this is true irrespective of whether there is a corresponding increase of power by clear channel stations on adjacent frequencies; or as the engineers put it, there is no insurmountable problem of adjacent channel interference.

"Men are always impeded by their fears and I recall that when the then supposedly great increase to higher power was being considered by the Radio Commission, and out of which came the present 50 KW power stations, it was urged that the interference between stations on adjacent channels would be such as to seriously impair the service that would be rendered. We all now know that those fears were groundless.

"I come then to the second objection urged, an economic consideration. We are told that the clear channel stations cannot afford to make the investment necessary for increased power and will be unable to bear the increased cost of operation, maintenance, depreciation, etc.

"I might in passing say that it strikes one as a little curious that those who urge the inability of the clear channel stations to survive are those who also urge that they will survive so successfully as to imperil the life of the regionals.

Economically Justified

"But I am not concerned with either the maximum or the minimum figures that have been presented, or some intermediate figure, though I want to suggest to your Commission before I go into the question of the reasons why I believe the increase of power will be economically justified, that very great weight should be given to the opinion of men who are risking their money in the venture. Certainly a commission should be exceedingly slow to stop the improvement of broadcasting service to the country by a predetermination on general considerations of the unwisdom of expenditures by those willing to take the gamble. America's progress has been made by the courageous who in the face of the declaration that it could not be done, have gone forward and done the particular thing.

"Let me suggest again that the ability of individual clear channel stations to make the outlay and sustain the increased cost of operation is one that can only be properly determined upon the hearing of the individual applications. This Commission is not confronted with the decision of now determining that 30 clear channel stations shall go to 500 KW power and no such request is urged by the group that I represent. What is being asked is that the prohibition against going to higher power shall be removed from the regulations.

Problem as Whole

"But let us turn to the question, viewing the problem as a whole, as to whether there is advertising patronage sufficient to make the venture successful. I would like to impress the Commission with this basic thought: What radio stations have to offer to advertisers is limited in quantity. It should not be limited in quality by any regulation that the Commission may make. Now what I mean by that is this: There are probably not over 18 hours a day of salable time, varying in value according to the particular time of the day or night. This is a limitation inherent in broadcast advertising and in this particular it differs entirely from advertising through other media. The newspaper may increase the volume of advertising carried by it to whatever extent the demand may require. But no matter how great the demand for a station's time, it has only so many minutes and so many hours available to carry the advertising program.

"It is because of this limitation that I am quite sure that the difficulty ahead of radio stations of all classes is not to find advertisers wanting their time; the difficulty will infrequently be to find time for such advertisers.

"If you will consider the number of different national programs carried on the air today by all stations, you will find it exceedingly small. A few hundred would certainly cover the number. Compare that with the potential national advertisers as measured by those businesses in America now engaged in national advertising through other media and I think it will readily be concluded that the saturation point is in no sense even approached, let alone reached.

John V. L. Hogan testified before the Commission yesterday as president of the Interstate Broadcasting Company, New York. Others testifying yesterday included Edward N. Nockels, secretary of the Chicago Federation of Labor and general manager of stations WCFL and W9XAA, and Professor J. F. Byrne on behalf of Station WGAR, Cleveland.

John V. L. Hogan

Mr. Hogan in his statement to the Commission urged that the Commission retain the experimental privileges and requirements as to stations in the 1510-1600 kilocycle section of the broadcast band. He urged the Commission also to open the 1510 and 1590 kilocycle channels for stations of a maximum power of 10 kilowatts. He made several other suggestions.

Mr. Hogan said:

First I would like to congratulate you of the Commission and the staff of your Engineering Department upon the plan underlying the present hearings, and to thank you for the opportunity to express to you such of my views as may be of possible utility to you. It was my good fortune and pleasure to cooperate with the Department of Commerce in its first broadcasting allocations, and with the Federal Radio Commission in forming the engineering basis for the allocation of 1928. I have enjoyed hearing and reading much of the testimony that has been presented here, and I think that I may say that we should all be grateful to the Commission, for the Clear Channel Survey as a direct proof of many of the principles underlying allocation engineering, and to many of those who have appeared before you, for their sound analyses and applications of the engineering principles that have been available to guide us throughout the growth of broadcasting. It is a matter of considerable interest, if not of considerable importance, that these hearings have developed much new information in support and confirmation of sound engineering principles, and nothing, so far as I know, that is radical or which would indicate the need of any revolutionary changes in allocation or allocation engineering.

Second, I would like to give you, as concisely as possible, my

thougbts with regard to certain of the topics listed in your Notice relating to tbese hearings on Docket No. 4063. It may be convenient if I treat tbese in the order of the Notice, which seems to me to be logical and satisfactory. I bave had the opportunity of studying these topics with the Broadcasting Committee of the Institute of Radio Engineers and of contributing to the Institute's comments that were presented by Professor Hazeltine, but nevertheless, you may be interested in hearing at first hand tbe viewpoint of an independent consulting engineer.

Classes of Stations

Your first topic is tbe "Classification of Broadcast Stations." There are just two classes of broadcast stations. One is that of the clear channel station, whose day and night service is properly limited only by the noise level at distant receiving points, or improperly by interference from station on neigbboring channels. The other class is that of the shared cbannel station, whose day service is limited either by noise at the receiver or by interference from stations on the same or on neigbboring channels and whose night service is limited principally by interference from other stations on the same channel. If there is to be any reclassification of stations, I suggest this simple division into the two groups, clear channel and shared channel.

As to definitions and purpose, the clear channel station whose service is limited only by noise level, is obviously for the purpose of serving listeners in nearby urban centers, in the hundreds or thousands of more remote cities and towns who have no stations of tbeir own, and in the widespread rural areas that cannot be reached by shared channel stations. The sbared channel station is for the provision of an *additional* or supplementary service, usually more local in flavor, to cities, towns and their nearby trading areas or otherwise defined local territories. That is all that shared-channel stations can do, by night, particularly if they are spaced so closely as is now common.

Number of Channels

With respect to the number of channels to be allocated to eacb class, I favor (and always have favored) an increased number of cleared cbannels. That is because I feel that, in general, urban centers have been getting all the radio they need, wbile our rural population has *not* been getting all the radio it needs and deserves. Since shared-channel stations serve the urban populations *only,* at the expense of tbe rural listeners, whereas clear channel stations serve *both* urban and rural listeners, there is no reason for further impairment of clear channel service and there are many sound reasons for working in the direction of at least 40 real clear cbannels in the broadcast spectrum.

With respect to the effect of frequency, I would point out that the sky wave depended upon for night-time wide area coverage is equally good throughout the broadcast band, and that tbe indicated difference in fading period favors the selection of the higher frequencies for clear channel service. So also does the reduced natural noise level that has often been observed. For daytime service, the lower frequencies are in general somewhat better than the higher frequencies, but by no means in the amount indicated by some of the witnesses here. There is evidence of the existence of a useful daytime sky wave at the upper part of tbe band, and much of the supposed increase in attenuation is offset by a higher antenna efficiency. Thus, for night-time service, the 1000-1600 kc. waves are equal or superior to the 550-1000 kc. waves, and for daytime service the variations in attenuation seem to be of less practical consequence than has often been suggested.

There can be no rule as to the number of stations to be permitted to operate simultaneously on a single channel at night. Once a channel has been dedicated to the supplemental service of *urban* listeners, i.e., once it has become shared, the number of stations to be permitted on it depends entirely upon the relative location and sizes of the areas to be served. At the two extremes are the present local channels, one each of which many small areas of perhaps only fifty or one hundred square miles are served, and the present two-station shared channels, on each of whicb two large urban and suburban areas may be served unless tbe two stations are geographically too close together.

Separation Tables

Mileage-frequency separation tables may be useful as a rough guide for shared channel allocation, but they can be no more than that unless they are extended to include the factor of the size of the area to be served by each station and, for daytime service, the channel frequency and the character of attenuation for the territory under consideration. On the wbole, I think it much wiser to establisb service standards to be met and to be protected, and tben to consider each specific case on its merits and in view of all the facts tbat can be determined to apply to that particular case, than to depend upon averaged or arbitrary mileage tables.

As to subclasses, there is no way to set up groups within the clear cbannel classification. Shared channels migbt be usefully subdivided according to tbe number of stations to be permitted on each.

Witb respect to the use of frequencies designated as clear cbannels "by stations of another class", it should be noted that this is impossible at night. As soon as a second station is allowed to operate on a clear channel at night, the channel is no longer clear, but automatically becomes shared, and automatically loses its capacity for rural service. But there is probably no need for a cleared channel by day, unless, with very bigh power and probably at a low frequency, a station can pusb out a division signal well above the noise level to such great distances that a second station on its channel would restrict tbe useful service. In general, under today's conditions, all channels that are clear at night could be shared in tbe daytime.

Protect Rural Listeners

However, the Commission should protect the rural listeners from tbe ever present dangers of losing tbeir radio service, by refusing to such additional daytime stations any possibility of becoming (either gradually or abruptly) night-time stations, witb the inevitable transformation of tbe cbannel from a clear cbannel to a shared channel.

In my opinion tbere is no reason why a single frequency should not be simultaneously used at night by two 50 KW. stations separated by a substantial distance, provided it is clearly understood that this results in a *shared* channel capable of serving well two centers of population, and that it is *not* a clear channel and consequently that it cannot serve as large a rural area as would be reached by a single 50 KW. station on a clear channel. By day it is entirely feasible to put two or even more 50 KW. stations into simultaneous operation on a single channel, without reducing the useful rural or urban area of any of them.

The hour of sunset at the westernmost station of a pair or a group is a convenient and, so far, a satisfactory time for making the division between daytime and night-time service conditions. Until we have learned more about the intensity of the daytime sky wave at tbe higher frequencies, however, it would be wise to limit the daytime loading of channels above 1000 kilocycles.

The remaining sub-topics of directive antennas and synchronization are in themselves matters that would warrant long discussion. At the moment I will say simply that neither one is the long sougbt answer to the prayer for a technical means whereby anybody can put up a new broadcast station anywhere he may choose.

Rule for Power

As to tbe maximum and minimum power, again there can be no general rule. Tbe principles are well known: First, increased power always gives better service over noise; second, "Horizontal" increases do not change the distribution of service, but improve service where it had been given. There is no reason to fear increased power, as has amply been proved; it should be welcomed to the extent that it can be paid for and to the extent that it can be used without reducing the service of otber stations on tbe same or adjacent channels But every application for a change in power should be considered on its own merits, although not necessarily by means of a hearing. Your Engineering Department is competent to advise you as to the changes in service and interference conditions that may be expected to result from any particular cbange in power that may be contemplated. In general, there should be no reluctance in permitting daytime power five or even ten times that used by the same station at night, and, in the interest of the listener, there should be encouragement of the use of higher powers, both day and night, by stations of all kinds.

On your main topic II, Standards for Coverage and Interference, the Commission's use of 20:1 as a proper minimum ratio of desired to undesired signal and at 5.2 and 0.2 MV/M as measures of minimum service signal under urban, residential and rural conditions, have worked out about as well as any arbitrary figures could be expected to. We all recognize that 20:1 does not represent freedom from interference, but merely a condition that can often be tolerated, and I believe that the use of a higher ratio would give listeners a better service. Also, we all know that there are many urban locations where a 5 MV/M signal is utterly inadequate, altbougb it seems to be a fair enough average value for first approxi-

mations. In relation to this point, I would like to emphasize the importance of working to reduce the urban and suburban noise level, a matter which is capable of much improvement by cooperative and even by legislative means. The broadcasters are working to deliver a signal-to-noise ratio, not merely a signal, and it is just as effective to help the listener by reducing the interfering noises as by increasing the transmitter power. Of course, the present practical way to improve the ratio is to increase transmitter power, for that can be done at once, but noise reduction should not be lost sight of.

Channel Separation

With regard to the established 10 KC. separation between channels and 50 KC. between stations located in the same community, I urge that these standards, which are none too high and which have been used for years, apparently without undue hardship to anyone, be continued as a service minimum.

Your sub-topic II, 6, (d), entitled "permissible disparity in power between stations on adjacent frequencies", seems to imply that the ideal situation would be to have adjacent channels occupied by stations of the same power. I feel that there are advantages in the opposite view, and that there should be no requirement as to a minimum difference in or ratio of power between stations on adjacent frequencies. This will be clear from consideration of the fact that a clear channel station serves a nearby urban and residential area plus a very large rural area, but is not expected to give optimum service in distant urban areas. If a second clear channel is immediately adjacent, each powerful transmitter will tend to reduce the rural service of the other in large areas. On the other hand, if the channels on either side of a powerful clear channel station are used by a number of channel-sharing low powered stations, each of the smaller stations may give a good service to the limited urban or community area in which it is located, but, because of the smaller power, its interference will not extend far into the rural service area of the cleared channel station. Thus the best possible allocation may well be one in which a "wave" system of power assignments is followed, the simplest case of the "wave" system being represented by successive channels with first low power, then medium, then high, then medium, then low, then medium, then high, and so on. This would be difficult to achieve at once without revolutionary changes in the present assignments, but is worth study and further consideration.

Blanketing Signal

As to blanketing signal, there is no doubt that 100 MV/M is too low. With most receivers as made during the past few years, and many made before, it is easy to receive programs 50 kc off the immediate local frequency even though that local signal have a field intensity of several volts per meter. Certainly no signal weaker than 1000 MV/M, i.e., one volt per meter, should today be called a "blanketing signal."

The only other topics of the Notice on which it may be helpful for me to speak at this time are Nos. 2 and 3 under heading III. I consider that it would be substantially impossible to establish a quota system that would include in a single set of rules all the factors necessary for adequate and proper compliance with Section 307 (b) of the 1934 Act. There is no automatic or mechanical way of providing "a fair, efficient and equitable distribution of radio service among the several states and communities," so far as I can see, except the progressive application of sound engineering principles and thereby the gradual evolution of such a distribution of service.

Experience

Finally, I would like to discuss the 1510-1600 kilocycle portion of the broadcast band, based upon my experience with W2XR since it began operating as an experimental broadcast station on July 2, 1934. In this period of more than two years it has been demonstrated beyond doubt that the frequencies above 1500 kilocycles are satisfactory for the delivery of a useful broadcast service. By day they suffer somewhat from a higher attenuation, but only slightly more than other broadcast stations such as the high-power regionals, and this handicap is largely offset by higher antenna efficiency and the evident existence of a useful sky wave even in the daytime. At night the 1510-1600 kc channels have a tremendously effective sky wave, and we have satisfactory evidence that that sky wave can be depended upon for night time service at great distances. The channels can be used on either a clear or a shared basis, but the relation between the number of stations that may be operated simultaneously on one channel, and the area that can be covered by each, is still to be determined by further observations on the day and night sky waves. However, our knowledge to date is sufficient to warrant the Commission in opening at once at least three more channels in the band, these being 1510, 1590 and 1600 kilocycles. Two of these, viz., 1510 and 1590 kc, should be made available only to interests that will do a good job of initial installation of stations of at least 1 kilowatt power with a well directed investigation and long-period study of wave transmission effects on those frequencies. The 1600 kc frequency might well be used under the same restrictions and for the same purposes, but its availability in many sections of the country for local stations of 100 to 250 watts power should also be considered.

High Fidelity

The high fidelity angle of broadcasting has also been proved out by W2XR, and there can be no doubt whatever that the vast majority of listeners recognizes and appreciates high fidelity transmission based upon extended frequency range, uniform frequency response and minimized harmonic distortion, even though they listen on commercial broadcast receiving sets. For that reason, I urge the Commission now to preserve the present 20 kilocycle separation between 1510, 1530, 1550, 1570 and 1590 kilocycles, and thus to permit the further demonstration of the value of high fidelity. This work should be carried on by the stations on 1530, 1550 and 1570 kilocycles with the present power limit of 1 kilowatt raised to at least 5 kilowatts and preferably to 10 kilowatts, so that the deleterious effects of electrical background noise on true high fidelity transmission can be more completely overcome.

Sidebands

We must recognize, however, that 10 kilocycle sidebands can be effectively transmitted over the service area of a high fidelity station even though an adjacent channel only 10 kc removed is occupied by another station, provided that the two stations are separated geographically so that the carrier of one has been attenuated to the noise level at the margin of the other's service. This offers the opportunity for the Commission to open first the 1520 and 1580 kilocycle channels, under such rigid geographical restrictions, and later the 1540 and 1560 kilocycle channels after the results have been observed and studied. In view of the excellent sky wave night-time service that all these channels can render to rural listeners, the Commission should be extremely careful not to permit any crowding of the channels with the consequent loss of rural service that cannot now be had in any other way. It would be far better to open additional channels, even at the sacrifice of 20 kilocycle separation between widely spaced stations, than to put more than a very few stations on any one channel other than such as may be dedicated to local service. In these new channels, by limiting their use only to licensees who will carry on the necessary and fundamental investigations that are needed by the art and by the Commission, you have the opportunity of determining more facts that are greatly needed while at the same time providing an extended radio service to listeners. I hope that you will not lose sight of the facts that the 1530, 1550 and 1570 kilocycle channels have already been found to be a valuable proving ground for what is new in radio, and that the pioneer work on these channels has resulted in increasing radio's potentialities for service both as to coverage and as to the realistic rendition of programs.

Summary

There are a number of other aspects of broadcasting that I would like to take up with you, but I have already perhaps talked too long. Let me summarize by recommending:

1. That you retain the experimental privileges and requirements as to stations in the 1510-1600 kc section of the broadcast band.
2. That you immediately open the 1510 and 1590 kilocycle channels for stations of a maximum power of ten kilowatts.
3. That you immediately change the power limitation for stations on the 1530, 1550 and 1570 kc channels from 1 kw to 10 kw.
4. That you study the advisability of opening the 1520 and 1580 kc channels to a limited number of stations, possibly using directive antennas, at a later date.
5. That you similarly consider the advisability of opening the 1540 and 1560 kc channels at a still later date.
6. That you immediately open the 1600 kc channel for similar stations, or, in your judgment of listeners' requirements, to a number of local stations of 100 to 250 watts power.

7. That you encourage the study of the sky wave coverage that has been demonstrated to be useful on these high frequency channels.

Hogan Cross Examination

Mr. Hogan under cross examination stated definitely that in his opinion it is necessary for the Commission to make provisions for local stations. He called attention during the course of his cross examination that engineering is an applied science and a science with an economic viewpoint.

Asked if he thought it is necessary to retain 40 clear channels Mr. Hogan stated that he did not know the answer to that. He contended that the Commission itself must decide how much service is to be given to rural listeners. Mr. Hogan stated that the curves of the allocation survey of the Commission are useful as a basis for coverage.

Discussing the question of directional antennas Mr. Hogan said that "directional antennas are useful medicine the same as alcohol is but like it, it can be abused." On the question of high power clear channel stations Mr. Hogan said that one station located on either coast could not give a good service to the country as we know it in the cities. Two high powered stations located on the east and west coast on the same frequency would cause interference he said, unless a fence could be built in the middle of the country.

City Noises

Discussing the possible reduction of city noises Mr. Hogan said that he had no specific recommendations to make in answer to this problem but he suggested that the Commission look into it. He stated that surveys are being made abroad on this subject.

In answer to further specific questions Mr. Hogan said that in his opinion there is no reason for a top limit of power nor is there any reason for a low limit. He testified that he is opposed to technical rules which will work hardship in any cases.

Mr. Hogan said that day-time static effects lower frequencies more than it does higher frequencies while at night-time the transmission is at a par.

Edward N. Nockels

Mr. Nockels in his testimony suggested to the Commission that it make a reallocation of the wave lengths and a revision of the regulations calculated to make sure "radio broadcasting is to be on the basis of the greatest need for the greatest number."

Mr. Nockels said:

In every other great country on earth the governments of those countries are so jealous of the use of broadcasting facilities in the interest of the people, that they have either placed strict limits on the commercialization of broadcasting or have entirely prohibited advertising by radio.

In this country Congress has permitted private interests to use broadcast facilities but wrote into law certain provisions to guide the Commission in the allocation of those facilities. It provided, first, that the Commission could grant licenses only for limited periods of time. Labor desires to commend the Commission for having carried out the purpose and spirit of that part of the law by limiting broadcast licenses to an even shorter period than the law requires.

In the second place, Congress provided that the Commission should grant licenses and *renewals of licenses* only in accordance with the public interest, convenience and necessity. That alone was to be the test. It was heralded as the Magna Charta of the radio listeners of America. It was claimed that this provision would forever protect the American people against over-commercialization of radio broadcasting.

What is the public interest, convenience and necessity? Labor desires to discuss this subject. It may be said that it is an old subject, but we submit it is a subject that is ever new in radio broadcasting in this country. It is always new in this country, because eventually public opinion will determine what kind of radio programs serve the public interest, convenience and necessity.

Public Interest

May we be permitted to call your attention to what Labor believes constitutes the public interest, convenience and necessity? It is that which contributes to the health, comfort and happiness of the people. It is that which provides wholesome entertainment, increases knowledge, arouses individual thinking, inspires noble impulses, strengthens human ties, breaks down hatred, encourages respect for law. It is that which aids employment, improves the standard of living, and adds to the peace and contentment of mankind.

Is it in the public interest, convenience and necessity that this marvelous new means of communication should be placed within the control of a few large corporations, or handed out as a free gift to a few private business concerns for commercial exploitation, or sucked into the maw of great metropolitan newspapers already in uncontrolled possession of power that threatens the welfare of this country? Is it that the public interest, convenience and necessity is to be determined by noisy acclaim? If so, then the movies overwhelm the universities and are themselves outranked by a ball game or a prize fight. The basest sex novel would then put to shame the greatest scientific treatise.

Utility Monopoly

Is it in the public interest, convenience and necessity that Bill Jones of Podunk have a radio station to advertise his garage or that a great public utility monopoly operate a 500,000 watt or even a 50,000 watt station to further its interest, when great labor and educational organizations are asking for radio facilities to serve great masses of the people instead?

The public interest, convenience and necessity is nation-wide. It is age long. It has to do with the physical, mental, moral, social and economic welfare of all the people. It is not greatly concerned with Bill Jones' garage or the private profit which a station owner hopes to derive from these broadcasting operations. It is not enhanced by the granting of special favors to a few individuals or corporations, however large and powerful they may be. The great things of civilization are not sob songs, nor symphony orchestras. They are matters that have to do with employment, home life, health, standard of living, great economic and industrial problems that enter into the webb and woof of the existence of all the people. To serve the public interest, radio must pour into the homes of the nation not only entertainment, but something that will help solve the practical problems of everyday life.

Is it in the public interest, convenience and necessity that all of the 90 channels for radio broadcasting be given to capital and its friends and not even one channel to the millions who toil? Will the public interest be served by granting all the channels of communication to those who do the employing and denying even one cleared channel of communication to the vast groups of employees?

Some years ago Station WCFL urged Congress to create a permanent Commission in charge of all wireless communications. We appreciated the extraordinary difficulties and problems that confronted the Commission in its early work. We recognized the magnitude of the work it has had to do. We tried not to indulge in fruitless criticism.

Engineering Tests

We urged a substantial amount of engineering tests and surveys. We believed they were necessary in order that the Commission might have accurate information regarding radio interference. We wanted channels and frequencies used efficiently. We recognized the relative advantages of high and low power. We desired the utilization of short wave frequencies, and many similar matters. We believed the law could not be efficiently administered by anybody until such scientific data had been assembled. But we never believed that the Commission should disregard the social, educational and economic considerations that broadcasting involves.

Labor believes the Commission must observe certain engineering rules, but believes the Commission should also apply the sole test provided by the Radio Act, viz: "The public interest, necessity and convenience." Permit me to state why.

In the earlier allocations some years ago the Commission granted the General Electric Company, Westinghouse Electric & Manufacturing Company, and Radio Corporation of America eleven stations with aggregate power of about 220,000 watts. It granted them seven cleared channels. These three great corporations at that time already had a strangle-hold on the radio industry by reason of some 2,000 patents which they have cross licensed to each other. We insisted then, that was in 1929, that it was not in the public interest, necessity and convenience to hand over to them so large a portion of the limited broadcasting facilities, while denying any adequate facility to other applicants, some of whom represent reputable and substantial citizens in very large groups.

Violation of Rules

At that time Westinghouse Company owned five stations, all in the National Broadcasting Chain, on cleared channels, and three

of them had high power. In fact, it had so many stations it leased KYW to the Chicago *Herald Examiner*. That was a 5,000 watt station then, located in the heart of Chicago in violation of the Rules of the Commission, and over our protest. It blanketed our Station WCFL, which only had 1,500 watts power then. Another Westinghouse station, KDKA at Pittsburgh, had 5,000 watts power on a cleared channel adjacent to WCFL and caused a great deal of interference with our programs.

That was seven years ago. What has happened? The Department of Justice brought anti-trust actions against the General Electric Company, Westinghouse Electric Manufacturing Company, Radio Corporation of America, American Telephone & Telegraph Company, Western Electric Company, R. C. A. Photophone, Inc., R. C. A. Radiotrone Company, R. C. A. Victor Company, and General Motors Radio Corporation. It declared them trusts and monopolies with the result that they have been split into many separate corporations. But what has been the result in the broadcast field?

Of the forty cleared channels an analysis today shows that National Broadcasting Company, now 100 per cent owned by Radio Corporation of America, owns or controls eleven 50,000 watt stations. They are: KPO San Francisco, KOA Denver, WENR and WLS Chicago, WMAQ Chicago, WBZ Springfield, WEAF New York, WJZ New York, WGY Schenectady, WTAM Cleveland, and KDKA Pittsburgh. This company alone controls approximately 550,000 watts of aggregate power today as compared with the 220,000 that the total trust combination controlled in 1929. Now let us examine the Columbia Broadcasting System. It now owns or controls seven 50,000 watt stations and one 10,000 watts. They are: WCCO St. Paul, KMOX St. Louis, WBBM Chicago, KNX Hollywood, WABC New York, KFAB Lincoln, WCAU Philadelphia, and WBT Charlotte, N. C. Thus they control 360,000 watts of aggregate power, which is almost one and one-half times as large as that controlled by all the organizations in the trust in 1929.

Networks Control

As the situation stands today, the networks control more than 50 per cent of the total facilities now available on cleared channel assignments. Is that in the public interest? Labor thinks it is not. To give each of their stations now asking 500,000 watts will only make the situation that much worse.

Another development which Labor has watched with growing apprehension is the acquiring of more than one station in a given locality by these interests and closely allied individuals. In New York City the National Broadcasting Company controls stations WEAF and WJZ, with 50,000 watts each. In Chicago the National Broadcasting Company controls WMAQ and WENR, each with 50,000 watts. In San Francisco the National Broadcasting Company controls Stations KPO with 50,000 watts and WGO with 7,500 watts. In New York City the Columbia Broadcasting System controls WABC with 50,000 watts and is attempting the control of another cleared channel used by WPG and WLWL with 5000 watts each. In the Chicago area the Atlas Brothers own station WJJD with 20,000 watts and WIND with 5000 watts. Any technical denial of this fact can be easily refuted by their published commercial propaganda.

The National Broadcasting Company further owns and operates in conjunction with three cities in the Northwest duplicate facilities, namely, Portland, Oregon, stations KGW and KEX; Seattle, Washington, stations KOMO and KJR; and Spokane, Washington, stations KHQ and KGA. In the opinion of Labor, a condition such as this is not in the public interest, convenience or necessity.

Oppose 500 KW.

Labor is opposed to the authorization of any additional 500,000 watt stations in America for the reason that such authorizations are contrary to the public interest and directly opposed to the fundamental principle of accomplishing the greatest good for the greatest number. Any further authorization of super power stations would be directly in line with the erroneous and much to be regretted policy in the first allocation of wave lengths, which amounted to nothing more or less than the cutting of a monstrous melon into forty luscious slices. These were passed out to the gluttons of monopoly and dedicated to the furtherance of selfish interest, with little thought for the public interest, convenience and necessity.

Labor has predicted and still predicts that the radio industry and radio service to the people of America will never reach a maximum of efficiency until the original misallocation of wave lengths is corrected. The first allocation can only properly be described as the division of the swag, at which time all persons and organizations whose desire for radio facilities were actuated by a zeal for public service were forced to sit on the side lines, while the monopolies and trusts and representatives of special privilege together with the monopoly owned newspapers and magazines and the radio chains were well taken care of in the manner to which such economic royalists were accustomed.

Reason for Opposition

The reason the authorization of 500,000 watt stations should be strenuously opposed is as simple as ABC. It requires no great mathematician or engineer to figure it out—it is based on a few fundamental natural facts which no one can deny. The time pieces of the world account for only twenty-four hours a day; of these twenty-four hours not more than eighteen can be said to be the average listening day of any radio station. In that average day it is only possible to crowd a limited number of programs. If a few radio stations in America are given the right to use power to the extent to which they now demand, they will to all intents and purposes drown out many other stations in America, and there will be available to the 120 million people living in this country only those limited programs which will be broadcast over a limited number of stations which might operate on this proposed super power.

That is not all. The cost of these super power stations, both to build and to operate is so large that the only way to maintain them is to increase advertising rates and thereby load down their programs with more and more advertising. Already the American people are protesting against too much advertising and too much commercialization. Labor respectfully submits that this Commission should not make that situation worse by grants of super power that will necessarily compel more advertising.

In times of national emergency, controversy, strikes, lockouts, and disagreement, these interests will surely disseminate propaganda the like of which this country has never yet experienced, with the result of further clipping and controlling by sheer power and brute force the intellectual and economic soul of this country. The importance of radio and the tremendous effect it has created in removing mental shackles from the public has been a source of consternation to the trusts and monopolies. In recent years they have made a determined effort to bring this powerful medium to a point of absolute subjugation. Failing in this they then made a determined drive to gain control and, gentlemen, they are now at the threshold ready to accomplish this purpose.

Power to Prevent

This Commission has the power to prevent the accomplishment of their purpose. Labor appeals to you to protect the people against them by refusing to grant their latest demand for super power stations all over America that will necessarily prevent the enlarging of radio facilities for the use of those other organizations who desire them for the public good instead of profit.

Although America has been quite properly called the "melting pot of the world", still its 120 million people are by no means possessed of the same characteristics nor of the same tastes when it comes to radio programs. These people spring from a varied type of antecedents. They have lived and are living in different kinds of environments. Their interests can not help but be diversified. They have widely separated likes and dislikes. If the radio channels are to be used in the public interest, all these people should be provided the variety of entertainment they demand. Along with this entertainment radio should furnish the varied types of economic and educational matter, which if intelligently disseminated, will do more than anything else toward removing the unrest with which the nation is afflicted.

The radio channels rightfully belong to all the people. We have previously asserted they constitute the last of the public domain. A basis should be carefully worked out for their permanent distribution for the benefit of all the people rather than for the benefit of a few of those special monopolistic interests which unfortunately stood ready and waiting at the time of their first distribution, to gobble them up for their own selfish interests and purposes. The granting of authority for super power to the radio stations now applying for it, as well as additional stations who might apply, would only be a continuation and enlargement of the original error.

Two Wrongs

Two wrongs do not make a right. Instead of making another grievous mistake, let us go back and rectify the first, in so far as rectification is possible. The Commission can do this by reassign-

ment of the cleared channels so that they may be occupied and utilized in perpetuity for the public good.

I am General Manager of Radio Station WCFL, "The Voice of Labor", and our short wave station W9XAA. WCFL started out with 500 watts over ten years ago and then was increased to 1500 watts and finally to 5,000 watts. Under this power authorization we have rendered what might be termed comparatively good service for those times. All the other stations in Chicago that had started at along about this time commenced to increase their power until we suddenly found that those stations which had originally been comparable with ours secured authority for utilizing 50,000 watts.

What happened? The radio audience naturally turned its dials and soon discovered that with 50,000 watts these stations not only had a larger coverage in adjoining territory, but a more intensive coverage within the Chicago Metropolitan area. We, therefore, applied for 50,000 watts and our application is pending before the Commission at this time. We certainly shall not discuss that application here, except to say that Labor is of the opinion because of its pioneering in this field, it is justly entitled to one national cleared channel in the United States.

Various Stations

National Broadcasting Company operates Station WEAF on 660 KC. with a power of 50 KW. The only other station that exists on that channel is Station WAAW at Omaha, Nebraska, a 500 watt station operating until sunset only. Station WABC in New York City, owned and controlled by the Columbia Broadcasting System, operates on a power of 50 KW. on a frequency of 860 KC., with no other station on that channel excepting Station WHB with a power of 1 KW. day only, at Kansas City. Station WBZ also controlled by National Broadcasting Company, operates on a frequency of 990 KC. with a power of 50 KW., unlimited time in synchronism with Station WBZA in Springfield, Massachusetts, a distance of only 96 miles, and with the exception of these two stations no other facilities are utilized anywhere in the United States on this frequency.

Station KYW owned by Westinghouse and operated by the National Broadcasting Company, operates with a power of 10 KW. unlimited time in Philadelphia with only one other station operating on this frequency, which is WDZ with power of 250 watts and until sunset only. WDZ is located at Tuscola, Illinois.

Station WCAU at Philadelphia, controlled by Columbia Broadcasting System, operates on a power of 50 KW. unlimited time on 1170 KC. with no other station operating on this frequency within the bounds of the United States.

It is a matter of very interesting public record that Station WGY, owned by the General Electric Company and operated by the National Broadcasting Company, fought for and won the right in court to simultaneous operation on 790 KC. with Station KGO in San Francisco, both stations operating full time and controlled by the same concern.

East Coast Outlet

It is also an interesting fact that when the National Broadcasting Company desired an east coast outlet at Raleigh, North Carolina, without hesitation they placed Station WPTF on 680 KC. and operated simultaneously day and night with their owned and operated station KPO at San Francisco, California, which station operates with 50 KW. unlimited time.

Station KDKA at Pittsburgh, Pennsylvania, operates on a frequency of 980 KC. with a power of 50 KW. unlimited time. It is owned by the Westinghouse Company and operated by the National Broadcasting Company with no other station in the United States operating at any time on this frequency.

The three stations formerly owned by the Northwest Network and which were unsuccessfully operated by two corporations before the National Broadcasting Company acquired ownership, as I before stated, have been leased to associated corporations operating other stations in the same cities and it is the recommendation of Labor that Station KJR in Seattle, being controlled by the same corporation which controls these frequencies on the east coast, which frequencies are not being duplicated for simultaneous operation in the west coast, be placed on 990 KC. to operate simultaneously, full time, thus freeing a channel for which Labor has striven and to which Labor is justly entitled, with no inconvenience to the owners and controlling interests who administer the policies of these two stations.

Since it has been demonstrated that two stations can operate during night time hours simultaneously on opposite coasts, when they want to do so, it seems to Labor that the principle has been flagrantly neglected in further application.

It is not in the interest of the public. It is only in the interest of monopoly.

Monopolistic Tendency

Certainly the holding of these cleared channels without an attempt to duplicate them with additional facilities for simultaneous operation on opposite coasts shows a monopolistic tendency and not one in accordance with the intent of the law when referring to the clause "public interest, convenience and necessity."

After the advent of radio the first attempt of the newspapers and national periodicals was to nullify and kill the effect radio might have on the public. In later years, failing in this attempt and recognizing the fact that the printed word might soon be outdone by the spoken broadcast message, they then sought to render their own opportunity of molding public opinion doubly secure by acquiring radio facilities. Then they operated these radio facilities in behalf of the same interests for which the kept press had been operated for years. Not satisfied with owning one station, some single newspapers have sought ownership or control of two or more stations, and in the last few years we have witnessed the development of a chain of radio stations owned and controlled by William Randolph Hearst and operated by him in the same manner as his newspapers are operated for his personal benefit and aggrandizement.

Summary

For these reasons, Labor takes the position that there are but three ways out of this situation with which radio broadcasting is confronted today:

1. A re-allocation of the wave lengths and a revision of the regulations calculated to make sure radio broadcasting is to be on the basis of the greatest good for the greatest number.
2. A limitation of all stations to a power of 10 KW., making them all virtually local stations, and serving only their own locality, and with only one station in any locality to any one owner or controlling interest.
3. That the Government take over and operate all radio stations in the United States. Labor hopes and trusts that the necessity for the last named alternative will not be forced upon us, but we are heartily and thoroughly in favor of complete government control and operation in preference to complete control and operation by trusts, press, magazine, radio networks and their closely allied interests.

Labor sincerely hopes that in this crisis the Federal Communications Commission will exercise its vested authority in the action which they are about to take in correcting the conditions I have here mentioned. The History of this country definitely shows that the people still have a powerful voice in matters of legislation and that the people have been compelled to destroy the trusts and monopolies in a continual war on private control and that these actions have occurred in a never ending cycle.

No public utility in America is as sensitive to public opinion as radio. Every Senator and every Congressman is in close touch with that public opinion as it changes from time to time.

If these trusts and monopolies and vested interests of an avaricious capitalistic group of corporations and individuals, seeking special privilege, are allowed now to obtain their ends, then will the people, through their one weapon, the Congress of the United States, be forced to take action again.

Nockels Cross Examination

During a brief cross examination Mr. Nockels said that labor strenuously opposes duplication of programs on networks. He said also that labor is anxious that the farmers of the country get good reception. He testified that there is no interference between WCFL and KJR. He said that his station had asked for 50 kilowatt power because it was not reaching its listeners. He expressed himself as being definitely opposed to 500 kilowatts.

J. F. Byrne

Mr. Byrne on behalf of Station WGAR, Cleveland, presented testimony with slides from the point of view of both the listener and as an engineer.

Mr. Byrne said:

The material presented at this time will be offered partly from the point of view of the listener and partly from an engineering point of view and it is hoped that the lines of thought presented will prove to be of some value in connection with the purpose of this hearing.

Aside from the important and extensive engineering advances that have taken place since the inauguration of the present allocation plan in 1928, prohably the most outstanding change has taken place in the listeners' attitude toward broadcast reception. The average broadcast listener of today is not a radio fan, he is today a broadcast listener in the strictest sense of the word, and values his radio receiver because it is capable of providing news, entertainment and educational features. Today's listener picks two to five channels in the broadcast band and looks to these channels for his broadcast service. These channels ordinarily provide the most satisfactory technical service at his receiver. The change in the hroadcast listener's habits is further clarified if one glances at the radio page of the New York *Times* of eight years ago and compare it with a radio page today. In 1928 the *Times* printed detailed programs of transmission for stations in the far west, southwest, middle west and south, in addition to the program material of the local stations. Today the programs of foreign short wave stations replace those of our own remote hroadcasting stations. The rural listener survey of this Commission furnishes still further and more convincing evidence concerning the listening hahits of a rural group and will be mentioned frequently.

As a matter of clarity it will he convenient to discuss the present allocation system and conditions as they exist today, in view of the technical considerations furnished hy the allocation survey of the Commission. The discussion will be taken up in the following order:

1. Clear Channel Stations
2. High Power Regional Stations
3. Regional Stations
4. Local Stations.

The principal source of material is the allocation survey published by the Commission September 1.

Clear Channel Stations

According to the Broadcast Committee of the Institute of Radio Engineers "The field of the clear channel is to afford service to those vast intervening areas in which the density of population is so low that a broadcast service could not otherwise be supported and in addition, to a single large center." This is an excellent summation of the purpose of a clear channel station. One is prompted to ask, however, how vast is the vast intervening area mentioned in the definition? The answer to this question is given in the postcard reports on file in the offices of this Commission.

Samples of cards from North Dakota, Kansas, Arkansas and Alabama were analyzed and produced the result shown in Plate I, where the sum of all listener reports of clear channel stations located at distances of between 100 and 200 miles from the receivers was plotted as a single point at 150 miles. The process was continued up to distances of 1000 miles. There were fifteen reports of stations at distances greater than 1000 miles, only 2 per cent of the total number of reports. The curve definitely shows that 50 KW stations have approximately 95 per cent of their rural audience located within 800 miles of the transmitter. The field intensity survey of the Commission may be used as a guide for estimating the field intensity existing at the various distances from a 50 KW station, assuming an unattenuated field of 1450 MV/M at one mile. The dotted curve in Plate I is a graph of field intensity exceeded 90 per cent of the time versus distance. This plate shows quite definitely that the average rural listener pays little or no attention to signals below 160 micro-volts per meter 10 per cent of the time. This practical limit of service of 50 KW stations exists at a distance of 800 miles and has several interesting angles. First, the operation of one 500 KW station resulted in its heing shown a marked preference among rural listeners. This is undoubtedly due to the fact that its signal was 10 DB higher than other clear channel stations at comparable distances. However, beyond a point where it's field intensity dropped to .25 millivolts, the number of listener reports it received was negligihle. This lends support to the assertion that the average broadcast listener tunes to the strongest signal in the band provided that the program material is to his liking. Clear channel stations of less than 50 KW, or operating with a poor antenna, or in a poor location were quite easily noted in the card analysis. As a matter of fact, if the postcard survey were completely analyzed it seems reasonable to assume that the actual radiated power of each station could be estimated with good accuracy.

If a numher of 50 KW stations were to increase their power to 500 KW it seems reasonable to assume that the revised picture of rural service would not differ greatly from that shown in the present survey. Why? Because one of the most important factors limiting the service of broadcast stations, particularly those on clear channels, is the *strong signal preference* of listener. With the present geographical spacing of clear channel stations this factor limits the practical service provided hy stations of equal power to a maximum of not over 900 or 1000 miles for 500 KW groups, or 800 miles for 50 KW groups.

Possible Sharing of Present Clear Channels

If the engineering division's present requirement of a 20:1 ratio of desired to undesired signal is taken as a standard, Plate III shows the power permissihle at various distances from a clear channel station. The 20:1 ratio is understood to exist at a distance of 800 miles from the 50 KW station at least 90 per cent of the time. A glance at the curve shows that a 1 KW station could be placed at a distance of 2270 miles. If this degree of protection is afforded the ½ millivolt signal, however, we are douhtless affording far more protection to the signal than do the gods of the storm. A signal that exceeds ½ millivolt 50 per cent of the time will only exceed 1/3 of a millivolt 30 per cent of the time, or 1/6 of a millivolt 10 per cent of the time. Does 160 microvolts sounds like a field intensity value 20:1 in excess of the average static level? Probably not. Grant that there is a scarcity of good data on atmospherics, and just scan the sample field intensity records enclosed in the clear channel report—noise records on comparatively sluggish recorders. They follow:

1.	May 14 at Florhan Park, average	20–30 microvolts per meter
2.	Mar. 24 at Florhan Park, average	20–30 microvolts per meter
3.	April 14 at Florhan Park, average	5–15 microvolts per meter
4.	Feh. 5 at Grand Island, average.	5*
5.	May 2 at Grand Island, average	5–10*
6.	April 2 at Boston, average	under 5*

* On a Brown recording instrument, crashes do not record well.

It should be remarked, that those reports were taken in absence of carrier, and hence are representative and comparahle to side band intensities of a modulated signal. Inasmuch as the average modulation of a radio broadcast transmitter seldom exceeds 50 per cent, the above field intensities should be multiplied by 5 or 6 to compare them to a modulated signal, on an interference or noise basis. No doubt these data are far too sketchy to use as a criterion, but they certainly seem to show that a further study should be made to determine just what degree of protection should be afforded a .5 millivolt average signal. There is certainly little or no advantage in protecting it to a point where the side band intensities of the interfering signal are helow the static level.

Furthermore, if further work shows that if a .5 millivolt signal is sufficiently protected when the interfering signal's side band intensities are equal to the static level, ono would be led to adopt a figure more like 5:1 for the ratio of the desired to undesired signals to be exceeded 90 per cent of the time. Where this is the case, a 1 KW station could he erected at a distance of 1750 miles, and the channel would accommodate stations having a present regional classification at distances greater than 2000 miles However, even the 5:1 ratio 90 per cent of the time would prohibit the simultaneous operation of two 50 KW stations, non-directional.

Frequencies for Clear Channel Stations

If one admits that a clear channel station serves a dual purpose, intense local coverage and extensive rural coverage, it might be rather difficult to state exactly what frequencies would be most desirable. It is a well recognized fact that the low frequencies are particularly good for ground wave coverage, while the signal to noise ratio is hetter at the higher frequencies. The remote listener receives a better quality signal as far as signal to noise ratio is concerned at the high frequency end of the hand. It would seem that in populous centers, low frequencies would be desirable, while in smaller communities higher frequencies might be of more value.

Effectiveness of Present Clear Channel Stations

The records as represented hy the listener survey in Plate II show that a considerahle numher of the "clear" channel stations are much below par as far as rural service is concerned. They apparently are not fully cognizant of the responsihility that is theirs, to provide a decent signal for rural communities remotely situated. This situation should be remedied, either hy reducing the number of clear channels, or by requiring a field intensity of at least 1500 millivolts per meter at one mile of all "clear" channel stations.

Classification of "Clear" Channel Stations

An attempt has been made to show the vastness of the intervening areas mentioned by the Broadcast Committee of the I. R. E., and data have been presented to show, that for all practical purposes, the area has a radius of 800 miles. A "clear" channel station is thus a regional station—clearness of the channel notwithstanding. The region served is of approximately 800 miles radius. True, such a large area served by a station in the center of the country would not permit simultaneous operation of other stations of any consequence, but when located on or near either coast, some other class of service could be established on the channel at a remote point.

Note on the Economics of Sky Wave Service

Plate IV shows the power required to produce ½ millivolt at various distances for both a quarter wave and a half wave antenna. The power per square mile required to produce ½ millivolts 50 per cent of the time has been plotted against the radius of the area in miles and is given on Plate V. For any particular case, if the annual cost of operation can be expressed in terms of dollars per watt for transmitters of different powers, a curve, dollars per square mile of ½ my service can be constructed. Figures, such as annual cost of operation, are subject to considerable variation, and this has not been done. Suffice it to say, that, unless the dollars per watt diminish very rapidly with increasing power, good economic practice will limit the service to less than 800 to 1000 miles.

High Power Regional Stations

Much of the material presented in the foregoing discussion of clear channel stations can be used in the discussion of the high power regional problem. Of particular importance in this connection is Table II. Consideration of this table shows that 5 KW and 10 KW stations are not a factor when secondary rural service is considered, due to the relatively low level of the received signal. If high power regional stations are to exist and justify themselves it certainly seems as though their signals should be afforded protection out to distances of 4 or 5 hundred miles, and powered sufficiently to provide a signal value that will be used by rural listeners. The radio public has become high level conscious and the trend noted in the allocation survey seems to show that the amount of power required for sky wave coverage should be at least 25 and preferably 50 kilowatts.

The minimum spacing of stations of this class will depend, of course, upon the degree of protection to be afforded at a distance of 500 miles.

The present status of high power regional stations is such that practically no sky wave coverage is obtained, and the ground wave coverage is extremely limited due to their high frequency assignments. Unless these stations are protected to an extent that permits secondary service, their present place in the broadcast scheme seems to be uncertain.

It is suggested that the function of a high power regional station should be to provide two services: First, a ground wave service of comparatively limited extent, and second, a secondary sky wave service out to a distance of 300 to 500 miles. The present frequencies would seem to be appropriate, if this definition of the service to be rendered is satisfactory.

Regional Stations

The function of a regional station has been well defined by other witnesses and need not be repeated here. However, the word regional might possibly require further definition. Economically, a station of the classification is interested in providing good ground wave service to those people living within the trading area of the community in which the station is located.

Service of Regional Stations

The amount of service rendered by regional stations in the United States varies between wide limits, a fact well recognized by everyone. In general the regional stations provide a day service much in excess of that provided at night. This effective day service might cover a region of anywhere from 20 miles radius up to 200 to 300 miles—the latter figures applying to conditions where the power is 5 KW, the frequency low, and the conductivity good. This day service, particularly in the west, is of considerable value to rural listeners, including small communities having no local radio facilities.

Because of the tremendous variation in ground wave transmission regional assignments are far from being equal in technical and economic value. Plate VI, for example, shows the limit of service (on a 20:1 ratio 90 per cent of the time) as a function of frequency. The two co-channel stations are assumed to be 800 miles distant. If one takes the case discussed in Plate VI, and assumes a night power of 1 KW, the low limit of field intensity for good broadcast service is 5.6 millivolts per meter. This value is independent of conductivity and frequency, for the interfering signal exceeds 280 microvolts 10 per cent of the time. In the case of local channels a typical channel when analyzed shows that the field intensity exceeds 200 microvolts 10 per cent of the time and 20:1 ratio would require a value of 4.0 millivolts for 90 per cent service. It is of interest to note that for good conductivity the low frequency regionals (600 KC) provide good broadcast reception at 28 miles, the mid-band regionals at 20 miles (900 KC), and the high frequency regional at 14 miles. If the conductivity is fair to poor, as it generally is in the larger urban centers of the east, the figures are under 22, 15, and 10 miles respectively. If the service of a station in centers of population is limited to ten miles, it is placed at a distinct economic disadvantage. It does not provide a reasonably large portion of the marketing and with an acceptable signal.

Ratio of Desired to Undesired Signal Intensities

It is interesting to compare the figures quoted in the clear channel survey concerning limit of service of regional and local stations, with the 20:1 ratio 90 per cent of the time. The allocation survey quotes on page 6 as follows:

> "Another part of the allocation survey was conducted by dispatching inspectors from the Field Section of the Commission's Engineering Department through various localities with field cars. On these trips rural listeners living within the primary service areas of several broadcasting stations of the different classifications were interviewed, for the purpose of determining the approximate limit of the night primary service areas. At the point where listeners reported to the inspectors that satisfactory service was no longer obtained, the day field intensity from the station was measured."

Class of Channel	Number of Measurements	Number of Stations	Day Field Intensity	Empirical Standard	Standards Based on Calculations
Regional	123	66	.935	1.0	5.6
Local	44	30	1.27	2.0	4.0

If the results as published in the survey are correct, it would seem that the 20:1 ratio of desired to undesired is not obtained in practice, the ratio dropping to 3.33 to 1 on regional channels and 6.3 to 1 on local channels.

What can one say about this striking difference in field reports (3 to 6:1) and laboratory tests (20:1)? There are several angles to the question. Undoubtedly the service provided by regional stations at their practical limit of service radius is inferior to that recommended by anyone who has conducted laboratory tests. The regional station, which provides a constant signal level at the receiver with a variable amount of flutter, cross talk, etc., does provide some service where to be conservative, the ratio of desired to undesired signal is of the order of 7:1, 90 per cent of the time. This service is used in spite of the fact that clear channel stations provide a secondary sky wave service at the points in question, entirely free from cross talk interference.

Frequency Assignments of Regional Stations

If we expect to provide a reasonably high technical standard of broadcast service by the use of regional stations, it is obvious that at the present time, there are with few exceptions far too many regional stations operating simultaneously on the same channel and this is particularly true if regional assignments in small towns are to be expected to have the same geographical coverage as those in populous centers. Possibly some arguments can be advanced in support of the equality hypothesis, but the fact remains that where condensation of population occurs, whether it be large or small, the density of population in general diminishes with increasing distance from the population center in such a way that the number of people living between 10 and 20 miles of a large center is greater than the number of people living in the same limits of distance from a small center. As a guess, the ratio of the numbers would be about the same as the population ratio of the centers in question. Furthermore, people in the larger centers expect and

get a good quality of broadcast service and it is probable that the 20:1 ratio of desired to undesired signals comes closer to realization in such centers. With these facts in mind, consider the lot of a high frequency regional station in a large community. Its service is extremely limited by cross talk interference on its channel, and the radius of grade A service is, in some cases, as low as 6 or 8 miles.

As a matter of fact, if the 20:1 ratio is to be maintained, the service radii of regional stations is so restricted by present allocation that it is impossible to provide good broadcast service to any reasonably large city, particularly on a high frequency regional assignment. This difficult situation might be somewhat relieved if the frequencies 520, 530, and 540 KC. were made available for regional service in larger communities where at present a number of high frequency regional channels are the principal ones in use.

Power of Regional Stations

For economic reasons it is undesirable to allow too great a difference of field intensities to exist in the primary service areas of broadcasting stations in the same community. With the present trend toward higher power and improvement of signal to noise ratios generally, the question of the power to be used on regional frequencies becomes important. A table of considerations of power increases for regional stations follows:

For Power Increase	For Status Quo
Signal level competition	Small increase in primary night coverage
Signal to noise ratio	Additional cost of new equipment
Obsolescence of present equipment	Higher operating costs
Increase in day service	

In a large city, there may be clear channel assignments in or nearby, and the listeners near the boundary of the regional station's service will be receiving signal levels of greatly different intensity from the regional and clear channel stations. In a small community, however, the listeners will be for the most part, nearer the regional station's transmitter, receiving a high level signal, and primary clear channel service may not be available. Hence the advisability of raising the signal level in the larger cities, and the questionableness of raising it in smaller communities.

Man-made electrical noise is probably predominant in larger cities and considerable improvement in signal to noise ratio can be effected by power increases. In the smaller communities, because of the probably nearness of the transmitter, a marked improvement of signal to man-made noise ratio would be of relatively small importance.

Increase in day service is desirable for stations in both large and small cities although in the larger centers the additional population served is undoubtedly greater.

The regional station in small towns would receive little or no additional night coverage, while as has been pointed out, the increase in signal to noise ratio would possibly increase the regional coverage in cities.

Operating revenues of stations in small towns would probably be increased a negligible amount and technical operating costs increased to about the same extent as other stations of equal rating.

Summarize

To summarize, a power increase seems to be desirable for regional stations in larger cities—definite technical and economic objectives are achieved by the increase. The exact technical and economic objectives are not as easily defined, however, in the case of some of the smaller regional stations, and it is conceivable that some of them do not care to obtain an increase in power. The increase in power to be permitted might be arrived at by adopting a value of power that would result in equal signal values at a point half-way to the fading wall of a clear channel station and half-way to the interference wall of a regional station.

The above considerations again seem to strengthen the argument that low frequency regional assignments should be in the larger cities, and in addition higher values of transmitting power would seem to be indicated and desirable for this class of regional station.

Furthermore, consideration of Plate VI permits one to draw a general conclusion concerning regional assignments. The ratio of useful service area to nuisance area of a station is greater at the low frequency and of the broadcast band—hence, the desirability of low frequency facilities. A system of allocation of regional facilities that would place low frequency and higher power regional stations in larger population centers of the country would undoubtedly be most sound economically. While it is realized that any sudden change might be undesirable and impracticable, a trend toward such a system would seem to be in order.

Local Stations

The principal problem of the local station in a larger town is very much the same as that of the regional station. Most of the discussion concerning regional stations could be repeated for local stations, with the single exception that the lowest local channel frequency is 1200 KC. Locals are almost necessarily situated in the centers of communities, and hence they very likely have and will continue to have low average antenna efficiencies. It should be noted here that if the interference level on a local channel exceeds 200 microvolts per meter 10 per cent of the time, the average local station on 1200 KC. would be limited to its 4 millivolt contour. At 1200 KC. and conductivity of 5 x 10^{-14} e.m.u. the 4 millivolt contour will probably lie at an average distance of 4½ to 5 miles. The position of the local station might be expressed by the following table:

Service rendered	Stations
Large trading center, either as to area or population	Clear and regional
Intermediate center	Regional and local
Small center	Local

This alignment is in the process of being automatically effected, because of the inherent nature of the broadcasting business. There are, of course, notable exceptions to this general proposition, particularly in the clear channel group, where the most successful stations are not necessarily located in the largest communties.

Power for Local Stations

It has been pointed out before that the public has become and is becoming more and more strong signal conscious. As one contemplates the broadcast problem, with respect to horizontal increases in power on all frequencies, one is confronted with the fact that the increase in primary night coverage under such increases will be small. Improvement in service will be attained, however, because of the increase in signal to noise raito. The question of increases in power is thus reduced to a question of increase in quality of broadcast service, and economically the question becomes, what is the increased quality of service worth in dollars and cents? This question should be answered by the local stations themselves, with some top limit of power authorized.

In connection with some of the more specific items on the docket, the following topical discussions are offered:

Antenna Efficiency

The allocation survey shows curves of field intensity versus distance, corrected to a common basis of 100 millivolts per meter at one mile. For purposes of allocation, should not these data be analyzed according to antenna types? From the point of view of duplication of stations on a single frequency the most important consideration is the field intensity at 800 to 1000 miles. If an analysis shows that the value of signal received at these distances, when corrected to the same field intensity at one mile, is of the same magnitude regardless of antenna, one cannot help but ask, of what value is a half-wave antenna to a regional station? Theoretically at least, the increase in low angle radiation is very nearly proportional to the increase in ground wave intensity, where a high antenna is installed. In practice, it is the writer's opinion that the same net result could be accomplished by power increases using the shorter antennas. This argument, of course, is not valid where conditions of fading limit the service of a station, but where co-channel interference is the limiting factor, high antennas would almost seem to be an economic absurdity.

The question of actual antenna efficiency receives undue emphasis because of the fact that station licenses are based on power input to the radiating system. What other method of licensing could be used? At present, a station may obtain a license on a power output basis, but the only difficulty is that such a determination is practically impossible. However, the polar radiation patterns of simple antenna configurations are easily calculated (a building top antenna is *not* a simple configuration). It would seem reasonable, for example, that a short, vertical antenna that provides an unattenuated field intensity of 186 MV/M at one mile is radiating one kilowatt, regardless of the input power necessary to produce this result. The principal consideration for all regional stations should be one of economy. The cost of additional power should be compared with the fixed charges on the antenna system. It is realized

that the thoughts presented above depend upon the relative nuisance signals produced at a distance of approximately 800 miles by a short and tall vertical antenna with the same field at one mile.

Directional Antennas

A minimum height limitation on directional systems would seem to be inadvisable, particularly on the lower frequencies. Here again, the additional cost of power supplied to the antenna should be compared with the actual fixed charges on the antenna system, and an antenna height selected that results in greatest economy. Directional systems could be licensed on a basis of RMS field intensity at one mile that would result with the licensed power if the antenna losses were not present.

Directional systems for regional stations should only be used in locations where a reasonable estimate of sky wave, etc., can be made.

Synchronization

Synchronous operation of a booster transmitter during the night hours might provide a possible "out" for high frequency regional stations in large cities, where sizable communities geographically adjacent now receive no night service. If the engineering and economic phases of operation are carefully worked out, it would seem that such operation should be permitted, and in some cases encouraged. The use of a directional antenna at the booster can greatly increase the feasibility of such schemes as the areas of distortion can be chosen so as to include as little population as possible.

Field Intensity Measurement

The Standards Committee of the I. R. E. some years ago, suggested the principle of using two coaxial loops as a standard way to measure receiver sensitivity. This same principle can be used to calibrate field intensity sets, and has the very definite advantage that the calibrating voltage is a distributed one, and errors introduced into measurements because of loop tuning, loop distributed capacitance, etc., are completely absent. When this system of calibration is used it may take the form of a small single turn loop located in the center and in the plane of the measuring or receiving loop. The mutual inductance between the receiving and calibrating loops can be accurately calculated, and the standardizing current in the calibrating loop can be accurately measured. The possibility of error is reduced to a minimum. Cannot this method of calibration be used as a standard? The complete technical advantages of such a scheme are too detailed to mention at this time, but the possibilities of the system as a standard are very encouraging.

Byrne Cross Examination

Mr. Byrne under cross examination stated that in his opinion the ground wave curve of the Commission's allocation survey is sound as a guide and he also declared that the sky wave curves in the same survey are good. He expressed it as his opinion that there is a need for some reclassification of regional stations. He favored, he stated, the use of lower frequencies for cities. Mr. Byrne said in answer to further questions that the rural people of Ohio listen to the University station while the city people do not.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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IN THIS ISSUE

DENIAL OF FLORIDA STATION RECOMMENDED

The Tribune Company applied to the Federal Communications Commission for a construction permit for the erection of a new broadcasting station at Tampa, Florida, to use 550 kilocycles, 1,000 watts night and 5,000 watts LS, and unlimited time.

Examiner John P. Bramhall, in Report No. I-301, has recommended that the application be denied. He found that the applicant failed to show the need for additional service in the area proposed to be served. The Examiner stated also that the proposed station would cause interference with a number of existing stations.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

W. Wallace Alexander, Inc., Philadelphia, Pa. (2-2526, Form A-1)
Electrol, Inc., Clifton, N. J. (2-2527, Form A-1)
Montana-Dakota Utilities Co., Minneapolis, Minn. (2-2528, Form A-2)
Tips Glass Company, Three Rivers, Tex. (2-2530, Form A-1)
Bondholders Committee Woods Bros. Corp., Chicago, Ill. (2-2531, Form D-1)
Associated Gold Producers, Inc., Washington, D. C. (2-2532, Form A-1)
Gage County Electric Co., Beatrice, Nebr. (2-2533, Form E-1)
Climas Engineering Co., Chicago, Ill. (2-2534, Form A-2)
Walter E. Heller & Co., Chicago, Ill. (2-2540, Form A-2)
New Mexico Gas Co., Chicago, Ill. (2-2537, Form A-1)
South Bend Lathe Works, South Bend, Ind. (2-2538, Form A-2)
Majestic Radio Company, Chicago, Ill. (2-2539, Form A-1)
Walter F. Heller & Co., Chicago, Ill. (2-2540, Form A-2)
Independence Fund of North America, Inc., New York City. (2-2541, Form C-1)
Independence Fund of North America, Inc., New York City. (2-2542, Form C-1)
Bay State Fund, Inc., Boston, Mass. (2-2543, Form A-1)

BROADCAST STATION CHANGES

The Federal Communications Commission has made public a list containing alterations and corrections (italicized) of broadcast stations to the edition dated January 1, 1936, for the month of September.

Call Letters	*Main Studio Location*	*Name of Licensee*	*Power*	*Frequency (kc)*	*Time Designation*
KARK	Little Rock, Arkansas	Arkansas Radio and Equipment Co.	250w 500w-LS	890	U
	C. P. T-N. Little Rock		500w-1kw-LS		
KDNC	Lewistown, Mont.	Democrat News Co., Inc.	100w *250w-LS*	1200	U (C. P. only)
KECA	Los Angeles, Calif. *T-Los Angeles County*	Earle C. Anthony, Inc.	1kw *5kw-LS*	1430	U
KELO	*Sioux Falls, So. Dak.*	*Sioux Falls Broadcast Assn., Inc.*	*100w* *Effective 10-20-36*	*1200*	*U (C. P. only)*
KFEL	Denver, Colo. *T-nr. Denver*	Eugene P. O'Fallon, Inc.	500w	920	S-KVOD
KGFG	Oklahoma City, Okla.	Oklahoma Broadcasting Co., Inc.	100w	1370	S-KCRC **U
KMLB	Monroe, La.	Liner's Broadcasting Station, Inc.	100w *C. P.250w-LS*	1200	U
KOAM	*Pittsburg, Kansas*	*A. Staneart Graham, E. V. Baxter & Norman Baxter, d/b as Pittsburg Broadcasting Co.*	*1kw* *Effective 10-6-36*	*790*	*D (C. P. only)*
KOIL	*Omaha, Nebr.* T-Council Bluffs, Iowa.	Central States Broadcasting Co.	1kw 2½kw-LS	1260	U
KPDN	Pampa, Texas	*R. C. Hoiles*	100w	1310	D
KPRC	Houston, Tex. T-Deepwater	Houston Printing *Corp.*	1kw 5kw-LS	920	U
KRE	Berkeley, Calif.	*Central California Broadcasters, Inc.*	100w 250w-LS	1370	U
KRGV	Weslaco, Texas	KRGV, Incorporated	500w *C. P. 1kw*	1260	U
KRLC	Lewiston, Idaho	H. E. Studebaker	100w *C. P. 250w*	1420 *1390*	U
KRQA *Formerly KIUJ*	Santa Fe, N. Mex.	J. Laurance Martin	100w	1310	U
KSJS	*Salina, Kansas*	*R. J. Laubengayer*	*100w*	*1500*	*U (C. P. only)*

Call Letters	Main Studio Location	Name of Licensee	Power	Frequency (kc)	Time Designation
KSUB	*Cedar City, Utah*	*Harold Johnson & Leland M. Perry, d/b as Johnson & Perry*	*100w* *Effective 10-27-36*	*1310*	*U (C. P. only)*
KUOA	*Siloam Springs, Ark.* T-Fayetteville	KUOA, Incorporated	1kw	1260	D
	C. P. T-Siloam Springs		2½kw		
KVOA	Tucson, Ariz.	Arizona Broadcasting Co., Inc.	500w *C. P. 1kw*	1260	U
KVSC	*San Diego, Calif.*	*Pacific Acceptance Corp.*	*100w*	*1200*	*D (C. P. only)*
KWK	St. Louis, Mo. *T-nr. St. Louis*	Thomas Patrick, Inc.	1kw 5kw-LS	1350	U
KWOS	*Jefferson City, Mo.*	*Tribune Printing Co.*	*100w*	*1310*	*D (C. P. only)*
KXOK	*St. Louis, Mo.* *T-nr. Venice, Ill.*	*Star-Times Publishing Co.*	*1kw* *Effective 10-6-36*	*1250*	*U (C. P. only)*
WABY	Albany, N. Y. *C. P. T-Colonie, N. Y.*	The Adirondack Broadcasting Co., Inc.	100w	1370	U
WADC	Tallmadge, Ohio	Allen T. Simmons	1kw *5kw-LS*	1320	U
WAIR	*Winston-Salem, N. C.*	*C. G. Hill, George D. Walker, Susan H. Walker*	*250w* *Effective 11-10-36*	*1250*	*D (C. P. only)*
WASH	Grand Rapids, Mich.	*King*-Trendle Broadcasting Corp.	500w C. P. 1kw-LS	1270	S-WOOD
WATR	Waterbury, Conn.	The WATR Co., Inc.	100w *C. P. 250w*	1190 *1290*	L-WOAI *U*
WBHP	*Huntsville, Ala.*	*Wilton Jarvey Pollard*	*100w* *Effective 10-27-36*	*1200*	*U (C. P. only)*
WBJW	*Kingston, N. C.*	*Jonas Weiland*	*100w* *250w-LS* *Effective 10-20-36*	*1200*	*U (C. P. only)*
WCBD	*Chicago*, Ill. T-Zion	WCBD, Incorporated	5kw	1080	L-WBT, S-WMBI
WCLO	Janesville, Wis.	Gazette Printing Co., Inc.	100w *250w-LS*	1200	U
WDRB	*Wausau, Wisc.*	*Northern Broadcasting Co., Inc.*	*100w* *Effective 11-10-36*	*1370*	*D (C. P. only)*
WDAE	Tampa, Fla.	Tampa Times Co. *Strike out S. A. 2½kw-LS-Exp.*	*1kw* *5kw-LS*	*1220*	*U*
WEBC	*Duluth, Minn.* T-Superior, Wisc.	Head of the Lakes Broadcasting Co.	1kw 5kw-LS	1290	U
WEHS	Cicero, Ill.	WEHS, Incorporated	100w *250w-LS (subject compliance C. P. granted WHFC)*	1420	S. H.
WEOA	Evansville, Ind.	Evansville on the Air, Inc.	100w *C. P. 250w-LS*	1370	U
WFIL	Philadelphia, Pa.	WFIL Broadcasting Co.	500w 1kw-LS	560	U
	C. P. T-Merion Twp.		1kw S. A. 1kw-night-Exp.		
WGAN	*Portland, Me.*	*Portland Broadcasting System, Inc.*	*500w*	*640*	*L-KFI (C. P. only)*
Formerly WSPG		*Strike out issues being determined by Court of Appeals, District of Columbia*			
WGR	Buffalo, N. Y. T-Amherst Twp.	Buffalo Broadcasting Corp.	1kw *C. P. 5kw-LS*	550	U
WGST	Atlanta, Ga.	Georgia School of Technology	500w 1kw-LS **1kw *C. P. 5kw-LS*	890	U
WHDL	Olean, N. Y.	Olean Broadcasting Co., Inc.	100w	1420	D
	C. P. T-Town of Allegany		*250w*	*1400*	
WHFC	Cicero, Ill.	WHFC, Incorporated	100w *C. P. 250w-LS*	1420	S. H.
WHIP	*Hammond, Ind.* *T-Highland*	*Hammond-Calumet Broadcasting Corp.*	*5kw*	*1480*	*D (C. P. only)*
WILL	Urbana, Ill.	University of Illinois	250w 1kw-LS *1kw	890 580	S-KFNF, KUSD D
	C. P. T-S. of Champaign		*1kw*	*580*	*D*
WJEJ	Hagerstown, Md.	Hagerstown Broadcasting Co.	100w	1210	D **S. H. night 50 watts

Call Letters	Main Studio Location	Name of Licensee	Power	Frequency (kc)	Time Designation
WJSV	*Washington, D. C.* T-Alexandria, Va.	Old Dominion Broadcasting Co.	10kw	1460	U
WKBI	Cicero, Ill.	WKBI, Incorporated	100w *250w-LS (subject compliance C. P. granted WHFC)*	1420	S. H.
WLBL	Stevens Point, Wis. T-nr. Ellis *C. P. T-S. of Auburndale*	State of Wisconsin, Department of Agriculture and Markets	2½kw *5kw*	900	S. H. *D*
WMBQ	Brooklyn, N. Y.	Metropolitan Broadcasting Corp. *S. A. Joseph Husid, Receiver—to operate station*	100w	1500	S. H.
WMVA	New York, N. Y. T-Flushing	Knickerbocker Broadcasting Co., Inc.	500w ***1kw Conditionally*	570	U
WMEX	Boston, Mass. T-Chelsea	The Northern Corp. *Strike out C. P. T-Milton*	100w 250w-LS *5kw*	1500 *1470*	U
WMFG	Hibbing, Minn.	Head of the Lakes Broadcasting Co.	100w *C. P. 250w-LS*	1210	U
WMIN	St. Paul, Minn.	Edward Hoffman	100w *250w-LS*	1370	U (C. P. only)
WMMN	Fairmont, W Va.	*Monongahela Valley Broadcasting Co.*	250w 500w-LS C. P. 500w-1kw-LS	890	U
WMT	Cedar Rapids, Iowa T-nr. Marion	Iowa Broadcasting Co.	1kw *5kw-LS*	600	U
WNNY	*Watertown, N Y.*	*Black River Valley Broadcasts, Inc.*	*100w* *250w-LS* *Effective 10-13-36*	*1420*	*U (C. P. only)*
WOOD	Grand Rapids, Mich.	*King*-Trendle Broadcasting Corp.	500w C. P. 1kw-LS	1270	S-WASH
WOWO	Ft. Wayne, Indiana	*Westinghouse Radio Stations, Inc.*	10kw	1160	Simultaneous D. S-WWVA night
WPTF	Raleigh, N. C. T-Cary	WPTF Radio Co. *S. A. 5kw to 11 P. M. EST-Exp.* *Strike out S. A. 1kw to 11 P. M. EST-Exp.*	5kw	680	L-KPO
WRDW	Augusta, Ga. *C. P. T-N. Augusta, S. C.*	Augusta Broadcasting Co.	100w	1500	U
WRJN	Racine, Wis. *T-Mt. Pleasant*	Racine Broadcasting Corp.	100w *250w-LS*	1370	U
WTMJ	Milwaukee, Wis. *T-Brookfield*	The Journal Co. (Milwaukee Journal)	1kw 5kw-LS	620	U
WXYZ	Detroit, Mich.	*King*-Trendle Broadcasting Corp.	1kw	1240	U
.....	*Corsicana, Texas*	*Navarro Broadcasting Assn., J. C. West, Pres.*	*100w* *Effective 10-20-36*	*1310*	*D (C. P. only)*

Call letters not yet assigned

**See Abbreviations—Lists of January 1, 1936.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2942. Five trade associations, composed of manufacturers and jobbers of automobile parts and accessories, are charged with forming a combination to control the market in and to fix and maintain the resale prices of these products throughout the United States, in a complaint.

Two of these associations, the **National Standard Parts Association,** of **Detroit,** and the **Motor and Equipment Wholesale Association,** of **Chicago,** are national organizations. The other three are middle western regional groups, namely: **Automotive Trades Association of Greater Kansas City, Kansas City, Mo.; Mississippi Valley Automotive Jobbers Association,** and **Southwestern Jobbers Association,** for neither of which is the headquarters listed. The complaint also names as respondents the officers, directors and members of the five associations.

The case is a consolidation of two previously issued complaints, one against the National Standard Parts Association, and others (Docket 2764), and one against the Motor and Equipment Wholesale Association, and others (Docket 2765), both dated April 15, 1936. Both those cases have been closed. The new complaint alleges substantially the same violations of the Federal Trade Commission Act as the two old complaints, and is expected to simplify trial of the case through adjustment of certain duplications in the names of respondents listed in the former complaints, and through elimination of various corporate respondents named separately in the former complaints. The new complaint is believed to cover practically the same field as the former complaints by including as respondents the five trade associations, their officers, members and directors.

No. 2943. Trading as **United States School of Music, David F. Kemp,** 225 Fifth Ave., **New York,** is charged with use of unfair methods of competition in selling correspondence courses of instruction in the art of playing various musical instruments. The respondent allegedly misrepresents in advertising matter the character of and the results to be obtained from a study of his courses, in violation of Section 5 of the Federal Trade Commission Act.

The respondent is said to make representations, which the complaint charges are exaggerated and untrue, that he has taught 700,000 pupils to play musical instruments and that a pupil can be taught to play in one-half the time usually required; that a pupil studying his course will quickly learn to play any jazz or classical selection, and, at the end of the course, the average pupil is sufficiently proficient to pass a teacher's examination; that no talent is necessary, and that when a pupil enrolls in the United States School of Music he is assured of success.

No. 2944. Cline Music Company, 126 W. Beverly St., **Staunton, Va.,** is respondent is a complaint alleging use of unfair methods of competition in connection with the sale of pianos.

The respondent corporation is said to advertise that it has for sale repossessed pianos, "almost new," which it has taken back from purchasers who could not keep up payments and which it will "sacrifice for the balance due." Each piano so advertised has stamped upon it a price purporting to be the regular retail price, the complaint alleges.

According to the complaint, the assertions made in the respondent corporation's advertisements together with the price markings serve as representations to prospective purchasers that the pianos are of high quality and of superior workmanship, were originally sold at prices closely approximating those stamped thereon, that they had been repossessed, and that prices at which they actually were offered for sale were sacrificed prices made for the purpose of eliminating shipping and other repossession charges.

No. 2948. Eastern Pharmacal Company, Inc., 151 Ludlow St., **Yonkers, N. Y.,** has been charged in a complaint with unfair representations in the sale of its product, "Aspiral," in violation of Section 5 of the Federal Trade Commission Act.

Advertising that "Elixir Aspiral offers the better way of prescribing aspirin," the respondent company is alleged to have designated its product in a manner tending to deceive buyers into believing that the product is aspirin and is designed for treatment of the same ills and conditions of the body as aspirin, and contains all the ingredients of aspirin.

Pointing out that the respondent company's product is not the same as aspirin, the complaint charges that its representations have a tendency to divert trade from competitors selling acetyl salicylic acid products, which are aspirin.

No. 2951. Alleging violation of Section 2 (a) of the Robinson-Patman Act prohibiting price discrimination, a complaint has been issued against the **United States Quarry Tile Company, of Canton, Ohio.** This is the fourth complaint issued under the recently enacted Robinson-Patman amendment to Section 2 of the Clayton Act.

The Commission's complaint charges that the United States Quarry Tile Company, which maintains factories in West Virginia and Ohio, has violated Section 2 (a) of the Robinson-Patman Act by discriminating in price between customers located in other states who are in competition with one another in the sale of tile to consumers. The United States Quarry Tile Company is alleged to have granted a 15 per cent discount to certain so-called wholesalers, regardless of the quantity sold, which discount has not been made available to tile contractors, thus tending to injure, destroy or prevent competition by tile contractors with the so-called wholesalers who are, in fact, in many instances acting as retailers by selling to the ultimate consumer.

Section 2 (a) of the Robinson-Patman Act, under which the complaint has been issued, says, "That it shall be unlawful for any person engaged in commerce * * * to discriminate in price between different purchasers of commodities of like grade or quality * * * where the effect of such discrimination may be substantially to lessen competition * * *."

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 01471. S. D. Cates and Juel Denn (Mrs. S. D. Cates), trading as The Buel Company, 207 North Michigan Ave., Chicago, agree to cease representing that "Buel Medicated Hair Drill" grows hair, prevents baldness, is an effective remedy for dandruff and for conditions responsible for a too oily scalp, or that it reconditions the scalp in 15 days, or at all. The respondents will stop advertising that dandruff causes the hair to break and fall out and that lifeless, brittle, faded hair is due to germ-infected hair follicles.

No. 01472. Richie Joseph Tucker, 700 Texas Avenue, San Antonio, Tex., operating under the name National Detective Bureau, in the sale of correspondence instruction in "private investigation" and of memberships in the bureau, agrees to cease and desist from representing that any individual employed by Tucker holds the position of "chief of staff" or "chief counsel, legal department"; that the respondent sells a "complete course" in private investigation; by direct statement or reasonable implication that the respondent has detective work to be performed by the "members" of his "bureau"; that anyone is "wanted" as a detective by the respondent, and other similar representations.

No. 01474. Herbal Medicine Company and Natex Company, 219 West Saratoga St., Baltimore, stipulate to cease representing that either "Natex" or "Herb Doctor Compound" is a competent remedy for a wide variety of diseases and ailments, including dyspepsia, rheumatism, headaches, stomach, liver and kidney troubles, high blood pressure, and blood impurities. They also will discontinue claims that either of their preparations is a new medicine, builds rich blood, acts as a tonic for the whole system, gives permanent relief from any physical disorder or disease, or removes the basic cause thereof.

Other respondents in this case are George Earl McKewen, George McKewen, Mrs. George McKewen, Mr. and Mrs. Leroy Burdette, James Howard, Jr., and H. B. Baker, representing Publicity Engravers and trading as Herbal Medicine Company and Natex Company.

No. 01475. Blair Laboratories, a Lynchburg, Va., corporation engaged in selling a variety of products, will stop representing that its "Whitehouse Cleaning Fluid" is "the" perfect home dry cleaner; that "Whitehouse Household Cement" will hold together shoes, torn soles, or anything else made of leather, so tightly that it will never come apart again, and that the "join" made with this preparation is stronger than before the break occurred.

In advertising its other preparations, the respondent corporation will discontinue claims that "Airo-Zone" makes clothes closets moth-proof; that "Dr. Blair's Cream of Cucumber" entirely cures face eruptions caused by the use of irritating face powders; that "Dr. Blair's Cleansing Cream" quickly restores the delicate complexion typical of youth, preserves it for years, and prevents blemishes; that "Dr. Blair's Snow White Bleaching Cream" clears up the complexion and banishes skin blemishes, unless such skin conditions are limited to external causes; that "Dr. Blair's Acne Cream" is a skin food that builds up broken-down tissues and refines the skin; that "Dr. Blair's Beauty Clay" corrects flabby, sallow and wrinkled skins by removing the cause of such conditions; that "N.B.O. Deodorant" banishes perspiration odor; that "Dr. Blair's Double Distilled Extract Witch Hazel" is 2-times stronger than U. S. Pharmacopoeia requirements; that "Dr. Blair's Shaving Lotion" kills germs, prevents eruptions, or keeps the skin in a healthy condition; that "Dr. Blair's Hair Tonic" removes dandruff or stops falling hair, and that "Family Salve" heals cuts, burns, stings of insects, or rough skin.

No. 01476. Seabury, Inc., 222 Fourth Ave., New York, will stop representing that "Edrolax" is a competent treatment for constipation, unless limited to those types of constipation the relief of which is within the known therapeutic efficacy of the product, and that use of the preparation will keep the intestinal tract in a normal, healthy condition. Other claims that will be discontinued are that "Edrolax" is especially beneficial to children, that it is neither a medicine nor a cathartic, that most cathartics weaken the intestinal wall, and that one portion of the product provides as much vegetable bulk or lubrication as a whole vegetable dinner.

No. 01477. Durand-McNeil-Horner Company, Chicago, selling "Klor-O-Wash," stipulates that it will desist from advertising that this cleaning compound is a deodorizer and disinfectant for chinaware, glassware, pots, pans, washbowls, bathtubs, tile floors, linoleum and sick room equipment, unless such representations are accompanied by instructions to the effect that the places or articles to be deodorizad and disinfected should be thoroughly washed before using "Klor-O-Wash." Another representation that will be discontinued is that the product will remove alcohol, ink, coffee, tea, fruit, mildew and scorch stains from white cotton or linen fabrics by soaking the article for a few minutes in a solution of one part of "Klor-O-Wash" to 20 parts of water.

No. 01478. Carl A. Burkhart, 1448 Webster St., Oakland, Calif., trading as Family Remedy Company and selling "Wong Yick Family Tea," agrees to cease from representing that his product is scientific and an effective remedy for indigestion, headaches, overweight, poor appetite, high blood pressure, arthritis, sinus trouble, tuberculosis, asthma, and other ailments. The respondent also will discontinue claims that his preparation is non-habit forming; will be "found very effective in removing the cause of many obstinate and obscure ailments"; that it will banish poison from the system and cause the kidneys to function properly.

No. 01479. Martha E. Richason, 4304 McPherson St., St. Louis, trading as Athex Company, will cease advertising that her preparation is competent in the treatment of athlete's foot and skin ailments, and that the term athlete's foot is synonymous with itch, ringworm, blistered feet, rash or tetter. The representation that "Athex" is guaranteed to produce any stated therapeutic effects will be discontinued.

No. 01480. Wilbert Products Company, Inc., 805 East 139th St., New York City, engaged in selling a washing fluid designated "Javex," will cease representing that the product disinfects or deodorizes, unless directions are given for first cleaning the article to be disinfected or deodorized; that it kills all germs, including their spores, or destroys odors, and that it is "magical" in whitening clothes.

No. 01481. E. J. O'Bryan, 2211 Woodward Ave., Detroit, trading as Hemerald Company, entered into a stipulation to refrain from advertising that the "Hemerald Pile Ointment" he sells is antiseptic or a germicide, or that it is an effective remedy, unless the assertion is specifically limited to its soothing and astringent effect and to its action as an emollient. Other representations that will be stopped are, that the ointment reduces swollen blood vessels, or that it is healing; that it prevents liver and kidney troubles, sciatic neuritis, rheumatism and constipation, and that these conditions enumerated will follow if piles are not treated.

No. 01482. Trading as International Agency, George Rosenzweig, Jr., of Cincinnati, sells booklets entitled "The Herbalist," "Complete Index of Salable Raw Drugs" and "Supplement of Raw Drug Buyers." Among representations to be discontinued under the stipulation, are: That "The Herbalist" teaches one to recognize, gather or prepare roots, herbs, flowers or seeds for the market, or is a text book or complete course; that the booklet entitled "The Index" is an index of drugs, and that the supplement booklet is a supplement of buyers of drugs; inferentially or otherwise, that the usual cost of merchandise sold by the respondent is any amount in excess of its actual market value, or, that the respondent offers any employment, or buys or finds the market for any item, until this is the fact.

No. 01485. The Star Water Manufacturing Company, Waterbury, Conn., agrees to discontinue representations that its "Star Water" washing fluid is a non-poisonous germicide and is safe; that it is an antiseptic, disinfectant or deodorant, without following such assertion with directions for cleansing the article to be disinfected or deodorized; and that it sterilizes, kills bacteria and disinfects when used to wash dishes.

No. 01486. Paul I. Miller, 5175 Hovey St., Indianapolis, Ind., trading as The Bioxo Products Company, agrees that in the sale of "Bioxo Salets" he will discontinue the following representations: That the preparation is competent in the treatment of neuritis, neuralgia, sciatica, lumbago or muscular soreness, unless such representations are limited to the temporary relief of pain; that it helps to eliminate poisons, overcomes the cause of any ailment, and aids digestive organs to assimilate food; that its formula is the latest in the field for treatment of the various ailments mentioned, or that it is a physician's prescription; that no other preparation on the market has the same formula, and that neglect of colds, defective teeth or infections are the causes of almost all cases of rheumatism.

No. 01487. Houchens Medicine Company, 2800 Philadelphia Road, Baltimore, selling "Houchens Liquid Vegetable Tonic Laxative," will discontinue representing that the preparation has any value as a tonic except to the intestines; it is a competent treatment for colds, acid stomach, fever or biliousness; that it is the kind of laxative most doctors prescribe and hospitals use; that it will overcome the effects of over-indulgence in food or drink, and is safe so long as it contains potassium chlorate in any substantial amount.

In stipulations entered into with the Federal Trade Commission, two Washington, D. C., firms dealing in women's fur and fur-trimmed wearing apparel have agreed to discontinue false representations in advertising matter.

Nos. 01460-01484. Mandre, Inc., Louis C. Rosenblatt, Arthur J. Rosenblatt and **H. Edelman,** trading as **M. Brooks & Co.,** 1109 G St., N. W., **Washington, D. C.,** are respondents in one stipulation. **Saks Fur Company,** 610 12th St., N. W., **Washington, D. C.,** is named in the other.

The respondents in both cases agree, among other things, to stop describing furs in any other way than by use of the correct name of the fur as the last word of the descriptive phrase, and when any dye or blend is used to simulate another fur, the true name of the fur must be preceded by the word "dyed" or "blended," compounded with the name of the simulated fur.

The respondents, for example, agree to stop using the words "seal" or "Hudson seal" to designate dyed muskrat, unless these words are compounded with "dyed" and immediately followed by words signifying the true name of the fur, as "Seal-dyed muskrat" or "Hudson seal-dyed muskrat."

Other advertising practices to be discontinued are the use of any geographical term to describe a fur unless such fur comes from the region indicated, and representing that rabbit, coney or lapin is "sealine" or "beaverette," or using any other descriptive term either as a prefix, suffix or name not commonly used to indicate rabbit fur dyed to imitate seal or beaver.

Mandre, Inc., and M. Brooks & Co., in their stipulation, agree to cease representing that garments or furs are imported from France, or elsewhere, unless such is the fact, and if so, a statement will be made in connection therewith indicating whether it is the garments or the furs that are so imported. These respondents admitted that certain coats described in an advertisement as "Imported French Seal (dyed coney)" were made in the United States of pelts that were stamped on the back "Dyed in France."

Selling and distributing dairy products and a poultry food in interstate commerce, the **Challenge Cream and Butter Association,** 925 East 2nd St., **Los Angeles,** and **Ultra-Life Laboratories, Inc.,** 103 South 35th St., **East St. Louis, Ill.,** have entered into stipulations to discontinue certain unfair advertising practices.

The Los Angeles association, dealing in dairy products, agrees to cease and desist from asserting that butter is the best known resister of disease; that it contains all elements necessary to human growth and will provide Vitamin A in quantities sufficient to afford protection from head and throat infections, sinus or mastoids.

No. 01470. Advertising its "Challenge Dry Skim Milk" as a poultry food, the respondent company agrees to discontinue representing that this milk affords complete protection from coccidiosis; that it will build health or vitality in chickens; that it will build resistance to all forms of diseases in chickens or promote vigor and stamina in breeding stock, and that it will provide adequate growth for baby chicks or control their health.

No. 1483. Ultra-Life Laboratories, Inc., is said to have advertised its product "Ultra-Life" as a "combination of a number of expensive ingredients," guaranteed, when mixed according to formula, to add exactly the required amount of every known vitamin to feeds. The respondent company stipulates that it will cease representing its product by such a guarantee, and that it will discontinue, inferentially or otherwise, representing that its product is the only product containing any specific number of vitamins, unless this is substantiated by factual evidence. It will also cease asserting that certain beneficial results in the health of poultry cannot be derived from feeds in which its product is not contained. Other similar representations will be discontinued.

FTC DISMISSES COMPLAINT

No. 2540. The Federal Trade Commission has dismissed its complaint against **W. Gordon Pervis, Tennille, Ga.,** who had been charged with unfair competition in the sale of so-called electric radio plates for the treatment of various diseases.

According to the order of dismissal, the evidence adduced in the case did not sustain the allegations of the complaint.

Pervis' product is a device to be worn in the shoes and is represented by him as giving relief to persons suffering from high or low blood pressure, headaches, asthma, paralysis, kidney trouble, and other ailments.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

The following hearings are scheduled at the Commission for the week beginning, Monday, October 26.

Thursday, October 29

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-237:

NEW—Miles J. Hansen, Fresno, Calif.—C. P., **1420 kc.,** 100 watts, unlimited time.

NEW—Julius Brunton & Sons Co., Fresno, Calif.—C. P., **980 kc.,** 250 watts, daytime.

Examiner's Report No. I-238:

NEW—Harold H. Hanseth, Fresno, Calif.—C. P., **1410 kc.,** 1 KW, unlimited time.

NEW—Fresno Broadcasting Co., Fresno, Calif.—C. P., **1410 kc.,** 500 watts, 1 KW LS, unlimited time.

Examiner's Report No. I-239:

NEW—Ventura County Star, Inc., Ventura, Calif.—C. P., **1170 kc.,** 250 watts, daytime.

Examiner's Report No. I-242:

KDYL—Intermountain Broadcasting Corp., Salt Lake City, Utah —C. P., **1290 kc.,** 1 KW, 5 KW LS, unlimited time. Present assignment: **1290 kc.,** 1 KW, unlimited time.

Friday, October 30

HEARING BEFORE AN EXAMINER

(Broadcast)

XICA—Western Broadcasters, Inc., Clovis, New Mexico—Modification of license, **1370 kc.,** 100 watts, unlimited time. Present assignment: **1370 kc.,** 100 watts, specified hours.

NEW—The Southwest Broadcasting Co., La Junta, Colo.—C. P., **1370 kc.,** 100 watts, unlimited time.

APPLICATIONS GRANTED

WLBF—WLBF Broadcasting Co., Kansas City, Kans.—Granted authority to make changes in equipment.

WIBU—Wm. C. Forrest, Poynette, Wis.—Granted C. P. to install new equipment.

WRBL—WRBL Radio Station, Inc., Columbus, Ga.—Granted C. P. to make changes in equipment, increase day power from 100 to 250 watts, erect an approved type of antenna system at new site to be determined subject to Commission's approval.

WCBS—WCBS, Inc., Springfield, Ill.—Granted C. P. approving vertical radiator, new transmitter site, changes in equipment.

WEXL—Royal Oak Broadcasting Co., Royal Oak, Mich.—Granted C. P. to authorize changes in equipment.

WHDF—Upper Michigan Broadcasting Co., Calumet, Mich.—Granted C. P. to install new equipment.

KTSA—KTSA Broadcasting Co., San Antonio, Tex.—Granted authority to determine operating power by direct measurement of antenna input in accordance with Rule 137. Also granted license to cover C. P. authorizing installation of new equipment.

WHA—University of Wisconsin, Madison, Wis.—Granted license to cover C. P. authorizing changes in equipment and increase in power from 2½ KW to 5 KW.

WHLB—Head of the Lakes Broadcasting Co., Virginia, Minn.—Granted license to cover C. P. authorizing erection of new station; **1370 kc.,** 100 watts, unlimited time.

KIDO—Frank L. Hill, C. G. Phillips, d/b as Boise Broadcast Sta., Boise, Idaho—Granted license to cover C. P. authorizing change in transmitter location, installation of new equipment and vertical radiator.

WMAZ—Southeastern Broadcasting Co., Inc., Macon, Ga.—Granted license to cover C. P. authorizing change in composite equipment and reduction in power from 1 KW to 500 watts for auxiliary purposes only.

KALE—KALE Inc., Portland, Ore.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937.

KGMB—Honolulu Broadcasting Co., Ltd., Honolulu, T. H.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937.

KFQD—Anchorage Radio Club, Inc., Anchorage, Alaska—Granted extension of present license for a period of 30 days on a temporary basis.

KVEC—Christina M. Jacobson, d/b as The Valley Electric Co., San Luis Obispo, Cal.—Granted modification of C. P. approving antenna and transmitter site south from center of San Luis Obispo, Cal.

KTEM—Bell Broadcasting Co., Temple, Tex.—Granted modification of C. P. approving transmitter and studio sites, authority to change type of equipment, approval of vertical radiator, and extension of commencement date to 30 days after grant, and completion date to 90 days after grant.

KFJB—Marshall Electric Co., Inc., Marshalltown, Iowa—Granted modification of C. P. to install new equipment, extend commencement date of 30 days after grant and completion date to 60 days thereafter.

KBST—The Big Spring Herald Broadcasting Co., Big Spring, Tex.—Granted modification of C. P. to make changes in equipment, approval of transmitter site and antenna system.

WNEW—Wodaam Corp., Newark, N. J.—Granted modification of license to change studio location rom Newark, N. J. to New York City.

KVOR—S. H. Patterson, Colorado Springs, Colo.—Granted consent to voluntary assignment of license to Out West Broadcasting Co., **1270 kc.,** 1 KW, unlimited time.

WHBI—May Radio Broadcast Corp., Newark, N. J.—Granted extension of present license for a period of 90 days (Main Transmitter) **1250 kc.,** 1 KW night, 2½ KW day, shares with WNEW.

WHBI—May Radio Broadcast Corp., Newark, N. J.—Granted extension of present license for a period of 90 days (for auxiliary transmitter), **1250 kc.,** 1 KW night, 2½ KW day, shares with WNEW.

WPTF—WPTF Radio Co., Raleigh, N. C.—Granted authority to determine operating power of main transmitter by direct measurement of antenna input in compliance with Rule 137.

KGO—National Broadcasting Co., Inc., San Francisco, Cal.—Granted authority to install automatic frequency control apparatus for auxiliary equipment.

KGHF—Curtis P. Ritchie, Pueblo, Colo.—Granted authority to install automatic frequency control.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Granted authority to make changes in automatic frequency control equipment.

KSOO—Sioux Falls Broadcasting Assn., Sioux Falls, S. Dak.—Granted authority to make changes in automatic frequency control equipment.

WEST—Asso. Broadcasters, Inc., Easton, Pa.—Granted authority to make changes in automatic frequency control equipment.

WWNC—Citizen Broadcasting Co., Inc., Asheville, N. C.—Granted consent to voluntary assignment of license to Asheville Citizen-Times Co., Inc.

WOCL—A. E. Newton, Jamestown, N. Y.—Granted voluntary assignment of license to the James Broadcasting Co., Inc.

NEW—Westinghouse E and M Co., Mobile, Chicopee Falls, Mass.—Granted C. P. for new experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 50 watts. Unlimited time. Also granted license covering same.

NEW—Westinghouse E and M Co., Portable-Mobile, Chicopee Falls, Mass.—Granted C. P. and license for low frequency relay broadcast station; frequencies **1606, 2022, 2102, 2758 kc.,** 15 watts.

NEW—Westinghouse E and M Co., Portable-Mobile, Chicopee Falls, Mass.—Granted C. P. and license for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.** in an experimental basis; 500 watts.

NEW—Westinghouse E and M Co., Portable-Mobile, Chicopee Falls, Mass.—Granted C. P. and license for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.** in an experimental basis; 500 watts.

NEW—Westinghouse E and M Co., Portable-Mobile, Chicopee Falls, Mass.—Granted C. P. and license for high frequency relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.** in an experimental basis; 50 watts.

NEW—Westinghouse E and M Co., Portable-Mobile, Chicopee Falls, Mass.—Granted C. P. and license for high frequency relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 500 watts, unlimited.

NEW—Westinghouse E and M Co., Portable-Mobile—Granted C. P. and license for high frequency relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 50 watts, unlimited.

WSMK—WSMK, Inc., Dayton, Ohio—Granted special temporary authority to operate simultaneously with station KQV, unlimited time on Tuesday, Nov. 3, 1936, in order to broadcast local, state and national election returns.

KPAC—Port Arthur College, Port Arthur, Tex.—Granted special temporary authority to operate from 5:15 p. m. to 12 midnight CST, Nov. 6, 14, and 26, 1936, in order to broadcast local high school football games.

WFAM—The South Bend Tribune, South Bend, Ind.—Granted special temporary authority to operate station without a approved frequency monitor for a period beginning Oct. 19 and ending no later than Oct. 30, 1936.

KUOA—KUOA, Inc., Fayetteville, Ark.—Granted special temporary authority to operate station without an approved frequency monitor for a period Oct. 16 to Oct. 25, 1936.

WPG—City of Atlantic City—Granted special temporary authority to operate from 12 midnight to 6 a. m., EST, Nov. 4; and from 12 midnight to 4 a. m., Nov. 5, in order to broadcast election returns.

KCMC—KCMC, Inc., Texarkana, Ark.—Granted special temporary authority to operate station without an approved frequency monitor for a period Nov. 11 to 30, 1936.

WCLS—WCLS, Inc., Joliet, Ill.—Granted special temporary authority to operate from 8:30 to 9 p. m., CST, Oct. 20 and 21, in order to broadcast special programs of Labor Non-Partisan League.

The Farmers and Bankers Life Ins., Co., Abilene, Kans.—Granted special temporary authority to operate a portable (high

frequency relay broadcast) transreceiver for the period ending in no event later than Oct. 31, 1936.

WBNX—Standard Cahill Co., Inc., New York City—Granted special temporary authority to operate from 12 midnight, Sat., Oct. 17, to 12 midnight, Mon., Oct. 26, with power of 1 KW and with one tower only (non-directional), unlimited time, or in the alternative, to operate with 1 KW power daytime with one tower only (non-directional, power to be reduced at local sunset to a point where the radiation does not exceed 100 millivolts per meter at one mile in the direction of station KWK, St. Louis, Mo.

KGFL—KGFL, Inc., Roswell, N. Mex.—Granted special temporary authority to operate simultaneously with station KICA from 7:30 to 10:30 p. m., EST, Friday, Oct. 23, in order to broadcast speech of Congressman J. J. Dempsey and other candidates.

W8XIN—Radio Air Service Corp., Cleveland, Ohio, Portable-Mobile—Granted license to cover C. P. for new relay broadcast station on an experimental basis; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

W6XKG—Ben S. McGlashan, Los Angeles, Cal.—Granted license to cover C. P. of experimental high frequency broadcast station for authority to change equipment and increase power from 100 watts to 1 KW.

W10XGK—Ben S. McGlashan, Los Angeles, Cal., Portable-Mobile—Granted license to cover C. P. for new relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** and **100000, 149,000, 280,000** and **580,000 kc.** on a temporary experimental basis only; 10 watts.

W6XLN—Ben S. McGlashan, Los Angeles, Cal., Portable-Mobile—Granted license to cover C. P. for new relay broadcast station in accordance with Rules 1000 and 1001 (b); frequencies **31100, 34600, 37600** and **40600 kc.,** and **90,000, 150,000, 300,000** and **600,000 kc.** on temporary experimental basis only; 100 watts.

KSOO—Sioux Falls Broadcast Assn., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 5:45 to 6:30 p. m., CST, Oct. 21, 22 and 28, 1936, in order to broadcast political talks.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Granted special temporary authority to operate from 8 to 10 p. m., EST, Wed. night, Oct. 21, 1936, using power of 100 watts, in order to broadcast a Democratic Rally.

WTBO—Asso. Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 8 to 10 p. m., EST, Oct. 20, 1936, in order to broadcast local Democratic meeting. Also to operate from 10 to 10:30 p. m., EST, Wed., Oct. 21, in order to broadcast an address by Pres. Roosevelt.

KFNF—KFNF, Inc., Shenandoah, Iowa—Granted special temporary authority to operate station without approved frequency monitor for a period beginning Oct. 20, and ending no later than Nov. 18, 1936.

WHDF—The Upper Mich. Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 6:30 to 10 p. m., CST, Oct. 22, in order to broadcast a Republican Rally; from 6:30 to 9:30 p. m., CST, Oct. 26, in order to broadcast the 22nd WHDF Radio Revue and Barn Dance; from 6:30 p. m. to 12 midnight, CST, Nov. 3, in order to broadcast election returns.

WTCN—Minn. Broadcasting Corp., Minneapolis, Minn.—Granted extension of special temporary authority to operate with temporary antenna for the period Oct. 23 to Nov. 21, 1936.

KSOO—Sioux Falls Broadcast Assn., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 6:30 to 7 p. m., CST, Oct. 23, in order to broadcast political talks.

WWVA—W. Va. Broadcasting Corp., Wheeling, W. Va.—Granted extension of special temporary authority to operate with a temporary antenna pending the rebuilding of towers demolished by storm, for the period Oct. 26 to Nov. 24, 1936.

WDBO—Orlando Broadcasting Co., Inc., Orlando, Fla.—Granted extension of special temporary authority to operate with additional power of 750 watts at night for the period Oct. 28 to Nov. 26, 1936.

WMBG—Havens & Martin Inc., Richmond, Va.—Granted extension of special temporary authority to operate from 5:30 to 7 p. m., EST, on Sundays, during month of November (provided WBBL remains silent) in order to broadcast special programs.

WCBS—WCBS, Inc., Springfield, Ill.—Granted special temporary authority to operate from 10 p. m., CST, Nov. 3, until 1 a. m., CST, Nov. 4, in order to broadcast election returns.

WWVA—W. Va. Broadcasting Corp., Wheeling, West Va.—Granted special temporary authority to operate simultaneously with WOWO on night of Tuesday, Nov. 3, in order to broadcast election returns.

WOWO—The Main Auto Supply Co., Fort Wayne, Ind.—Granted special temporary authority to operate simultaneously with WWVA on night of Tuesday, Nov. 3, in order to broadcast election returns.

WJAC—WJAC, Inc., Johnstown, Pa.—Granted special temporary authority to operate simultaneously with station WFBG from 10 to 10:30 p. m., EST, Oct. 21, 1936, in order to broadcast speech by President.

WCLS—WCLS, Inc., Joliet, Ill.—Granted special temporary authority to operate from 8:30 to 9 p. m., CST, Oct. 20 and 21, in order to broadcast special programs of Labor Non-Partisan League.

KRLC—H. E. Studebaker, Lewiston, Idaho—Granted special temporary authority to operate without an approved frequency monitor for a period not to exceed 30 days.

KWKH—International Broadcasting Corp., Shreveport, La.—Granted special temporary authority to operate with reduced power of 2500 watts for period not to exceed 10 days.

KOY—Nielson Radio & Sporting Goods Co., Phoenix, Ariz.—Granted special temporary authority to operate with former antenna system for period not to exceed 30 days, pending application for new antenna and site.

KLRA—Ark. Broadcasting Co., Little Rock, Ark.—Granted special temporary authority to operate with reduced power not less than 1 KW during daytime hours of operation while constructnig new tower, for period not to exceed 30 days.

WATL—J. W. Woodruff, and S. A. Cisler, d/b as Atlanta Broadcasting Co., Atlanta, Ga.—Granted extension of special temporary authority to operate a 100 watt portable transmitter on **1370 kc.,** in the vicinity of Atlanta, Ga., between the hours of 12 midnight and 6 a. m., CST, for a period not to exceed 30 days from Oct. 23, 1936, in order to make field intensity survey tests.

KHBC—Honolulu Broadcasting Co., Ltd., Hilo, T. H.—Granted special temporary authority to operate without an approved frequency monitor for a period beginning Oct. 15 and ending not later than Nov. 13, 1936.

WEST—Asso. Broadcasters Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with station WKBO from 9 to 9:30 p. m., EST, Tuesday, Oct. 20, in order to broadcast a Democratic national network program featuring a speech by Mr. Farley.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted special temporary authority to operate from 7 p. m. to 12 midnight, EST, Tuesday, Nov. 3, 1936, in order to broadcast election returns.

WELI—City Broadcasting Corp., New Haven, Conn.—Granted special temporary authority to operate unlimited time, Tuesday, Nov. 3, 1936, in order to broadcast election returns.

WKBV—Knox Radio Corp., Richmond, Ind.—Granted special temporary authority to operate from 1:30 to 5:30 p. m., CST, Nov. 7, 1936, for the purpose of broadcasting Earlham College Football game.

SET FOR HEARING

NEW—John D. Fields, Inc., Las Vegas, Nev.—Application for C. P. for new broadcast station at Las Vegas, Nev., to authorize operation on **1370 kc.,** 100 watts, unlimited time, site to be approved.

NEW—Peninsula Newspapers, Inc., Palo Alto, Calif.—Amended application for C. P. for a new broadcast station at Palo Alto, Calif., to authorize operation on **1160 kc.,** 250 watts, daytime only. Transmitter site and type of antenna to be determined with Commission's approval.

NEW—KLZ Broadcasting Co., Denver, Colo.—Application for a C. P. for new broadcast station at Denver, Colo., to authorize operation on **1210 kc.,** 100 watts night, 250 watts day, unlimited time. Site and type of antenna are to be determined with Commission's approval.

NEW—The Louisville Times Co., Louisville, Ky.—Application for C. P. for new broadcast station at Louisville, Ky., to authorize operation on **1210 kc.,** 100 watts, unlimited time.

NEW—Okmulgee Broadcasting Corp., Okmulgee, Okla.—Application for C. P. for new broadcast station at Okmulgee, Okla.,

to authorize operation on **1210 kc.,** 100 watts, daytime only. Site to be determined subject to Commission approval.

NEW—Times Publishing Co., Okmulgee, Okla.—Application for C. P. for new broadcast station at Okmulgee, Okla., to authorize operation on **1210 kc.,** 100 watts, daytime only. Transmitter site and antenna to be determined with Commission's approval.

NEW—Paul B. McEvoy, publisher, Hobart Democrat-Chief, Hobart, Okla.—Amended application for C. P. for a new broadcast station at Hobart, Okla., to authorize operation on **1420 kc.,** 100 watts, daytime only.

NEW—J. Leslie Doss, Sarasota, Fla.—Application for C. P. for new broadcast station at Sarasota, Fla., to authorize operation on **1390 kc.,** 250 watts, daytime only.

NEW—Broadus McSwain, d/b as "The Voice of The Times" Raleigh, N. C.—Application for C. P. for new broadcast station at Raleigh, N. C., to authorize operation on **1210 kc.,** 100 watts, daytime only.

NEW—Clarence A. Berger, Coeur d'Alene, Idaho.—Application for C. P. for new broadcast station at Coeur d'Alene, Idaho, to authorize operation on **1200 kc.,** 100 watts, daytime only. Transmitter site and antenna design to be determined subject to Commission's approval.

NEW—Richard M. Casto, Johnson City, Tenn.—Application for C. P. for new broadcast station at Johnson City, Tenn., to authorize operation on **1200 kc.,** 100 watts night, 250 watts day, unlimited time.

NEW—Falls City Broadcasting Corp., Falls City, Nebr.—Amended application for C. P. for new broadcast station at Falls City, Nebr., to authorize operation on **1310 kc.,** 100 watts, unlimited time.

KLPM—John B. Cooley, Minot, N. Dak.—Application for C. P. requesting authority to move transmitter to rural location near Minot, N. Dak.; install approved antenna system; change frequency to **1360 kc.** from **1240 kc.;** make changes in equipment; increase night and day power to 1 KW, and increase operation from specified hours to unlimited time.

KWBG—The Nation's Center Broadcasting Co., Inc., Hutchinson, Kans.—Amended application for C. P. to authorize moving transmitter locally, install directional antenna system, make changes in equipment, change frequency from **1420 kc.** to **550 kc.,** and increase power from 100 watts to 250 watts, unlimited time, using directional antenna system for nighttime operation.

WSJS—Winston-Salem Journal Co., Winston-Salem, N. C.—Application for C. P. to change frequency from **1310 kc.** to **1250 kc.,** make changes in equipment, increase power from 100 watts to 1 KW, and move transmitter locally. Site and antenna system to be determined subject to Commission approval.

WJBW—Charles C. Carlson, New Orleans, La.—Application for C. P. to change studio location, install new equipment and vertical radiator, increase day power from 100 watts to 250 watts and time of operation from sharing time with station WBNO to unlimited time.

WMBD—Peoria Broadcasting Co., Peoria, Ill.—Application for C. P. to authorize installation of new equipment, increase night power from 500 watts to 1 KW and day power from 1 KW to 5 KW, unlimited time.

NEW—J. H. Allison, Rhea Howard, B. D. Donnell, d/b as West Texas Broadcasting Co., Wichita Falls, Tex.—Application for C. P. to erect new station at Wichita Falls, Tex., to authorize operation on **1380 kc.,** 1 KW, unlimited time, employing directional antenna system nighttime.

KUOA—KUOA, Inc., Siloam Springs, Ark.—Application for modification of C. P. requesting authority to increase day power from 2.5 KW to 5 KW, increase operating time to include midnight to 6 a. m., using 5 KW power, and extend commencement date from August 12, 1936, to 30 days after grant, and completion date from February 12, 1937, to 150 days thereafter. Hearing before Broadcast Division.

WJBR—J. B. Roberts, Gastonia, N. C.—Application for modification of C. P. requesting extension of commencement date from 12-15-35 to 10-1-36 and completion date from 6-15-36 to 1-1-37.

KFKA—The Mid-Western Radio Corp., Greeley, Colo.—Application for modification of license requesting authority to change frequency from **880 kc.** to **1450 kc.,** and increase operation to unlimited time.

WHN—Marcus Loew Booking Agency, New York, N. Y.—Hearing before Broadcast Division on application for modification of license to authorize increase in night power from 1 KW to 5 KW.

WORL—Broadcasting Service Organization, Inc., Needham, Mass.—Application for C. P. for authority to increase power from 500 watts to 1 KW, to increase time of operation from daytime to unlimited time, and for authority to use a directional antenna both day and night.

KMPC—Beverly Hills Broadcasting Corp., Beverly Hills, Calif.—Application for Commission's consent to the transfer of control of the Beverly Hills Broadcasting Corp. from the Pacific Southwest Discount Corp. to George A. Richards.

ORAL ARGUMENT GRANTED

NEW—Ex. Rep. I-289: Saginaw Broadcasting Co., Saginaw, Mich.; Harold F. Gross and Edmund C. Shields, Saginaw, Mich.—Granted oral argument before Broadcast Division to be held on December 17, 1936.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KDFM, Casper, Wyo.; KECA, Los Angeles; KFBK, Sacramento, Calif.; KMO, Tacoma, Wash.; KQV, Pittsburgh, Pa.; KSCJ, Sioux City, Iowa; KWK, St. Louis, Mo.; KXYZ, Houston, Tex.; WBNS, Columbus, Ohio; WFBL, Syracuse, N. Y.; WGAR, Cleveland, Ohio; WGES, Chicago; WHBL, Sheboygan, Wis.; WHEC, Rochester, N. Y.; WHK, Cleveland, Ohio; WHOM, Jersey City, N. J.; WHP, Harrisburg, Pa.; WJSV, Alexandria, Va.; WKBW, Buffalo, N. Y.; WLAC, Nashville, Tenn.; WSAR, Fall River, Mass.; WSBT, South Bend, Ind.; WSFA, Montgomery, Ala.; WSPD, Toledo, Ohio; WTAQ, Green Bay, Wis.

APPLICATIONS DISMISSED

The following cases, heretofore set for hearing, were dismissed at request of applicants:

NEW—Auburn Pub. Co., Auburn, N. Y.—Applied for C. P., **1420 kc.,** 100 watts, unlimited.

NEW—Maine Broadcasting Co., Inc., Portland, Me.—Applied for C. P., **620 kc.,** 500 watts, 1 KW LS, unlimited.

WLBZ, Maine Broadcasting Co., Inc., Bangor, Me.—Applied for modification of license, **970 kc.,** 500 watts, 1 KW LS, day and until sunset at Chicago.

NEW—Clarence C. Dill, Washington, D. C.—Applied for C. P., **1310 kc.,** 100 watts, unlimited.

WBIG—North Carolina Broadcasting Co., Inc., Greensburg, N. C.—Special experimental authority, **1440 kc.,** 1 KW, unlimited.

NEW—Rev. Edw. Warren Cremey, Rector, Church Wardens & Vestrymen of St. Michael's P. E. Church, Brooklyn, N. Y.—Applied for C. P., **1130 kc.,** 1 KW, daytime, facilities of WOV.

NEW—Voice of Corsicana Assn., Corsicana, Tex.—Applied for C. P., **1310 kc.,** 100 watts, daytime.

The following cases, heretofore set for hearing, were denied as in cases of default for failure of applicants to file an appearance:

NEW—Paul Sullivan Andrews, Lewiston, Me.—Applied for C. P., **560 kc.,** 250 watts, daytime.

NEW—I. Martin Courtney, Toledo, Ohio.—Applied for C. P., **1420 kc.,** 100 watts, unlimited.

NEW—Bay State Broadcasting Corp., Providence, R. I.—Applied for C. P., **720 kc.,** 1 KW, limited.

MISCELLANEOUS

NEW—Navarro Broadcasting Assn., Corsicana, Tex.—Denied request that new station granted on September 28, 1936, in Corsicana, Tex., be assigned call letters WOLF, since it is policy of Commission to assign stations west of Mississippi River call letters beginning with "K".

NEW—Philip J. Wiseman, Lewiston, Me.—Granted petition to intervene at hearing of application of Paul Sullivan Andrews for new broadcast station at Lewiston, Me.

WTCN—Minnesota Broadcasting Corp., Minneapolis, Minn.—Reconsidered and granted application for modification of license so as to operate full time instead of 6/7 time on present frequency of **1250 kc.**

WCAL—St. Olaf College, Northfield, Minn.—Reconsidered and granted application to change frequency from **1250 kc.** to **760 kc.** and to increase power to 5 KW daytime only, sharing time with WLB. WCAL to use 1/3 daytime.

WLB—University of Minnesota, Minneapolis, Minn.—Reconsidered and granted application to change frequency from **1250 kc.** to **760 kc.** and to increase power to 5 KW daytime only. WLB is to operate 2/3 daytime.

WGPC—Americus Broadcast Corp., Albany, Ga.—Granted petition to postpone hearing on renewal of license from November 2 to November 19.

NEW—John S. Braun, Waco, Tex.—Granted petition to continue hearing scheduled for November 11, 1936, in re application for C. P. to erect a new broadcast station at Waco, Tex., to operate on **1500 kc.,** 100 watts, daytime only, for a period of 90 days. KTSA Broadcasting Co., licensee of WACO, which has been permitted to intervene in the proceedings, has consented to the continuance.

WACO—KTSA Broadcasting Co., Waco, Tex.—Granted petition to intervene in hearing scheduled on application of John S. Braun for C. P. to erect new broadcast station at Waco, Tex., to operate on **1500 kc.,** 100 watts, unlimited time.

NEW—J. W. Plame, Los Angeles, Calif.—Application for C. P. for new station at Vernon, Calif., requesting facilities of KVOE, Santa Ana., Calif., dismissed. Petition filed by KVOE to strike appearance sustained.

NEW—Pacific Acceptance Corp., Los Angeles, Calif.—Reconsidered action of September 22, 1936, granting C. P. for new station to operate on **1200 kc.,** 100 watts daytime, and redesignated application for hearing.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

KABF—James McClatchy Co., Sacramento, Calif.—Granted authority to operate as licensed October 16 to November 1, 1936, relay-broadcast orchestra music from Twin-gardens to KFBK nightly.

WHER—Westinghouse Electric and Manufacturing Co., Chicopee Falls, Mass.—Granted authority to operate as licensed at intermittent intervals beginning October 16 to November 14, 1936, in connection with test flights of Commander Hawks.

W8XIP-W8XIQ-W8XIR—WGAR Broadcasting Co., Cleveland, Ohio.—Granted authority to operate as licensed October 16 from athletic field, Baldwin-Wallace College; October 17 from Western Reserve University; and October 17 to November 17, inclusive, station W8XIR interviews with school children.

KGDE—Radio Station KGDE, Fergus Falls, Minn.—Granted authority to install and use for 30 days Commercial Radio Equipment Co. Type FC two frequency control equipment pending filing and action on formal application.

WEMC—Westinghouse Electric and Manufacturing Co., Chicopee Falls, Mass.—Granted extension of special temporary authority to operate portable-mobile (low frequency relay broadcast) transmitter for period beginning October 16 and ending no later than November 14, aboard Commander Hawks' plane for rebroadcast of test flight; frequencies **1606, 2022, 2102, 2758 kc.,** 15 watts.

KGFX—Dana McNiel, Pierre, S. Dak.—Granted special temporary authority to Mrs. Dana McNeil to operate station KGFX for period October 17 to November 15, 1936, pending receipt and action on application for consent to involuntary assignment of license.

King-Trendle Broadcasting Corp., Detroit, Mich.—Granted authority to transmit sustaining programs from WXYZ to stations of the Canadian Broadcasting Corp. for a period of 6 months from September 15, 1936.

APPLICATIONS RECEIVED

First Zone

WBZA—Westinghouse Electric & Manufacturing Co., Springfield,
550 Mass.—Construction permit to install a new transmitter and directional antenna; change frequency from **990 kc.** to **550 kc.**; move transmitter from 625 Page Blvd., East Springfield, Mass., to Agawam, Mass., and studio from Hotel Bradford, 275 Tremont St., Boston, Mass., to 140 Chestnut St., Springfield, Mass; also change hours of operation from unlimited when synchronized with WBZ to unlimited time. Amended to request facilities of WDEV. (Suggests that WDEV be assigned to **560 kc.** with present power and hours of operation.

NEW—Troy Broadcasting Company, Inc., Troy, N. Y.—Construc-
950 tion permit to erect a new broadcast station to be operated on **1240 kc.,** 500 watts power, daytime operation. Amended to make changes in equipment, and change requested frequency from **1240 kc.** to **950 kc.,** and power from 500 watts to 1 KW.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Construc-
1200 tion permit to make changes in equipment, erect a vertical antenna, increase power from 100 watts to 100 watts night and 250 watts day, change specified hours.

WGBB—Harry H. Carman, Freeport, N. Y.—Construction permit
1210 to make changes in equipment.

WSAY—Brown Radio Service & Laboratory (Gordon P. Brown,
1210 owner), Rochester, N. Y.—Modification of license to change hours of operation from daytime to unlimited. Request nighttime facilities of WOCL.

NEW—John Glebauskas, Athol, Mass.—Construction permit to
1210 erect a new broadcast station to be operated on **1210 kc.,** 100 watts, specified hours of operation. Amended to give corrected specified hours.

WABY—Adirondack Broadcasting Company, Inc., Albany, N. Y.
1370 —Modification of construction permit (B1-P-1191) for new equipment, move transmitter and studio, requesting further changes in equipment and increase in power from 100 watts to 100 watts night and 250 watts day.

NEW—James D. Scannell, Lewiston, Maine.—Construction permit
1420 to erect a new broadcast station to be operated on **1210 kc.,** 100 watts power, unlimited time. Amended to change frequency from **1210 kc.** to **1420 kc.**

WILM—Delaware Broadcasting Company, Wilmington, Del.—
1420 Authority to make changes in automatic frequency control apparatus.

NEW—Paul J. Gollhofer, Brooklyn, N. Y.—Construction permit
1500 to erect a new broadcast station to be operated on **1500 kc.,** 100 watts power, specified hours, facilities of station WMBQ.

NEW—Broadcasting Service Organization, Inc., Boston, Mass.—Construction permit for a high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 5 watts power.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md.—Construction permit to erect a high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 1 watt power.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md.—License to cover the above.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md.—Construction permit to erect a high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 1 watt power.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md.—License to cover above.

Second Zone

WCHS—Charleston Broadcasting Corporation, Charleston, W. Va.
580 —Voluntary assignment of license from Charleston Broadcasting Corporation to Charleston Broadcasting Company.

WRAX—WRAX Broadcasting Company, Philadelphia, Pa.—Au-
920 thority to transfer control of corporation from Clarence H. Taubel to John Iraci, 60 shares of common stock.

WPEN—Wm. Penn Broadcasting Company, Philadelphia, Pa.—
920 Authority to transfer control of corporation fsom Clarence H. Taubel to John Iraci, 450 shares of common stock.

WPEN—Wm. Penn Broadcasting Company, Philadelphia, Pa.—
920 Modification of license to change hours of operation from share with WRAX to unlimited time, facilities of WRAX.

NEW—Voice of Detroit, Inc., Detroit, Mich.—Construction per-
1120 mit to erect a new broadcast station to be operated on **1120 kc.,** 500 watts power night and 1 KW power daytime, unlimited hours of operation. Amended to give transmitter site as 13 mile road, north of Detroit, Michigan; and install directional antenna for night use.

WALR—WALR Broadcasting Corp., Zanesville, Ohio—Construc-
1210 tion permit to install a new transmitter.

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Construction
1210 permit to install a new transmitter.

NEW—Geo. W. Taylor Co., Inc., Williamson, W. Va.—Construc-
1210 tion permit to erect a new broadcast station to be operated on **1210 kc.,** 100 watts, daytime.

NEW—John H. Stenger, Jr., Wilkes-Barre, Pa.—Construction per-
1260 mit to erect a new broadcast station to be operated on **1260 kc.,** 1 KW power, unlimited time.

WBLK—The Exponent Co., Clarksburg, W. Va.—Modification of
1370 construction permit (B2-P-1127) for a new station, requesting changes in transmitting equipment, approval of vertical antenna, and transmitter site at 5th St. and West

Virginia Ave., Clarksburg, W. Va. Amended: Antenna changes.

NEW—Valley Broadcasting Co., Youngstown, Ohio.—Construc-
1370 tion permit for new broadcast station to be operated on **780 kc.,** 1 KW power, unlimited time. Amended to make equipment changes, specify vertical antenna, change requested frequency from **780 kc.** to **1370 kc.,** power from 1 KW day and night to 100 watts night and 250 watts day.

NEW—West Virginia Newspaper Publishing Co., Buckhannon, W. Va.—Construction permit for a high frequency relay broadcast station on **31600, 35600, 38600, 41000 kc.,** 100 watts power.

Third Zone

WSOC—WSOC, Inc., Charlotte, N. C.—Construction permit to
600 install a new transmitter, erect a directional antenna for night use, change frequency from **1210 kc.** to **600 kc.,** increase power from 100 watts night and 250 watts day to 250 watts night and 1 KW day, move transmitter from 516 W. Trade St., Charlotte, N. C., to 2½ miles north of Charlotte, N. C.

WSPA—Virgil V. Evans, d/b as The Voice of South Carolina,
920 Spartanburg, S. C.—Construction permit to install a new transmitter, erect vertical antenna, increase power from 1 KW to 5 KW. Amended to change frequency from **920 kc.** to **970 kc.**

WBNO—The Coliseum Place Baptist Church, New Orleans, La.—
1200 Construction permit to install new equipment, vertical antenna; change time from shares with WJBW to unlimited; move studio from New Orleans Hotel, 1300 Canal St., New Orleans, La., to St. Charles Hotel, 211 St. Charles St., New Orleans, La., and transmitter from 1376 Camp St., New Orleans, La., to Thalia and South Broad St., New Orleans, La.; requesting facilities of WJBW. (Filed under name of Pelican State Broadcasting Company.) Amended to change frequency from **1200 kc.** to **1500 kc.,** omit request for facilities of WJBW.

WGCM—WGCM, Inc., Mississippi City, Miss.—Construction per-
1210 mit to install new transmitter.

NEW—Charles Chambers and Jack Hawkins, d/b as Alpine Broad-
1370 casting Co., Alpine, Tex.—Construction permit for new broadcast station to be operated on **1370 kc.,** 100 watts power, unlimited time.

KCMC—KCMC, Inc., Texarkana, Ark.—Modification of con-
1420 struction permit (B3-P-1307) to make changes in antenna, move studio and transmitter from 2600 Locust St., Texarkana, Ark., to 317 Pine St., Texarkana, Ark.

WRGA—Rome Broadcasting Corp., Rome, Ga.—Authority to in-
1550 stall automatic frequency control.

NEW—Tulsa Broadcasting Company, Inc., Tulsa, Okla.—Construction permit for a high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 10.5 watts power.

Fourth Zone

KFNF—KFNF, Incorporated, Shenandoah, Iowa—Construction
890 permit to install a new transmitter, erect a vertical antenna, increase power from 500 watts, 1 KW day to 1 KW night and 5 KW day.

WTAD—Illinois Broadcasting Corporation, Quincy, Ill.—Modifi-
900 cation of construction permit (B4-P-1325) to install new transmitter and antenna, and move transmitter, further requesting authority to increase power from 500 watts to 1 KW.

NEW—Edgar L. Bill, Peoria, Ill.—Construction permit to erect a
1040 new broadcast station to be operated on **1040 kc.,** 250 watts daytime.

WCAZ—Superior Broadcasting Service, Inc., Carthage, Ill.— Con-
1070 struction permit to make changes in equipment and increase power from 100 watts to 250 watts.

WDGY—Dr. George W. Young, Minneapolis, Minn.—Construc-
1180 tion permit to install a new transmitter.

WFAM—The South Bend Tribune, South Bend, Ind.—Construc-
1200 tion permit to install new transmitter.

KWLC—Luther College, Decorah, Iowa—Authority to make
1270 changes in automatic frequency control apparatus.

WMIN—Edward Hoffman, St. Paul, Minn.—License to cover con-
1370 struction permit (4-P-B-3310) as modified for new station. Amended: License to cover construction permits, 4-P-B-3310 and B4-P-1230.

WHFC—WHFC, Incorporated, Cicero, Ill.—Modification of con-
1420 struction permit (B4-P-300) for new equipment, and antenna, increase in power, requesting changes in authorized equipment.

NEW—Frank M. Dunham, Fort Dodge, Iowa—Construction per-
1500 mit to erect a new broadcast station to be operated on **1210 kc.,** 100 watts power, unlimited time. Amended: To change frequency from **1210** to **1500 kc.,** hours of operation from unlimited to daytime.

WKBV—KNOX Radio Corp., Richmond, Ind.—Modification of
1500 license to change hours of operation from specified to unlimited time.

Fifth Zone

KFEL—Eugene P. O'Fallon, Inc., Denver, Colo.—Modification of
920 license to change hours of operation from shares equally with KVOD to unlimited time. This application contingent upon granting of application filed by KVOD for change in frequency and hours of operation.

KVOD—Colorado Radio Corp., Denver, Colo.—Modification of
920 license to change frequency from **920 kc.** to **630 kc.,** change hours of operation from shares KFEL to unlimited, contingent upon the granting of KFEL's application for unlimited time.

KYOS—Merced Star Publishing Co., Inc., Merced, Calif.—License
1040 to cover construction permit (B5-P-673) as modified for new station.

KRSC—Radio Sales Corporation, Seattle, Wash.—Modification of
1120 construction permit (B5-P-498) for changes in equipment, increase power, and change hours of operation, requesting authority to install vertical antenna and for approval of transmitter site at 819 Fairview Place, Seattle, Wash.

KSUN—Copper Electric Co., Inc., Lowell, Ariz.—License to cover
1200 construction permit (B5-P-1155) for changes in equipment, new antenna, and increase in power.

KROY—Royal Miller, Sacramento, Calif.—Modification of con-
1210 struction permit (B5-P-713) to make changes in equipment, for approval of antenna and transmitter site at 14th Ave. and 65th St., Sacramento, Calif., and change studio site from 16th and Kay Sts. to Sacramento Hotel, Sacramento, Calif.

KGY—KGY, Inc., Olympia, Wash.—License to cover construction
1210 permit (B5-P-1144) for new equipment.

KALE—KALE, Inc., Portland, Ore.—Modification of license to
1300 change hours of operation from specified hours to unlimited.

KUJ—KUJ, Inc., Walla Walla, Wash.—Construction permit to
1370 make changes in equipment.

KSLM—Oregon Radio, Inc., Salem, Ore.—Modification of con-
1370 struction permit (B5-P-1182) for a new transmitter, requesting changes in authorized equipment.

KECA—Earle C. Anthony, Inc., Los Angeles, Calif.—Authority
1430 to determine operating power by direct measurement of antenna power.

KLS—S. W. Warner and E. N. Warner, d/b as Warner Brothers,
1440 Oakland, Calif.—Construction permit to install vertical antenna, move studio and transmitter from 2201 Telegraph Ave., Oakland, Calif., to 323-327 21st St., Oakland, Calif.

KGA—Louis Wasmer, Spokane, Wash.—Modification of license to
1470 change frequency from **1470 kc.** to **950 kc.,** and power from 5 KW to 1 KW night, 5 KW day.

NEW—Earle Yates, Las Cruces, N. Mex.—Construction permit to
1500 erect a new broadcast station to be operated on **930 kc., 1** KW power, daytime operation. Amended: Changes in equipment, and install vertical antenna, change frequency from **930** to **1500 kc.,** power from 1 KW to 100 watts night and 250 watts day, time from daytime to unlimited.

NEW—S. H. Patterson, Denver, Colo.—Construction permit for a
1570 special broadcast station to he operated on **1570 kc.,** 1 KW, unlimited time. Amended: Changes in antenna and transmitting equipment.

W10XGK—Ben McGlashan, Portable—License to cover construction permit for high frequency relay broadcast station on **31100, 34600, 37600, 40600, 100000, 1400000, 280000, 580000 kc.,** 10 watts.

W6XKG—Ben McGlashan, Los Angeles, Calif.—License to cover construction permit for 1000 watts power for high frequency broadcast station.

The National Association of Broadcasters

NATIONAL PRESS BUILDING * * * * * WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

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IN THIS ISSUE

RADIO LITIGATION

The following broadcasting station appeals are pending in some form or other in the United States Court of Appeals for the District of Columbia as of this date:

Paul R. Heimeyer, Cheyenne, Wyoming, vs. FCC.
Paul R. Heitmeyer, Salt Lake City, Utah, vs. FCC.
Eastland Company vs. FCC.
Congress Square Hotel Company vs. FCC.
The Monocacy Broadcasting Company vs. FCC.
Great Western Broadcasting Association, Inc., Logan, Utah, vs. FCC.
Great Western Broadcasting Association, Inc., Provo, Utah, vs. FCC.
Intermountain Broadcasting Corporation vs. FCC.
W. H. Kindig vs. FCC.
Pulitzer Publishing Company vs. FCC.
Missouri Broadcasting Company vs. FCC.
A. H. Bole vs. FCC.

FULL TIME RECOMMENDED FOR WTHT

WNRI, Newport, R. I., applied to the Federal Communications Commission for an extension of time to complete station construction, to use 1200 kilocycles, 100 watts and 250 watts LS and unlimited time; E. Anthony & Sons, Inc., asked for a construction permit for the erection of a new station at Pawtucket, R. I., to use 1200 kilocycles, 100 watts and 250 watts LS and unlimited time, and WTHT, Hartford, Conn., using 1200 kilocycles, 100 watts power and daytime hours of operation, asked for unlimited time on the air.

Examiner R. H. Hyde, in Report No. I-303, recommended that the application of WTHT be granted for full time operation; that the application for time extension for the erection of a new station by S. George Webb called WNRI be terminated "by allocation of the frequency involved for the operation of WTHT, and that the application of E. Anthony & Sons, Inc., be denied."

STATUS OF RECORD SUITS

On July 8th, 1936, the National Association of Performing Artists caused to be filed against the owners of Station WHN a suit in the New York Supreme Court in the County of New York in the name of Frank Crumit asking that the station be enjoined from broadcasting any of the Crumit records in the future. Simultaneously with the filing of the suit the plaintiff secured an order from the Court to compel the station to show cause why an injunction should not be granted immediately and this motion was returnable on July 15th. The station required some additional time to investigate the facts and prepare its defense papers due to the short notice of this motion for temporary relief and accordingly secured an extension of time from the plaintiff's attorney, Maurice J. Speiser, to July 29th and again to August 5th. On August 5th the defendant was prepared to proceed with the argument of the motion in opposition to the demand for a temporary injunction, but the plaintiff's counsel claimed not to be ready. The following is a record of the adjournments secured at the request of Mr. Speiser:

August 5th to August 19th
August 19th to September 2nd
September 2nd to September 16th
September 16th to September 30th
September 30th to October 21st
October 21st to November 18th

It is safe to assume that NAPA is unwilling to go ahead with this suit. It is also self evident that the delay of over three months by the plaintiff is proof that a temporary injunction is not at all necessary.

In the suit by Whiteman in the United States District Court for the Southern District of New York nothing has happened since the filing of the answer by Station WNEW early in September.

In August NAPA caused to be filed a suit in the name of Abe Lyman in the Circuit Court of Cook County, Ill., against Station WGES, requesting an injunction, an accounting of profits and the sum of $5,000, together with costs and attorneys' fees. An immediate injunction was asked but was denied by the Court when the station offered to give plaintiff's counsel a letter to the effect that it would not play any more of Abe Lyman's records in the future. The present status of the case is that it will probably be referred to a Master of the Court for trial since the plaintiff indicates that it is not satisfied with the letter agreeing not to play any more Abe Lyman records. The attitude of the Court in refusing a temporary injunction apparently surprised the plaintiff's counsel, and so another suit was commenced, this time in the United States District Court for the Northern District of Illinois, Eastern Division, in the name of Connie Boswell, asking for an injunction and costs and attorneys' fees, on September 15, 1936. This case is being defended by the station and an answer will shortly be filed by it.

The American Society of Recording Artists, Inc., filed a suit in its name in the California Superior Court, Los Angeles County, against Station KFWB, for an injunction and an accounting for the broadcasting of Jan Garber records on or about August 27, 1936. This case is being defended by the station which filed an answer on or about October 5th. Another suit was filed by ASRA in the same court on September 23rd against Station KFAC, asking for an injunction and an accounting. This case is also being defended by the station and an answer will be filed shortly. The case involves the artists Victor Young and Don Bestor.

If the amazing procrastination of NAPA in the Crumit case is at all indicative, then we may assume that NAPA and ASRA in the other cases will endeavor to delay as long as possible bringing the suits to the point where they may be decided by the Courts.

NOTES FOR THE SALES STAFF

The extent to which the summer slump has been beaten in 1936 should prove important sales data for use in the spring of 1937. (See Total Broadcast Advertising, page 1748 in the present report and Total Broadcast Advertising, page 1588 in the July report of October 1, 1936.)

The continued strength of local and regional station volume in the non-network field should be of interest to the sales staffs of stations in these groups. (See Non-network Advertising, page 1748.)

The marked gains shown by national announcement business and local transcription business during August also are significant in the planning of future business. (See Non-network Advertising by Type of Sponsoring Business, page 1750.)

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities and Exchange Commission under the Securities Act:

Henry Fischer Packing Company, Louisville, Ky. (2-2544, Form A-2)

Morgan J. Hammers, New York City (2-2545, Form F-1)

Abbott Laboratories, North Chicago, Ill. (2-2546, Form A-2)

Murray Ohio Manufacturing Co., Cleveland, Ohio (2-2547, Form A-2)

Detroit-Michigan Stove Company, Detroit, Mich. (2-2548, Form A-2)

Washington National Cemetery Corp., Washington, D. C. (2-2549, Form A-1)

Bondholders Committee Council Bluffs Railway Co., Omaha, Nebr. (2-2550, Form D-1)

Faulkenham Lake Gold Mines, Ltd., Toronto, Canada (2-2551, Form A-1)

Silver Summit Mining Company, Wallace, Idaho (2-2552, Form A-1)

Mountain State Water Company, Philadelphia, Pa. (2-2553, Form A-2)

Turners Falls Power & Electric Co., Turners Falls, Mass. (2-2554, Form A-2)

ROBERT E. BLYTHE

Anyone considering doing business with Robert E. Blythe, operating as a one-man agency, should communicate with W. N. McGill, Station KGGC, San Francisco.

RECOMMENDS DENIAL AS IN DEFAULT

Theodore E. Johnson filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new station at Houston, Texas, to use 1210 kilocycles, 100 watts power and unlimited time on the air.

Examiner Ralph L. Walker in Report No. I-302 has recommended that the "application be denied as in cases of default." When the case was called for hearing the applicant failed to appear and no evidence was offered in support of the application.

BROADCAST ADVERTISING IN AUGUST

Highlights of the Month

Broadcast advertising during August continued to show less in the way of a seasonal decline than during the preceding year. Total radio volume declined 3.1% from the July level as compared to 3.5% in the case of the previous August.

Total gross time sales for the month of August amounted to $6,994,675 and were 24.1% greater than during the corresponding month of 1935. Gains were fairly strong throughout all portions of the medium, with national non-network advertising alone showing weakness. The increase in the national non-network field was but half as great as for the medium as a whole.

Local and regional stations continued to experience the greatest gain in advertising volume as compared to the corresponding period of the preceding year. Non-network advertising also exhibited marked strength in the South.

In the non-network field, the two principal developments of interest during the month were the marked increase in national announcement volume and in local transcription business. All forms of rendition declined to generally the same degree as compared to the preceding month.

Decreases were general in various sponsor groups as compared to July. Several exceptions of importance occurred. Local gasoline and accessory and clothing advertising rose materially, while national non-network food advertising increased 5.6%. Regional network and national non-network soap and kitchen supply volume and national network and national non-network radio set advertising also rose during the month.

Compared to August 1935, gains were fairly general throughout the entire sponsor field. Local automotive volume rose materially, though other automotive broadcast advertising showed weakness for the first time in many months. Regional network gasoline and accessory and drug advertising increased materially.

National network beverage, confectionery, soap and kitchen supply, radio set and tobacco volume increased to an important degree. National non-network drug and cosmetic advertising also increased. In addition to a 53.1% rise in local automotive volume, a marked gain was experienced in local department store advertising over the radio.

Total Broadcast Advertising

Total broadcast advertising during the month of August is found in Table I.

TABLE I

TOTAL BROADCAST ADVERTISING

	1936 Gross Time Sales		
Class of Business	*July*	*August*	*Cumulative Jan.-August*
National networks	$3,832,320	$3,776,885	$35,791,181
Regional networks	113,705	114,990	873,168
National non-network	1,661,200	1,518,200	14,707,260
Local	1,625,000	1,584,600	13,657,470
Total	$7,232,225	$6,994,675	$65,029,079

Broadcast advertising declined in volume 3.1% from the level of the previous month. With the exception of regional network business, which remained unchanged, all portions of the medium experienced decreases. The heaviest dropping off in volume occurred in the national non-network field, where it amounted to 8.6% of July volume. National network advertising declined 1.4% and local business 2.4%.

When compared to August of the preceding year, all forms of broadcast advertising gained. National network volume rose 28.5%, while regional network advertising increased 38.6%. Local advertising increased 25.0%. National non-network business experienced the least increase over the previous year, rising but 12.7%.

Comparison with Other Media

Advertising volume by major media during the month under consideration is set forth in Table II.

TABLE II

ADVERTISING BY MAJOR MEDIA

	1936 Gross Time and Space Sales		
Advertising Medium	*July*	*August*	*Cumulative Jan.-August*
Radio broadcasting	$7,232,225	$6,994,675	$65,029,079
National magazines[1]	8,907,011	8,505,337	92,169,232
National farm papers[1]	398,892	422,624	4,552,281
Newspapers[2]	44,085,000	41,084,000	360,875,000
Total	$60,623,128	$57,006,636	$522,625,592

[1] Publishers Information Bureau.
[2] Estimated.

Seasonal declines were prevalent in the case of all media. National magazine advertising decreased 4.6%, national farm paper volume 5.9%, and newspaper advertising 6.8%. Gains as compared to the corresponding month of the preceding year also were general. National magazine advertising was 15.2% more than during August 1935. National farm paper volume rose 38.0%. Newspaper lineage increased 9.8%.

Non-network Advertising

General non-network advertising decreased 5.5% as compared to July, but experienced a gain of 18.7% when comparison was made with August of last year. The greatest decrease as against July occurred in the clear channel and high powered regional field where non-network volume decreased 12.4%. Regional station advertising remained practically unchanged, decreasing but 0.7% during the month. Local station business decreased 2.6% as against July.

As against August of last year, clear channel station non-network business decreased 6.6%, due principally to rising national network volume. Regional station non-network advertising rose 33.1%, while local volume gained 61.6%.

Broadcast advertising in the non-network field by power of station is found in Table III.

TABLE III
NON-NETWORK ADVERTISING BY POWER OF STATION

Power of Station	1936 Gross Time Sales July	August	Cumulative Jan.-August
Over 1,000 watts	$1,281,400	$1,121,800	$12,267,540
250–1,000 watts	1,420,800	1,411,900	11,631,450
100 watts	584,000	569,100	4,465,740
Total	$3,286,200	$3,102,800	$28,364,730

Trends in non-network broadcast advertising volume by various sections of the country are set forth in Table IV.

TABLE IV
NON-NETWORK BROADCAST ADVERTISING BY GEOGRAPHICAL DISTRICTS

Geographical District	1936 Gross Time Sales July	August	Cumulative Jan.-August
New England-Middle Atlantic Area	$595,300	$701,300	$6,099,250
South Atlantic-South Central Area	727,500	671,800	5,703,870
North Central Area	1,286,800	1,175,600	11,139,330
Pacific and Mountain Area	676,600	554,100	5,422,280
Total	$3,286,200	$3,102,800	$28,364,730

Non-network advertising in the Middle Atlantic and New England States alone increased as compared to July, rising 17.8%. Declines in other sections of the country were as follows: North Central States, 8.6%; South Atlantic and South Central States, 7.6%; Mountain and Pacific States, 18.1%.

With the exception of the Mountain and Pacific States, where volume remained unchanged from August of the preceding year, all sections of the country experienced increases. Non-network volume in the Middle Atlantic and New England States rose 14.2%, while that in the South increased 96.9%. Non-network business in the North Central States gained 6.5%.

Non-network Advertising by Type of Rendition

Declines were experienced in all forms of rendition during the month. Total transcription business decreased 15.4%, live talent volume 4.2%, records 8.6%, and announcements 8.0%.

The principal decrease in the national non-network field occurred with regard to transcriptions, where volume dropped 15.3% from the July level. Live talent business decreased 2.6% and announcements 9.4%.

Transcriptions also experienced the greatest decrease in the local field. In this case the decline was 15.7%. Local live talent advertising declined 6.6%.

Non-network broadcast advertising by type of rendition is found in Table V.

TABLE V
NON-NETWORK ADVERTISING BY TYPE OF RENDITION

Type of Rendition	National non-network July	August	1936 Gross Time Sales Local July	August	Total July	August	Cumulative Jan.-August
Electrical transcriptions	$601,100	$509,000	$201,300	$169,700	$802,400	$678,700	$7,205,050
Live talent programs	697,840	679,500	782,160	738,500	1,480,000	1,418,000	13,541,770
Records	8,800	9,700	63,400	57,300	72,240	67,000	562,360
Announcements	353,460	320,000	578,100	619,100	931,560	939,100	7,055,550
Total	$1,661,200	$1,518,200	$1,625,000	$1,584,600	$3,286,200	$3,102,800	$28,364,730

The most important gain in the national non-network field, as compared to August 1935, was the 77.7% rise in announcement volume. Transcription business remained 7.1% above the level of the corresponding month of the preceding year. Live talent business showed a decline for the first time in a long while. The decrease was 9.8% below the level of August of last year.

In the local field transcription business experienced the greatest gain, rising 63.3% above last August. Gains were fairly even throughout other types of rendition and were as follows: live talent 24.2%, records 29.6%, announcements 21.3%.

Total non-network volume experienced the following gains with regard to the various types of rendition: transcription 17.1%, live talent 10.7%, records 1.5%, announcements 36.1%.

Sponsor Trends in August

Declines were general with regard to the advertising of all sponsoring groups when comparison is made with July. There were but few exceptions to this trend. Local clothing volume increased 25.0%, while gasoline and accessory advertising in that field increased 17.3%. National non-network food advertising rose 5.6%. Regional network soap and kitchen supply advertising gained 9.2% over July, while national non-network volume in the same field rose 4.1%. National network and national non-network radio set advertising increased 6.1% and 7.0%, respectively. General gains were experienced in the miscellaneous group.

Comparison with Preceding Year

A number of important gains were experienced as compared to August 1935, while a number of significant decreases in broadcast advertising volume also occurred. National network beverage advertising rose 58.8%, while confectionery volume almost tripled. National network soap and kitchen supply advertising increased 82.3%, radio set volume 156.6%, and tobacco advertising 116.9%.

In the regional network field gasoline and accessory sponsorship rose 45.8%, drug volume 79.7%, and beverage advertising more than tenfold. Tobacco volume decreased 52.2%.

National non-network drug advertising increased 43.5% and cosmetic volume rose 155.1%. Automotive advertising declined 15.6%, confectionery volume 56.0%, and household equipment business 40.8%.

The principal trends of importance in the local broadcast advertising field were a rise of 53.1% in automotive advertising, and an increase of 29.0% in department store volume.

Broadcast advertising during August by various sponsoring groups is found in Table VI.

Detailed information regarding various sponsor groups during the month under consideration is as follows:

1a. ***Amusements.*** National non-network volume 33.1% and local 35.3% above July. National non-network volume 136.6% and local 20.8% above August 1935. Total volume 35.7% above last August.

1. ***Automotive.*** General declines occurred from the July level as follows: national networks, 16.5%; national non-network, 25.7%; local 51.6%. Declines from August of preceding year were as follows: national networks, 9.3%; national non-network, 15.6%. Local volume up 53.0%. Total volume down 3.9%.

2. ***Gasoline and accessories.*** Decreases from the July level as follows: national networks, 3.6%; regional networks, 12.1%; national non-network, 28.3%. Local up 17.3%. National network volume 2.1% below the corresponding month of the preceding month. Gains in other portions of the medium were as follows: regional networks, 45.8%; national non-network, 18.7%; local, 1.2%. Total volume rose 3.1%.

3. ***Clothing.*** Local volume 25.0% above July. National network business down 20.0% and national non-network 14.8%. Gains as compared with last August as follows: national networks, 373.8%; national non-network, 3.8%; local, 17.4%. Total volume up 8.9%.

TABLE VI

RADIO BROADCAST ADVERTISING BY TYPE OF SPONSORING BUSINESS

(August 1936)

Type of Sponsoring Business	Gross Time Sales: National Networks	Regional Networks	National Non-networks	Local	Total
1a. Amusements	—	—	$18,080	$62,360	$80,440
1–2. Automobiles and accessories:					
1 Automobiles	$125,900	—	162,260	80,570	368,730
2 Accessories, gas and oils	341,860	$19,460	103,510	66,520	531,350
3. Clothing and apparel	4,101	—	23,220	217,070	214,391
4–5. Drugs and toilet goods:					
4 Drugs and pharmaceuticals	321,520	6,578	199,960	44,160	572,218
5 Toilet goods	654,266	5,730	82,960	20,670	763,626
6–8. Food products:					
6 Foodstuffs	802,841	28,370	342,920	209,080	1,383,211
7 Beverages	306,784	10,228	60,970	106,550	484,532
8 Confections	97,350	200	5,150	1,730	104,430
9–10. Household goods:					
9 Household equipment and furnishings	35,936	5,447	30,030	156,570	227,983
10 Soap and kitchen supplies	282,295	3,032	161,420	5,500	452,247
11. Insurance and financial	38,486	643	18,950	64,330	122,409
12. Radios	110,260	—	28,530	12,260	151,050
13. Retail establishments	—	—	3,870	130,820	134,690
14. Tobacco products	396,850	9,950	57,720	9,110	473,630
15. Miscellaneous	258,436	25,352	218,650	397,300	899,738
Total	$3,776,885	$114,990	$1,518,200	$1,584,600	$6,994,675

4. ***Drugs and pharmaceuticals.*** National network volume unchanged from July. Declines in other portions of the medium were as follows: regional networks, 5.9%; national non-network, 17.7%; local, 14.6%. Increases as compared to August of last year as follows: national networks, 7.4%; regional networks, 79.7%; national non-network, 43.5%; local, 35.8%. Total advertising increased 20.5%.

5. ***Toilet goods.*** With the exception of local volume, which remained unchanged, various portions of the medium declined from the July level as follows: national networks, 12.0%; regional networks, 28.0%; national non-network, 18.5%. National network advertising 4.5% below August 1935. National non-network business 155.1% above the corresponding period of last year and local up 14.2%. Total volume up 3.8%.

6. ***Foodstuffs.*** National non-network advertising 5.6% above July. National network volume down 6.5%, regional networks 18.6%, and local 4.6%. Gains compared to the corresponding month of last year as follows: national networks, 13.0%; regional networks, 37.7%; national non-network, 0.8%; local, 10.0%; and total, 9.6%.

7. ***Beverages.*** Declines from the July level as follows: national networks, 7.7%; regional networks, 35.0%; national non-network, 9.2%; local, 15.1%. National non-network advertising 9.5% below the August of last year. Other gains as follows: national networks, 58.8%; regional networks, 1147.3%; local, 19.4%. Total advertising up 38.2%.

8. ***Confectionery.*** Decreases from the July level as follows: national networks, 9.3%; national non-network, 10.1%; local, 13.5%. National network advertising 250.2% above last August. National non-network business down 56.0% and local 87.2%. Total volume up 38.2%.

9. ***Household equipment.*** Declines from the previous month were as follows: national networks, 19.3%; regional networks, 4.8%; national non-network, 42.1%; local, 18.4%. National network advertising 44.3% greater than during the corresponding month of last year. Regional network volume down 13.3%, national non-network business down 40.8%, and local up 0.2%.

10. ***Soaps and kitchen supplies.*** Regional network and national non-network volume 9.2% and 4.1% above July, respectively. National network business down 8.3% and local 47.6%. National network business 82.3% above last August. Regional network volume down 38.6% and local 15.4%. National non-network up 5.2%. Local up 41.4%.

11. ***Insurance and financial.*** National network advertising 7.2% above the July level. National non-network down 10.9% and local 3.0%. National network volume 114.6% above August of last year, regional networks 38.6%, and local 43.5%. National non-network down 29.0%.

12. ***Radios.*** National network volume 6.1% above July. National non-network business up 7.0%. Local down 16.6%. Gains over the previous August as follows: national networks, 156.6%; national non-network, 16.4%; local, 58.1%. Total volume up 145.5%.

13. ***Department and general stores.*** National business unchanged from July and local down 8.2%. Compared to August 1935, national volume down 66.7% and local up 29.0%. Total volume up 18.3%.

14. ***Tobacco products.*** National network and national non-network advertising 5.6% and 25.0% below July, respectively. Regional network business up 91.1% and local 127.7%. Compared to August of the preceding year, national network increased 116.9%, national non-network, 14.7%, and local, 41.2%. Regional network business declined 52.2%.

15. ***Miscellaneous.*** National network and national non-network advertising 72.4% and 3.6% above July, respectively. Regional network business up 64.7% and local down 6.3%. Gains compared to August of last year as follows: national networks 210.0%; regional networks, 236.8%; national non-network, 58.1%; and local, 57.6%. Total volume up 86.7%.

Retail Broadcast Advertising

Broadcast advertising by retail establishments of various types is set forth in Table VII.

TABLE VII

RETAIL BROADCAST ADVERTISING OVER INDIVIDUAL STATIONS

Type of Sponsoring Business	1936 Gross Time Sales: July	August
Automobiles and accessories:		
Automobile agencies and used car dealers	$128,100	$80,540
Gasoline stations, garages, etc	30,200	37,300
Clothing and apparel shops	180,350	222,510
Drugs and toilet goods:		
Drug stores	11,210	11,660
Beauty parlors	8,050	7,410
Food products:		
Grocery stores, meat markets, etc	47,820	40,510
Restaurants, eating places	17,500	16,700
Beverage retailers	700	1,000
Confectionery stores	890	1,030
Household goods:		
Household equipment dealers	81,680	60,640
Furniture stores	91,900	84,290
Hardware stores	13,500	11,510
Radio retailers	12,200	12,910
Department and general stores	122,800	134,690
Tobacco shops	—	—
Miscellaneous	97,400	102,240
Total	$844,300	$824,940

Declines were fairly general during the month, with several notable exceptions. Gasoline filling station and accessory store volume increased 23.0%, clothing and apparel shop volume rose 23.4%, and department store advertising 9.7%. Total retail volume declined 2.3% during the month.

Gains occurred in the majority of the more important retail fields as compared to August of last year. Principal gains were as follows: automotive dealers, 61.1%; filling stations and accessory stores, 21.4%; household equipment dealers, 14.4%; department and general stores, 18.3%. General retail volume gained 16.8% as compared to the corresponding period of last year.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will he given an opportunity for hearing to show cause why cease and desist orders should not he issued against them.

No. 2540. Unfair competition in the interstate sale of luggage and other leather products is alleged in a complaint issued against **George Landon** and **Michael Mason Warner, Jr.,** 360 North Michigan Ave., **Chicago,** trading as **Landon and Warner.**

Gladstone hags are said to have heen described hy the respondents as "genuine cowhide," "made only of choice leathers" and of "A-1 quality leather," when, according to the complaint, they were not made of genuine cowhide or leather.

The complaint also charges the respondents with advertising that initial letters and frames placed on Gladstone hags, and metallic corners and snap buttons on bill folds, were 14-K gold, when in fact the initial letters and frames were 14-K gold-plated and the metallic corners and snap buttons were other than 14-K gold.

No. 2943. Misrepresentations in the sale of liquors are alleged in a complaint issued against the **Fort Clark Distilleries, Inc.,** manufacturer and bottler, 915 Forsythe St., **Peoria, Ill.**

Pointing out that the respondent company does not own or control a place where liquors are made hy a process of original distillation from mash, wort or wash, the complaint alleges that its use of the word "Distilleries" in its corporate name has a tendency to deceive dealers and the purchasing puhlic into believing that the company's products are made through a process of distillation.

The respondent company is not a distiller, according to the complaint, although it does operate a still for use in the production of gins by a process of rectification wherehy alcohol, purchased but not produced hy the company, is redistilled over juniper berries and other aromatics.

No. 2945. A complaint has been issued against **Pascal Company, Inc.,** 1014 American Bank Building, **Seattle, Wash.,** charging unfair competition in the sale of a medicinal preparation for treating asthma, hay fever and kindred diseases.

Manufacturing and selling its product known as "Breatheasy" and of an atomizer or so-called "nebulizer" for administering "Breatheasy," the respondent company, advertising in newspapers, over the radio, and in circulars, is alleged to have represented its product as a great discovery created by a physician to successfully cure his own asthma, and as a treatment for asthma which ohviates the necessity of a special diet.

However, the complaint charges that "Breatheasy" is not a remedy for and it does not cure asthma. The complaint points out that in any treatment for asthma the proper diet is essential, as mucus-forming foods are injurious, but that the respondent company has created the erroneous impression that in the use of "Breatheasy" it is not necessary to follow any particular diet.

No. 2946. Charging unfair methods of competition, a complaint has heen issued against **Worthmore Sales Promotion Service, Incorporated,** 6256 Champlain Ave., **Chicago,** engaged in selling sales promotion cards said to be so arranged as to involve a lottery scheme when used by retail merchants in promoting the sale of their merchandise.

According to the complaint, merchants, acting upon the suggestion of the respondent corporation, distrihute the cards free to customers, and when purchases are made, punches corresponding to the amount of such purchases are made around the margin of the card. The complaint sets out that when all numhers around the margin are punched, a secret panel in the center of the card is opened and the customer is entitled to merchandise in the amount shown hy the legend under the panel, the awards ranging from 20 cents to $10.

Instructions printed on the card, it is said, provide that the merchant shall open the secret panel, and that the card becomes void if the customer opens it. The legend under the panel is effectively concealed until the panel has been opened, and the amount of merchandise the holder of the card will receive as a prize is thus determined wholly hy lot or chance, the complaint alleges.

No. 2950. Allegedly representing that the chinaware it sells is manufactured and decorated in Limoges, France, when such is not a fact, **Tolpin Studios, Inc.,** 2129 West Van Buren St., **Chicago,** is named respondent in a complaint charging unfair methods of competition.

The favorahle reputation of "Limoges" china for utility and beauty has heen developed over a period of 150 years, according to the complaint, and the word "Limoges," when applied to chinaware, is said to signify a product manufactured at Limoges, France.

The complaint alleges that the respondent corporation imports or purchases from importers plain and undecorated articles of chinaware, known to the trade as "blanks," and which are produced in countries other than France. Before reselling the chinaware to wholesalers and retailers, the respondent is said to stamp the "hlanks" with the words "Limoges, French Decoration, Handpainted" and to decorate them with pictorial representations of French scenes and designs suggestive of Limoges chinaware or characteristic of France.

No. 2952. Charging unfair competition in promoting the sale of mushroom spawn in interstate commerce, a complaint has heen issued against **Maurice Willens,** 431 North Clark St., **Chicago,** trading under the name **Mushroom Growers of America.**

Use of the name "Mushroom Growers of America" and of certain assertions in advertising serve to represent to purchasers that Willens' firm is a large and substantial organization or trade association maintaining a staff of experts. This is not true, according to the complaint, as the name is simply a firm name or style adopted by Willens to induce huyers to patronize him under the false impression that they are dealing with a hona fide trade organization.

No. 2953. Alleging false and misleading advertising in the sale of a medicinal preparation called "Biotone", a complaint has heen issued against **Biotone Laboratories, Inc.,** and **Rocky Mountain Laboratories, Inc.,** 18 West Second South St., **Salt Lake City, Utah.**

Advertising in newspapers, magazines and over the radio, the respondent company is alleged to have represented that "Biotone" is the natural solution for all health prohlems; that the average individual is not getting the elements from his food supply to maintain a normal chemical halance in the hody, and that "Biotone" supplies these elements; that most common ailments have their origin in the digestive system, and that "Biotone" has healing qualities that correct serious intestinal disorders.

No. 2954. Central Pattern & Foundry Company, 3737 South Sacramento Ave., **Chicago,** is named respondent in a complaint charging unfair competition in the sale of aluminum and other castings.

In representing its products to prospective customers, the respondent company is alleged to have offered, through circular letters, clean, smooth, aluminum castings at a price as low as 23 cents a pound, using only "new ingot metals." The complaint points out that the phrase "new ingot metals" means castings made from virgin ingots, and that the respondent company's castings were not made from virgin ingots, and were not "new ingot metals" as understood by the trade. These castings, according to the complaint, were made from secondary or so-called numher two grade of No. 12 remelted metals and alloys.

No. 2956. Charged with unfair competition in the interstate sale of baby chicks, **A. L. Hilkemeyer** and **R. J. C. Tricou,** 822 Poydras St., **New Orleans,** trading as **Louisiana Hatcheries,** have heen named respondents in a complaint.

In newspapers and other periodicals having interstate circulation, the respondents are alleged to have advertised "Commercial White Leghorns from trapnested pedigreed hreeders," when, according to the complaint, the bahy chicks so offered were not white leghorn stock, trapnested and pedigreed as those terms are understood in the trade.

The complaint points out that the trade understands the phrase "chicks from trapnested stock" to mean that they are produced from "dams" that have heen trapnested for at least 51 consecutive weeks, and that the "sires" of such chicks are individually pedigreed. Industry memhers are also said to understand that the term "pedigreed," applied to chicks, designates those individually pedigreed, to the extent that the exact and precise parentage of each chick and egg, and records of ancestors for at least two generations, are known.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1794. Eldon M. Graves, trading as Graves Laboratories, 524 South Spring St., Los Angeles, and selling "Graves' Home Treatment for Alcoholism," signed a stipulation to cease and desist from representing that his product is a specific treatment or cure for alcoholism; that the product or the advertising matter used in selling it has been submitted to or approved by any department or official of the United States Government; that it is safe in all cases, and that it is prepared in his laboratories, when such is not a fact. He also will cease advertising purported guarantees which are not executed or are effected only upon conditions not made known in the advertisements.

No. 1795. Rubin E. Rappeport, trading as R. E. Rappeport, 1700 West Monroe St., Chicago, agrees to cease branding leather luggage as "Cowhide" so to imply that his products are composed of leather made from the top or grain cut of cowhide. He also stipulates that if his products are composed of leather made from the inner or flesh cut of the hide, and the word "Cowhide" is used as descriptive thereof, then that word shall be accompanied by other words in type equally as conspicuous as that in which the word "Cowhide" is printed, so as to indicate clearly that the products are not of leather made from the top or grain cut.

No. 1796. Nostane Products Corporation, trading as Dr. Brown's Laboratories, 68 Jay St., Brooklyn, stipulates that in the sale of aspirin it will stop representing that aspirin is tasteless, that it will relieves colds or do more than temporarily allay the pain resulting from colds, or that when used for the treatment of headaches, neuralgia or muscular pains, it is anything more than a palliative, or will accomplish more than a temporary allaying of the pain caused by simple cases of such ailments. Nothing in the stipulation shall be construed as preventing Nostane Products Corporation from making proper therapeutic claims based upon reputable medical opinion or recognized medical or pharmaceutical authority, according to the agreement.

No. 1797. Charles and Isadore Levin, trading as Levin Brothers, 39 West 23d St., New York City, and selling two brands of shaving cream, one designated "Elgin" and the other "Stetson," will discontinue marking their products with any fictitious or exaggerated price in excess of that for which the products are sold or intended to be sold in the usual course of trade. They also agree to desist from using on cartons the word "laboratories" so as to tend to create the impression that they manufacture shaving cream or that they own or operate a plant or laboratory in which their products are made, when such is not a fact.

No. 1799. The Forest City Rubber Company, 1276 Ontario St., Cleveland, is engaged in the sale of absorbent cotton, gauze bandages, adhesive tape, and foot aids. The company, which trades as Sentinel Products Corporation and as Sentinel Products Division of The Forest City Rubber Company, agrees to cease using on the containers of its products the word "sterilized" or the phrases, "Guards against infection," "Guards the health," and "Practical for all surgical and household needs," so as to imply that the products are sterile or free from bacteria when purchased by the consuming public, when such is not a fact. The company also will discontinue use of the statement, "This cotton was thoroughly sterilized during process of manufacture," unless accompanied by other words printed in type equally conspicuous, so as to indicate clearly that there is no assurance that the product continues to be or remains sterile at the time of its purchase by the ultimate consumer.

No. 1800. Aspirin Company of America, 525 West 43d St., New York City, and its subsidiary, American Pharmaceutical Company, Inc., will discontinue representing that the aspirin they sell in interstate commerce has been freed from all uncombined salicylic acid, thereby preventing gastric disturbances, and that it is odorless and tasteless, when such is not a fact.

No. 1801. P. Lindhorst, Inc., 49 West 23d St., New York City, engaged in the sale of imported tapestry and tapestry wool under the trade names "Lindhorst's Lady Tapestry Wool" and "Lady's Tapestry Wool," will cease and desist from use of the word "mothproof" as a brand or label on its products, and from use of any similar word which may imply that its products are immune against the ravages of moths, when such is not a fact.

No. 1802. Timothy Wiglesworth, trading as Brawner Serum Company, 602 West 20th St., Kansas City, Mo., dealing in livestock treatments, will cease and desist from the use on letterheads or in advertisements of the words "Producers Animal Biologics—Pharmaceuticals" in connection with his trade name or in any manner which may imply that Brawner Serum Company is the producer of the animal "biologics" and pharmaceuticals sold by Wiglesworth, when such is not a fact; and from making exaggerated statements of the retail selling value of syringes offered as a premium for the purchase of the products, and understating or underestimating to any material extent the cost of the products included in combination deals, so that customers are deceived. According to the stipulation, Wiglesworth deals in anti-hog cholera serum and hog cholera virus produced by the Brawner Serum Company, of Converse, Mo., and in animal "biologics" and pharmaceuticals produced by companies other than the Brawner Serum Company.

No. 1803. W. J. and Rose Tibbals, trading as Roselawn Poultry Farm, 620 West 3d St., Dayton, Ohio, agree that in selling baby chicks they will discontinue representations to the effect that competitive hatcheries engaged in the sale of sexed chicks are "unscrupulous racketeers," or that the sale of such chicks is a "racket." They also will stop representing that the mortality rate among sexed chicks has been found to be higher or different from the mortality rate of unsexed chicks; that the average accuracy of persons engaged in segregating chicks according to sex is only 71 per cent and not 90 per cent as claimed by experts; that sexed pullets cost at least 10 per cent more than unsexed chicks, and that such increased costs may run as high as 50 per cent more, when such are not the facts.

No. 1804. Pakula & Co., 5 North Wabash Ave., Chicago, agrees to stop representing that its rings are "cameo," "intaglio" or "hematite" rings; that the mountings of such rings are of gold, chromium or rhodium, and that it is a manufacturers' distributor, when such are not the facts.

No. 1805. Walter Spiegel, trading as Regal Manufacturing Company and Playland Supply Company, 118 East 28th St., New York, signed an agreement to cease use of the word "Majestic" alone or with the word "International," or with any other words, as a brand for radio sets which are not products manufactured by Grigsby-Grunow Company, and from use of the word "Majestic" in any manner implying that his radio sets are manufactured by Grigsby-Grunow Company, when such is not a fact. According to the stipulation, the Grigsby-Grunow Company, makers of "Majestic" radio sets, acquired a valuable good-will in that name, which name, used in connection with radio receiving sets, is now vested in Frank McKey, trustee in bankruptcy for the creditors of Grigsby-Grunow Company.

No. 1806. Algren Manufacturing Co., Inc., 8 Washington Place, New York, will discontinue use of the words and symbols "12 K. Gold Shell" as a stamp or brand on wrist watch buckles or on any of the products it sells, unless they contain a layer or shell of gold of substantial thickness on the outside, and unless the words "12 K. Gold Shell" are preceded by a fraction designating the correct proportion of the weight of the shell to the weight of the entire article.

No. 1807. American Candy Co., of Milwaukee, has been served with an order to cease and desist, requiring the company to discontinue lottery methods in the sale of candy to wholesalers, jobbers and retailers.

Among devices used in the sale of the respondent company's candy, according to findings, were the push card and "break and take," "draw" or "deal" assortments.

An order to cease and desist against this respondent company covering lottery practices was issued by the Commission in 1934. Later, the Commission vacated this order and served upon the respondent company an amended and supplemental complaint charging certain additional practices.

Nos. 1808-1809. Stipulations to discontinue misrepresentations in connection with the sale of headwear, including novelty and baseball caps, have been entered into by four companies. They are **Joe Stovitzky,** trading as **Capitol Cap and Novelty Co.,** 1302 South Halsted St., **Chicago; American Needle & Novelty Co.,** 1701 West Superior St., **Chicago; Aviation Headwear Manufacturing, Inc.,** 37 East 21st St., **New York City,** and **Lessing Hat Company, Inc.,** 11 West 3rd St., **New York City.**

The companies agree to cease selling or offering for sale hats or caps manufactured from second-hand, old or discarded felts or other materials, unless there is stamped upon or affixed to such products in a conspicuous place, so as to be easily and readily seen, some words clearly indicating that the hats or caps are not made from new or unused felts or other materials, but from second-hand, old, discarded felts or other materials.

No. 1810. The Hygienic Products Company, 220 7th St., S. E., Canton, Ohio, agrees, in selling a cleansing preparation designated "Hy-Pro," to stop using in advertisements the word "germicide" without qualification, or any other words implying

that by use of the product all micro-organisms can be killed or destroyed. The respondent company also will cease using the words "Disagreeable odors go," to create the impression that by use of the product all disagreeable odors can be destroyed, and the words, "Made by the makers of Sani-Flush," to imply that the product is made by The Hygienic Products Company, when such is not a fact.

No. 1811. Woodward & Lothrop, Washington, D. C., will discontinue representations in advertising or in any other manner which imply that the wood of which its "Philippine mahogany" furniture is manufactured is in fact mahogany and has the same qualities and characteristics as are possessed by wood derived from trees of the genus "swietenia" of the "meliaceae" family, or that such "Philippine mahogany" furniture is made of wood whose qualities and characteristics are other than those possessed by wood of the "dipterocarpaceae" or "lauan" family.

No. 2452. Dominion Distilleries, Inc., Harborside Terminal, **Jersey City, N. J.,** has been ordered to discontinue representing that it distills the alcoholic beverages it sells in interstate commerce, when such is not a fact. An exception is made in the case of gin which the respondent corporation manufactures through a process of rectification whereby alcohol purchased but not produced by it is redistilled over juniper berries and other aromatics.

Specifically, the order prohibits the respondent corporation from representing through use of the word "Distilleries" in its corporate name, in advertising matter or on labels, that it is a distiller of spirituous beverages, that it manufactures such beverages through the process of distillation, or that it owns or operates a place where it manufactures its products by a process of original and continuous distillation, until such is a fact.

No. 2511. A cease and desist order has been issued against **World Library Guild, Inc.,** 1440 Broadway, **New York City,** distributor of the "Twentieth Century Encyclopedia" and of a loose-leaf revision service therefor and memberships in a research bureau. The order prohibits certain misrepresentations concerning the prices charged, editorial matter contained in the books, and the identity of the publisher and editors.

Among misrepresentations of price barred under the order are the following: That the encyclopedia is given free to persons subscribing to the 10-year loose-leaf semi-annual extension service; that the regular price is an amount in excess of that for which the encyclopedia is being regularly offered, and that the total cost of the revision service is a certain stated sum unless, when there is an additional coupon charge for the semi-annual revision supplements, such coupon charge is included in the stated sum.

No. 2568. An order to cease and desist has been issued against **Willard B. Casterline,** 1916 Sunnyside Ave., **Chicago,** trading as **Casterline Brothers,** and selling candy and chewing gum to the wholesale and jobber trade.

The order directs the respondent to stop selling and distributing candy and chewing gum so packed and assembled that its sales to the public may be made by means of a lottery or gift enterprise.

No. 2742. Under an order to cease and desist, **Louis Fabrikant,** trading as **Louis Fabrikant Company,** 450 Seventh Ave., **New York,** has been directed to cease representing that textile fabrics, used in the manufacture of dress goods and which contain no wool of the sheep or hair of the camel, are made from wool or from camel's hair. He was also ordered to stop using the word "camel" alone or with other words in advertisements, on labels, or in any manner to designate a textile fabric which does not contain camel's hair or camel's wool.

No. 2798. An order to cease and desist has been issued against **John H. Meyer,** trading as **Med-Dental Systems Company,** 1015 Schmidt Building, **Cincinnati,** distributor of accounting systems for use of doctors and dentists, requiring discontinuance of the use of blank forms, cards, indexes or other materials closely simulating the forms, cards and other materials of the McCaskey Register Company, Alliance, Ohio, or of any other competitor.

Findings are that for several months the respondent produced record systems for doctors and dentists simulating those of the McCaskey Company, a well-known corporation whose products had become recognized in the trade as having certain distinctive and original features. It was alleged that a former McCaskey employee at one time aided the respondent in producing the record forms sold by him.

No. 2824. An order has been issued directing **Service Products, Inc.,** 125 Rivington St., **New York,** and its officers, Sam Irving and Harry Hagler, also trading as **West Point Laboratories, Inc.,** to discontinue representing that the hair tonic, bay rum, cosmetics and lotions they sell in interstate commerce have the approval of either the United States Government or the State of New York.

The respondents are ordered to cease representing, directly or by inference, through use of the name "West Point" alone or with other words, or with the picture of a cadet in full military uniform, that their products have been compounded under any specifications authorized by the War Department or adopted for use in the United States Military Academy at West Point, N. Y.

Use of the words "West Point" as part of the trade name, "West Point Laboratories, Inc.," is prohibited unless in every instance the words "West Point" are accompanied in close proximity by a qualifying statement clearly indicating that the respondents' products are not those of the United States Military Academy and have not been authorized by the academy authorities.

No. 2822. An order to cease and desist has been issued against **Martin J. Leyden,** 168½ Thomas St., **Seattle, Wash.,** distributor of "Leyden's Hair Tonic."

The order directs Leyden to cease representing that this product will remove dandruff, stop hair from falling out, stop itching scalp, and that it will restore gray or faded hair to natural color and give new life to the hair. Admitting the material allegations of the Commission's complaint to be true, the respondent consented to issuance of the findings and order to cease and desist.

No. 2847. Engaged in the manufacture and sale of cosmetics, **Quality Products Company, Inc.,** 382 Jefferson St., **Brooklyn,** has been ordered to discontinue false and misleading representations concerning the nature and effect of certain of its preparations.

The order prohibits the respondent corporation from representing that its cosmetics nourish the skin and cause crows' feet and wrinkles to disappear; give new vigor and elasticity to sagging muscles; eliminate old-looking chin or neck lines; re-activate hormone-producing glands and countless tiny glands underneath the skin's surface, and banish blackheads, whiteheads and enlarged pores.

No. 2856. G. Fred Stayton and the **Betty White Corporation,** of **Des Moines, Ia.,** distributor of "Betty White" cosmetics has been ordered to discontinue certain misrepresentations, particularly in connection with the use of puzzles in advertisements to obtain sales of the respondents' products.

Among practices prohibited in the order to cease and desist is the representation that a person solving a problem or puzzle presented in an advertisement and sending in the solution will, without being required to make any expenditure or other substantial effort, be entitled to a prize, award, or reward, when such is not the fact.

Such representation, according to findings, usually has appeared in the first or contact advertisement and this has been followed up by a series of advertisements and form letters relating to the prize contest, the primary purpose and effect of which was to encourage contestants to sell Betty White beauty preparations.

No. 2897. The Hewitt Soap Company, Inc., and **The Crown Soap Company,** also trading as **Dayton Soap Company,** both of **Dayton, Ohio,** have been ordered to stop certain unfair trade practices deemed to be in violation of the Federal Trade Commission Act. These practices include misbranding, fictitious price marking, misrepresentation, and misleading advertising.

The order to cease and desist prohibts the respondent companies from representing by fictitious or exaggerated price markings and labels that their soaps have values in excess of their actual values or in excess of the prices at which they are ordinarily sold.

No. 2928. An order has been entered directing **Helmco, Inc.,** 844 West Jackson Boulevard, **Chicago,** manufacturing and selling electric fudge warmers and hot cups, to discontinue placing on its products the word "Lacy," which is part of the corporate name of its competitor, Lacy Products Corporation, also of Chicago. The respondent corporation's products, as well as those of its competitor, are designed for heating liquid mixtures of chocolate and other ingredients used in making candy and soda fountain drinks.

Fudge warmers and hot cups advertised and sold by Lacy Products Corporation under the trade name "Lacy Hot Cups," according to the findings, are widely and favorably known to members of the drug trade who, through long usage and over a long period of time, have identified such products bearing the name "Lacy" as being those of Lacy Products Corporation.

FTC DISMISSALS

The Federal Trade Commission has dismissed the following complaint and vacated an order:

No. 2211. The Commission has dismissed its complaint against **Harry and Oscar Markovich,** trading as **California Candy Company,** 138 Greene St., **New York,** because the testimony and

other evidence introduced in the case did not sustain the allegations of the complaint.

The respondents had been charged with unfair competition through alleged use of a lottery scheme in the sale of candy.

No. 2067. The Commission also has vacated and set aside an order to cease and desist issued June 12, 1934, against California Alfalfa Products Co., Pasadena, Calif.

Among practices prohibited in the now vacated order was the advertisement by the respondent company that its food products have therapeutic value or effect and that their use is endorsed by leading physicians or health authorities.

The Commission has now issued an amended and supplemental complaint alleging that California Alfalfa Products Co., trading as Alvita Products Co., is practicing methods of competition substantially similar to those barred under the former order to cease and desist.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

The following broadcast hearings are scheduled at the Commission for the week beginning Monday, November 2:

Thursday, November 5

HEARING BEFORE AN EXAMINER (Broadcast)

NEW—Nolan S. Walker, Canton, Ohio.—C. P., **1200 kc.**, 100 watts. 250 watts LS, unlimited time (requests facilities of WHBC).

WHBC—Edward P. Graham, Canton, Ohio.—Modification of C. P., **1200 kc.**, 100 watts, 250 watts LS, specified hours.

WHBC—Edward P. Graham, Canton, Ohio.—Voluntary assignment of license and C. P., **1200 kc.**, 100 watts, unlimited time (C. P., 250 watts LS, S.H.).

WHBC—Edward P. Graham, Canton. Ohio.—Renewal of license, **1200 kc.**, 100 watts, unlimited time.

Friday, November 6

HEARING BEFORE AN EXAMINER (Broadcast)

NEW—Asheville Daily News, Harold H. Thoms, Owner, Asheville, N. C.—C. P., **1370 kc.**, 100 watts, unlimited time.

NEW—W. Hanes Lancaster and J. W. Birdwell, d/b as Johnson City Broadcasting Co., Johnson City, Tenn.—C. P., **1200 kc.**, 100 watts, 250 watts LS, unlimited time.

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-245:

NEW—Southwest Broadcasting Co., Prescott, Ariz.—C. P., **1500 kc.**, 100 watts, 250 watts LS, unlimited time.

NEW—W. P. Stuart, Prescott, Ariz.—C. P., **1500 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-249:

KTFI—Radio Broadcasting Corp., Twin Falls, Idaho.—Renewal of license, **1240 kc.**, 500 watts, 1 KW LS, unlimited time.

KTFI—Radio Broadcasting Corp., Twin Falls, Idaho.—Modification of license, **630 kc.**, 500 watts, 1 KW LS, unlimited time. Present assignment, **1240 kc.**, 500 watts, 1 KW LS, unlimited time.

Examiner's Report No. I-273:

NEW—Albert Lea Broadcasting Corp., Albert Lea, Minn.—C. P., **1200 kc.**, 100 watts, unlimited time.

NEW—Winona Radio Service, Winona, Minn.—C. P., **1200 kc.**, 100 watts, unlimited time.

APPLICATIONS GRANTED

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—Granted C. P. to move auxiliary transmitter of station KOMO to the location of main transmitter of stations KOMO and KJR and use as auxiliary of these stations using the same antenna.

WGBB—Harry H. Caman, Freeport, N. Y.—Granted C. P. to make changes in equipment.

WEBR—WEBR, Inc., Buffalo, N. Y.—Granted C. P. for authority to install new transmitter and vertical radiator.

WDGY—Dr. Geo. W. Young, Minneapolis, Minn.—Granted C. P. for authority to install new equipment.

WFAM—The South Bend Tribune, South Bend, Ind.—Granted C. P. for authority to install new equipment.

WBAX—John H. Stenger, Jr., Wilkes Barre, Pa.—Granted C. P. for authority to install new equipment.

WLAP—American Broadcasting Corp. of Kentucky, Lexington, Ky.—Granted C. P. for authority to move station locally and install new equipment.

WROK—Rockford Broadcasters, Inc., Rockford, Ill.—Granted C. P. to increase daytime power from 500 watts to 1 KW and install new equipment.

WNOX—Continental Radio Co., Knoxville, Tenn.—Granted C. P. to install new equipment and increase daytime power to 5 KW, and move station locally; **1010 kc.**, 1 KW night, unlimited.

WALR—WALR Broadcasting Corp., Zanesville, Ohio.—Granted C. P. approving new equipment.

KVOE—The Voice of the Orange Empire, Inc., Ltd., Santa Ana, Calif.—Granted license to cover C. P. authorizing change in transmitter and studio sites and installation of vertical radiator.

KGY—KGY, Inc., Olympia, Wash.—Granted license to cover C. P. authorizing installation of new equipment.

KRRV—Red River Valley Broadcasting Corp., Sherman, Tex.—Granted license to cover C. P. authorizing erection of new station; **1310 kc.**, 100 watts, daytime only.

WMIN—Edward Hoffman, St. Paul, Minn.—Granted license to cover C. P. authorizing erection of new station; **1370 kc.**, 100 watts night, 250 watts day, unlimited time.

WSAY—Brown Radio Service and Lab. (Gordon P. Brown, owner), Rochester, N. Y.—Granted license to cover C. P. authorizing erection of new station; **1210 kc.**, 100 watts, daytime.

KMED—Mrs. W. J. Virgin, Medford, Ore.—Granted amended C. P. authorizing move of transmitter locally, install vertical radiator, change in composite equipment; change time of operation from specified hours to unlimited; **1310 kc.**, 100 watts night, 250 watts day, unlimited.

WBLK—The Exponent Co., Clarksburg, W. Va.—Granted modification of C. P. approving transmitter site, equipment and antenna.

WHFC—WHFC, Inc., Cicero, Ill.—Granted modification of C. P. authorizing installation of new equipment.

WGNY—Peter Goelet, Newburg, N. Y.—Granted modification of C. P. for authority to install new equipment and vertical radiator, also to move transmitter and studio locations locally.

KMA—May Seed & Nursery Co., Shenandoah, Iowa.—Granted modification of license to increase day power from 2½ KW to 5 KW; **930 kc.**, 1 KW night.

WSMB—WSMB, Inc., New Orleans, La.—Granted modification of license to operate unlimited time at present transmitter location with an increase in power from 500 watts to 1 KW, with provisions limiting power radiated in direction of Akron, Ohio, not to be greater than 88 mv/m at distance of 1 mile from transmitter of station WSMB as contained in B3-R-448 be modified so as not to exceed 70.6 per cent of average based on radiation by it in all directions.

KUJ—KUJ, Inc., Walla Walla, Wash.—Granted authority to make changes in automatic frequency control apparatus.

WRGA—Rome Broadcasting Corp., Rome, Ga.—Granted authority to install automatic frequency control.

WILM—Delaware Broadcasting Co., Wilmington, Del.—Granted authority to make changes in automatic frequency control.

KWLC—Luther College, Decorah, Iowa.—Granted authority to make changes in automatic frequency control equipment.

WSMK—WSMK, Inc., Dayton, Ohio.—Granted authority to make changes in automatic frequency control equipment.

KECA—Earle C. Anthony, Inc., Los Angeles, Calif.—Granted authority to determine operating power by direct measurement of antenna input in compliance with terms of Rule 137.

WATL—J. W. Woodruff and S. A. Cisler, d/b as Atlanta Broadcasting Co., Atlanta, Ga.—Granted voluntary assignment of license to J. W. Woodruff, d/b as Atlanta Broadcasting Co.; **1370 kc.**, 100 watts, unlimited.

WATL—J. W. Woodruff and S. A. Cisler, d/b as Atlanta Broadcasting Co., Atlanta, Ga.—Granted renewal of license on the regular basis.

WCHS—Charleston Broadcasting Corp., Charleston, W. Va.—Granted voluntary assignment of license to Charleston Broadcasting Company; **580 kc.**, 500 watts night, 1 KW day, unlimited.

KGLO—Mason City Globe Gazette Co., Mason City, Iowa.—Granted modification of C. P. approving transmitter and studio sites, new equipment and vertical radiator, also extending commencement date to 30 days after grant and completion date to 90 days thereafter.

WBBR—Peoples Pulpit Assn., Brooklyn, N. Y.—Granted renewal of license for a period of 30 days.

WIOD-WMBF—Isle of Dreams Broadcasting Corp., Miami, Fla.—Granted renewal of license for a period of 90 days.

WORK—York Broadcasting Co., York, Pa.—Granted renewal of license for the period November 1, 1936, to May 1, 1937; **1320 kc.,** 1 KW night and day, unlimited, using directional antenna at night and non-directional antenna day.

WCBD—WCBD, Inc., Waukegan, Ill.—Granted renewal of license for the period August 1, 1936, to February 1, 1937. (Since August 1, 1936, station has been operating under temporary extension pending decision on application to transfer control.)

WKBH—WKBH, Inc., La Crosse, Wis.—Granted renewal of license on a temporary basis for a period of 90 days; **1380 kc.,** 1 KW, unlimited.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md., Portable-Mobile.—Granted C. P. for new relay broadcast station on an experimental basis under provisions of Rules 1001, 1001(b) and 1003(e); frequencies **31100, 34600, 37600,** and **40600 kc.,** 1 watt. Also granted license covering same.

NEW—The Baltimore Radio Show, Inc., Baltimore, Md., Portable-Mobile.—Granted C. P. and license for new relay broadcast station on an experimental basis under provisions of Rules 1000, 1001(b) and 1003(e); frequencies **31100, 34600, 37600** and **40600 kc.,** experimentally, 1 watt.

NEW—Tulsa Broadcasting Co., Inc., Portable-Mobile (Tulsa, Okla.).—Granted C. P. for new relay broadcast station on an experimental basis under provisions of Rules 1001, 1001(b) and 1003(e); frequencies **31100, 34600, 37600** and **40600 kc.,** 10.5 watts.

NEW—Broadcasting Service Organization, Inc., Portable, Boston, Mass.—Granted C. P. for new relay broadcast station on experimental basis under provisions of Rules 1001, 1001(b) and 1003(e); frequencies **31100, 34600, 37600** and **40600 kc.,** 5 watts.

W2XJI—Bamberger Broadcasting Service, Inc., Newark, N. J.—Granted modification of C. P. for authority to change equipment, decrease power from 1000 watts to 100 watts, establish a transmitter site, and extend commencement and completion dates to 4-15-36 to 9-15-36, respectively.

SET FOR HEARING

NEW—David J. Mercier and Geo. F. Warren, d/b as Northern Broadcasting Co., Traverse City, Mich.—Application for C. P. for new station to operate on **830 kc.,** 500 watts, daytime.

NEW—Twin City Broadcasting Corp., Longview, Wash.—Application for C. P. for new station to operate on **1500 kc.,** 100 watts night, 250 watts day, unlimited, exact transmitter site to be determined with Commission's approval.

NEW—Charles Porter and Edward T. Eversole, Festus, Mo.—Application for C. P. for new station to operate on **1420 kc.,** 100 watts, day only.

NEW—D. L. Thornton, between Chehalis and Centralia, Wash.—Application for C. P. for new station to operate on **1500 kc.,** 100 watts night, 250 watts day, unlimited. Exact transmitter and studio sites to be located between the cities of Centralia and Chehalis, Wash., which are separated approximately 4 miles from center to center.

KDON—Monterey Peninsula Broadcasting Co., Monterey, Calif.—Application for C. P. to install new equipment; change frequency from **1210 kc.** to **1280 kc.;** increase night power from 100 watts to 250 watts and day power from 100 watts to 1 KW.

KFIO—Spokane Broadcasting Corp., Spokane, Wash.—Application for C. P. to change equipment and frequency from **1120 kc.** to **1110 kc.;** increase power from 100 watts daytime to 500 watts unlimited; move transmitter site and install vertical radiator (subject to Commission's approval). To be heard before the Broadcast Division.

WTAQ—WHBY, Inc., Green Bay, Wis.—Application for C. P. to install new equipment and increase day power from 1 KW to 5 KW.

WGY—General Electric Co., Schenectady, N. Y.—Application for C. P. to change equipment, increase power to 500 watts, and move transmitter locally with transmitting equipment site and antenna to be determined subject to Commission approval. To be heard before the Broadcast Division.

WBAL—The WBAL Broadcasting Co., Baltimore, Md.—Application for C. P. to install directional antenna system for nighttime operation; increase time of operation from S-WTIC to unlimited. To be heard before the Broadcast Division.

KTHS—Hot Springs Chamber of Commerce, Hot Springs National Park, Ark.—Application for C. P. to move transmitter location to McAlmont, Ark., and studio from Hot Springs National Park to site to be determined at Little Rock, Ark.; install new equipment and directional antenna for nighttime operation to operate on **1060 kc.,** with 10 KW, unlimited time. To be heard by Broadcast Division.

KROY—Royal Miller, Sacramento, Calif.—Application for modification of C. P. for authority to change frequency from **1210 kc.** to **1340 kc.;** change equipment; increase power and operating time from 100 watts day only to 250 watts night, 1 KW day, unlimited time. Exact transmitter site to be determined subject to Commission approval.

WDBJ—Times-World Corp., Roanoke, Va.—Application for modification of license to increase nighttime power from 1 KW to 5 KW. To be heard before the Broadcast Division.

WSPR—Quincy A. Brackett, Lewis B. Breed and Edmund A. Laport, copartners, d/b as Conn. Valley Broadcasting Co., Springfield, Mass.—Application for modification of license for authority to change operating time to limited to local sunset at KVOO, Tulsa, Okla. To be heard before the Broadcast Division.

WHBB—W. J. Reynolds, Jr., J. C. Hughes and J. S. Allen, d/b as Selma Broadcasting Co., Selma, Ala.—Application for modification of license to change time of operation from 100 watts daytime only to 100 watts unlimited, **1500 kc.**

KFXR—Exchange Ave. Baptist Church of Oklahoma City, Okla.—Application for voluntary assignment of license to Plaza Court Broadcasting Co. (**1310 kc.,** 100 watts night, 250 watts day, unlimited).

KSFO—The Asso. Broadcasters, Inc., San Francisco, Calif.—Application for voluntary assignment of license to Columbia Broadcasting System of Calif., Inc. (**560 kc.,** 1 KW, unlimited).

KGDY—Voice of South Dakota, Huron, S. Dak.—Application for renewal of license for the period November 1, 1936, to May 1, 1937; **1340 kc.,** 250 watts day.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KFH, Wichita, Kans.; KGNF, North Platte, Nebr.; KOY, Phoenix, Ariz.; WBIG, Greensboro, N. C.; WBNX, New York City; WCBA, Allentown, Pa., and auxiliary; WCKY, Covington, Ky.; WCOA, Pensacola, Fla.; WCSC, Charleston, S. C.; WDRC, Hartford, Conn.; WEVD, New York City; WFBC, Greenville, S. C.; WHAZ, Troy, N. Y.; WHIS, Bluefield, W. Va.; WMBD, Peoria, Ill.; WNBC, New Britain, Conn.; WNBR, Memphis, Tenn.; WOKO, Albany, N. Y.; WQBC, Vicksburg, Miss.; WROK, Rockford, Ill.; WSAI, Cincinnati; WSAN, Allentown, Pa., and auxiliary; WSMK, Dayton, Ohio; KFJR, Portland, Ore.; KLRA, Little Rock, Ark.

Licenses for the following stations were extended on a temporary basis only, for the period ending no later than December 1, 1936, pending receipt and/or action on renewal applications:

KGNC, Amarillo, Tex.; KIDO, Boise, Idaho; KSCJ (auxiliary), Sioux City, Iowa; WFAB, New York City; WIRE, Indianapolis, Ind.; WSMB, New Orleans; WTFI, Athens, Ga.

The following stations were granted renewal of licenses on a temporary basis only, subject to such action as the Commission may take on their pending applications for renewal:

WARD, WBBC (and auxiliary), WLTH, and WVFW, all of Brooklyn, N. Y.

WFEA—New Hampshire Broadcasting Co., Manchester, N. H.—Granted conditional license on a temporary basis only subject to whatever action may be taken upon application for renewal and upon petition of WSPD in opposition to granting renewal of license to WFEA; also subject to the condition that applicant (WFEA) shall not permit nighttime signal intensity without attenuation of station radiated in the direction of station WSPD to be greater than 62.5 milli-

volts per meter at a distance of one mile from transmitter of WFEA.

WWAE—Hammond-Calumet Broadcasting Corp., Hammond, Ind. —Present license further extended on a temporary basis only, from November 1 to December 1, 1936, pending receipt and/or action on renewal application.

KGFG—Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—Present license further extended on a temporary basis only, from November 1 to December 1, 1936, subject to such action as may be taken upon application for renewal of license.

WHIO—Miami Valley Broadcasting Corp., Dayton, Ohio.—Present license extended on a temporary basis for the period November 1 to December 1, 1936, pending receipt and/or action on application for renewal.

WWL—Loyola University, New Orleans, La.—Special temporary experimental authority further extended on a temporary basis only, for the period ending February 1, 1937, subject to the same conditions as contained in the existing authorities to said station, pending consideration of the pending petition of WLWL and petitions in opposition thereto.

SPECIAL AUTHORIZATIONS

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted special temporary authority to operate from 12 midnight, EST, November 3, 1936, to 6 a. m., EST, November 4, 1936, in order to broadcast election returns.

WAGF—John T. Hubbard and Julian C. Smith, d/b as Dothan Broadcasting Co., Dothan, Ala.—Granted special temporary authority to operate station on October 31, 1936, for the duration of the State College football game played in California in order that the game may be broadcast.

WDGY—Dr. George W. Young, Minneapolis, Minn.—Granted special temporary authority to operate from 9 p. m. to 9:30 p. m., CST, October 28, 1936, in order to broadcast Republican program over ABC network.

WELI—City Broadcasting Corp., New Haven, Conn.—Granted special temporary authority to operate unlimited time the evening of Wednesday, October 28, 1936, in order to broadcast a debate between Yale University and Harvard, also an Italian American Democratic League Rally.

WJAC—WJAC, Inc., Johnstown, Pa.—Granted special temporary authority to operate simultaneously with WFBG from 8:30 p. m. to 9 p. m., EST, on October 29, 1936 (instead of from 8:15 p. m. to 8:45 p. m., EST, as granted 10-19-36) in order to broadcast speech of Attorney General Cummings.

WSAY—Brown Radio Service and Laboratory (Gordon F. Brown, Owner), Rochester, N. Y.—Granted special temporary authority to operate from 5:30 p. m. to 7:30 p. m., EST, October 27, 1936, in order to carry a pro-Roosevelt address.

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Granted special temporary authority to operate simultaneously with Radio Station WKOK from 8:30 p. m. to 10 p. m., EST, October 28, 1936, in order to broadcast a Republican rally.

WKZO—WKZO, Inc., Kalamazoo, Mich.—Granted special temporary authority to operate from 8:30 p. m. to 9 p. m., CST, October 28, 1936, with reduced power of 250 watts, in order to broadcast an address by Rabbi Wise sponsored by the Democratic Committee.

WOW—Woodmen of the World Life Ins. Assn., Omaha, Nebr.—Granted extension of special temporary authority to operate with power of 5 KW at night for period beginning October 29, 1936, and ending in no event later than November 27, 1936.

WKOK—Sunbury Broadcasting Corp., Sunbury, Pa.—Granted special temporary authority to operate simultaneously with Radio Station WBAX after 12 midnight on the morning of Nov. 4, 1936, in order to broadcast election returns.

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Same as above only simultaneously with WKOK.

WRAK—WRAK, Inc., Williamsport, Pa.—Granted special temporary authority to operate station without an appproved frequency monitor (waiver of Rule 145) for a period beginning Oct. 21, 1936, and ending in no event later than Nov. 3, 1936.

WALR—WALR Broadcasting Corp., Zanesville, Ohio—Granted special temporary authority to operate station without an approved frequency monitor (waiver of Rule 145) for a period not to exceed 30 days.

KNEL—G. L. Burns, Brady, Texas—Granted special temporary authority to operate station without plate voltmeter for period not to exceed 10 days.

WCBA—B. Bryan Musselman, Allentown, Pa.—Granted special temporary authority to use a 50 w. portable test transmitter between the hours of 12 midnight and 6 a. m., EST, for a period not to exceed three weeks in order to determine a more favorable transmitter site.

WSAN—WSAN, Inc., Allentown, Pa.—Granted special temporary authority to use a 50 w. portable test transmitter between the hours of 12 midnight and 6 a. m., EST, for a period not to exceed three weeks in order to determine a more favorable transmitter site.

KFNF—KFNF, Inc., Shenandoah, Iowa—Granted extension of special temporary authority to operate simultaneously with WILL from 8 a. m. to 11 a. m., CST, daily except Sundays, during the month of Nov. 1936.

KEX—The Oregonian Publishing Co., Portland, Ore.—Granted special temporary authority to operate simultaneously with station KOB, unlimited time, the nights of Nov. 2 and 3, 1936, for the purpose of rendering election returns.

KOB—Albuquerque Broadcasting Co., Albuquerque, N. Mex.—Granted special temporary authority to operate simultaneously with station KEX, unlimited time, the nights of Nov. 2 and 3, 1936, for the purpose of rendering election returns.

KFRU—KFRU, Inc., Columbia, Mo.—Granted special temporary authority to operate simultaneously with station WGBF from 8:30 p. m. to 9:30 p. m., CST, Oct. 28, 1936, in order to broadcast Democratic State Rally from Mexico, Mo.

WGBF—Evansville on the Air, Inc., Evansville, Ind.—Granted special temporary authority to operate simultaneously with KFRU from 8:30 to 9:30 p. m., CST, Oct. 28, 1936, with reduced power of 250 watts.

KSOO—Sioux Falls Broadcast Assn., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 5:45 to 7 p. m., CST, for remote control from Rochester, Minn., on Oct. 27; and from 8:15 to 10 p. m., CST, Oct. 30, for remote control from Huron, S. Dak., in order to broadcast political talks.

KADA—C. C. Morris, Ada, Okla.—Granted special temporary authority to operate from local sunset (5:15 p. m., CST), until 12 midnight, Nov. 3, 1936, in order to broadcast state and national election returns.

WPTF—WPTF Radio Co., Raleigh, N. C.—Granted special temporary authority to operate unlimited time the night of Nov. 3, 1936, in order to broadcast election returns.

KCRJ—Charles C. Robinson, Jerome, Ariz.—Granted special temporary authority to operate from 8 p. m., MST, Nov. 3, to 2 a. m., MST, Nov. 4, 1936, in order to broadcast local, state and national election returns.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Granted special temporary authority to operate from local sunset (5:30 p. m.), until 9 p. m., PST, Oct. 31, in order to broadcast description of local Halloween Parade and Children's Festival, also political speeches of Democratic and Republican Central Committees; from local sunset (5 p. m.) to 8 p. m., PST, Nov. 2, in order to broadcast political speeches and rallies of both Democratic and Republican Central Committees.

WGNY—Peter Goelet, Chester Township, N. Y.—Granted special temporary authority to operate simultaneously with WGBB from 7 to 9 p. m., EST, Tuesday, Nov. 3, and to operate simultaneously with WFAS from 9 p. m. to 12 midnight, Nov. 3, in order to broadcast local and national election returns.

KRNR—Southern Oregon Pub. Co., Roseburg, Ore.—Granted special temporary authority to operate from local sunset (4:45 p. m.), until close of football games, Nov. 7, 14, 21 and 28, 1936.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted special temporary authority to operate simultaneously with station WSMK from 7 to 7:15 p. m., EST, Nov. 2, in order to broadcast a state wide political program; also from 10 p. m. to 12 midnight, EST, Nov. 3, and 12 midnight to 6 a. m., EST, Nov. 4, in order to broadcast election returns.

KALB—Alexandria Broadcasting Co., Inc., Alexandria, La.—Granted special temporary authority to operate from 10 p. m. to 12 midnight, CST, Monday, Nov. 2, in order to broadcast paid political talks.

WILL—University of Illinois, Urbana, Ill.—Granted special temporary authority to operate simultaneously with KFNF

from 1:45 p. m. to 4 p. m., CST, Nov. 14 (provided WBAA remains silent), in order to broadcast home football games.

WNAD—University of Oklahoma, Norman, Okla.—Granted special temporary authority to operate from 2 to 4 p. m., CST, Nov. 2 to 5 incl., 9 to 12 incl., 16 to 19 incl., 23 and 24th, in order to broadcast special educational programs (provided KGGF remains silent); also from 9:15 to 10:30 p. m., CST, Nov. 11, in order to broadcast special Armistice program.

KGGF—Powell & Platz, Coffeyville, Kans.—Granted special temporary authority to operate from 7:15 to 9:15 p. m., CST, Nov. 3, in order to broadcast election returns (provided WNAD remains silent) and from 8:15 to 9:15 p. m., CST, Nov. 25, and 7:15 to 9:15 p. m., CST, Nov. 26, in order that WNAD may remain silent during University Thanksgiving vacation.

WSMK—WSMK, Inc., Dayton, Ohio—Granted special temporary authority to operate simultaneously with KQV from 9:30 to 10 p. m., EST, Sat., Oct. 31, 1936, in order to broadcast political speech.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Granted special temporary authority to remain on the air from 4:30 to 5:30 p. m., EST, the following Sat. afternoons: Nov. 7, 14, 21 and 28, in order to broadcast football games.

KWYO—Big Horn Broadcasting Co., Inc., Sheridan, Wyo.—Granted special temporary authority to operate station without an approved frequency monitor for a period not to exceed 30 days.

WKAR—Mich. State College, E. Lansing, Mich.—Granted special temporary authority to operate without antenna ammeter for the period Oct. 21 to 31, 1936.

KSOO—Sioux Falls Broadcast Assn., Inc., Sioux Falls, S. Dak.—Granted special temporary authority to operate from 5:45 to 6:45 p. m., CST, Oct. 29, in order to broadcast political talk.

WBAA—Purdue University, West Lafayette, Ind.—Granted special temporary authority to operate from 4 to 5 p. m., CST, Nov. 21, 1936 (provided WLL remains silent), in order to broadcast football game.

WSVA—Shenandoah Valley Broadcasting Co., Harrisonburg, Va.—Granted special temporary authority to operate from 8 p. m., EST, Nov. 3, to 2 a. m., EST, Nov. 4, 1936, with reduced power of 250 watts, in order to broadcast election returns.

KFRU—KFRU, Inc., Columbia, Mo.—Granted special temporary authority to operate simultaneously with station WGBF using reduced power of 250 watts from 5 p. m., CST, Nov. 3, to 6 a. m., CST, Nov. 4, for the purpose of broadcasting election returns.

WGBF—Evansville on the Air, Inc., Evansville, Ind.—Same as above simultaneously with station KFRU.

KGIW—Leonard E. Wilson, Alamosa, Colo.—Granted special temporary authority to operate simultaneously with station KIDW from 9:30 p. m. to 12 midnight, MST, Nov. 3, in order to broadcast election returns.

WCAD—St. Lawrence University, Canton, N. Y.—Granted special temporary authority to operate from 4 to 5:15 p. m., EST, Oct. 31, in order to broadcast meeting of Northern Federation Chambers of Commerce.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted special temporary authority to rebroadcast Naval Observatory time signals from NAA at Washington, for the period ending no later than Dec. 1, 1936.

WFIL—WFIL Broadcasting Co., Philadelphia, Pa.—Granted extension of special temporary authority to operate on **560 kc.**, with power of 1 KW at night during month of November, 1936, pending filing and action on license application to cover C. P. for this authority.

WHDF—The Upper Mich. Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 6:30 to 7:30 p. m., CST, Nov. 2, 1936, in order to broadcast political address sponsored by Houghton County Democrat Committee.

WCLS—WCLS, Inc., Joliet, Ill.—Granted special temporary authority to operate from 8:30 p. m., CST, Nov. 3, to 6 a. m., CST, Nov. 4, for the purpose of broadcasting election returns.

APPLICATIONS DENIED

KALE—KALE, Inc., Portland, Ore.—Denied special temporary authority to operate unlimited time for the period Nov. 1 to Nov. 30, pending action on formal application for modification of license for unlimited time and pending construction of vertical radiator.

WAAT—Bremer Broadcasting Corp., Jersey City, N. J.—Denied special temporary authority to operate from 6 p. m. to 12 midnight, EST, Nov. 3, and from 12 midnight to 6 a. m., EST, Nov. 4, in order to broadcast local, state and national election returns.

WINS—Hearst Radio, Inc., New York City—Denied special temporary authority to operate from 7 p. m., EST, Nov. 3, 1936, until 2 a. m., EST, Nov. 4, 1936, in order to broadcast election returns.

The following applications, heretofore set for hearing, were denied as in cases of default for failure of applicant to file an appearance in accordance with Rule 104.6(e):

NEW—Valley Broadcasting Co., Cleveland, Ohio—Applied for C. P., **890 kc.**, 1 KW, unlimited.

NEW—James G. Bourus, Everett, Wash.—Applied for C. P., **1500 kc.**, 100 watts, unlimited.

APPLICATIONS DISMISSED

The following applications, heretofore set for hearing, were dismissed at request of applicants:

NEW—C. W. Snider, Wichita Falls, Tex.—Applied for C. P., **1500 kc.**, 100 watts, 250 watts LS, unlimited time.

WRDW—Augusta Broadcasting Co., Augusta, Ga.—Applied for C. P., **1240 kc.**, 250 watts, 500 watts LS, unlimited.

NEW—I. T. U. Radio Station, Inc., Indianapolis, Ind.—Applied for C. P., **560 kc.**, 1 KW, 5 KW-LS, unlimited (Facilities of WIND).

WKZO—WKZO, Inc., Kalamazoo, Mich.—Applied for modification of license, **590 kc.**, 1 KW, daytime to LS at Omaha, Neb.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Applied for C. P., **1390 kc.**, 250 watts, unlimited.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

WBAM—Bamberger Broadcasting Service, Inc., Newark, N. J.—Granted authority to conduct tests as set forth under Rules 217 and 218 if construction has been completed under terms of C. P.; also, if transmitter is in satisfactory operating condition, granted authority to operate on Oct. 24 and 27, aboard the USS *Illinois,* USS *Indianapolis,* and a submarine in New York Harbor for broadcasting Naval maneuvers and Navy Day program. (Action taken 10-17.)

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—Granted extension of equipment test period for 10 days from Oct. 22, 1936. (Action taken 10-9.)

KMA—May Seed and Nursery Co., Shenandoah, Iowa—Granted authority to commence equipment tests Oct. 22, 1936, as set forth in Rule 164. (Action taken 10-20.)

W6XKF-W10XGK-W6XLN-KABG—Ben S. McGlashan, Los Angeles, Calif.—Granted authority to operate stations from Oct. 22 to 31, 1936, inclusive, to relay broadcast of birthday program of the Los Angeles *Evening Herald* from Goodyear blimp *Volunteer;* also authority to operate W6XLN and KABG for the same period on program tests. (Action taken 10-21.)

W3XEM-W3XEL—WFIL Broadcasting Co., Philadelphia, Pa.—Granted authority to operate as licensed the night of Nov. 3 and morning of Nov. 4, 1936, for relay broadcast of election returns. (Action taken 10-23.)

WJAC—WJAC, Inc., Johnstown, Pa.—Granted special temporary authority to operate simultaneously with WFBG from 8:15 to 8:45 p. m., EST, Oct. 29, in order to broadcast speech by Atttorney General Cummings. (Action taken 10-19.)

W9XNX—WHBY, Inc., Green Bay, Wis.—Granted authority to operate as licensed Oct. 24, 31 and Nov. 7, 1936, for relay broadcast to Station WTAQ of football games from Legion Park. (Action taken 10-22.)

W9XAJ—The Journal Company, Milwaukee, Wis.—Granted authority to operate as licensed the evening of Nov. 3, for relay broadcast of election returns. (Action taken 10-23.)

KIIQ—KMTR Radio Corp., Los Angeles, Calif.—Granted authority to operate as licensed for relay broadcast purposes on Oct. 25, in connection with auto races, and Nov. 2 to 11, 1936, from Rancho Los Amigos. (Action taken 10-23.)

WTBO—Asso. Broadcasting Corp., Cumberland, Md.—Granted special temporary authority to operate from 9:30 to 10 p. m., EST, Tuesday, Oct. 27, in order to broadcast address of Secretary Ickes. (Action taken 10-19.)

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted special temporary authority to operate from 7 to 8 p. m., Oct. 26 and 28, and from 7 to 8:30 p. m., EST, Nov. 2, in order to broadcast local and national political speeches. (Action taken 10-19.)

The Baltimore Radio Show, Inc., Baltimore, Md.—Granted special temporary authority to operate two portable-mobile high frequency relay broadcast transmitters for the period Oct. 24 and ending no later than Oct. 31, 1936, for the purpose of picking up programs originating at 5th Regimental Armory, Baltimore, and relay for rebroadcast over WFBR. (Action taken 10-22.)

WCLS—WCLS, Inc., Joliet, Ill.—Granted special temporary authority to operate from 8:30 to 9 p. m., CST, for the period Oct. 22 and ending no later than Nov. 2, 1936, for the purpose of broadcasting programs of the Labor Non-Partisan League. (Action taken 10-22.)

WKBO—Keystone Broadcasting Corp., Harrisburg, Pa.—Granted special temporary authority to operate simultaneously with WEST from 8 p. m., EST, Nov. 3 to 2 a. m., EST, Nov. 4, 1936, in order to broadcast election returns. (Action taken 10-23.)

WDGY—Dr. Geo. W. Young, Minneapolis, Minn.—Granted special temporary authority to operate from 7 to 7:30 p. m., CST, Oct. 27; 8 to 8:30 p. m., CST, Oct. 28; 8:30 to 9 p. m., CST, Oct. 30; 9:30 to 10 p. m., CST, Oct. 31; 8:30 to 9 p. m. and 9:30 to 10 p. m., CST, Nov. 2, 1936, in order to broadcast Republican speeches; 8 to 8:30 p. m., CST, Oct. 26; 7:30 to 8 p. m. and 8:30 to 9 p. m., CST, Oct. 28; 8 to 8:30 p. m., Oct. 29 and 30; 10:30 to 11 p. m., Oct. 31; 10 to 11 p. m., Nov. 2, in order to broadcast Democratic speeches; 8:30 to 9 p. m., Oct. 29, and 9 to 9:30 p. m., Nov. 2, 1936, in order to broadcast Farm Labor speeches. (Action taken 10-22.)

WNLC—Thames Broadcasting Corp., New London, Conn.—Granted special temporary authority to operate from 6 to 7:30 p. m., EST, Nov. 1, in order to broadcast program originating at WICC by Republican Town and State Commission; to operate from 7:30 to 11 p. m., EST, Oct. 29, in order to broadcast addresses of nationally known speakers; and to operate from 4:30 p. m. to 12 midnight on Nov. 2 and 3, in the interest of all political parties. (Action taken 10-23.)

WSPR—Connecticut Valley Broadcasting Co., Springfield, Mass.—Granted special temporary authority to operate from 6:15 to 6:45 p. m., EST, Oct. 26 to 30, 1936, inclusive, in order to broadcast programs of National Democratic Committee. (Action taken 10-24.)

WSMK—WSMK, Inc., Dayton, Ohio—Granted special temporary authority to operate simultaneously with KQV from 7:30 to 10 p. m., EST, Oct. 26, and from 9:30 to 10 p. m., EST, Oct. 29, for the purpose of broadcasting political talks. (Action taken 10-24.)

WEST—Associated Broadcasters, Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with WKBO from 9:30 to 10 p. m., EST, Oct. 26; from 9 to 9:30 p. m., Oct. 27, in order to broadcast addresses by Gov. Landon; to operate from 9 to 9:30 EST, Oct. 29, in order to broadcast Republican program featuring Judge McDevitt. (Action taken 10-24.)

WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Granted special temporary authority to operate with power of 100 watts on night of Oct. 27, in order to broadcast addresses of Cordell Hull, David Lewis and others. (Action taken 10-24.)

WNBC—State Broadcasting Corp., New Britain, Conn.—Granted special temporary authority to operate from 7 to 7:15 p. m., EST, Oct. 26, through Nov. 2, 1936, incl., in order to broadcast political talks sponsored by Democratic Town Committee; also from 6 to 6:15 p. m., EST, Oct. 26, through Nov. 2, 1936, incl., in order to broadcast talks by Republican Town Committee. (Action taken 10-24.)

WEST—Asso. Broadcasters, Inc., Easton, Pa.—Granted special temporary authority to operate simultaneously with WKBO from 10 to 10:30 p. m., EST, Oct. 29, 1936, to broadcast Republican State network programs. (Action taken 10-23.)

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Granted special temporary authority to operate from 5:15 to 7:30 p. m., EST, Oct. 27, in order to broadcast Democratic Rally featuring Gov. Lehman; also from local sunset (4:30 p. m.) to 11 p. m., EST, Nov. 3, to broadcast election returns, using 100 watts power. (Action taken 10-23.)

WGBF—Evansville on the Air, Inc., Evansville, Ind.—Granted special temporary authority to operate simultaneously with KFRU with reduced power of 250 watts, from 7:30 to 9 p. m., CST, Oct. 31, for purpose of broadcasting political speeches. (Action taken 10-23.)

KFRU—KFRU Inc., Columbia, Mo.—Granted special temporary authority to operate simultaneously with WGBF with reduced power of 250 watts, from 7:30 to 9 p. m., CST, Oct. 31, for purpose of broadcasting political speeches. (Action taken 10-23.)

NEW—Walker Jamar, Duluth, Minn.—Denied petition requesting his application for C. P. for new station at Duluth, be withdrawn from Docket without prejudice. (Action taken 10-22.)

MISCELLANEOUS

WNEW—WODAAM Corp., Newark, N. J.—Denied petition asking Commission to reconsider denial of application and grant the same for increase in day power from 2½ KW to 5 KW.

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Denied petition asking Commission to reconsider its action in designating for hearing, its application and grant the same, to increase its day power from 500 watts to 1 KW, the application to increase night power from 500 watts to 1 KW to remain on hearing docket.

NEW—Daily News Corp., St. Paul, Minn.—Granted petition asking permission to appear as respondent at hearing scheduled for Nov. 13, 1936, on applications of National Battery Broadcasting Co. for authority to erect two new broadcasting stations at St. Paul, one to operate on **920 kc.,** 1 KW, unlimited time, the other to use **580 kc.,** with 1 KW unlimited time. The Daily News Corp., in an amended application, seeks authority to erect a new broadcast station to operate on **580 kc.,** 1 KW, daytime only.

KIDW—Southwest Broadcasting Co., La Junta, Colo.—Permitted to file answer as respondent, to be made a part of the record, for hearing on Nov. 18, 1936, of the application of Mile High Radio Corp. for permission to erect and operate a new radio station using the frequency of **1210 kc.,** with 100 watts night, 250 watts day, unlimited time.

NEW—Ferris Hodge, Edward Hodge, Leon C. Rogers, Clifford J. Hood, John S. Michener, Frank Zimmerman and Karl M. Schneider, d/b as Lenawee Broadcasting Co., Adrian, Mich.—Granted request to postpone from Nov. 25, 1936 to Dec. 15, 1936, hearing of application for C. P. to erect new radio broadcast station at Adrian to operate on **1440 kc.,** 250 watts daytime.

NEW—Richard M. Castro, Johnson City, Tenn.—Denied motion asking Commission to postpone hearing scheduled for Nov. 6, 1936, of application of W. Hanes Lancaster and J. W. Birdwell, d/b as Johnson City Broadcasting Co., for new broadcast station. Castro has previously been permitted to intervene at hearing since he has application for new station on same frequency of **1200 kc.,** 100 watts night, 250 watts day, in same community.

APPLICATIONS RECEIVED

First Zone

WDEV—Harry C. Whitehill, Waterbury, Vt.—Construction per-
550 mit to install new equipment and increase power from 500 watts to 1 KW. Amended to change name from Harry C. Whitehill to Mary M. Whitehill, Executrix of the estate of Harry C. Whitehill, and make further changes in equipment.

NEW—Young People's Association for the Propagation of the
640 Gospel, Shark River Bay, N. J.—Construction permit for a new station to be operated on **640 kc.,** 5 KW, daytime to local sunset at Station KFI.

WBEN—WBEN, Inc., Buffalo, N. Y.—License to cover construc-
900 tion permit (B1-P-567) as modified, for new equipment, increase in power and move of transmitter.

WBEN—WBEN, Inc., Buffalo, N. Y.—Authority to determine
900 operating power by direct measurement of antenna.

NEW—Elmira Star-Gazette, Inc., Elmira, N. Y.—Construction
1200 permit to erect a new station to be operated on **1200 kc.,** 250 watts power, daytime operation.

NEW—Eugene Meyer & Co., d/b as The Washington Post, Wash-
1230 ington, D. C.—Construction permit to erect a new broadcast station to be operated on **1310 kc.,** 100 watts night, 250 watts day power, unlimited time. Amended: Request this application be contingent upon granting of WOL's application for change in frequency from **1310 kc.** to **1230 kc.**

NEW—Citizens Broadcasting Corporation, Schenectady, N. Y.—
1240 Construction permit to erect a new broadcast station to be operated on **1240 kc.,** 1 KW power night and 5 KW power day, unlimited time. Directional antenna for night use.

WMBO—WMBO, Inc., Auburn, N. Y.—Construction permit to
1310 install a new transmitter and erect a vertical antenna, increase power from 100 watts to 100 watts night, 250 watts day; move transmitter from Metcalf Bldg., 141 Genesee Street, Auburn, N. Y., to York Street, corner No. Dix Street, Auburn, N. Y.

NEW—Mid-Atlantic Corp., Washington, D. C.—Construction per-
1570 mit for a new special broadcast station to be operated on **1570 kc.,** 1 KW, unlimited time.

Second Zone

WKZO—WKZO, Inc., Kalamazoo, Mich.—Special experimental
590 authority to operate unlimited time, using 250 watts power at night, for period to 3-1-37.

WCPO—Continental Radio Co., Cincinnati, Ohio.—Construction
1200 permit to install new transmitter and vertical antenna; move transmitter from 108-112 Garfield Place, Cincinnati, Ohio, to 659 E. 6th Street, Cincinnati, Ohio.

WCAE—WCAE, Inc., Pittsburgh, Pa.—Modification of license to
1220 change power from 1 KW night, 5 KW day, to 5 KW day and night.

WADC—Allen T. Simmons, Village of Tallmadge, Ohio.—Modifi-
1320 cation of license to change power from 1 KW night, 5 KW daytime, to 5 KW day and night.

WPAY—Vee Bee Corporation, Portsmouth, Ohio.—Construction
1370 permit to make changes in equipment (unnecessary).

NEW—Petersburg Newspaper Corp., Petersburg, Va.—Construc-
1370 tion permit for a new station to be operated on **1370 kc.,** 100 watts, daytime.

Third Zone

NEW—Wichita Broadcasting Co., Wichita Falls, Tex.—Construc-
630 tion permit to erect new broadcast station to be operated on **630 kc.,** 1 KW power, unlimited time. Directional antenna at night.

WCOC—Mississippi Broadcasting Company, Inc., Meridian, Miss.
880 —Construction permit to make changes in equipment.

NEW—F. M. Gleason, d/b as North Georgia Broadcasting Com-
1200 pany, Rossville, Ga.—Construction permit for a new broadcast station to be operated on **1200 kc.,** 100 watts power, unlimited time. Amended to change hours of operation from unlimited to daytime.

WAYX—E. F. Sapp and S. F. Sapp, d/b as Waycross Broadcast-
1200 ing Co., Waycross, Ga.—License to cover construction permit (B3-P-574) as modified for a new station.

WFOY—Fountain of Youth Properties, Inc., St. Augustine, Fla.—
1210 Modification of construction permit (B3-P-466) for a new station, requesting authority to install a new transmitter. (Sec. 14 (b) and geographical site.)

WDSU—WDSU, Inc., New Orleans, La.—License to cover con-
1250 struction permit (B3-P-1205) for changes in equipment.

WDSU—WDSU, Inc., New Orleans, La.—Authority to determine
1250 operating power by direct measurement of antenna.

NEW—Associated Arkansas Newspapers, Inc., Hot Springs, Ark.—
1310 Construction permit for a new broadcast station to be operated on **1310 kc.,** 100 watts power, unlimited time. Amended to change hours of operation from unlimited to daytime only.

KFYO—Plains Radio Broadcasting Co., Amarillo, Tex.—Construc-
1310 tion permit to install a new transmitter and antenna.

WSMB—WSMB, Inc., New Orleans, La.—Construction permit to
1320 install a new transmitter and directional antenna for day and night use.

KGFG—Oklahoma Broadcasting Company, Inc., Oklahoma City,
1370 Okla.—Construction permit to install new transmitter; erect a vertical antenna; move transmitter from 1110 West 2nd St., Oklahoma City, Okla., to site to be determined, Oklahoma City, Okla., and studio from 22nd Floor, Perrine Bldg., Oklahoma City, Okla., to site to be determined, Oklahoma City, Okla.

NEW—Ruth W. Adcock and S. E. Adcock, d/b as General Broad-
1370 casters, Johnson City, Tenn.—Construction permit for a new broadcast station to be operated on **1370 kc.,** 100 watts night and 250 watts day power, unlimited time.

KGNC—Plains Radio Broadcasting Company, Amarillo, Tex.—
1410 Construction permit to make changes in equipment.

WGPC—Americus Broadcast Corp., Albany, Ga.—Modification of
1420 construction permit (B3-P-1077) for new equipment; move of studio and transmitter, further requesting authority to install new transmitter and make antenna changes, increase day power from 100 to 250 watts, change studio address from 127½ N. Jackson to 125½ N. Jackson St., move transmitter from corner Pine and Jackson Sts. to 125½ N. Jackson St., Albany, Ga.; extend commencement and completion dates from 9-17-36 and 3-17-37 to 30 days after grant and 60 days thereafter. Amended: Change type of equipment and make antenna changes.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—License to
1420 cover construction permit (B3-P-439) as modified for a new station. Amended re equipment.

WACO—KTSA Broadcasting Co., Waco, Tex.—Construction per-
1420 mit to install a new transmitter and erect vertical antenna.

WBIG—North Carolina Broadcasting Co., Inc., Greensboro, N. C.
1440 —Modification of license to change power from 500 watts, 1 KW day, to 1 KW day and night.

NEW—Richard S. Gozzaldi, d/b as Oak Cliff-Dallas County
1500 Broadcasting Co., Dallas, Tex.—Construction permit for a new broadcast station to be operated on **1500 kc.,** 100 watts power, daytime operation.

NEW—The National Life & Accident Insurance Co., Inc., Nash-
ville, Tenn.—Construction permit for a low frequency relay station to be operated on **1606, 2022, 2102, 2758 kc.,** 20 watts.

Fourth Zone

WAAF—Drovers Journal Publishing Co., Chicago, Ill.—Construc-
920 tion permit to install new transmitter, change hours of operation from day to unlimited time, increase power from 1 KW day and night to 1 KW night and 5 KW day.

WFBM—Indianapolis Power & Light Company, Indianapolis, Ind.
1230 —License to cover construction permit (B4-P-1169) for changes in equipment.

KGCU—Mandan Radio Association, Mandan, N. Dak.—Authority
1240 to install automatic frequency control.

KOIL—Central States Broadcasting Company, Omaha, Nebr.—
1260 Construction permit to make changes in equipment; install a vertical antenna; increase power from 1 KW night, 2½ KW day, to 1 KW night, 5 KW day; move transmitter from 600 Huntington Ave., Fairmont Park, Council Bluffs, Iowa, to Township 74 N., Range 44 W., Pottawattamie County, Iowa.

WSBT—The South Bend Tribune, South Bend, Ind.—License to
1310 cover construction permit (B4-P-1322) for new equipment.

KFGQ—Boone Biblical College, Boone, Iowa.—Authority to make
1370 changes in automatic frequency control apparatus.

WMBH—Joplin Broadcasting Co., Joplin, Mo.—License to cover
1420 construction permit (B4-P-1272) for new transmitter.

KGNF—Great Plains Broadcasting Co. (a corp.), North Platte,
1430 Nebr.—License to cover construction permit (B4-P-1123) for changes in equipment.

W9XNX—WHBY, Inc., Portable-Mobile, Green Bay, Wis.—
License to cover construction permit (B-4-PE-178) for high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 10 watts power.

W9XNW—WHBY, Inc., Green Bay, Wis. (Portable-Mobile).—
License to cover construction permit (B-4-PE-177) for new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 10 watts power.

Fifth Zone

KLZ—KLZ Broadcasting Co., Denver, Colo.—Modification of
560 license to change power from 1 KW night and 5 KW day to 5 KW day and night.

KHQ—Louis Wasmer, Inc., Spokane, Wash.—Modification of
590 construction permit (B5-P-925) as modified to make changes in equipment.

KFPY—Symons Broadcasting Co., Spokane, Wash.—License to
890 cover construction permit (B5-P-332) as modified for new equipment, increase in power, move of transmitter. Amended: Antenna ammeter.

KHSL—Golden Empire Broadcasting Co., Chico, Calif.—Author-
950 ity to install automatic frequency control apparatus.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Modification of
1200 license to change hours of operation from daytime to unlimited, using 100 watts power night and 250 watts day.

KTFI—Radio Broadcasting Corp., Twin Falls, Idaho—Authority
1240 to install new automatic frequency control equipment.

NEW—The Bend Bulletin, Bend, Ore.—Construction permit to
1310 erect a new broadcast station, operated on **1310 kc.,** 100 watts night, and 250 watts day power, unlimited time.

KUMA—Albert H. Schermann, Yuma, Ariz.—Authority to in-
1420 stall automatic frequency control apparatus.

NEW—Loyal K. King, d/b as Radio & Television Research Co.,
1570 Los Angeles, Calif.—Construction permit for a new special broadcast station to be operated on **1530 kc.,** 1 KW, unlimited time. Amended: To change frequency from **1530 kc.** to **1570 kc.**

NEW—Ben S. McGlashan, Los Angeles, Calif. (Portable-Mobile) —License to cover construction permit (B5-PRY-12) for low frequency relay broadcast station, on **1622, 2058, 2150, 2790 kc.,** 100 watts power.

NEW—Nichols & Warinner, Inc., Long Beach, Calif.—License for a low frequency relay broadcast station to be operated on **1622, 2058, 2150, 2790 kc.,** 200 watts.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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IN THIS ISSUE

MORNER PRODUCTIONS

And now it's "music and flowers." The Morner Production Company of New York tell you "we are happy to be in a position to offer a limited number of radio stations—*without charge*—thirteen weekly 15-minute educational programs on 'Music and Flowers,' to be released on a sustaining basis."

The following reply made by a member station seems most appropriate:

"Dear Mr. Morner:

"Thank you for your letter of October 16th, in connection with programs entitled 'Music and Flowers.'

"While we consider it unethical to carry these programs as sustaining, inasmuch as they unquestionably have a commercial aspect in behalf of the flower industry, we are willing to have you supply us with a samply recording for audition to local flower dealers. If local dealers wish to participate in sponsoring the series, we shall be glad to carry them.

"Awaiting your decision,

"Very truly yours."

TELEVISION GRANT RECOMMENDED

The Farnsworth Television Corporation applied to the Federal Communications Commission for a construction permit for the erection in Philadelphia of an experimental television broadcast station to use 1,000 watts power and 42,000-56,000 and 60,000-86,000 kilcycles.

Examiner R. H. Hyde in Report No. I-304 recommended that the application be granted. He found that the corporation "has a program of research and experimentation affording reasonable promise of substantial contributions to the development of the visual broadcast art." Also "that the program of research and experimentation proposed by the applicant is to be conducted by qualified engineers" and that the granting of the application would be in the public interest.

HOTEL CLARK, LOS ANGELES

Members contemplating the acceptance of due bills from the Hotel Clark in Los Angeles, Calif., are advised to first communicate with the Washington State Association of Broadcasters, Seattle.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

1905 Corporation, New York City (2-2555, Form A-1)
National City Lines, Inc., Chicago, Ill. (2-2556, Form A-1)
Major Metals Corporation, New York City (2-2557, Form A-1)
Bartgis Brothers Company, Ilchester, Md. (2-2558, Form A-2)
Fred P. Hamilton et al., Council Bluffs (2-2559, Form F-1)
Winnebago Distilling Company, Chicago, Ill. (2-2560, Form A-1)
South Umpqua Mining Company, Portland, Ore. (2-2561, Form A-1)
Humboldt, Mines, Inc., Dover, Del. (2-2562, Form A-1)
Tom More Distillery Company, Louisville, Ky. (2-2565, Form A-1)
Solar Manufacturing Corp., New York City (2-2566, Form A-2)
Cummins Distilleries Corporation, Louisville, Ky. (2-2567, Form A-1)
Omaha & Council Bluffs Street Railway Co., Omaha, Nebr. (2-2569, Form A-2)
North Western Refrigerator Line Co., Chicago, Ill. (2-2570, Form A-2)

MANUAL PINKOWITZ AND SON MURRAY

Any member station contemplating doing business with a concern operating under the name of Paramount Studios, conducting a voice and dance studio (the partners' names are understood to be Manual Pinkowitz and his son Murray; the senior has been known as Mr. G. and his son has been known professionally as Murray Allen) is advised to communicate with Radio Station WDAS, Philadelphia, Pa.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity to show cause why cease and desist orders should not be issued against them.

No. 2597. A complaint alleging use of unfair methods of competition in the sale of a liquid laxative, called "Dr. Caldwell's Syrup Pepsin," has been issued against **Dr. W. B. Caldwell, Inc., Monticello, Ill.**

Advertising in newspapers, magazines and over the radio, the respondent corporation is said to represent that its preparation is a doctor's prescription, that physicians and hospitals prefer a liquid laxative, that it is not habit-forming but will correct the laxative habit caused by taking other laxatives, and that it restores and maintains health by regulating the system and maintaining it in normal working condition.

These representations are false and misleading, according to the complaint, which alleges that the general public understands that a doctor's prescription is his treatment for a diagnosed condition, whereas Dr. Caldwell did not prescribe or administer his preparation in all cases of constipation, under all conditions, or to patients of all ages.

No. 2955. Alleging unfair methods of competition in violation of Section 5 of the Federal Trade Commission Act, a complaint has been issued against **Silver Rod Stores Supply Company, Inc.,** and **Dale Drug Company, Inc.,** 60 Broadway, **Brooklyn,** engaged in the sale of "Dale's Aspirin."

The respondent corporations' alleged representations in advertising matter and on containers that either of them was the first or original manufacturer of or dealer in aspirin are untrue, the complaint alleges. Retail prices stamped on containers are false and fictitious, according to the complaint, are in excess of the actual selling prices and of the value of the aspirin, and are not the prices at which the product is sold or is intended to be sold.

No. 2958. Thirty-four corporations and their officers, said to constitute substantially all of the country's manufacturers of water gate valves, hydrants, fittings and similar articles used for water supply systems, are charged in a complaint with fixing and maintaining enhanced uniform prices in the sale of their products. The corporations are members of the Water Works Valve and Hydrant Group of the Valve and Fittings Institute, New York City, which, with its governing committee and its officers, George V. Denny, president commissioner, and Sam. G. Moyers, assistant secretary, also is named a respondent.

Selling chiefly to municipalities and to divisions and institutions of State and Federal governments, the respondents allegedly engage in price-fixing practices which prevent price competition and restrain trade, increase prices and create in themselves a monopoly in the sale and resale of their products.

Prior to 1933, the respondents were in competition among themselves, but in Decemher of that year they entered into their price-fixing combination, the complaint alleges. For the purpose of making their comhination effective, and pursuant to their alleged agreement, the resporidents are said to have divided the United States into zones in which they fix and maintain uniform discounts and enhanced uniform prices, and to have established the prices at which johhers and distrihutors huying their products must resell them.

The complaint charges that Denny and Moyers, officers of the Valve and Fittings Institute, acting for the memhers of the Water Works Valve and Hydrant Group, by intimidation and persuasion induced certain of the other respondents to raise their prices to the enhanced uniform prices fixed under the agreement.

The respondents are:

American Foundry & Manufacturing Company, 11th and Hehert Sts., St. Louis; The Bourbon Copper & Brass Works, Cincinnati; Camhridge Machine & Tool Company, Cambridge, Mass.; The Chapman Valve Manufacturing Company, 203 Hampshire St., Indian Orchard, Mass.; Columhian Iron Works, 2501 Chestnut St., Chattanooga; The Crane Company, 836 S. Michigan Ave., Chicago; The Darling Valve & Manufacturing Company, Williamsport, Pa.; The Eddy Valve Manufacturing Company, Troy, N. Y.; The Fairbanks Company, 393 Lafayette St., New York; The Filer & Stowell Company, Milwaukee, Wis.; Iowa Valve Company, Oskaloosa, Iowa; Jenkins Bros., Bridgeport, Conn.; The Johnson City Foundry & Machine Company, Inc., Johnson City, Tenn.; The Kennedy Valve Manufacturing Company, Elmira, N. Y.; The Ludlow Valve Manufacturing Company, Troy, N. Y.; M. & H. Valve & Fittings Co., Anniston, Ala.; Manistee Iron Works, Manistee, Mich.

The Michigan Valve & Foundry Company, 3631 Parkinson Ave., Detroit; Ohio Injector Co., Wadsworth, Ohio; Pacific States Cast Iron Pipe Company, Provo, Utah; The Pittshurgh Valve and Fittings Company, Philadelphia; The Reading-Pratt & Cady Company, Bridgeport, Conn.; The Rensselaer Valve Company, Troy, N. Y.; The Rich Manufacturing Co., Ltd., Los Angeles; A. P. Smith Manufacturing Company, East Orange, N. J.; South Park Foundry & Machine Company, St. Paul, Minn.; Traverse City Iron Works, Traverse City, Mich.; Walworth Company, 60 E. 42nd St., New York; Waterous Company, St. Paul, Minn.; Western Gas Construction Company, Ft. Wayne, Ind.; R. D. Wood Company, 400 Chestnut St., Philadelphia; W. E. Malpass and Mrs. Frank Bretz, trading as East Jordan Iron Works, East Jordan, Mich.; J. Roy Tanner, receiver for Pittshurgh Valve Foundry & Construction Company, Pittsburgh; and H. M. Kessler, trustee in bankruptcy for The Vogt Brothers Manufacturing Company, Louisville, Ky.

The Rundel Spence Company, Milwaukee, a suhsidiary of The Crane Company, and engaged as a johher and distributor, is named as a respondent but is not a memher of the Water Works Valve and Hydrant Group.

No. 2960. Operating under the firm name, **Greenberg & Josefsberg,** and under the trade names, **American Merchandise Company, G. & J. Manufacturing Co.,** and **G. & J. Products, Harry Greenberg** and **Leo Josefsberg,** 27-33 West 23rd St., **New York City,** are charged in a complaint with using unfair methods of competition in the sale of imported merchandise.

Quantities of gloves and thumb tacks imported hy the respondents from Japan and Germany, respectively, were marked with the words "Made in Japan" or "Japan," and "Made in Germany" or "Germany," the complaint alleges. After the gloves and thumh tacks were received in the United States, the respondents are said to have removed the words indicating their foreign origin and to have sold the products without informing dealers or the puhlic that they were manufactured in foreign countries.

According to the complaint, a substantial number of dealers and the public have a preference for merchandise manufactured in the United States, and the law requires that imported articles shall he legihly labeled so as to show the country of origin.

Nos. 2959-2961. Alleging unfair methods of competition through use of lottery schemes in the sale of candy and peanut confections, complaints have been issued against **The Sweets Company of America, Inc.,** 414 West 45th St., **New York City,** and **William P.** and **Charles C. Bennett,** trading as **Peanut Novelty Company,** 1615 North Prairie Ave., **Dallas, Tex.**

Selling to wholesalers and retailers, the respondents in both cases are said to pack their products in assortments which involve a lottery when the candy and peanuts are sold to consumers. Such sales promotion plans, the complaints charge, are deemed contrary to puhlic policy and tend to divert trade to the respondents from competitors who do not engage in similar methods.

The Sweets Company of America, Inc., according to the complaint, arranges its candy in assortments wherehy purchasers of certain pieces may win larger pieces without additional cost. In the other case, the respondents allegedly sell assortments of sealed packages of peanuts, some of which contain coins ranging in denominations of from 5 cents to $1, but ultimate purchasers cannot ascertain which packages contain money until a selection has heen made and the individual package broken open.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1813. Susquehanna Silk Mills, 149 Madison Ave., New York, selling a line of fahrics designated "Gracette," under the trade-mark "The Suskana Silks," agrees to cease using the word "silk" or "silks" as a part of its corporate or trade name in advertising matter so as to imply that the fabrics referred to are silk, when such is not a fact.

No. 1814. Fanciers' Foods, Inc., 75 East Wacker Drive, Chicago, selling dry dog food called "Prest O' Meat," agrees to discontinue use of the word "meat" as a part of that trade name or otherwise in advertising, implying that the product is made of meat. The agreement provides that if the food consists substantially of meat, the word "meat," if used to describe the meat content, shall he accompanied by other words in large type clearly indicating that the food is not made wholly of meat, but contains other products.

Assertions that its dog food is a scientifically complete food or a complete food for puppies or dogs of all breeds, will be discontinued unless a standard definition of what constitutes a balanced ration for dogs has heen properly determined.

The respondent company agrees to stop representations of 20 years' experience in practical dog hreeding and feeding, and use of the word "manufacturers," implying that the company, which is a distrihutor, manufactures its dog foods, when this is not true.

No. 1815. Operating under the name Maple Lawn Hatchery, Roy T. Ehrenzeller, McAlisterville, Pa., agrees to stop using advertising matter which has heen copied and appropriated from advertisements of a competitor or competitors, or the use of any advertising which may have a tendency to cause buyers to believe that Ehrenzeller's husiness is associated with the business of a competitor or competitors, or that his merchandise is the same as competitors', when such are not the facts. Ehrenzeller also agrees to cease advertising in a manner implying that he maintains and operates the flocks which produce the eggs from which the chicks he advertises are hatched, when this is not true. The stipulation points out that he purchases such eggs from various poultrymen.

No. 1816. Morays Watch Case Company, 27 Sixth Ave., Brooklyn, stipulates that it will stop using advertisements or other printed matter containing exaggerated or misleading representations concerning the values or prices at which its products are sold. According to the stipulation, this company sold its wristwatch hracelets under the trade name "Gold Suntan Bracelet," the figures "$3.00" appearing on the cards on which these articles were mounted. The stipulation points out that the prices on the mounting cards were not the prices at which the products were sold or expected to be sold, but were greatly in excess of the usual prices.

No. 1817. The Hutchins Pants Company, 408 West 7th St., Cincinnati, trading as Dunlap Pants Company, will discontinue use in advertising matter of the phrases "tailored to fit" or "made to fit" or from otherwise representing that its articles of clothing are tailored to the measure of the individual customers, when such is not a fact. The company also stipulates that it will stop representing that garments are given free, when such purported gifts are in fact hought and paid for hy the services performed by the agents in the sale of merchandise for the company, and that it will cease using such statements as "Direct to wearer" or "Buy your garments direct" so as to imply that the Hutchins Pants Company manufactures the products it sells, or owns and operates a factory in which such products are made.

No. 1818. Harry Kean, Samuel Weisman and William Albaum, trading as Mode Novelty Company, 232 13th Ave., Newark, N. J., will discontinue selling basehall or novelty caps manufactured from second-hand, old or discarded felt or other materials, unless there is affixed to such products in a conspicuous place, so as to be readily seen, some words clearly indicating that they are not made from new and unused materials, but from second-hand, old or discarded materials.

No. 1819. Luzier's, Inc., 3210 Gillham Plaza, Kansas City, Mo., in the sale of cosmetics, will cease representing on labels affixed to its products that "Hair Tonic" will promote hair growth, that "Muscle Oil," when applied to the outer surface of a double chin, will tighten the muscles, that "Marvelo" and "Lu-Mar" will remove age-lines or wrinkles, or that "Massage Cream" or "Lu-Tone" will nourish and strengthen tissues of the skin, when such are not the facts.

No. 1820. M. A. Willis, whose address is Lumber Exchange Building, Minneapolis, sells coupons and advertising matter for use of retailers in connection with the sale of their merchandise, and redeems such coupons when returned by customers of the retailers through exchanging them for articles of silver-plated ware and chinaware. Coupons sold to retailers under the name of "The Thompson Pottery Co., Advertising Department," are redeemable in chinaware, through an arrangement made between Willis and The C. C. Thompson Pottery Company, of East Liverpool, Ohio. Coupons sold under the name Rogers Redemption Bureau, formerly Rogers Advertising Syndicate, are redeemable in silver-plated ware purchased by Willis from wholesalers.

In this stipulation, the respondent agrees to stop representing that the merchandise he distributes to retailers' customers is free, and to stop concealing from, or failing to disclose to such retailers the fact that such merchandise is not distributed free, but that a charge therefor is exacted from their customers. Willis also agrees to cease the use in retail dealer contracts of misleading clauses respecting the terms and conditions upon which refunds of sums paid by retailers for coupons and advertising will be made.

Use of the name "The Thompson Potter Co., Advertising Department," or of any abbreviation thereof, such as "Advt. Dept," or of any other similar words implying that the respondent is conducting an advertising campaign for The C. C. Thompson Pottery Company, of East Liverpool, Ohio, or that he is the advertising department of that company, or is connected therewith in any way other than as purchaser, will be discontinued, under the stipulation.

Willis stipulates that he will discontinue exhibiting to retailers merchandise of a different quality than that distributed, as a means of inducing them to subscribe for coupons and advertising matter.

No. 1821. Novel-Wash Company, 4045 Garfield Ave., St. Louis, trading as Biancolava Chemical Company, engaged in the sale of a cleaning fluid under the trade names "Novel-Wash" and "Biancolava," agrees to discontinue advertising that its product is a liquid solution of chlorine and is non-poisonous; that it will sterilize and disinfect at the same time, or will remove all stains, and that it is a deodorizer, antiseptic, and will promote health.

No. 1822. Michael L. Temkin, trading as Temson Spice Company and as Temson Products Company, 1142 South Karlov Avenue, Chicago, agrees that in the sale of spices and flavoring extracts he will cease placing on labels any false or fictitious representations concerning the price or value of his products, and will stop selling products marked with a purported selling price known to be in excess of the price at which the products are intended to be and are sold in the usual course of trade.

No. 1823. Samuel Klein, 1374 39th St., Brooklyn, trading as Pierre Villon and dealing in perfumes, toilet waters and sachets, stipulates that he will discontinue the use on labels of such legends as "Pierre Villon, Roma-Italy," "Pierre Villon, Paris-New York," or "Noel en Paris, Villon," either alone or in connection with phrases or pictorial representations which may signify that the products so labeled are made in or imported from a foreign country, or that he has an office or laboratory in a foreign city, when such is not a fact. Klein will stop using containers imported from Italy and so marked, in which to sell domestic products, unless such containers are plainly and conspicuously stamped with words informing purchasers that the contents are not imported, but are domestic products.

No. 1824. New York Eagle Ink Company, Inc., 611 Broadway, New York, engaged in the sale of powdered ink, stipulates that it will discontinue using the phrase "Established 1902" on letterheads, billheads or in advertising matter, and the words "Manufactured and Distributed by the Eagle Ink Co." on labels or in advertising matter, implying that prior to March, 1936, the corporation manufactured the product which it sold in interstate commerce.

No. 1825. Joseph E. and Lester C. Bush, trading as The Bush Woolen Mills Company, Dresden, O., will cease and desist from use of the words "All Wool" to describe products not composed wholly of wool, and from use of the words "Wool" or "All Wool" in a manner to create the impression that the products referred to are composed wholly of wool, when such is not a fact. The stipulation provides that in the event the product is composed in substantial part of wool, and the word "Wool" is used to describe it, then that word shall be accompanied by other words in conspicuous type so as to indicate that the product is not composed wholly of wool, but in part of other materials.

No. 1826. Augustine & Kyer, Inc., 815 First Avenue, Seattle, agrees that in the sale of candy in interstate commerce it will cease and desist from the use of any scheme or plan to promote the sale of its product which involves or places in the hands of dealers, for use by them, any gift enterprise or lottery whereby any article is obtained or the value of any article is determined by lot or chance.

No. 1827. The Studebaker Corporation and its subsidiary, **The Studebaker Sales Corporation of America,** both having headquarters in **South Bend, Ind.,** have entered into a stipulation to discontinue certain misleading representations in connection with advertising a financial plan for use by customers in the purchase of automobiles.

In their agreement with the Commission, these companies stipulate that in their advertising matter or in that furnished to authorized dealers, they will stop using representations, pursuant to a financing plan, the effect or tendency of which is to cause purchasers to believe that the plan contemplates the payment of a simple interest rate on deferred and unpaid balances of the purchase price, as, for instance, 6 per cent, when in fact the interest rate involved and actually required is other than a simple interest rate of the amount referred to in such advertising.

According to the stipulation, the respondent companies advertised that "the new Studebaker C.I.T. six per cent plan offers a new low in cost to the time buyer," the initials "C.I.T." referring to Commercial Investment Trust Corporation, New York City, a financing company. Another advertisement was quoted as follows: "New low down payment which may easily be covered by the trade-in value of your present car, delivers this completely equipped 1936 Studebaker sedan in Chicago. Transportation, preparation and new low C.I.T. six per cent financing charges all paid! Then you pay as little as $29.50 a month."

No. 1828. Fred B. Havens, trading as Puritan Poultry Products, 1002 West Michigan Avenue, Jackson, Mich., engaged in selling an alleged proprietary medicinal product called "Puritan Egg Producer," agrees to cease employing the words "egg producer" alone or in connection with other words to describe the merchandise he sells, when in fact it does not contain ingredients serving as an aid in the egg production of poultry. Havens also agrees to discontinue advertising a "special offer" of $5 worth of his products for only $1.95, when in fact, according to the stipulation, $5 is not the regular price and $1.95 is not a special offer but the regular price.

No. 1829. Albert Sieb and Frank E. Dumser operate Sieb's Hatchery, for production of baby chicks, at Lincoln, Ill. They have branches at New Holland, Mt. Pulaski, and McLean, Ill. In selling their products, these respondents agree to bar use as a trade name for their baby chicks of the words "Sieb's Oversize Chicks," unless their chicks are definitely larger and heavier than those of competitors. The stipulation points out that under the Illinois "approved hatchery plan" eggs for hatching shall weigh at least 24 ounces to the dozen and the minimum weight for individual eggs shall be 1 11/12 ounces. These standards are observed by other dealers as well as Sieb and Dumser, and, according to the stipulation, there is no good reason for believing that the Sieb's Hatchery chicks are larger and heavier than those produced by others observing the requirements. The respondents also agree to cease using representations implying that increases in the number of their customers are due to the fact that the baby chicks they sell are larger and heavier than those of competitors, when this is not true.

No. 1830. Remedies for dogs are sold by Benjamin S. Bonebrake and William T. Hollifield, trading as S. A. Crisp Canine Company, with headquarters at Blacksburg, S. C. In their stipulation they agree to stop asserting that their product, "Crisp's Hot Shot Nerve Sedative," is a remedy for running fits in dogs; that "Crisp's Expectorant" is a remedy for dog distemper; and agree to cease using exaggerated assertions regarding the curative properties of their "Tun Kone" treatment of black tongue, and of "Crisp's Sarcoptic Mange Remedy."

No. 2724. The Commission has vacated its findings of fact and order to cease and desist against **Gustave Goldstein,** trading as **Humania Hair & Specialty Mfg. Co.,** 10-12 East 23rd St., **New York City,** and entered a new order against the same respondent, who is engaged in the sale of hair goods, cosmetics and toilet preparations.

The new order is substantially the same as the original, and

directs the respondent to discontinue representing that he is a manufacturer of hair and specialty goods and an importer of hair goods, and to cease certain claims as to the benefits to the skin and hair to be derived from the use of his various cosmetics and toilet preparations, unless such representations are true.

FEDERAL COMMUNICATIONS COMMISSION ACTION

There was no meeting of the Broadcast Division of the Commission this week. It is expected that the next meeting of the Division will be held Tuesday, November 10.

HEARING CALENDAR

Monday, November 9

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Memphis Commercial Appeal, Inc., Mobile, Ala.—C. P., **630 kc.**, 1 KW, 5 KW LS, unlimited time.

NEW—Isadore Goldwasser, Anniston, Ala.—C. P., **1420 kc.**, 100 watts, daytime.

WCOP—Massachusetts Broadcasting Corp., Boston, Mass.—Modification of license, **1130 kc.**, 500 watts, limited until LS at KSL, Salt Lake City.

Tuesday, November 10

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Advertiser Publishing Co., Ltd., Honolulu, T. H.—C. P., **1370 kc.**, 100 watts, unlimited time.

NEW—Fred J. Hart, Honolulu, T. H.—C. P., **600 kc.**, 250 watts, unlimited time.

Wednesday, November 11

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—State Capitol Broadcasting Assn., R. B. Anderson, President, Austin, Tex.—C. P., **1120 kc.**, 500 watts, 1 KW LS, specified hours (all hours not used by WTAW).

NEW—Dallas Broadcasting Co., Dallas, Tex.—C. P., **1500 kc.**, 100 watts, daytime.

NEW—Brownwood Broadcasting Co., Brownwood, Tex.—C. P., **1370 kc.**, 100 watts, daytime.

NEW—Sweetwater Broadcasting Co., Sweetwater, Tex.—C. P., **1310 kc.**, 100 watts, daytime.

Thursday, November 12

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Harriett M. Alleman and Helen W. McLellan, d/b as Cape Cod Broadcasting Co., Barnstable, Mass.—C. P., **1210 kc.**, 100 watts, 250 watts LS, unlimited time.

NEW—Philip J. Wiseman, Lewiston, Maine.—C. P., **1210 kc.**, 100 watts, unlimited time.

NEW—Arthur E. Seagrave, Lewiston, Maine.—C. P., **1420 kc.**, 100 watts, 250 watts LS, unlimited time.

NEW—Twin City Broadcasting Co., Inc., Lewiston, Maine.—C. P., **1210 kc.**, 100 watts, unlimited time.

NEW—George M. Haskins, Hyannis, Mass.—C. P., **1210 kc.**, 100 watts, 250 watts LS, unlimited time.

WMAS—WMAS, Inc., Springfield, Mass.—C. P., **560 kc.**, 1 KW, unlimited time.

Friday, November 15

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-243:

NEW—Nathan N. Bauer, Miami, Fla.—C. P., **1420 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-253:

WALR—WALR Broadcasting Corp., Zanesville, Ohio.—C. P. to move to Toledo; **1210 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-254:

NEW—Community Broadcasting Co., Toledo, Ohio.—C. P., **1200 kc.**, 100 watts, daytime.

Examiner's Report No. I-261:

NEW—Earl Weir, St. Petersburg, Fla.—C. P., **1370 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-221:

KLO—Interstate Broadcasting Corp., Ogden, Utah.—C. P., **1400 kc.**, 1 KW, 5 KW LS, unlimited time. Present assignment: **1400 kc.**, 500 watts, unlimited time.

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—National Battery Broadcasting Co., St. Paul, Minn.—C. P., **920 kc.**, 1 KW, unlimited time.

NEW—National Battery Broadcasting Co., St. Paul, Minn.—C. P., **580 kc.**, 1 KW, unlimited time.

NEW—Hildreth & Rogers Co., Lawrence, Mass.—C. P., **680 kc.**, 1 KW, daytime.

NEW—Old Colony Broadcasting Corp., Brockton, Mass.—C. P., **680 kc.**, 250 watts, daytime.

APPLICATIONS RECEIVED

First Zone

810 WNYC—City of New York, Dept. of Plant & Structures, New York, N. Y.—Modification of construction permit (B1-P-678) as modified, for equipment changes, antenna changes, move of transmitter and to extend completion date from 11-28-36 for 180 days.

1100 WLWL—Missionary Society of St. Paul the Apostle, New York, N. Y.—Modification of license to change hours of operation from specified hours to unlimited time, requesting facilities of WOV. Also requesting that WPG be assigned to **1130 kc.**, unlimited time.

1190 NEW—Charles Greenblatt, Waterbury, Conn.—Construction permit to erect a new station to be operated on **1190 kc.**, 250 watts daytime. Amended: Change hours of operation from day to limited time, using 250 watts power day and night. Request frequency and time of WATR.

1370 WBNY—Roy L. Albertson, Buffalo, N. Y.—Modification of license to operate 2 to 3 p. m., 10-31-36 and 11-14-36; 8:30 to 10 a. m. and 2 to 3 p. m., 11-1-36, 11-8-36 and 11-15-36; all hours on 11-3-36, 11-6-36, 11-7-36 and 11-11-36.

1410 WAAB—Bay State Broadcasting Corp., Boston, Mass.—License to use present licensed transmitter (W.E. 106-B) as an auxiliary transmitter.

1420 WNNY—Black River Valley Broadcasts, Inc., Watertown, N. Y.—Modification of construction permit (B1-P-1088) for a new station, requesting authority to make changes in authorized equipment.

1450 WSAR—Doughty & Welch Electric Co., Inc., Fall River, Mass.—Modification of construction permit (B1-P-225) for changes in equipment, increase in power, requesting extension of completion date from 10-31-36 to 12-1-36.

1450 WHOM—New Jersey Broadcasting Corporation, Jersey City, N. J.—Construction permit to install a new transmitter and increase power from 250 watts to 250 watts night, 1 KW day.

NEW—General Electric Co., near Belmont, Calif.—Construction permit for international broadcasting station on **9530, 15330, 21480 kc.**, power 20 KW.

W2XAD—General Electric Co., Schenectady, N. Y.—Construction permit to make changes in equipment and add frequency **21480 kc.**

Second Zone

610 WIP—Pennsylvania Broadcasting Company, Inc., Philadelphia, Pa.—Construction permit to install new transmitter and vertical antenna, increase night power from 500 watts to 1 KW, move transmitter from 35 S. Ninth St., Philadelphia, Pa., to 21st and Hamilton Sts., Philadelphia, Pa.

780 NEW—Allen T. Simmons, Mansfield, Ohio.—Construction permit to erect a new broadcast station to be operated on **780 kc.**, 1 KW power, daytime.

1200 NEW—Statistical Research Laboratories, Inc., Cleveland, Ohio.—Construction permit for a new broadcast station to be operated on **1200 kc.**, 100 watts nighttime, 250 watts day, unlimited time; studio, 1501 Euclid Ave., Cleveland, Ohio; transmitter, to be determined, Cuyahoga County, Ohio. Amended to install directional antenna and for approval of transmitter site at Distribution Terminal Warehouse, W. 14th and University Rd., Cleveland, Ohio.

NEW—Frazier Reams, Mansfield, Ohio.—Construction permit to
1370 erect a new broadcast station to be operated on **1370 kc.,** 100 watts, daytime.

WHK—Radio Air Service Corp., Cleveland, Ohio.—Authority to
1390 determine operating power by direct measurement of antenna power.

WBCM—James E. Davidson, Bay City, Mich.—Authority to de-
1410 termine operating power by direct measurement of antenna power.

WCKY—L. B. Wilson, Inc., Covington, Ky.—Construction permit
1490 to install new transmitter.

NEW—Leo J. Omelian, Erie, Pa.—Construction permit for new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 8 watts power.

W3XAU—WCAU Broadcasting Co., Newtown Square, Pa.—License to cover construction permit for international broadcast station, for increase in power to 10 KW.

Third Zone

NEW—H. O. Davis, Mobile, Ala.—Construction permit for a new
610 station to be operated on **610 kc.,** 250 watts night and 500 watts day power, unlimited time.

WOAI—Southland Industries, Inc., San Antonio, Tex.—Authority
1190 to transfer control of corporation from G. A. C. Halff to Columbia Broadcasting System, Inc., 2,000 shares of common stock.

KMLB—Liner's Broadcasting Station, Inc., Monroe, La.—License
1200 to cover construction permit (B3-P-872) for changes in equipment and increase in power (move covered by license B3-L-319).

WJRD—James R. Doss, Jr., Tuscaloosa, Ala.—License to cover
1200 construction permit (B3-P-694) as modified for a new station.

WFOY—Fountain of Youth Properties, Inc., St. Augustine, Fla.—
1210 Modification of construction permit (B3-P-466) for a new station to install new transmitter and extend commencement and completion dates from 8-12-36 and 2-12-37 to 30 days after grant and 120 days thereafter.

KTAT—Tarrant Broadcasting Company, Fort Worth, Tex.—Con-
1240 struction permit to install new transmitter and vertical antenna (contingent upon granting of B3-AL-136).

NEW—Red Lands Broadcasting Asso., Ben. T. Wilson, President,
1310 Lufkin, Tex.—Construction permit to erect a new broadcast station to be operated on **1310 kc.,** 100 watts power, daytime. Amended: Change transmitter site from 3 miles northeast of Lufkin, Tex., to site to be determined, Lufkin, Tex.

KFXR—Exchange Ave. Baptist Church of Oklahoma City, Okla-
1310 homa City, Okla.—Modification of construction permit (B3-P-1141) to change type of equipment.

WALA—Pape Broadcasting Corporation, Inc., Mobile, Ala.—Au-
1380 thority to make changes in automatic frequency control equipment.

WGPC—Americus Broadcast Corp., Albany, Ga.—Modification of
1420 construction permit (B3-P-1077) for new equipment; move studio and transmitter, further requesting authority to install new transmitter and make antenna changes; increase day power from 100 to 250 watts; change studio address from 127½ N. Jackson St. to 125½ N. Jackson St., Albany, Ga.; move transmitter from corner Pine and Jackson Sts. to 125½ N. Jackson St., Albany, Ga.; extend commencement and completion dates from 9-17-36 and 3-17-37 to 30 days after grant and 60 days thereafter. Amended: Omit request for increase in day power.

WHBB—W. J. Reynolds, Jr., J. C. Hughes, and J. S. Allen, d/b
1500 as Selma Broadcasting Co., Selma, Ala.—Voluntary assignment of license from W. J. Reynolds, Jr., J. C. Hughes, and J. S. Allen, d/b as Selma Broadcasting Co., to Selma Broadcasting Co., Inc.

KGKB—East Texas Broadcasting Co., Tyler, Tex.—Construction
1500 permit to make changes in equipment, increase power from 100 watts to 100 watts night and 250 watts day, change hours of operation from unlimited day, specified hours night, to unlimited.

Fourth Zone

KFYR—Meyer Broadcasting Co., Bismarck, N. Dak.—Modifica-
550 tion of license to change power from 1 KW nighttime, 5 KW daytime, to 5 KW day and night.

WIBW—Topeka Broadcasting Association, Inc., Topeka. Kans.—
580 Modification of license to change power from 1 KW night, 5 KW day, to 5 KW day and night.

WMT—Iowa Broadcasting Co., Cedar Rapids, Iowa.—Modification
600 of license to increase power from 1 KW night, 5 KW day, to 5 KW day and night, using directional antenna at night.

KMA—May Seed & Nursery Co., Shenandoah, Iowa.—Authority
930 to determine operating power by direct measurement of antenna.

KMA—May Seed & Nursery Co., Shenandoah, Iowa.—License to
930 cover construction permit (B4-P-764) for new equipment and move of transmitter.

WWAE—Hammond-Calumet Broadcasting Corp., Hammond, Ind.
1200 —Construction permit to install new transmitter.

KSCJ—Perkins Bros. Co. (Sioux City Journal), Sioux City, Iowa.
1330 —Construction permit to move auxiliary transmitter from 1st and Bluff Sts., Sioux City, Iowa, to McLaughlin Farm, southeast quarter of northeast quarter, Section 1, Sioux City, Iowa.

WGRC—Northside Broadcasting Corporation, New Albany, Ind.—
1370 License to cover construction permit (B4-P-494) as modified for new station.

WMIN—Edward Hoffman, St. Paul, Minn.—Modification of
1370 license to change name from Edward Hoffman to Edward Hoffman, tr/as WMIN Broadcasting Co.

NEW—Abraham Plotkin, Chicago, Ill.—Construction permit for
1600 a new broadcast station to be operated on **1600 kc.,** 100 watts nighttime, 250 watts day, unlimited time; studio, Ashland and Van Buren Ave., Chicago, Ill., transmitter to be determined, Cook County, Ill.

W9XLP—Mississippi Valley Broadcasting Co., Portable-Mobile.—
License to cover construction permit for high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 5 watts.

W9XAZ—The Journal Co. (The Milwaukee Journal), Milwaukee, Wis.—Modification of license to change frequencies from **31600, 35600, 38600, 41000 kc.** to **26400 kc.**

Fifth Zone

KGHL—Northwestern Auto Supply Co., Inc., Billings, Mont.—
780 License to cover construction permit (B5-P-984) for increase in power and move of transmitter.

KGHL—Northwestern Auto Supply Co., Inc., Billings, Mont.—
780 Authority to determine operating power by direct measurement of antenna.

KFPY—Symons Broadcasting Co., Spokane, Wash.—Authority to
890 determine operating power by direct measurement of antenna power.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—License to cover
1310 construction permit (B5-P-444) as modified for new equipment, move of transmitter, change in frequency, power, and hours of operation.

NEW—Ellwood Warwick Lippincott, Bend, Ore.—Construction
1310 permit for new station to be operated on **1310 kc.,** 100 watts power, unlimited time.

KMO—KMO, Inc., Tacoma, Wash.—Modification of construction
1330 permit (B5-P-1235) for increase in power, move of transmitter and new antenna, requesting new equipment and approval of transmitter site at Main Tacoma-Seattle Highway, 1½ miles north of city of Tacoma, Wash.

KGER—Consolidated Broadcasting Corporation, Ltd., Long Beach,
1360 Calif.—Construction permit to make changes in equipment.

KSLM—Oregon Radio, Inc., Salem, Ore.—Modification of con-
1370 struction permit (B5-P-1182) for a new transmitter, requesting changes in authorized equipment. Amended to make further changes in equipment.

KGAR—Tucson Motor Service Company, Tucson, Ariz.—Modifi-
1370 cation of license to change frequency from **1370 kc.** to **890 kc.,** power from 100 watts night, 250 watts day, to 250 watts day and night.

NEW—Central Broadcasting Corporation, Centralia, Wash.—Con-
1440 struction permit for new station on **1440 kc.,** 1 KW power, unlimited time.

NEW—Dr. A. H. Schermann, Mobile, Flagstaff, Ariz.—Construction permit for a low frequency relay station on **2190, 1646, 2090, 2830 kc.,** 10 watts power.

NEW—Radio Service Corp. of Utah (Mobile), Salt Lake City, Utah.—Construction permit for a high frequency relay broadcast station on **39700, 39900, 40800, 41400 kc.,** 5 watts power.

NEW—Radio Service Corp. of Utah (Mobile), Salt Lake City, Utah.—Construction permit for high frequency relay broadcast station on **39700, 39900, 40800, 41400 kc.,** 5 watts power.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

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IN THIS ISSUE

RECOMMENDS NEW PENNSYLVANIA STATION

The Pottsville Broadcasting Company has filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new broadcasting station at Pottsville, Pa., to use 580 kilocycles, 250 watts and daytime operation.

Examiner Melvin H. Dalberg in Report No. I-305 recommended that the application be granted. The Examiner found that there is need for daytime broadcast service in the area proposed to be served. He found that there would be no interference with any existing facilities or conflict with any of the pending applications before the Commission.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

Minneapolis-Honeywell Regulator Co., Minneapolis, Minn. (2-2571, Form A-2)
Florence Stove Company, Gardner, Mass. (2-2572, Form A-2)
Duquesne Brewing Co. of Pittsburgh, Pittsburgh, Pa. (2-2573, Form A-2)
Checker Cab Manufacturing Corp., Kalamazoo, Mich. (2-2574, Form A-2)
Greenwich Gas System, Inc., Greenwich, Conn. (2-2575, Form A-1)
Kentucky Springs Distillery, Louisville, Ky. (2-2576, Form A-1)
Eaton & Howard Management Fund, Boston, Mass. (2-2577, Form A-1)
H. A. Montgomery Company, Detroit, Mich. (2-2578, Form A-2)
Shenango Valley Water Co., Sharon, Pa. (2-2580, Form A-2)
Comstock-Dexter Mines, Inc., Prescott, Ariz. (2-2580, Form A-1)
Peaslee-Gaulbert Corp., Louisville, Ky. (2-2582, Form A-2)
Beaunit Mills, Inc., New York City (2-2583, Form A-2)
Michigan Bumper Corp., Grand Rapids, Mich. (2-2584, Form A-1)
Que-On Mines, Ltd., Toronto, Canada (2-2586, Form A-1)
Kline Brothers Company, New York City. (2-2587, Form D-1)
Kline Brothers Company, New York City (2-2588, Form A-2)
Preferred Stockholders Indianapolis Chain Store, Indianapolis, Ind. (2-2589, Form D-1)
United States Casualty Company, New York City. (2-2590, Form A-2)
Canusa Gold Mines, Ltd., Toronto, Canada. (2-2591, Form A-1)
Rickard Ramore Gold Mines, Ltd., Toronto, Canada. (2-2592, Form A-1)
Reliance Electric & Engineering Co., Cleveland, Ohio. (2-2593, Form A-2)
Store Kraft Manufacturing Co., Beatrice, Nebr. (2-2594, Form A-2)
Petrie Stores Corp., New York City. (2-2595, Form A-2)
James Talcott, Inc., New York City. (2-2596, Form A-2)
Ohio Associated Telephone Company, Erie, Pa. (2-2597, Form A-2)

CHANGES RECOMMENDED FOR WKZO

Broadcasting station WKZO, Kalamazoo, Mich., applied to the Federal Communications Commission for authority to move its transmitter to a new site, to install a directional antenna and to operate on 590 kilocycles, with power of 250 watts night and one kilowatt unlimited time. The station now operates on 590 kilocycles, with 1,000 watts power daytime only.

Examiner George H. Hill in Report No. I-306 recommended that the application be granted. He found that "there is a definite need for this additional service as this area does not have any acceptable nighttime service." The Examiner states that the operation of the station with a directional antenna "would not result in any objectionable interference to the normally protected service area of any existing station."

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2809. An order to cease and desist has been issued against **G. Lindholm Company, Inc.,** 316 Flatbush Ave., **Brooklyn,** dealer in a comb product for use in treating the hair and scalp.

The order directs the respondent company, in the sale of the "Evans Dermectro Electric Comb", to discontinue representing through employment of phrases such as "amazing invention", "it does wonders for your hair", and "it strokes new life and vigor into your hair", that use of this device will check dandruff and falling hair, impart new life to dry, dull hair and cause it to become lustrous, thick and wavy, and other representations.

The order also prohibits representations, directly or indirectly, that each of the respondent's products carries with it a guarantee for the benefit of the purchaser in the event of dissatisfaction. In connection with such purported guarantee, the order prohibits the use of language such as "A thousand-dollar guarantee goes with every comb. If, after seven days' usage you are not satisfied, just return the comb and your money will be cheerfully refunded."

No. 2962. Suppression of competition in the women's wearing apparel trade through a merchandising plan said to have been entered into by more than 50 retail dealers in more than 50 of the larger cities of the United States, with two New York corporations and an individual, is alleged in a complaint.

Respondents named in the complaint are National Modes, Inc., National Modes Holding Corporation, Inc., and John Block, all of 130 W. 31st St., New York City. Block is president, treasurer and majority stockholder of the holding corporation, and secretary of National Modes, Inc. The more than 50 retailers are stockholders in National Modes, Inc.

The plan involved, as alleged, the creation and development of trade-marks and trade names in connection with certain lines of wearing apparel and other merchandise, for popularizing certain styles through the channels of the respondent organizations and their retail subscribers. It is charged that the respondent corporations entered into contracts with the retailers to feature and promote these styles at prices to be fixed by National Modes, Inc., and with certain manufacturers to supply the garments advertised.

According to the complaint, National Modes, Inc., created the trade-mark or trade name "Carolyn" to be applied to garments costing $10.75, or more, each, and the name "Jeanne Barrie" for garments costing less than $10.75. These names were nationally advertised by the respondents, according to the complaint, so that a widespread public preference for them, and the garments they designated, was created.

No. 2963. A complaint has been issued against **Zion Holy Spiritual Mission** and **Eustace N. French,** trading as **Zion Holy Spiritual Mission Laboratories,** 3338 S. State St., **Chicago,** alleging unfair trade practices and false advertising in the sale of correspondence courses in spiritual development, magic and mysticism; "success seals", good luck coins, and books.

French allegedly represents that he is an ordained minister of the Spiritualist Church, being a graduate of, and holding degrees from a seminary of that church, when, according to the complaint, such are not the facts, and he is not entitled to use ecclesiastical titles.

Other representations which the respondents are said to make, and which the complaint alleges are untrue, are that their "success seals" enable one to have power and influence over all things, and that their correspondence lessons and books are complete courses of instruction in magical spiritual arts and in educational and spiritual development, equipping purchasers with the power to make money immediately upon beginning the course and to accomplish the many results claimed for their products.

No. 2964. Alleging use of unfair methods of competition in connection with the sale of a poultry medicine designated "Pratt's 'Split-Action' N-K Capsules," a complaint has been issued against **Pratt Food Company,** 126 Walnut St., **Philadelphia.**

Advertising in newspapers, on labels and in other ways, the respondent company allegedly makes representations to the effect that its product will destroy all worms, including tapeworm heads. According to the complaint, such representations are false and misleading, and tend to deceive purchasers and to divert trade unfairly to the respondent company from competitors who truthfully advertise their products.

No. 2965. Labeling hosiery in a manner tending to cause purchasers to believe it is composed substantially of silk when such is not a fact, is the basis of a complaint issued against **Shuford Hosiery Mills, Inc., Hickory, N. C.**

The respondent corporation allegedly stamps certain of its hosiery with the words "Pure Thread Silk," in large type, while the accompanying words "Reinforced with Rayon" are in smaller and less conspicuous type. Such a brand is alleged to create the false impression that the rayon content constitutes a relatively small part of the hosiery, when, according to the complaint, the hosiery is not composed principally of silk but is made chiefly of a material or materials other than silk. In many instances, the complaint points out, the hosiery referred to is constructed from 80 per cent rayon thread and 20 per cent silk thread.

No. 2966. Unfair competition through excessive price marking of soap is alleged in a complaint issued against **Indianapolis Soap Co.,** 1249 Roosevelt Ave., **Indianapolis,** trading also as **Sanisoap Co.** and **W. W. Soap Manufacturing Co.**

Cardboard boxes containing soap sold by the respondent company principally through house-to-house canvassers, were marked "3 bars—combination price, 75 cents", when in fact, according to the complaint, these prices were many times in excess of the actual selling price. This practice is alleged to have tended toward deception of purchasers into believing that they were receiving a soap of much greater value than the price charged would indicate. Such representations were in violation of Section 5 of the Federal Trade Commission Act, according to the complaint.

No. 2967. Fourteen companies manufacturing school supplies and the trade association of which they are the principal members are respondents in a complaint charging violation of the Federal Trade Commission Act. The respondents are alleged to have entered into a combination or conspiracy among themselves and through the association to restrain competition in the sale of their products by agreeing to fix and maintain uniform prices, terms and discounts.

Selling a large proportion of the total volume of chalk, wax crayons, water-colors, tempera colors and other school supplies distributed in interstate commerce, the following companies are named respondents in the Commission's complaint: American Crayon Company, Sandusky, O.; Binney & Smith Co., 41 East 42nd St., New York; Milton Bradley Co., Springfield, Mass.; Talens School Products, Inc., 36 West 24th St,, New York; Joseph Dixon Crucible Company, Jersey City, N. J.; Standard Crayon Manufacturing Co., Danvers, Mass.; National Crayon Company, West Chester, Pa.; New Jersey Crayon Company, Paterson, N. J.; Pennart Crayon Company, Easton, Pa.; Creston Crayon Company, New York; Weber Costello Co., Chicago Heights, Ill.; American Art Clay Company, 4717 West 16th St., Indianapolis; Globe Crayon Company, Brooklyn, N. Y.; and Art Crayon Company, 253 36th St., Brooklyn, N. Y.

The trade association is the Crayon, Water-Color and Craft Institute, 386 Fourth Ave., New York City, formerly known as Paint and Crayon Industry.

Since December, 1934, the fourteen companies and the association are alleged to have cooperated in enforcing and maintaining fixed prices, terms and discounts by exchange of information through the association serving as a clearing house for exchange of price and sale information furnished by the corporate respondents. Regular meetings of the association members are alleged to have been held for discussion of trade and competitive conditions and for agreement upon trade policies to be followed and prices to be charged.

The result, it is alleged, has been the enhancement of school supply prices above the levels prevailing in times of normal, open competition between the respondents, and a tendency to create in them a monopoly in the manufacture and sale of their class of products.

No. 2968. A complaint has been issued against **Alpha Laboratory, Inc.,** 5908 North Clark St., **Chicago,** charging unfair competition in the interstate sale of hygienic products for use by women.

Among advertising assertions used were alleged misleading representations regarding the efficacy of the respondent company's products, and that they were approved by the American Medical Association, also language implying cooperation and close connection between the respondent company and the American Birth Control League.

The complaint charges that the respondent's products were not of the effectiveness advertised and that the representations concerning the medical and birth control organizations were not founded on fact. These advertising assertions are alleged to be in violation of the Federal Trade Commission Act, constituting unfair competition.

Nos. 2969-2970-2971. Complaints have been issued against **Consolidated Candy Co.,** 826 Exposition Ave., **Dallas, Tex.; Charles Elisco,** trading as **Maywood Candy Co.,** 415 Lake St., **Maywood Ill.;** and **Chocolate Products Co., Inc.,** Amber and Westmoreland Sts., **Philadelphia,** charging them with unfair competition through use of lottery methods in the sale of candy.

Assortments of candy were arranged so that purchasers drawing larger pieces than the customary sizes would receive prizes, and in other assortments the push card device was used, according to the complaints. In another type of assortment were packages of candy in which were concealed either articles of merchandise or coins, one complaint alleged.

Nos. 2972-2975. Four additional complaints charging violations of Robinson-Patman anti-price discrimination amendments to the Clayton Act have been issued. The complaints also allege violations of Section 5 of the Federal Trade Commission Act prohibiting unfair competition.

Twelve respondents are named in the complaints. They are:

Bourjois, Inc., of New York City, and Bourjois Sales Corporation and Barbara Gould Sales Corporation, subsidiaries of Bourjois, Inc.

Richard Hudnut, of New York City, and Richard Hudnut Sales Company, a subsidiary;

Coty, Inc., of New York City, and Coty Corporation, Ltd., incorporated in Maryland; Coty Corporation, Ltd., incorporated in Tennessee; Coty California Corporation, and Coty New Jersey Corporation;

Elmo, Inc., of Philadelphia, and Elmo Sales Corporation, a subsidiary.

The complaints charge violations of Sections 2(a), 2(d) and 2(e) of the Robinson-Patman Act, as well as Section 5 of the Federal Trade Commission Act.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 01488. Frank S. Perkins, Omaha, Nebr., an individual operating under the trade name of National Detective System, selling a correspondence course in detective instruction, agrees to stop various representations of his course, typical among which are the assertions that men and women are in demand everywhere for secret investigation and confidential work; that experience is unnecessary to be a successful detective, and that detectives who graduate from this course are never poor.

No. 01490. Frank R. Jelleff, Inc., 1214 F St., N. W., Washington, D. C., dealing in fur coats and fur-trimmed coats, agrees to cease describing furs in any other way than by use of the correct name of the fur as the last word of the description, and when any dye or blend is used in simulating another fur, the true name of the fur appearing as the last word of the description is to be immediately preceded by the word "dyed", or "blended" compounded with the name of the simulated fur. The Jelleff company agrees to stop representing that vicuna fur dyed or dressed to resemble the fur of the fox is "Vicuna Fox"; that kid or young goat dyed or dressed to resemble caracul is "Kid Caracul", and like representations.

No. 01491. Rudolph Blank, trading as Golden Youth, 1860 Broadway, New York, agrees to cease representing that "Stimu-

lax" is a natural system cleanser and a digestant; that "Glantonic" is a gland tonic or builds resistance against disease; that "Vegetonic" preserves and restores clear complexion and general health; and that certain other of his products correct or remove wrinkles, or recreate the natural beauty of the skin. The respondent also will stop using such names as "Glantonic" or "Tonic Cleanser" to designate his products.

No. 01492. I. M. Silverberg, trading as The Roxol Company, 123 S. 8th St., St. Louis, will cease and desist from representing in advertising matter that "Roxol" is a competent remedy for eczema or psoriasis and kindred irritating skin ailments; that it will give "sure relief" in cases of long standing where all other remedies have failed; and that athlete's foot and ringworm yield quickly to "Roxol." The respondent also will stop advertising that he makes a special offer of $3.00 for his product for a limited time.

No. 01493. The Elizabeth Towne Company, Inc., 247 Cabot St., Holyoke, Mass., engaged in selling a "Regeneration Series," including 12 Yogi developing exercises, will discontinue advertising that use of its course of lessons will retard old age, bring radiant health and new life to students of the course, and produce vital changes in chronic invalids.

No. 01494. V. E. Thompson, of Aurora, Ill., an individual trading as Thompson Bros. Balloon and Parachute Co., in selling parachutes, agrees to stop advertising that they have been approved by any governmental agency, or that the parachutes are of Navy surplus.

No. 01495. Randolph A. Menefee, trading as Khylex Chemical Co., Chevy Chase, Md., agrees to stop advertising that "Khylex", when followed by an application of vinegar, will remove all kinds of ink spots; will "renew" old painted woodwork and floors, and will act as a germicide or deodorant, unless, in connection with this last representation, the direction for the use of the product indicates that the room or article first must be thoroughly cleansed before "Khylex" is applied.

No. 01496. The Malone Oil Co., 2197 E. 18th St., Cleveland, in the sale of "Vitachix", will no longer assert that its "Vitachix Cod Liver Oil" is the richest known source of vitamins A and D, and that feeding "Vitachix Cod Liver Oil" to chickens builds up resistance against disease, eliminates thin-shelled eggs, and improved hatchability. Other like representations will be discontinued.

No. 01497. W. T. Grinstead, Edwardsville, Ill., trading as Rapid Marbleizing Service, engaged in selling instructions and a formula for the manufacture of imitation marble, agrees to cease representing that the composition "Liquid Marble", made by use of his instructions, "excels almost any other material for the reproduction of statuary", and to stop asserting that such composition "may be used wherever marble is used in building," or that "no experience is needed in the manufacture of imitation marble by the use of his instructions and formula."

No. 01498. The Empire Regenerator Co., Inc., 605 6th Ave., New York City, in selling a hair dye designated "The Empire Hair Regenerator", will cease representing that the product will remove gray hair or restore the original color to hair, or that it will prevent hair from turning gray. The corporation also agrees to cease using the words "Hair Regenerator" in connection with the sale of its product.

No. 01499. S. L. Doster, trading as Doster & Co., 4835 Rice St., Chicago, stipulates that in the sale of "Doster's Ointment" he will cease representations that the product is healing or antiseptic; that it causes red blotches to disappear and the skin to regain its normal texture, unless these assertions are qualified by statements that it cannot be relied upon to accomplish these results in all cases. The respondent also agrees to stop asserting that psoriasis, eczema, and other skin diseases yield quickly to the product, and that its results are guaranteed.

No. 01500. Charles F. Slade Co., Inc., 102 Clinton St., Buffalo, engaged in selling a preparation designated "S-K-O Slade's Solution", stipulates that it will discontinue representations that the product will sterilize bathroom equipment or any other articles.

No. 01501. J. J. Preo, trading as J. J. Preo & Co., Blaine, Wash., will stop advertising that his "Magic Skin Remedy" is competent in the treatment of insect bites, eczema, and all skin disorders; that it is a new discovery, giving instant relief, and that its use prevents the return of skin ailments.

No. 01502. Fred S. and William W. Hirsch, operating as Innerclean Manufacturing Co., 346 E. 6th St., Los Angeles, engaged in selling "Innerclean Intestinal Laxative", agrees to discontinue claims that the product, among other things, is a competent treatment for constipation, unless the representation is limited in reference to the relief of a simple or temporary condition. The respondents also agree to stop representing that their product will purify the blood, relieve catarrhal conditions, or have any action on the kidneys, except that of a mild diuretic; that it will prevent ulcers, diabetes, Bright's disease, or other serious ailments; and that it will overcome irritations of the entire digestive and intestinal tract. The representation that the product does not contain drugs also will be stopped.

No. 2809. An order to cease and desist has been issued against **G. Lindholm Company, Inc.,** 316 Flatbush Ave., **Brooklyn,** dealer in a comb product for use in treating the hair and scalp.

The order directs the respondent company, in the sale of the "Evans Dermectro Electric Comb", to discontinue representing through employment of phrases such as "amazing invention", "it does wonders for your hair", and "it strokes new life and vigor into your hair", that use of this device will check dandruff and falling hair, impart new life to dry, dull hair and cause it to become lustrous, thick and wavy, and other representations.

The order also prohibits representations, directly or indirectly, that each of the respondent's products carries with it a guarantee for the benefit of the purchaser in the event of dissatisfaction. In connection with such purported guarantee, the order prohibits the use of language such as "A thousand-dollar guarantee goes with every comb. If, after seven days' usage you are not satisfied, just return the comb and your money will be cheerfully refunded."

No. 2846. An order has been issued requiring **Frances Brown,** trading as **American Bank Machinery Co.,** 4626 Lancaster Ave., **Philadelphia,** to discontinue unfair representations in the business of repairing and rebuilding perforating and check endorsing machines, and in selling new parts therefor.

The respondent is directed to cease asserting that she represents either the American Perforator Company or the Cummins Perforator Company, old line companies of Chicago; that she does all repair work for these companies; that the American company and the respondent are one and the same concern, and that the American and Cummins companies were, or are, out of business.

Representation that the respondent is a member of the National Association of Manufacturers of the United States of America is to be discontinued unless and until she becomes such a member, and she is directed to stop asserting that she has places of business in Chicago or Atlanta, unless and until this is the fact.

No. 2883. False and misleading representations in the sale of tonics, cosmetics and toilet preparations are prohibited under an order to cease and desist issued against Charles of the **Ritz Distributors Corporation,** 9-11 University Place, **New York City.**

The respondent corporation is directed to cease asserting that "Eye Lotion Ritz" strengthens the eye nerves or relieves eye strain due to any functional defect; that "Scalp Food Ritz" promotes growth of hair, and that "Eye Cream Ritz" nourishes the delicate underlying tissues about the eyes, so as to prevent crow's feet or banish face lines.

Another representation prohibited is that "Rejuvenescence Cream Ritz" is a compound of substances extracted from living tissues, or that it supplies the skin with the precious youth-giving element essential to young skin. Under the order, "Eyelash Grower Ritz" will no longer be represented as promoting the growth of the lashes.

No. 2886. Misrepresentation of the value and quality of imitation diamonds and rings is prohibited under an order to cease and desist entered against **J. R. Stone, Wheeling, W. Va.,** trading as **Spanish Diamond Co., Chinese Ring Co.,** and **National Jewelry Co.**

Stone is directed to discontinue advertising that the imitation diamonds he sells in interstate commerce are flawless; that they deceive experts, and cannot be told from genuine diamonds costing many hundreds of dollars; that they are "Spanish Diamonds", imported from Spain, and are "Laboratory made."

As to the ring mountings he sells, the respondent is ordered to stop representing that they have a platinum effect finish, are "white gold-appearing chromium" reproductions of a diamond ring worth $300, or any substantial amount of money, or that they are 18-carat white gold.

No. 2896. Utilities Engineering Institute, Inc., 404 North Wells St., **Chicago,** has been ordered to discontinue certain unfair methods of competition, including the advertising of its correspondence courses in air conditioning and electric refrigeration under the guise of offering employment to persons answering its ads.

The Commission directed the respondent corporation to cease representing in the "Help Wanted" columns of newspapers, or otherwise, that it has positions at its disposal or that employment is being offered when, in reality these so-called "blind ads" are contact advertisements used in connection with the sale of the correspondence courses.

Under the order, the respondent corporation is directed to dis-

continue representing that it has made arrangements with various firms to employ and give permanent positions to students who have completed any course, or that the respondent will do so, and that so-called "job tickets" will be furnished applicants or students whereby they can earn money installing and servicing electric ice boxes while they are training.

No. 2926. The **John J. McCann Co.**, 454 Lawrence St., **Burlington, N. J.**, manufacturer of artificial limb appliances, has been ordered to cease and desist from false and misleading representations in the interstate sale of one of its products, namely, "stump socks", which are used to ease the pressure or friction caused by attachment of an artificial appliance in cases of amputation of a limb.

The order directs the respondent to cease and desist, directly or by implication, from representing through use of the phrase, "literally never wear out", or other words of similar import or effect, that the life of its stump socks is indefinite and that they are impervious to ordinary wear and tear, or are moth-proof or impervious to damage by moths.

FTC CLOSES CASE

No. 2886. The Federal Trade Commission has issued an order closing its case against **Nolan Atz**, of **Milltown, Ind.**, trading under the names **Atz's Hatchery, Atz's Blue Mound Hatchery,** and **Atz's Mammoth Hatchery.**

In a Commission complaint issued August 3, 1936, Nolan Atz and other respondents were charged with unfair competition in the sale of baby chicks.

Closing of the case as to Nolan Atz was ordered following the signing by him of a stipulation in which he agreed to cease and desist from the use in advertisements of representations that the chicks he sells are hatched from the eggs of old hens, when such is not the definitely known fact, and that the chicks are hatched from eggs of flocks which have been "blood tested" for a term of years.

Atz agrees also to cease the substitution of sex or breeds different from those called for and specified in the orders, and to stop unduly delaying shipments without immediate advice to the purchaser of inability to fill orders at a given time, accompanied by offer of immediate refund.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, November 16

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Eau Claire Broadcasting Co., Eau Claire, Wis.—C. P., **1210 kc.,** 100 watts, unlimited time.

Tuesday, November 17

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—George Harm, Fresno, Calif.—C. P., **1310 kc.,** 100 watts, unlimited time.

KHSL—Golden Empire Broadcasting Co., Chico, Calif.—Modification of license, **1260 kc.,** 250 watts, unlimited time. Present assignment: **950 kc.,** 250 watts, daytime.

NEW—Golden Empire Broadcasting Co., Marysville, Calif.—C. P., **1140 kc.,** 250 watts, daytime.

NEW—Luther E. Gibson, d/b as Times-Herald Publishing Co., Vallejo, Calif.—C. P., **1320 kc.,** 250 watts, daytime.

NEW—Loyal K. King, Pasadena, Calif.—C. P., **1480 kc.,** 250 watts, daytime.

Wednesday, November 18

HEARING BEFORE AN EXAMINER

(Broadcast)

KTHS—Hot Springs Chamber of Commerce, Hot Springs, Ark.—Voluntary assignment of license, **1040 kc.,** 10 KW, shares-KRLD.

NEW—Radio Enterprises, Inc., Hot Springs, Ark.—C. P., **1310 kc.,** 100 watts, daytime.

Thursday, November 19

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-244:

WTJS—The Sun Publishing Co., Inc., Jackson, Tenn.—C. P., **920 kc.,** 250 watts, 500 watts LS, unlimited time. Present assignment: **1310 kc.,** 100 watts, 250 watts LS, unlimited time.

Examiner's Report No. I-248:

WPRO—Cherry & Webb Broadcasting Co., Providence, R. I.—C. P., **630 kc.,** 500 watts, 1 KW LS, unlimited time.

Examiner's Report No. I-252:

NEW—J. R. Maddox and Dr. W. B. Hair, d/b as Chattanooga Broadcasting Co., Chattanooga, Tenn.—C. P., **590 kc.,** 1 KW, unlimited time.

Examiner's Report No. I-256:

NEW—Dorrance D. Roderick, El Paso, Tex.—C. P., **1500 kc.,** 100 watts, unlimited time.

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Geo. P. Allison and T. R. Waters, Jr., d/b as Skagit Broadcasting Assn., Whitney, Wash.—C. P., **1420 kc.,** 100 watts, unlimited time.

NEW—H. Wimpy, Albany, Ga.—C. P., **1420 kc.,** 100 watts, 250 watts LS, unlimited time (requests facilities WGPC).

WGPC—Americus Broadcast Corp., Albany, Ga.—Renewal of license, **1420 kc.,** 100 watts, unlimited time.

Friday, November 20

HEARING BEFORE AN EXAMINER

(Broadcast)

J. L. Statler, M.D., d/b as Baker Hospital, Muscatine, Iowa.—Authority to transmit programs to stations in Canada and Mexico.

NEW—A. Frank Katzentine, Miami Beach, Fla.—C. P., **1500 kc.,** 100 watts, unlimited time.

FURTHER HEARING BEFORE AN EXAMINER

NEW—Continental Radio Company, Columbus, Ohio.—C. P., **1310 kc.,** 100 watts, unlimited time.

NEW—Continental Radio Company, Toledo, Ohio.—C. P., **1200 kc.,** 100 watts, daytime.

APPLICATIONS GRANTED

KGFG—Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—Granted C. P. to move transmitter and studio, install new equipment and vertical radiator.

WSAN—WSAN, Inc., Allentown, Pa.—Granted C. P. to install new equipment and vertical radiator.

WCOC—Mississippi Broadcasting Co., Inc., Meridian, Miss.—Granted C. P. to change equipment.

WCBA—B. Bryan Musselman, Allentown, Pa.—Granted C. P. to install new equipment and vertical radiator.

WCAZ—Superior Broadcasting Service, Inc., Carthage, Ill.—Granted C. P. to make changes in equipment and increase day power from 100 watts to 250 watts; **1070 kc.**

WFBG—The Gable Broadcasting Co. (Lessee), Altoona, Pa.—Granted C. P. to install new equipment, vertical radiator, and increase day power from 100 to 250 watts; **1310 kc.,** 100 watts night, S-WJAC.

WAYX—E. F. Sapp and S. F. Sapp, d/b as Waycross Broadcasting Co., Waycross, Ga.—Granted license to cover C. P. for new station to operate on **1200 kc.,** 100 watts, unlimited time.

KFPY—Symons Broadcasting Co., Spokane, Wash.—Granted license to cover C. P. authorizing changes in transmitter site and equipment; change frequency from **1340 kc.** to **890 kc.,** and increase day power from 1 KW to 5 KW (unlimited).

KYOS—Merced Star Pub. Co., Inc., Merced, Calif.—Granted license to cover C. P. authorizing new station to operate on **1040 kc.,** 250 watts, daytime only.

KHQ—Louis Wasmer, Inc., Spokane, Wash.—Granted modification of C. P. approving new equipment.

WTAD—Illinois Broadcasting Co., Quincy, Ill.—Granted modification of C. P. to increase power from 500 watts to 1 KW, daytime only.

KHSL—Golden Empire Broadcasting Co., Chico, Calif.—Granted authority to install automatic frequency control.

KUMA—Albert H. Schermann, Yuma, Ariz.—Granted authority to install automatic frequency control.

WOC—Tri-City Broadcasting Co., Davenport, Iowa.—Granted authority to transfer control of corporation from Palmer School of Chiropractic to B. J. Palmer and D. D. Palmer (as individuals); **1370 kc.**, 250 watts day, unlimited.

KMAC—W. W. McAllister, San Antonio, Tex.—Granted amended C. P. authorizing move of transmitter site locally, installation of new equipment and vertical radiator, and increase in day power from 100 watts to 250 watts.

KLS—S. W. Warner, E. N. Warner, d/b as Warner Bros., Oakland, Calif.—Granted C. P. to move transmitter and studio sites locally and install vertical radiator.

WIBX—WIBX, Inc., Utica, N. Y.—Granted C. P. authorizing local move of transmitter, installation of new equipment and vertical radiator and reduction in day power from 300 watts to 250 watts.

WBEN—WBEN, Inc., Buffalo, N. Y.—Granted license to cover C. P. authorizing move of transmitter site locally, installation of new equipment and vertical radiator, and increase in day power from 1 to 5 KW; **900 kc.**, 1 KW night, unlimited. Also granted authority to determine operating power by direct measurement of antenna input in compliance with Rule 137.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—Granted license to cover C. P. authorizing new station to operate on **1420 kc.**, 100 watts, unlimited time.

WMBH—Joplin Broadcasting Co., Joplin, Mo.—Granted license to cover C. P. authorizing installation of new equipment.

WSBT—The South Bend Tribune, South Bend, Ind.—Granted license to cover C. P. authorizing installation of new equipment.

KWYO—Big Horn Broadcasting Co., Inc., Sheridan, Wyo.—Granted license to cover C. P. authorizing change in transmitter location, installation of new equipment and vertical radiator, and increase in day power from 100 to 250 watts; **1370 kc.**, 100 watts night, unlimited.

WDSU—WDSU, Inc., New Orleans, La.—Granted license to cover C. P. authorizing changes in equipment. Also granted authority to determine operating power by direct measurement of antenna input, in compliance with Rule 137.

KGNF—Great Plains Broadcasting Co., North Platte, Nebr.—Granted license to cover C. P. authorizing changes in equipment.

KCMC—KCMC, Inc., Texarkana, Ark.—Granted modification of C. P. approving transmitter and studio sites and vertical radiator.

WBCM—James E. Davidson, Bay City, Mich.—Granted modification of license to increase day power from 500 watts to 1 KW; **1410 kc.**, unlimited time.

KFGQ—Boone Biblical College, Boone, Iowa.—Granted authority to install automatic frequency control.

KGCU—Mandan Radio Assn., Mandan, N. Dak.—Granted authority to install automatic frequency control.

KUJ—KUJ, Inc., Walla Walla, Wash.—Granted C. P. to change equipment.

KGKB—East Texas Broadcasting Co., Tyler, Tex.—Granted C. P. to change equipment, increase day power from 100 to 250 watts, and time of operation from unlimited day, specified hours night, to unlimited; **1500 kc.**

WACO—KTSA Broadcasting Co., Waco, Tex.—Granted C. P. to install new equipment and vertical radiator.

KSCJ—Perkins Bros. Co. (The Sioux City Journal), Sioux City, Iowa.—Granted C. P. to move auxiliary transmitter to present licensed site of main transmitter.

WDAF—The Kansas City Star Co., Kansas City, Mo.—Granted C. P. to move transmitter site locally, install new equipment and vertical radiator.

WCKY—L. B. Wilson, Inc., Covington, Ky.—Granted C. P. to install new equipment.

KRNR—Southern Oregon Pub. Co., Roseburg, Ore.—Granted C. P. to change equipment, increase power and operating time from 100 watts day only to 100 watts night, 250 watts day, unlimited time; **1500 kc.**

WBTM—Piedmont Broadcasting Corp., Danville, Va.—Granted C. P. to change equipment.

WATL—J. W. Woodruff and S. A. Cisler, d/b as Atlanta Broadcasting Co., Atlanta, Ga.—Granted C. P. to move transmitter and studio to 26 Cain St., Atlanta; install new equipment, and increase day power from 100 watts to 250 watts, **1370 kc.**, unlimited.

KFVD—Standard Broadcasting Co., Los Angeles, Calif.—Granted C. P. to install new equipment and vertical radiator; increase power from 250 watts night and day, limited time, to 1 KW night and day, limited time; **1000 kc.**

WGRC—Northside Broadcasting Corp., New Albany, Ind.—Granted license to cover C. P. authorizing new station; **1370 kc.**, 250 watts, daytime only.

KSLM—Oregon Radio, Inc., Salem, Ore.—Granted modification of C. P. to make changes in equipment.

WFOY—Fountain of Youth Properties, Inc., St. Augustine, Fla.—Granted modification of C. P. authorizing installation of new equipment; extend commencement date to 30 days after grant and completion date to 120 days thereafter.

KTAT—Raymond E. Buck, Birdville, Tex.—Granted voluntary assignment of license to Tarrant Broadcasting Co.; **1240 kc.**, 1 KW, unlimited.

KOY—Nielsen Radio & Sporting Goods Co., Phoenix, Ariz.—Granted voluntary assignment of license to Salt River Valley Broadcasting Co.; **1390 kc.**, 500 watts night, 1 KW day, unlimited.

WWAE—Hammond-Calumet Broadcasting Corp., Hammond, Ind.—Granted C. P. to install new equipment.

KOVC—George B. Bairey, Valley City, N. Dak.—Granted license to cover C. P. authorizing new station; **1500 kc.**, 100 watts, unlimited time.

WHK—Radio Air Service Corp., Cleveland, Ohio.—Granted authority to determine operating power by direct measurement of antenna power.

WGST—Georgia School of Technology, Atlanta, Ga.—Granted modification of C. P. approving vertical radiator and transmitter site.

KRSC—Radio Sales Corp., Seattle, Wash.—Granted modification of C. P. to move transmitter site locally, install vertical radiator and make changes in equipment.

WCPO—Continental Radio Co., Cincinnati, Ohio.—Granted C. P. to move transmitter locally; install new equipment and vertical radiator.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Granted C. P. to move transmitter site locally; install new equipment and vertical radiator; increase day power from 100 to 250 watts and share time with WDAH, with permanent authority to carry WDAH's schedule on KTSM's transmitter.

KSUN—Copper Electric Co., Inc., Lowell, Ariz.—Granted license to cover C. P., **1200 kc.**, 100 watts night, 250 watts day, unlimited.

KMA—May Seed and Nursery Co., Shenandoah, Iowa.—Granted license to cover C. P. for **930 kc.**, 1 KW night, 5 KW day, unlimited time. Also authority to determine operating power by direct measurement of antenna input in compliance with Rule 137.

KGHL—Northwestern Auto Supply Co., Inc., Billings, Mont.—Granted license to cover C. P. to operate on **780 kc.**, 1 KW night, 5 KW day, unlimited time. Also granted authority to determine operating power by direct measurement of antenna input in compliance with Rule 137.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted license to cover C. P. and modifications thereof; **1450 kc.**, 1 KW, unlimited time.

WSAR—Doughty & Welch Electric Co., Fall River, Mass.—Granted modification of C. P. to extend completion date from 10-31-36 to 12-1-36.

WEAU—Central Broadcasting Co., Eau Claire, Wis.—Granted modification of C. P. to make changes in equipment and increase day power from 250 watts to 1 KW.

KROY—Royal Miller, Sacramento, Calif.—Granted modification of C. P. to move transmitter and studio sites locally, install new equipment and vertical radiator.

WGPC—Americus Broadcast Corp., Albany, Ga.—Granted modification of C. P. authorizing move of station locally; change equipment and install vertical radiator; extend commencement date to 30 days after grant and completion date to 60 days thereafter.

WJRD—James R. Doss, Jr., Tuscaloosa, Ala.—Granted license to cover C. P. for **1200 kc.**, 100 watts, daytime only.

KGER—Consolidated Broadcasting Corp., Ltd., Long Beach, Cal.—Granted C. P. to make changes in equipment.

WALA—Pape Broadcasting Corp. Inc., Mobile, Ala.—Granted authority to make changes in automatic frequency control equipment.

WAAB—Bay State Broadcasting Corp., Boston, Mass.—Granted license to use former transmitter of station WNAC as an auxiliary transmitter.

KSCJ—Perkins Bros. Co. (The Sioux City Journal), Sioux City, Iowa—Granted C. P. to make changes in equipment, increase day power to 5 KW LS; **1330 kc.,** 1 KW night.

WHFC—WHFC, Inc., Cicero, Ill.—Granted modification of license to change time of operation from specified to unlimited, facilities of WEHS and WKBI. (This merely combines these three call letters to WHFC with unlimited time.)

W9XIW—WCBD, Inc., Portable-Mobile (Ill.)—Granted license to cover C. P. for new relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 5 watts. To be used as general experimental pickup station.

W9XLP—Miss. Valley Broadcasting Co., Inc. (E. St. Louis, Ill.), Portable-Mobile (Ill.)—Granted license to cover C. P. for experimental relay station to operate on frequencies in Group D, Rule 1003.

W9XNW—WHBY, Inc. (Green Bay, Wis.), Portable-Mobile—Granted license to cover C. P. for new experimental relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

W9XNX—WHBY, Inc. (Green Bay, Wis.), Portable-Mobile—Granted license to cover C. P. for new experimental relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.,** 10 watts.

W9XAZ—The Journal Co. (The Milwaukee Journal), Milwaukee, Wis.—Granted modification of license of high frequency broadcast station to change frequencies now assigned in Group C to **26,400 kc.** under Group B.

NEW—National Life & Accident Ins. Co., Inc., Nashville, Tenn., Portable-Mobile—Granted C. P. for new relay broadcast station; frequencies **1606, 2022, 2102, 2758 kc.,** 20 watts.

NEW—Nichols & Warinner Inc., Long Beach, Cal., Portable-Mobile—Granted license to cover C. P. for new relay broadcast station; frequencies **1622, 2058, 2150, 2790 kc.,** 200 watts.

NEW—Radio Air Service Corp., Cleveland, Ohio, Portable-Mobile—Granted C. P. for new relay broadcast station; frequencies **31100, 34600, 37600** and **40600 kc.** on an experimental basis, 10 watts.

NEW—Dr. A. H. Schermann, Flagstaff, Ariz., Mobile—Granted C. P. for new relay broadcast station; frequencies **1646, 2090, 2190** and **2830 kc.,** 10 watts.

NEW—Leo J. Omelian, Mobile (Erie, Pa.)—Granted C. P. for new experimental relay broadcast station; frequencies of **31100, 34600, 37600** and **40600 kc.,** 8 watts.

NEW—Radio Service Corp. of Utah, Mobile, Salt Lake City—Granted C. P. for experimental relay high frequency broadcast station; frequencies of **39700, 39900, 40800** and **41400 kc.,** 5 watts.

NEW—Radio Service Corp. of Utah, Mobile, Salt Lake City—Granted C. P. for experimental relay high frequency broadcast station; frequencies of **39700, 39900, 40800** and **41400 kc.,** 5 watts.

NEW—Fort Worth Broadcasters, Inc., Portable-Mobile, Fort Worth, Tex.—Granted C. P. for high frequency relay experimental b/c station; frequencies of **31100, 34600, 37600** and **40600 kc.,** 5 watts.

NEW—Intermountain Broadcastnig Corp., Portable, Salt Lake City, Utah—Granted C. P. for new high frequency relay b/c experimental station; frequencies of **31100, 34600, 37600** and **40600 kc.,** 2 watts.

SET FOR HEARING

KGFI—Eagle Broadcasting Co. Inc., Corpus Christi, Tex.—Application for modification of C. P. to change assignment to **1330 kc.,** 500 watts, unlimited time.

KPRC—Houston Printing Corp., Houston, Tex.—Application for modification of license to increase night power from 1 to 5 KW (**920 kc.,** 5 KW day, unlimited time). To be heard before Broadcast Division.

KFNF—KFNF, Inc., Shenandoah, Ia.—Application for C. P. to install new equipment (transmitter) and increase night power from 500 watts to 1 KW, day power from 1 to 5 KW.

WSAY—Brown Radio Service & Lab., Gordon P. Brown, Owner, Rochester, N. Y.—Application for modification of license to increase hours of operation from daytime only to unlimited using 100 watts power, requesting night time facilities of WOCL.

NEW—Earle Yates, Las Cruces, New Mex.—Amended application for C. P. for new broadcast station at Las Cruces, N. Mex. to operate on **1500 kc.,** 100 watts night, 250 day, unlimited time. Site to be approved.

NEW—Valley Broadcasting Co., Youngstown, Ohio—Amended application for C. P. for new broadcast station at Youngstown, Ohio, to operate on **1370 kc.,** 100 watts night, 250 watts day, unlimited. Site to be approved.

WOWO—Westinghouse Radio Stations, Inc., Fort Wayne, Ind.—Application for C. P. to install new equipment, increase night power from 10 KW to 25 KW, and install new antenna system.

NEW—Birmingham News Co., Birmingham, Ala.—Amended application for C. P. for new broadcast station at Birmingham, Alabama, to operate on **590 kc.,** 500 watts night, 1 KW day, unlimited time, using directional antenna for night time operation only.

NEW—T. E. Kirksey, Waco, Tex.—Application for C. P. for new broadcast station at Waco, Texas, to operate on **1330 kc.,** 500 watts, unlimited time. Transmitter and studio sites to be determined.

NEW—George H. Payne, San Jose, Calif.—Application for C. P. for new broadcast station at San Jose, Calif., to operate on **1010 kc.,** 1 KW, unlimited time. Transmitter site to be determined. Requests facilities of KQW.

NEW—Dr. William States Jacobs Broadcasting Co., Houston, Tex.—Application for C. P. for new broadcast station at Houston, Texas, to operate on **1220 kc.,** 1 KW, unlimited time.

KRKO—Lee E. Mudgett, Everett, Wash.—Application for C. P. for authority to change frequency from **1370 kc.** to **1420 kc.,** increase power to 100 watts night, 250 watts day, increase hours of operation to unlimited, install new equipment, and move station locally, site to be approved.

KABR—Aberdeen Broadcast Co., Aberdeen, S. Dak.—Application for C. P. to make changes in equipment, change frequency from **1420 kc.** to **1390 kc.,** and increase night and day power to 1 KW from 100 watts.

WAAF—Drovers Journal Publishing Co., Chicago, Ill.—Application for C. P. to install new equipment and to operate with 1 KW night, 5 KW day, unlimited time.

NEW—St. Petersburg Chamber of Commerce, St. Petersburg, Fla.—Application for C. P. for new station at St. Petersburg, Fla., to authorize operation on **1050 kc.,** 5 KW, limited time with KNX, Los Angeles, Calif. Site to be approved.

NEW—The Central Michigan Radio Co. (James Bourland, John Tebbel, Gerald J. Cotter and Ray D. Markel), Mt. Pleasant, Mich.—Amended application for C. P. for new broadcast station at Mt. Pleasant, Mich., to authorize operation on **570 kc.,** 250 watts, unlimited time.

NEW—Lou Poller, Scranton, Pa.—Application for C. P. for new station at Scranton, Pa., to authorize operation on **930 kc.,** 250 watts daytime only. Site to be approved.

NEW—James D. Scannell, Lewiston, Me.—Amended application for C. P. for new broadcast station at Lewiston, Me., to authorize operation on **1420 kc.,** 100 watts, unlimited time.

WJJD—WJJD, Inc., Chicago, Ill.—Hearing before Broadcast Division on application for C. P. to authorize installation of directional antenna for nighttime operation and change time of operation from limited to unlimited.

WCOA—Pensacola Broadcasting Co., Pensacola, Fla.—Application for C. P. to install new equipment, increase power from 500 watts to 1 KW, unlimited time, and move station locally to a site to be approved.

KVOO—Southwestern Sales Corp., Tulsa, Okla.—Application for C. P. to authorize changes in equipment and increase power from 25 KW to 50 KW.

KYW—Westinghouse Elec. & Mfg. Co., Philadelphia, Pa.—Application for C. P. to authorize changes in equipment and increase power from 10 KW to 50 KW.

NEW—The Journal Co. (The Milwaukee Journal), Milwaukee, Wis.—Amended application for C. P. for new special broadcast station to be located at Milwaukee, Wis., to operate on **1570 kc.,** 1 KW, unlimited time. Site and antenna system to be approved.

NEW—Carolina Advertising Corp., Florence, S. C.—Application for C. P. for new station at Florence, S. C., to operate on **1200 kc.,** 100 watts, unlimited time. Site to be approved.

NEW—Carolina Advertising Corp., Columbia, S. C.—Application for C. P. for new broadcast station at Columbia, S. C., to operate on **1370 kc.,** 100 watts night, 250 watts daytime, unlimited time. Site to be approved.

KARK—Arkansas Radio & Equipment Co., Little Rock, Ark.—Application for modification of C. P. to increase nighttime power to 1 KW.

NEW—Allen T. Simmons, Mansfield, Ohio—Application for C. P. for new broadcast station at Mansfield, Ohio, to operate on **780 kc.,** 1 KW daytime only. Transmitter and studio sites to be determined with Commission's approval.

WHOM—New Jersey Broadcasting Corp., Jersey City, N. J.—Application for C. P. to install new equipment and increase day power from 250 watts to 1 KW.

KVOD—Colorado Radio Corp., Denver, Colo.—Application for modification of license to change assignment from **920 kc.,** 500 watts sharing time equally with station KFEL to **630 kc.,** 500 watts, unlimited time.

KFEL—Eugene P. O'Fallon, Inc., Denver, Colo.—Application for modification of license to increase hours of operation from sharing time equally with KVOD to unlimited time.

KGA—Louis Wasmer, Spokane, Wash.—Application for modification of license to change frequency from **1470 kc.** to **950 kc.** and decrease night power from 5 KW to 1 KW.

KLZ—KLZ Broadcasting Co., Denver, Colo.—Hearing before Broadcast Division on application for modification of license to change power from 1 KW night, 5 KW day, to 5 KW night and day.

KGBX—Springfield Broadcasting Co., Springfield, Mo.—Application for C. P. to move studio site locally, make changes in equipment, and change power and time of operation from 500 watts, unlimited time, using directional antenna, for nighttime operation to 1 KW, unlimited time, using directional antenna for nighttime operation.

NEW—John R. & Joe L. Peryatel & Richard K. Beauchamp, d/b as Peryatel Bros. & Richard K. Beauchamp, Raton, N. Mex.—Application for C. P. for new broadcast station at Raton, New Mexico, to operate on **1210 kc.,** 100 watts, unlimited time.

WADC—Allen T. Simmons, Tallmadge, Ohio—Application for modification of license to increase night power from 1 to 5 KW. To be heard before the Broadcast Division.

WKBV—Knox Radio Corp., Richmond, Ind.—Application for modification of license to change hours of operation from specified to unlimited time.

APPLICATIONS DENIED

KBTM—W. J. Beard, Beard's Temple of Music, Jonesboro, Ark.—Denied special authority to operate from local sunset to 6:30 p. m. during month of November.

WJAX—City of Jacksonville, Fla.—Denied special temporary authority to operate from 1 to 2:30 a. m., EST, November 10, 17, 24, December 1 and 8, with 5 KW power to broadcast series informative programs about Jacksonville, Fla.

WMFR—Hart & Nelson, High Point, N. C.—Denied special temporary authority to operate from local sunset to 10 p. m., EST, for the period Nov. 7 to Dec. 6, 1936, to carry programs of outstanding interest to listeners.

WJTN—James Broadcasting Co. Inc., Jamestown, N. Y.—Denied special temporary authority to conduct program tests in accordance with C. P. granted Sept. 22, 1936, to A. E. Newton for period Nov. 5 to Dec. 4, 1936, pending action on license to cover C. P. and receipt and action on application for voluntary assignment of C. P.

NEW—Harry C. Lowe & Clara A. Lowe, DuBois, Pa.—Denied as in cases of default, application for C. P., **1210 kc.,** 100 watts daytime, heretofore set for hearing, for failure to file an appearance in accordance with Rule 104.6.

NEW—Homer D. Banta, Burlington, Ia.—Denied as in cases of default, application for C. P. for new station, **1310 kc.,** 100 watts, unlimited, heretofore set for hearing, for failure to file an appearance and statement of facts in accordance with Rule 104.6.

APPLICATION DISMISSED

The following application, heretofore set for hearing, was dismissed at request of applicant:

NEW—Memphis Commercial Appeal, Inc., C. P., **630 kc.,** 1 KW, 5 KW-LS, unlimited time, Mobile, Ala.

ACTION ON EXAMINERS' REPORTS

WPRO—Ex. Rep. No. 1-248: Cherry & Webb Broadcasting Co., Providence, R. I.—Granted C. P. to install new equipment (directional antenna); and increase power from 250 watts ot 500 watts night, 1 KW day, **630 kc.;** unlimited time. Examiner P. W. Seward sustained. Order effective Dec. 15, 1936.

KRNT—Ex. Rep. No. 1-281: Iowa Broadcasting Co., Des Moines, Ia.—Granted C. P. to install new equipment (directional antenna) and increase power from 500 watts night, 1 KW day to 1 KW night, 5 KW day, **1320 kc.;** unlimited time. Examiner Geo. H. Hill sustained. Order effective Dec. 22, 1936.

MISCELLANEOUS

WIL—Missouri Broadcasting Corp. & The Star Times Pub. Co., St. Louis, Mo.—Ordered that C. P. heretofore and on Oct. 10, 1936, issued to the Star-Times Pub. Co. for new station at St. Louis, be recalled and suspended during pendency and until determination of Stay Order issuing out of U. S. Court of Appeals for D. C. in causes No. 6866, Pulitzer Pub. Co. v. FCC and No. 6869, Missouri Broadcasting Co. v. FCC, staying the Division's action of Sept. 22, 1936, effective 3 a. m., EST, Oct. 6, in granting application of Star-Times Pub. Co., and denying application of Missouri Broadcasting Co. for C. P.

Central Broadcasting Co., Eau Claire, Wis.—Granted petition to intervene in hearing of application of Eau Claire Broadcasting Co. of application for C. P. to erect new station at Eau Claire to operate on **1210 kc.,** 100 watts, unlimited.

WIND—Johnson Kennedy Radio Corp., Gary, Ind.—Granted regular renewal of license for period ending March 1, 1937, since application of I. T. N. Radio Station Inc., for its facilities has been withdrawn and rebroadcasting of transmissions of W9XXP was not done deliberately but was due to mechanical difficulties which WIND is attempting to remedy.

WRR—City of Dallas, Dallas, Tex.—Granted petition to intervene in hearing of application of Dallas Broadcasting Co. for C. P. to erect new broadcast station at Dallas to operate on **1500 kc.,** 100 watts, daytime only.

KROW—Educational Broadcasting Corp., Oakland, Cal.—Granted petition to intervene and be made a party to proceedings on application of Chauncey W. Hammond for C. P. for new broadcasting station at Oakland, to operate on **1280 kc.,** 1 KW, unlimited.

WTAD—Ill. Broadcasting Corp., Quincy, Ill.—Granted petition to intervene and be made a party to the hearing on applications of Courier-Post Pub. Co. and Hannibal Broadcasting Co., both of which seek C. P.'s to construct and operate stations on **1310 kc.,** 100 watts, unlimited.

Voice of Greenville, Greenville, Tex.—Granted petition to intervene at hearing of application of Hunt Broadcasting Assn. for permit to erect and operate a radio broadcasting station at Greenville on **1200 kc.,** 100 watts daytime only.

WBBZ—Howard Johnson & Mrs. Adelaide Lillian Carroll, Ponca City, Okla.—Granted petition requesting authority to modify special temporary authority now outstanding in favor of Howard Johnson to operate station WBBZ as special representative of estate of C. L. Carroll, deceased, and to grant Mrs. Carroll the same authority pending disposition of the estate of C. L. Carroll. The modification is granted subject to same conditions and limitations as now exist.

KMPC—Pacific Southwest Discount Corp., Beverly Hills, Cal.—Denied petition for reconsideration of the Commission's action of Oct. 20, 1936, in designating for hearing application for Commission's consent to transfer of control of KMPC from Pacific Southwest Discount Corp. to George A. Richards, and to grant same without hearing.

WCHV—W. B. and Katherine V. Brown, Charlottesville, Va.—Denied petition requesting that Commission reconsider its action of Sept. 22, 1936, in granting application for transfer of control of Community Broadcasting Corp., licensee of WCHV, from W. B. Brown to present stockholders of said licensee corporation, and grant hearing on aforesaid application.

WLWL—The Missionary Society of St. Paul the Apostle, New York City, N. Y.—Denied petition to withdraw without prejudice its application for modification of license. International Broadcasting Corp. (WOV) opposed the granting of the petition on grounds that it would be in violation of Par. 103.8 of the Rules of Practice of the Commission.

Knox Broadcasting Co., Scbenectady, N. Y.—Denied petition asking Commission to waive rule governing filing of petition for reconsideration and to grant application for new broadcast station at Schenectady, N. Y., to operate on **1240 kc.**, 1 KW, unlimited time.

WLWL—Missionary Society of St. Paul tbe Apostle, New York, N. Y.—Granted petition to withdraw without prejudice its "Petition for Relief", filed Jan. 20, 1936. Tbis petition requests Commission to grant petitioner relief from "curtailment of its existing service area" by cancelling certain special experimental autborizations and denying certain pending applications for continuance of such authorizations.

APPLICATIONS DISMISSED

Tbe following applications, heretofore set for hearing, were dismissed at request of applicants:

WCHS—Cbarleston Broadcasting Corp., Charleston, W. Va.—Special experimental authority; **580 kc.**, 1 KW, unlimited time.

NEW—The Tribune, Great Falls, Mont.—C. P., **950 kc.**, 1 KW, 5 KW LS, unlimited.

NEW—John C. Looney, d/b as High Fidelity Broadcasting Service, Milton, Mass.—C. P., **1570 kc.**, 1 KW, unlimited and variable.

WAPO—W. A. Patterson, Chattanooga, Tenn.—Modification of C. P., **1200 kc.**, 100 watts, 250 watts LS, unlimited.

APPLICATION RETIRED TO CLOSED FILES

KOOS—H. H. Hanseth, Inc., Marshfield, Ore.—Application for modification of C. P. to change frequency to **1390 kc.**, 250 watts, daytime operation, granted on September 3, 1936, was retired to closed files.

SPECIAL AUTHORIZATIONS

KSAC—Kansas State College of Agriculture and Applied Science, Manhattan, Kans.—Granted special temporary authority to operate station without an antenna ammeter for period beginning November 3, 1936, and ending in no event later than November 5, 1936, pending recalibration of antenna ampere.

WKAR—Michigan State College, East Lansing, Mich.—Granted extension of special temporary authority to rebroadcast Naval Observatory time signals over station WKAR, provided station complies with requirements of Naval Observatory station, for period beginning November 6, 1936, and ending in no event later than February 1, 1937.

WCPO—Continental Radio Co., Cincinnati, Ohio.—Granted extension of special temporary autbority to operate station without an approved frequency monitor (waiver of Rule 145) for period beginning November 7, 1936, and ending in no event later than November 21, 1936.

WOW—Woodmen of the World Life Ins. Assn., Omaha, Nebr.—Granted extension of special temporary authority to operate with power of 5 KW at night for period beginning November 28, 1936, and ending in no event later tban December 27, 1936.

WSYB—Philip Weiss, t/s Philip Weiss Music Co., Rutland, Vt.—Granted special temporary authority to operate from 9 a. m. to 10 a. m. every week day from November 15 through December 15, 1936, in order to broadcast Rutland County Community programs; also to operate from 9 p. m. to 10 p. m.. EST, November 24, 1936, in order to broadcast a special community musical concert.

KTSM—Tri-State Broadcasting Co., Inc., El Paso, Tex.—Granted extension of special temporary authority to carry programs of station WDAH for period beginning November 11, 1936, and ending in no event later than December 10, 1936.

KGKB—East Texas Broadcasting Co., Tyler, Tex.—Granted special temporary authority to operate from 8 p. m. to 10 p. m., CST, November 7, 1936, to December 7, 1936, in order to broadcast special holiday features, football games, etc.

KGFL—KGFL, Inc., Roswell, N. Mex.—Granted special temporary authority to operate simultaneously with KICA from 1 p. m. to 4 p. m., MST, November 6, 1936, in order to broadcast football game.

WRBL—WRBL Radio Station, Inc., Columbus, Ga.—Granted special temporary authority to operate 100-watt portable test transmitter on **1200 kc.**, in vicinity of Columbus, Ga., between the hours of 12 midnight to 6 a. m., CST, for period not to exceed 30 days, in order to determine proper and efficient location for new transmitter site.

WKBN—WKBN Broadcasting Corp., Youngstown, Obio.—Granted special temporary autbority to operate from 1 p. m. to 3 p. m., EST, November 26, 1936 (provided WOSU remains silent), in order to broadcast annual local Thanksgiving Day football game.

KFIO—Spokane Broadcasting Corp., Spokane, Wash.—Granted special temporary autbority to operate from 4:15 p. m. to 5 p. m., PST, November 11 and 26, 1936, in order to complete broadcast of football games.

WLBC—Donald A. Burton, Muncie, Ind.—Granted special temporary authority to operate simultaneously with WTRC from 6 p. m. to 7:30 p. m., CST, November 25, 27 and 30, 1936, in order to broadcast basketball games.

Transcontinental & Western Air, Inc., Washington, D. C.—Granted special temporary authority to operate already licensed aircraft radio transmitter aboard the plane owned by TWA as a low frequency relay broadcast transmitter on frequency **2790 kc.**, November 12, 1936, for transmission of program in connection with opening of San Francisco Bridge and to be rebroadcast over KFRC.

Isle of Dreams Broadcasting Corp., Miami, Fla.—Granted special temporary authority to use relay broadcast mobile transmitter on frequencies **31100, 34600, 37600, 40600 kc.** for relay broadcast on November 11, 1936, program in connection with Armistice Day ceremonies and dedication of War Memorial in Miami.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted special temporary authority to operate simultaneously with WSMK from 10 p. m. to 12 midnight, EST, Tuesday, November 10, 1936, in order to broadcast a program in connection with the Community Fund.

WHBB—W. J. Reynolds, Jr., J. C. Hughes, and J. S. Allen, d/b as Selma Broadcasting Co., Selma, Ala.—Granted special temporary authority to operate nighttime hours November 10, 11, 12, 13, 14 and 15, 1936, in order to celebrate first anniversary and automobile show sponsored by Selma Chamber of Commerce.

WTAD—Illinois Broadcasting Corp., Quincy, Ill.—Granted special temporary authority to operate without an approved frequency monitor (waiver of Rule 145) for a period ending in no event later than November 14, 1936.

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—Granted extension of special temporary authority to use auxiliary transmitter as the main transmitter for period beginning November 6, 1936, and ending in no event later than December 5, 1936.

WPRP—Julio M. Conesa, Ponce, P. R.—Granted extension of special temporary authority to operate without an approved frequency monitor (waiver of Rule 145) for period beginning November 6, 1936, and ending in no event later tban November 15, 1936.

KGGF—Hugh J. Powell and Stanley Platz, d/b as Powell & Platz, Coffeyville, Kans.—Granted special temporary authority to operate without plate ammeter for period beginning November 3, 1936, and ending in no event later than November 12, 1936, pending repair of that apparatus.

KGKO—Wichita Falls Broadcasting Co., Wichita Falls, Tex.—Granted special temporary authority to operate a 50-watt portable test transmitter between hours of 12 midnight and 6 a. m., CST, for period beginning November 10, 1936, and ending in no event later than December 9, 1936, for purpose of selecting a transmitter site in Fort Wortb area.

WNAD—University of Oklahoma, Norman, Okla.—Granted special temporary authority to operate from 8:30 p. m. to 9:30 p. m., CST, November 20, 1936 (provided KGGF remains silent), in order to broadcast the regional educational conference.

WHDF—The Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 12:30 p. m. to 2:30 p. m., CST, November 11, 1936, in order to broadcast Armistice Day banquet of Ira Penberthy Post of American Legion, Calumet; also to operate from 12:30 p. m. to 1 p. m., CST, November 18, 25, December 7, 1936, in order to broadcast programs of Calvary Northland Missions of Ontonagon, Mich.

The Associated Broadcasters, Inc., San Francisco, Calif.—Granted special temporary authority to operate portable-mobile relay transmitter on board plane RC-12118 belonging to Consolidated Airlines in connection with dedication ceremonies

of San Francisco Bay Bridge opening, for period November 11 and 12, 1936, and to be broadcast over KSFO.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

KVOE—The Voice of the Orange Empire, Ltd.—Santa Ana, Calif.—Granted extension for period of 30 days from October 30, 1936, for program test period.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—Granted extension for period of 30 days from October 30, 1936, for program test period.

WSAY—Brown Radio Service & Lab., Rochester, N. Y.—Granted temporary extension of program test period for 30 days from October 25.

KRKO—Lee E. Mudgett, Everett, Wash.—Granted extension of equipment test period for 10 days from October 29th.

WHBF—Rock Island Broadcasting Co., Rock Island, Ill.—Granted extension of temporary authority to maintain main studio in Moline instead of Rock Island, for a period November 3 to December 2, 1936.

WTRC—The Truth Pub. Co., Inc., Elkhart, Ind.—Granted temporary authorization to operate simultaneously with station WLBC from 7:30 to 10 p. m., CST, on November 6, 13, 20 and 27, in order to broadcast football games; and from 7:30 to 9 p. m., CST, on November 10, 11, 12, 14, 16, 17, 18, 19 and 21, in order to broadcast evangelistic services.

WFAS—Westchester Broadcasting Corp., White Plains, N. Y.—Granted temporary authority to operate station without an approved frequency monitor for a period 10-29-36 to 11-27-36.

KFAC—Los Angeles Broadcasting Co., Inc., Los Angeles, Calif.—Granted temporary renewal of license for period 11-1-36 to 5-1-36 (temporary basis), **1300 kc.**, 1 KW, unlimited time, subject to decision by U. S. Court of Appeals for D. C. in the case of W. H. Kindiv v. FCC, and subject to whatever order may be entered by the Commission pursuant thereto.

KNEL—G. L. Burns, Brady, Tex.—Granted special temporary authority to operate unlimited time on nights of November 6, 13, and 20, to broadcast football games only.

KGFL—KGFL, Inc., Roswell, N. M.—Granted special temporary authority to operate simultaneously with KICA from 7:30 to 10 p. m., MST, November 7, 14, 21 and 26, to broadcast football games.

KFDY—South Dakota State College, Brookings, S. Dak.—Granted special temporary authority to operate from 2 to 3:30 p. m., CST, November 10, and from 2 to 3 p. m., CST, November 11 and 12 to broadcast Farm and Home Week program; also from 8 to 9:45 p. m., CST, November 12, in order to broadcast banquet program honoring eminent farmers and homemakers.

WOSU—Ohio State University, Columbus, Ohio.—Granted special temporary authority to operate from 12:30 p. m. to 1 p. m., EST, November 10 (provided WKBN remains silent), to broadcast account of National Corn Husking Contest.

WNLC—Thames Broadcasting Corp., New London, Conn.—Granted special temporary authority to operate from 4:30 to 5:15 p. m., EST, November 7, 14, 21 and 28, in order to broadcast football games, only on condition that the consents of WMEX, WSYB and WCNW are received by Commission.

W3XAU—WCAU Broadcasting Co., Philadelphia, Pa.—Program tests extended for period of 30 days from November 6.

W4XBT—Radio Station WSOC, Charlotte, N. C.—Granted authority to operate as licensed November 7 to broadcast football game; also November 11 to 21, inclusive, to broadcast Charlotte Food Exposition.

WIEF—Miami Broadcasting Co., Miami, Fla.—Granted authority to operate as licensed November 11, relay broadcast Armistice Day Parade.

WBNY—Roy L. Albertson, Buffalo, N. Y.—Granted special temporary authority to operate from 2 to 3 p. m., EST, November 7, to broadcast football game; November 8 to broadcast Catholic program, and November 14 to broadcast football game (provided WSVS remains silent), and to operate unlimited time November 11 to broadcast Armistice Day program, and November 15 to broadcast Catholic programs (provided WSVS remains silent).

National Broadcasting Co., Inc., New York City.—Granted authority to operate as licensed November 8 to 13, inclusive, to broadcast dedication of San Francisco Bay Bridge.

KMA—May Seed and Nursery Co., Shenandoah, Ia.—Issued Modification of License to increase daytime power to 5 KW, in conformity with action of October 27, 1936, inasmuch as applicant has complied with proviso contained therein.

WMCA—Knickerbocker Broadcasting Co., New York City.—Waived Rule 104.6 and permitted WMCA to file answer in the matter of the application of WMAS, Inc., Springfield, Mass., for C. P. (Docket 4106).

The Broadcast Division granted petition of James D. Scannell to intervene in the hearing upon application of Arthur E. Seagrave for C. P. to establish a new station in Lewiston, Me.

The Broadcast Division granted the motion of the Tribune Co., Tampa Fla., for extension of time for filing exceptions to Ex. Rep. No. 1-301, and gave all parties interested in the event of the proceeding had upon this application until November 14, 1936, to file exceptions thereto.

The Broadcast Division granted motion filed by Niagara Falls Gazette Publishing Co. (Docket 3903), requesting extension of time for filing exceptions and making request for oral argument on Ex. Rep. No. 1-291, from October 14 to October 17, 1936, and granted extension of five days from the grant thereof within which the Power City Broadcasting Corp. (Docket 3839) might make request for oral argument and answer said exceptions.

The Broadcast Division granted petition of Quincy A. Brackett, Lewis B. Breed and Edmund A. LaPort, d/b as Connecticut Valley Broadcasting Co. (WSPR) to intervene in hearing on application of WMAS, Inc., for C. P. (Docket 4106)

The Broadcast Division upon its own motion postponed effective date of its decision upon application of H. E. Studebaker, KRLC, Docket 3494, and Oklahoma Broadcasting Co., KGFG, Dockets 3106 and 3918, from November 3, 1936, until one week after next meeting of Broadcast Division.

The Broadcast Division granted petition filed in behalf of James D. Scannell to intervene in hearing upon application of Philip J. Wiseman, to establish a new station in Lewiston, Me. Docket 3203.

The Broadcast Division granted petition filed in behalf of James D. Scannell to intervene in hearing upon application of Twin City Broadcasting Co., Inc., to establish a new station in Lewiston, Me.

The Broadcast Division upon its own motion postponed effective date of its decision upon application of WCBD, for Modification of License to move studio to 128 N. Pulaski Road, Chicago, and for authority to transfer control of corporation from Wilbur Glenn Voliva, Ernest E. Harwood and M. J. Mintern to L. E. Moulds, W. F. Moss, Gene T. Dyer, and E. N. Ringwald, from November 2 until November 16, 1936.

The Broadcast Division denied petition of W. P. Stuart, Prescott, Ariz., requesting that application of Southwest Broadcasting Co., Prescott, Ariz., for C. P., Docket 3797, and application of W. P. Stuart, for C. P., Docket 3906, be remanded to docket for further testimony, and that oral argument on said applications now scheduled for November 6 be cancelled.

The Broadcast Division granted petition filed by Twin City Broadcasting Co., Inc., to waive Rule 104.6(b) and to permit it to file its answer as a respondent and to participate in the hearing on the application of George M. Haskins for C. P. (Docket 4129).

The Broadcast Division denied the request of the Iowa Broadcasting Co., respondent, that the Commission issue a number of subpenas, *in blank*, to be filled out by the presiding Notary Public, for the purpose of summoning witnesses to take depositions in the hearing on application of Stanley Reid and Chas. Witnell Bogel, Jr., d/b as The Rapids Broadcasting Co., for C. P., Docket No. 3922.

The Broadcast Division granted request of H. Wimpy, Thomasville, Ga., for an order to take depositions in support of his application for C. P., Docket 3995, provided the applicant furnishes the name of an officer embraced within the provisions of Sec. 409(e).

The Broadcast Division denied request of H. Wimpy, Thomasville, Ga., for Subpena Duces Tacum requiring Americus Broadcasting Corp., WGPC, to produce certain evidence in connection with hearing in re application for C. P., Docket 3995.

APPLICATIONS RECEIVED

First Zone

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—Modification of construction permit (B1-P-109) for changes in equipment, move transmitter and increase in power, requesting extension of completion date from 11-3-36 to 1-1-37.
570

WJAR—The Outlet Co., Providence, R. I.—License to cover construction permit (B1-P-1290) to move old Western Electric 94994 transmitter to present site of transmitter for auxiliary purposes only.
890

W1XBS—American-Republican, Inc., Waterbury, Conn.—Authority to make changes in automatic frequency control.

Second Zone

WSVA—Shenandoah Valley Broadcasting Corp., Harrisonburg,
550 Va.—Authority to transfer control of corporation from Marion K. Gilliam to Floyd Williams (50 shares common stock).

WHIO—Miami Valley Broadcasting Corp., Dayton, Ohio—Au-
1260 thority to make changes in automatic frequency control apparatus.

WCMI—The Ashland Broadcasting Co. Inc., Ashland, Ky.—
1310 License to cover construction permit (B2-P-1099) as modified, for equipment changes, increase in power, move of studio and transmitter locally.

NEW—Ann Arbor Broadcasting Co. Inc., Ann Arbor, Mich.—
1550 Construction permit for special broadcast station on **1570 kc.,** 1 KW power, unlimited time. Amended: Change frequency requested from **1570** to **1550 kc.,** and change name from Waldo Abbot, to Ann Arbor Broadcasting Co., Inc.

W3XE—Philco Radio & Television Corp., Philadelphia, Penna.—Modification of license to increase power from 1500 watts (visual), 250 watts (aural) to 10 KW, visual and aural.

Third Zone

WGST—Georgia School of Technology, Atlanta, Ga.—Modifica-
890 tion of construction permit (B3-P-1296) for new equipment, increase in power and move of transmitter, requesting approval of transmitter site at Seaboard Railway Cheshire Bridge, Road, Atlanta, Georgia, and approval of antenna.

WFTC—Jonas Weiland, Kinston, N. C.—Modification of con-
1200 struction permit (B3-P-944) for a new broadcast station, requesting changes in authorized equipment, approval of transmitter and studio sites at South Queen Street, Kinston, North Carolina, and approval of antenna.

NEW—The Metropolis Co., Jacksonville, Fla.—Construction per-
1290 mit to erect a new broadcast station to be operated on **1290 kc.,** 250 watts power, unlimited time. Amended: Equipment changes.

NEW—B. H. Hopson, Birmingham, Ala.—Construction permit
1310 for a new station to be operated on **1310 kc.,** 100 watts night, 250 watts day, unlimited time. Request facilities of WSGN, contingent upon B3-P-997 being granted to The Birmingham News Company.

KELD—Radio Enterprises, Inc., El Dorado, Ark.—License to
1370 cover construction permit (B3-P-1347) for new transmitter.

KLRA—Arkansas Broadcasting Co., Little Rock, Ark.—Authority
1390 to install new automatic frequency control equipment.

WBIG—North Carolina Broadcasting Co. Inc., Greensboro, N. C.
1440 —Modification of license to change power from 500 watts, 1 KW day to 1 KW day and night. Amended: Antenna changes.

NEW—Centennial Broadcasting Corp., Dallas, Tex.—Construc-
1500 tion permit to erect a new broadcast station to be operated on **1500 kc.,** 100 watts, daytime.

W4XBW—WDOD Broadcasting Corp., Chattanooga, Tenn.—Construction permit to move transmitter from Brainerd Community to Hotel Patten.

NEW—Stuart Broadcasting Corp., Knoxville, Tenn.—Construction permit for high frequency relay broadcast station to be operated on **38900, 39100, 39300, 39500 kc.,** 2 watts power.

NEW—Stuart Broadcasting Corp., Knoxville, Tenn.—Construction permit for high frequency relay broadcast station same frequency as above, 10½ watts.

KTVL—Voice of Longview, Longview, Tex.—Modification of construction permit to extend commencement and completion dates from 5-10-36 and 11-10-36 to 11-1-36 and 6 months thereafter.

Fourth Zone

KGFX—Ida A. McNeil, Pierre, S. Dak.—Involuntary assignment
630 of license from Dana McNeil to Ida A. McNeil.

KOBH—Black Hills Broadcast Company (Robert Lee Dean),
1370 Rapid City, S. Dak.—Modification of construction permit (B4-P-231) as modified for changes in type of equipment from RCA. 4240 to RCA. 100 E.

KOVC—George B. Bairey, Valley City, N. Dak.—License to cover
1500 construction permit (B4-P-224) as modified for a new station.

Mutual Broadcasting System, Inc., Chicago, Ill.—Extension of authority to transmit sustaining programs to a foreign country, CKLW, and the Canadian Radio Commission or its successor (Western Ontario Broadcasting Co., Ltd.), Windsor, Ontario, Canada (B4-FP-22), for period from 12-1-36 to 6-1-37.

NEW—Westinghouse Radio Stations, Inc., Fort Wayne, Ind.—Construction permit for international broadcasting station on **6140, 9570, 11870, 15210** and **17780, 21540 kc.,** 50,000 watts power.

W9XPV—WDZ Broadcasting Co., Portable-Mobile.—License to cover construction permit for high frequency relay broadcast station for **31100, 34600, 37600, 40600 kc.,** 2 watts power.

Fifth Zone

KGO—National Broadcasting Company, Inc., San Francisco, Calif.
790 —Construction permit to install new equipment; increase power from 7½ KW to 50 KW; and move transmitter from 5555 East Fourteenth Street, Oakland, Calif., to near Belmont, Calif. Amended: Omit request for directional antenna.

KOMO—Fisher's Blend Station, Inc., Seattle, Wash.—Authority
920 to determine operating power by direct measurement of antenna power.

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—License to
970 cover construction permit (B5-P-1113) for new transmitter and erect a new antenna, and move transmitter.

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—Authority to
970 determine operating power by direct measurement of antenna power.

KFBB—Buttrey Broadcast, Inc., Great Falls, Mont.—License to
1280 cover construction permit (B5-P-1146) for new transmitter and antenna and move of transmitter.

KFBB—Buttrey Broadcast, Inc., Great Falls, Mont.—Authority
1280 to determine operating power by direct measurement of antenna power.

KGB—Don Lee Broadcasting System, San Diego, Calif.—Construc-
1330 tion permit to install new transmitter; erect a vertical antenna; increase power from 1 KW to 1 KW night, 5 KW day; move transmitter from Pickwick Terminal Hotel, 132-152 Broadway, San Diego, Calif., to site to be determined, San Diego, Calif.

KEUB—Eastern Utah Broadcasting Co. (Sam G. Weiss), Price,
1420 Utah.—License to cover construction permit (B5-P-648) as modified for new station on **1420 kc.,** 100 watts power, unlimited time.

KDB—Santa Barbara Broadcasters, Ltd., Santa Barbara, Calif.—
1500 Construction permit to make changes in equipment, erect vertical antenna, change frequency from **1500 kc.** to **1220 kc.,** increase power from 100 to 500 watts, and move transmitter from 17 E. Haley St., Santa Barbara, Calif., to site to be determined, near Santa Barbara, Calif.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

★ ★ ★ ★ ★

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IN THIS ISSUE

RECOMMENDS AGAINST NEW JERSEY STATION

The North Jersey Broadcasting Company, Inc., filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new broadcasting station at Paterson, N. J., to use 620 kilocycles, 250 watts and daytime operation.

Examiner John P. Bramhall in Report No. I-307 recommended that the application be denied. The Examiner found that the applicant failed to show need for additional daytime service in the area proposed to be served "but on the contrary the evidence shows that the Paterson area is now receiving primary service from eight stations." It is also found in the Report by the Examiner that the interests of WEAF may be adversely affected by reason of the granting of the application and stations WICC and WIP would "sustain slight interference in the service area of the proposed station."

AWAIT KVOS DECISION

The broadcasting industry of the United States is awaiting with interest a decision of the United States Supreme Court in the case of the Associated Press against KVOS, Bellingham, Wash. Argument was heard by the Court in this case on November 11. There is no way of guessing when the Court will render any of its decisions but inasmuch as not many undecided cases have been heard it is reasonable to assume that it will not be long.

In this case, it will be recalled, the Circuit Court of Appeals held that KVOS had pirated news despatches of the Associated Press thereby reversing a decision of Federal Judge John C. Bowen of Seattle, Wash., who previously held that broadcasting stations had the right to broadcast news despatches after the papers are available for sale.

BROADCAST MEASUREMENTS

During the month of October, the Federal Communications Commission has announced that 615 broadcast station measurements were taken while 50 were not measured.

Of the number of stations measured, the maximum deviation within 0-10 cycles, was 453; a deviation within 11-25 cycles, 128 stations; deviation within 26-50 cycles, 23 stations and deviation within 50 cycles, 11 stations.

AAAA RADIO COMMITTEE

Chester J. LaRoche of Young & Rubicam, Inc., New York, has been appointed Chairman of the Committee on Radio Broadcasting of the American Association of Advertising Agencies.

Members of the Committee include: G. R. Dunham, The Greenleaf Company, Boston; H. H. Kynett, The Aitkin-Kynett Co., Philadelphia; Richard G. Marvin, J. Walter Thompson Company, Chicago; and John U. Reber, J. Walter Thompson Company, New York.

Added Members are: Charles F. Gannon, Arthur Kudner, Inc., New York; Arthur Pryor, Jr., Batten, Barton, Durstine & Osborn, Inc., New York; and Donald S. Shaw, McCann-Erickson, Inc., New York.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

Interstate Bond Company, Atlanta, Ga. (2-2599, Form A-2)
Medical & Surgical Underwriters, Inc., Houston, Texas (2-2600, Form A-1)
The Mengel Company, Louisville, Ky. (2-2601, Form D-1A)
Hein-Werner Motor Parts Corp., Waukesha, Wis. (2-2602, Form A-2)
A. Hollander & Son., Inc., Newark, N. J. (2-2604, Form A-2)
The Fairmont Creamery Company, Omaha, Nebr. (2-2606, Form A-2)
Atlas Plywood Corporation, Boston, Mass. (2-2607, Form A-2)
George P. Coleman et al., Richmond, Va. (2-2608, Form D-1)
Somoa Products Company, Inc., Chicago, Ill. (2-2609, Form A-1)
Black & Decker Mfg. Company, Towson, Md. (2-2611, Form A-2)
Same (2-2612, Form A-2)
Medical Arts Building Corp., Baltimore, Md. (2-2613, Form A-2)
George Kline, New York City. (2-2614, Form E-1)
Jacob Kline, Chicago, Ill. (2-2615, Form E-1)
International Mining Corp., Jersey City, N. J. (2-2616, Form E-1)
Oliver Farm Equipment Co., Chicago, Ill. (2-2617, Form A-1)
Atlantic Realty Company, Atlanta, Ga. (2-2618, Form A-1)
Bardstown Distillery, Inc., Boubon Springs, Ky. (2-2619, Form A-1)
Insurance Investors Fund, Inc., Seattle, Wash. (2-2621, Form A-1)
Breese Corporations, Inc., Newark, N. J. (2-2622, Form A-1)
Lerner Stores Corporation, New York City. (2-2624, Form A-2)
General Finance Corporation, Detroit, Mich. (2-2626, Form A-2)
Graton & Knight Company, Worchester, Mass. (2-2627, Form A-2)

RECOMMENDS DISMISSAL OF APPLICATION

Carl C. Struble, Curtis T. Strong and Jane M. Fagan applied to the Federal Communications Commission for a construction permit for the erection of a new broadcasting station at The Dalles, Texas, to use 1200 kilocycles, 100 watts and unlimited time on the air.

Examiner John P. Bramhall in Report No. I-308 recommended that the application be dismissed with prejudice. At the hearing the attorney for the applicants asked that the application be dismissed without prejudice. However, the Examiner states that the respondent station had incurred considerable expense and he recommended that it be dismissed with prejudice.

BROADCAST STATION CHANGES

The Federal Communications Commission has issued the following list containing alterations and corrections (italicized) to the edition dated January 1, for the month of October.

Call Letters	*Main Studio Location*	*Name of Licensee*	*Power*	*Frequency (kc)*	*Time Designation*
KANS	Wichita, Kans.	Charles C. Theis	100w	1210	U
		C. P. Covered by license Strike out Effective 7-21-36			
KAST	Astoria, Oregon	*Astoria Broadcasting Co.*	100w	1370	D
KCKN	Kansas City, Kans.	The WLBF Broadcasting Co.	100w	1420	U
Formerly WLBF				**1310	

Call Letters	Main Studio Location	Name of Licensee	Power	Frequency (kc)	Time Designation
KFJR	Portland, Oregon	*KALE, Incorporated*	500w	1300	S. H.
KFRO	Longview, Texas	Voice of Longview	100w *C. P. 250w*	1370	D
KGFF	Shawnee, Okla.	KGFF Broadcasting Co., Inc.	100w *250w-LS*	1420	U
KGGM	Albuquerque, N. Mex.	New Mexico Broadcasting Co.	250w 5 0w-LS *C. P. 1kw*	1230	U
KGKB	Tyler, Texas	East Texas Broadcasting Co.	100w	1500	*U-D* *S. H. night*
KMA	Shenandoah, Iowa	May Seed and Nursery Co.	1kw *5kw-LS*	930	S-KGBZ **U S. A. U C. P. U
KMED	Medford, Oregon	Mrs. W. J. Virgin	100w 250w-LS **250w *C. P. 250w*	1310 1410 *1410*	U S. H. *U*
KMO	Tacoma, Wash.	KMO, Incorporated	250w *C. P. 1kw*	1330	U
KNX	Los Angeles, Calif.	*Columbia Broadcasting System of California, Inc.*	50kw	1050	U
KRMC	*Jamestown, N. Dak.*	*Roberts MacNab Co. (Arthur L. Roberts, R. B. MacNab and A. J. Breitbach, Gen. Mgr.)*	*100w*	*1310*	*Simultaneous D. S-KVOX night (C. P. only)*
		Effective 11-24-36			
KRMD	Shreveport La.	Radio Station KRMD, Inc.	100w *C. P. 250w-LS*	1310	U
KRRV	Sherman, Texas	Red River Valley Broadcasting Corp. *C. P. covered by license*	100w	1310	D
KVOR	Colorado Springs, Colo.	*Out West Broadcasting Co.*	1kw	1270	U
KVOX	*Moorhead, Minn.*	*Robert K. Herbst*	*100w*	*1310*	*Simultaneous D. S-KRMC night (C. P. only)*
		Effective 11-24-36			
KVSC	San Diego, Calif.	*Strike out all particulars*			
KXOK	St. Louis, Mo. T-nr. Venice	*Strike out all particulars* *Issues being determined by Court of Appeals, District of Columbia*			
WATL	Atlanta, Ga.	*J. W. Woodruff tr. as Atlanta Broadcasting Co.*	100w	1370	U
WBNX	New York, N. Y. T-Cliffside Park, N. J.	Standard Cahill Co., Inc. *Strike out Effective 6-20-36*	*1kw*	1350	S-WAWZ
WCAL	Northfield, Minn.	St. Olaf College	1kw 2½kw-LS *C. P. 5kw*	1250 *760*	S H. *D-S-WLB*
WCHS	Charleston, W. Va.	Charleston Broadcasting Co.	500w 1kw-LS	580	U
WDBJ	Roanoke, Va.	Times World Corp.	1kw *5kw-LS*	930	U
WDBO	Orlando, Fla.	Orlando Broadcasting Co., Inc.	250w S. A. 1kw-LS-Exp. S. A. 1kw-night **1kw	580	U
	C. P. T-nr. Orlando		1kw		
WFTC	*Kinston, N. C.*	Jonas Weiland	100w 250w-LS	1200	U (C. P. only)
Formerly WBJW		Effective 10-20-36			
WHA	Madison, Wis.	University of Wisconsin	*5kw*	940	D
WHLB	Virginia, Minn.	Head of the Lakes Broadcasting Co. *C. P. covered by license*	100w	1370	U
WIOD-WMBF	Miami, Fla. T-Miami Beach *C. P. T-Miami*	Isle of Dreams Broadcasting Corp.	1kw	1300	U
WJAC	Johnstown, Pa.	WJAC, Incorporated	100w *C. P. 250w-LS*	1310	S-WFBG
WJAY	Cleveland, Ohio *C. P. T-Village of Seven Hills*	Cleveland Radio Broadcasting Corp.	500w	610	D
WJIM	Lansing, Mich.	*Harold F. Gross*	100w 250w-LS	1210	U
WJTN	Jamestown, N. Y.	*James Broadcasting Co., Inc.*	50w	1210	U
Formerly WOCL					
WLB	Minneapolis, Minn. T-St. Paul	University of Minnesota	1kw *C. P. 5kw*	1250 *760*	S. H. *D-S-WCAL*
WMC	Memphis, Tenn. *T-nr. Memphis*	Memphis Commercial Appeal, Inc.	1kw *5kw-LS*	780	U

Call Letters	Main Studio Location	Name of Licensee	Power	Frequency (kc)	Time Designation
WMIN	St. Paul, Minn.	Edward Hoffman	100w 250w-LS	1370	U
		C. P. covered by license			
		Strike out effective 4-7-36			
WMMN	Fairmont, W. Va.	Monongahela Valley Broadcasting Co.	*500w* *1kw-LS*	890	U
WNEW	*New York, N. Y.* T-nr. Carlstadt, N. J.	WODAAM Corp.	1kw 2½kw-LS	1250	S-WHBI
WNLC	New London, Conn.	Thames Broadcasting Corp.	100w	1500	D
		C. P. covered by license			
		Strike out Effective 7-21-36			
WNOX	Knoxville, Tenn.	Continental Radio Co.	1kw 2kw-LS	1010	U
	C. P. T-nr. Knoxville		*5kw-LS*		
WOL	Washington, D. C.	American Broadcasting Co.	100w	1310	U
	C. P. T-Maryland		*1kw*	*1230*	
WQDM	St. Albans, Vermont	E. J. Regan and F. Arthur Bostwick, d/b as Regan and Bostwick	100w C. P. 1kw	1370 1390	S. H.
WRBL	Columbus, Ga.	WRBL Radio Station, Inc.	100w *C. P. 250w-LS*	1200	U
WROK	Rockford, Ill.	Rockford Broadcasters, Inc.	500w *C. P. 1kw-LS*	1410	U
WSAU *Formerly WDRB*	Wausau, Wisc.	Northern Broadcasting Co., Inc. Effective 11-10-36	100w	1370	D (C. P. Only)
WSAY	Rochester, N. Y.	Brown Radio Service and Laboratory (Gordon P. Brown, Owner)	100w	1210	D
		C. P. covered by license			
WSIX	*Nashville, Tenn.*	Jack M. and Louis R. Draughon, d/b as 638 Tire and Vulcanizing Co.	100w	1210	U
WTCN	Minneapolis, Minn. T-Rose Twp.	Minnesota Broadcasting Corp.	1kw 5kw-LS	1250	S. H. **U
WTMV	E. St. Louis, Ill.	Mississippi Valley Broadcasting Co.	100w *C. P. 250w-LS*	1500	U
WTRC	Elkhart, Ind.	The Truth Publishing Co. Inc.	*100w* *250w-LS*	1310	Simul. D & S-WLBC night
WWNC	Asheville, N. Car.	*Asheville Citizen-Times Co., Inc.*	1kw	570	U

** See Abbreviations—Lists of January 1, 1936

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2976. Olson Rug Company, 2800 North Crawford Ave., **Chicago,** is named respondent in a complaint alleging unfair methods of competition in connection with the sale of rugs which it manufactures from old materials such as rugs, carpets and clothing.

Catalogues, sample books and other advertising matter of the company are alleged to contain representations that the rugs sold by it are made on the special order of the customer, and from identical materials sent to it by such customer, together with other materials furnished by the respondent company, such as new wool.

The complaint charges that one of the company's advertised assertions is that "Within a week we will weave Olson rugs in any of the fashionable, new, plain or two-tone colors, or exquisite oriental or early American patterns shown in this book, regardless of the color of your materials."

No. 2977. Alleging misrepresentation of the therapeutic value of a medicinal preparation designated "Pepsotalis," a complaint has been issued against **C. G. Hyre,** trading as the **Pepsotalis Company, Morgantown, West Virginia,** charging violation of Section 5 of the Federal Trade Commission Act.

The respondent is said to represent on containers that "Pepsotalis" is an intestinal antiseptic, very helpful in the treatment of acidity, heartburn and stomach disorders in general, and that it is a quick relief for indigestion. For the purpose and with the effect of creating consumer demand and to induce wholesalers and retailers to purchase the preparation for resale to the public, the respondent, in radio broadcasts, allegedly made representations to the effect that the product has brought relief to countless numbers suffering from stomach disorders, and in such broadcasts, the complaint charges, he read letters from purported users of "Pepsotalis" whom he represented as asserting that it had cured them of, or given permanent relief from different forms of stomach trouble.

No. 2978. Charged with maintaining a price-fixing combination, the purpose of which is to restrain, monopolize and eliminate competition in the sale of metal window products, 19 corporations and their trade association and its officers are named respondents in a complaint alleging violation of Section 5 of the Federal Trade Commission Act.

The respondent corporations are said to constitute substantially all of the manufacturers of metal window products in the United States, and to sell a considerable amount of their output to Federal, state and municipal governments. Prior to January, 1934, certain of the respondent corporations organized a trade association designated as the Solid Section Steel Window Industry, but since that time it has been known as **Metal Window Institute,** with headquarters at 1427 Eye St., **Washington, D. C.**

The respondent corporations are:

The William Bayley Company, Springfield, O.; Bliss Steel Products Corporation, 617 West Manlius St., East Syracuse, N. Y.; The Bougert and Carlough Company, 28 Peach St., Paterson, N. J.; Campbell Metal Window Corporation, Bush & Humburg Sts., Baltimore; Concrete Engineering Company, 1141 North 11th St., Omaha, Nebr.; Crittall Manufacturing Company, Inc., 1224 24th St., N. W., Washington, D. C.; Detroit Steel Products Company, 2250 East Grand Boulevard, Detroit; Druwhit Metal Products Company, Los Angeles; Federal Steel Sash Company, Inc., Waukesha, Wis.; Michael Flynn Manufacturing Company, Allegheny Ave. and Tulip St., Philadelphia; Hope's Windows, Inc., 84 Hopkins Ave., Jamestown, N. Y.; Kewanee Manufacturing Company, Kewanee, Ill.; Mesker Brothers Iron Company, 424 South 7th St., St. Louis; Michel & Pfeffer Iron Works, Inc., 1415 Harrison St., San Francisco; S. H. Pomeroy Company, Inc., 282 East 134th St., New York; Soule Steel Company, 1750 Army St., San Francisco; J. S. Thorn Company, 20th St. and Allegheny Ave., Philadelphia; Truscon Steel Company, Youngstown, O.; and Vento Steel Sash Company, Inc., Sherman Boulevard, Muskegon Heights, Mich.

Respondent officers of the trade association, and the corporations with which they are affiliated are: Carl R. Raquet, Detroit Steel Products Company; Grover J. Meyer, Truscon Steel Company; James Allinson, J. S. Thorn Company; Guy D. Bayley, William Bayley Company; Frank Garratt, Hope's Windows, Inc., and C. J. McIntosh, Federal Steel Sash Company, Inc.

Ralph H. Sartor, who is not an officer of Metal Window Institute but is employed by it as its commissioner, also is a respondent.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1812. A. Goldman, trading as **Lord Baltimore Tailoring Co.,** 106 West Baltimore St., **Baltimore,** and selling tailored-to-order men's suits, has entered into a stipulation to discontinue on display tags or in other advertising matter use of the words "fine woolens" to describe garments not composed wholly of wool, and to cease using the word "wool" in any manner tending to misguide purchasers respecting the wool content of his products.

According to the stipulation, not all of the respondent's garments labeled "fine woolens" were made wholly of wool, but some were composed in substantial part of another material.

No. 1831. Alaska Fur Trappers, Inc., 36 West 35th St., New York, agrees that in the sale of fur garments it will cease using in its trade name, or in any other manner, the word "Trappers", alone or with the words "Alaska Fur", to imply that it is engaged in business as a producer of furs or in trapping Alaskan or other animals, when such is not a fact. The corporation also will stop using the word "wholesale" in printed matter to create the impression that it is a wholesaler, when this is not true, and the word "manufacturing" to imply that it makes the products it sells or that it owns a plant for that purpose.

No. 1832. Reliance Manufacturing Company, 212 West Monroe St., Chicago, stipulates that it will discontinue labeling men's jackets, not composed wholly of wool, with the phrases "All Wool Melton" and "Genuine Wool Melton", and will refrain from use of the word "Wool", independently or with other words, to imply that jackets are composed entirely of wool, when such is not a fact. If the jackets are composed in substantial part of wool and the word "Wool" is used to describe them, then that word shall be prominently accompanied by other words in type equally conspicuous so as to indicate clearly that the jackets are composed in part of materials other than wool.

Nos. 1840 and **1844. Sigmunds, Inc., 7th and H Sts., N. W.,** and **H. Zirkin and Sons, Inc., 821 14th St., N. W., Washington, D. C.,** signed separate stipulations, agreeing to stop describing the fur garments they sell in any other manner than by using the correct name of the fur as the last word of the description. The stipulation provides that when any dye or blend is used simulating another fur, the true name of the fur appearing as the last word of the description shall be immediately preceded by the word "dyed" or "blended", compounded with the name of the simulated fur, as, for example, "Beaver-dyed coney."

No. 1841. Arthur Siegman, Inc., 16 East 34th St., New York, engaged in the manufacture and sale of neckwear, agrees to cease using the words "Silk Craft Cravats" to describe its products not composed of silk, and the word "Silk", alone or with any other words on tags or labels, implying that the neckwear so branded is made of silk, when such is not a fact. When the neckwear is composed in substantial part of silk and the word "silk" is used to describe it, then that word shall be accompanied by other words printed in type sufficiently conspicuous to indicate that the products are not made wholly of silk but in part of other materials.

No. 2319. An order to cease and desist from false representations has been entered against **Chesapeake Distilling & Distributing Co.,** 9 South Howard St., **Baltimore,** engaged in selling whiskies, brandies and other spirituous beverages.

The order directs the respondent company to discontinue representing, through the use of the word "Distilling" in its corporate name, in advertising matter or on labels, that it is a distiller of whiskies, brandies or any other spirituous beverages, that such products are manufactured by it through the process of distillation, or that it owns or operates a place where it manufactures such products by a process of distillation, until it does own or control such a place.

No. 2631. Trading as **Boyd Business University** and selling courses of business instruction and textbooks, **Jefferson Educational Company, Washington, D. C.,** has been ordered to discontinue representing through use of the word "University" in its trade name, or in any manner, that it conducts a university or institution of higher learning.

The order also prohibits use of the name "Robert Boyd", his portrait, or his signature on diplomas as president, to represent that he is president of the respondent educational institution. Likewise, the phrase "F. P. Baker & Company, London, England", is not to be used in conjunction with the name of the respondent corporation so as to represent that the two are affiliated business or educational institutions.

No. 2670. M. and A. Berger, trading as **Wearwell Knitting Mills,** 82 Orchard St., **New York,** have been ordered to cease and desist from representing, through use of the words "knitting" or "mills" alone or with other words in their trade name, or in any manner, that they own or operate a mill or factory in which are manufactured the knitted products they sell in interstate commerce.

The respondents were charged in the Commission's complaint with falsely advertising their products by means of the phrase "Manufacturers of high-grade sweaters, bathing suits and knitted novelties."

No. 2885. False representations as to the merits and effectiveness of "Youthray," offered as a hair color restorer, are prohibited under an order to cease and desist entered against **Erna Saffan, Inc.,** and **Roy M. Kirtland,** 646 North Michigan Ave., **Chicago.**

The respondents are directed to discontinue representing in catalogues, on labels, by radio broadcasting, or in any manner, that "Youthray" is not a dye, can be used to restore the color of hair without the aid of harmful dyes, and is not injurious to the scalp and hair; that it will restore hair to its natural or original color, and is a fine germicide and antiseptic and beneficial to users.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, November 23

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Owensboro Broadcasting Co., Owensboro, Ky.—C. P., **1500 kc.,** 100 watts, unlimited time.

NEW—Clarence C. Dill, Washington, D. C.—C. P., **1390 kc.,** 1 KW, unlimited time.

NEW—Continental Radio Co., Washington, D. C.—C. P., **1230 kc.,** 1 KW, unlimited time.

Tuesday, November 24

HEARING BEFORE AN EXAMINER

(Broadcast)

KINY—Edwin A. Kraft, Juneau, Alaska.—C. P., **1430 kc.,** 250 watts, unlimited time. Present assignment: **1310 kc.,** 100 watts, unlimited time.

NEW—Edwin A. Kraft, Petersburg, Alaska.—C. P., **1430 kc.,** 100 watts, unlimited time.

Wednesday, November 25

FURTHER HEARING BEFORE AN EXAMINER

NEW—State Capitol Broadcasting Assn., R. B. Anderson, Pres., Austin, Tex.—C. P., **1120 kc.,** 500 watts, 1 KW LS, specified hours (all hours not used by WTAW).

APPLICATIONS GRANTED

KEUB—Eastern Utah Broadcasting Co. (Sam G. Weiss), Price, Utah.—Granted license to cover C. P. authorizing erection of new station; **1420 kc.,** 100 watts, unlimited time.

WJAR—The Outlet Co., Providence, R. I.—Granted license to cover C. P. authorizing move of transmitter to E. Providence, for auxiliary purposes only; **890 kc.,** 1 KW.

WCMI—The Ashland Broadcasting Co., Inc., Ashland, Ky.—Granted license to cover C. P. authorizing changes in equipment, increase in day power from 100 to 250 watts, and move of studio and transmitter locally to 20th and Greenup St., Ashland, Ky.; **1310 kc.,** 100 watts night, unlimited.

KFXR—Exchange Ave. Baptist Church of Oklahoma City, Oklahoma City, Okla.—Granted Modification of C. P. to change type of equipment to be installed.

KMO—KMO, Inc., Tacoma, Wash.—Granted Modification of C. P. approving vertical radiator; transmitter site at 1½ mile north of Tacoma, and new equipment.

KWJJ—KWJJ Broadcast Co., Inc., Portland, Ore.—Granted Modification of C. P. extending completion date to December 8, 1936, for change in transmitter and studio locations, installation of vertical radiator.

KTVL—Voice of Longview, Mobile, Longview, Tex.—Granted Modification of C. P. extending completion date from 11/10/36 to 6 months thereafter, for relay broadcast station.

KALE—KALE, Inc., Portland, Ore.—Granted modification of license, subject to Rule 131, to increase hours of operation from specified to unlimited; **1300 kc.,** 500 watts.

KIRO—Station KIRO, Seattle, Wash.—Granted special temporary authority to make changes in antenna system employed during regular broadcast day to make measurements to determine whether modified antenna will comply with Rule 131.

WAGF—John T. Hubbard and Julian C. Smith, d/b as Dothan Broadcasting Co., Dothan, Ala.—Granted assignment of license to John T. Hubbard, Julian C. Smith and Fred C. Mosley, d/b as Dothan Broadcasting Co.; **1370 kc.,** 250 watts, daytime only.

KLRA—Arkansas Broadcasting Co., Little Rock, Ark.—Granted authority to install new automatic frequency control equipment.

KPLC—Calcasieu Broadcasting Co. (T. B. Lanford, R. M. Dean, L. M. Sepaugh), Lake Charles, La.—Granted C. P. to move transmitter site locally, install vertical radiator, make changes in equipment, and increase day power from 100 to 250 watts; **1500 kc.,** unlimited.

KELD—Radio Enterprises, Inc., El Dorado, Ark.—Granted license to cover C. P. for new station; **1370 kc.,** 100 watts, unlimited.

WNYC—City of New York, Department of Plant and Structures, New York City.—Granted Modification of C. P. extending completion date from 11/28/36 to 180 days thereafter.

WAML—New Laurel Radio Station, Inc., Laurel, Miss.—Granted modification of license to change operation from specified hours to unlimited; **1310 kc.,** 100 watts, night-day.

WAAE—Hammond Calumet Broadcasting Corp., Hammond, Ind. —Granted renewal of license for the term December 1, 1936, to June 1, 1937.

WHIO—Miami Valley Broadcasting Corp., Dayton, Ohio.—Granted authority to make changes in automatic frequency control apparatus.

NEW—Stuart Broadcasting Corp., Mobile (Knoxville, Tenn.).—Granted C. P. for experimental relay broadcast station; frequencies **38900, 39100, 39300, 39500 kc.,** 2 watts. Also granted license covering same.

W9XPV—WDZ Broadcasting Co., Mobile, Tuscola, Ill.—Granted license to cover C. P. for relay broadcast station on an experimental basis; frequencies **31100, 34600, 37600** and **40600 kc.,** 2 watts.

W3XE—Philco Radio and Television Corp., Philadelphia, Pa.—Granted Modification of license to make changes in equipment and increase power of visual transmitter from 1.5 KW to 10 KW and aural transmitter from 250 w. to 10 KW.

W3XAU—WCAU Broadcasting Co., Newton Square, Pa.—Granted license to cover C. P. for changes in equipment and increase in power to 10 KW.

SET FOR HEARING

NEW—The Ogdensburg Publishing Co., Inc., Ogdensburg, N. Y.—Application for C. P. to erect new broadcast station in Ogdensburg, N. Y., to operate on **1500 kc.,** 100 watts, unlimited time. Exact transmitter site and type of antenna to be determined with Commission's approval. Granted petition of Ogdensburg Advance Co., Inc., to intervene in hearing.

NEW—Wm. C. Grove and S. H. Patterson, a partnership, Cheyenne, Wyo.—Application for C. P. for new broadcast station at Cheyenne, Wyoming, to operate on **1420 kc.,** 100 watts night, 250 watts day, unlimited time. Exact transmitter and studio sites to be determined with Commission's approval.

NEW—Aberdeen News Co., Aberdeen, S. Dak.—Application for C. P. for new broadcast station at Aberdeen, S. Dak., to operate on **1390 kc.,** 1 KW, unlimited time. Site to be determined with Commission's approval.

NEW—H. O. Davis, Mobile, Ala.—Application for C. P. for new broadcast station at Mobile, Ala., to operate on **610 kc.,** 250 watts night, 500 watts day, unlimited time. Exact transmitter and studio sites to be determined subject to Commission approval.

NEW—R. W. Page Corp., Columbus, Ga.—Application for C. P. for new broadcast station at Columbus, Ga., to operate on **950 kc.,** 250 watts, unlimited time. Exact transmitter site and type of antenna to be determined with Commission's approval.

NEW—Charles Greenblatt, Bridgeport, Conn.—Application for C. P. for new broadcast station at Bridgeport, Conn., to operate on **1190 kc.,** 250 watts night and day, unlimited time. Applicant is requesting facilities of WATR. Exact transmitter and studio sites to be determined with Commission's approval.

NEW—Red Lands Broadcasting Assn., Ben T. Wilson, president, Lufkin, Tex.—Amended application for C. P. for new broadcast station at Lufkin, Tex., to operate on **1310 kc.,** 100 watts, daytime only. Amended to change transmitter location to site to be determined.

NEW—H. A. Hamilton, Spartanburg, S. C.—Application for C. P. for new broadcast station at Spartanburg, S. C., to authorize operation on **1420 kc.,** 100 watts night, 250 watts day, unlimited time.

NEW—Edgar L. Bill, Peoria, Ill.—Application for C. P. for new broadcast station at Peoria, Ill., to operate on **1040 kc.,** 250 watts daytime only. Transmitter and studio sites are to be determined with Commission's approval.

NEW—Troy Broadcasting Co., Inc., Troy, N. Y.—Application for C. P. for new broadcast station at Troy, N. Y., to operate on **950 kc.,** 1 KW, daytime only. Transmitter site to be determined subject to Commission's approval.

NEW—Ellwood Warwick Lippincott, Bend, Ore.—Application for C. P. for new broadcast station at Bend, Ore., to operate on **1310 kc.,** 100 watts, unlimited time. Transmitter site to be determined with Commission's approval.

NEW—Richard S. Gozzaldi, d/b as Oak Cliff-Dallas County Broadcasting Co., Dallas, Tex.—Application for C. P. for new broadcast station at Dallas, Tex., to operate on **1500 kc.,** 100 watts, daytime only. Transmitter site to be determined with Commission's approval.

NEW—The Hebrew Evangelization Soc., Inc., Los Angeles, Calif.—Application for C. P. for new broadcast station at Los Angeles, Calif., to operate on **570 kc.,** 1 KW, unlimited time.

NEW—Frazier Reams, Mansfield, Ohio.—Application for C. P. for new broadcast station at Mansfield, Ohio, to operate on **1370 kc.,** 100 watts, daytime only. Transmitter and studio sites and type of antenna are to be determined with Commission's approval.

NEW—Juan Piza, San Juan, P. R.—Application for C. P. for new broadcast station at San Juan to operate on **1500 kc.,** 100 watts night, 250 watts day, unlimited time, using same vertical radiating system as Station WNEL.

NEW—H. E. Studebaker, La Grande, Ore.—Application for C. P. for new broadcast station at La Grande, Ore., to operate on **1420 kc.,** 100 watts night, 250 watts day, unlimited time. Transmitter and studio sites are to be determined with Commission's approval.

KFYR—Meyer Broadcasting Co., Bismarck, N. Dak.—Hearing before Broadcast Division on application for modification of license to increase night power from 1 KW to 5 KW.

KGAR—Tucson Motor Service Co., Tucson, Ariz.—Application for modification of license to change frequency from **1370 kc.** to **890 kc.;** increase power from 100 watts night, 250 watts day, unlimited time, to 250 watts, unlimited time.

WWRL—Long Island Broadcasting Corp., Woodside, L. I., N. Y.—Application for modification of license to make changes in specified hours, requesting the hours now used by station WMBQ.

NEW—Abraham Plotkin, Chicago, Ill.—Hearing before Broadcast Division on application for C. P. for new broadcast station at Chicago, Ill., to operate on **1600 kc.,** 100 watts night, 250 watts day, unlimited time, exact location to be determined subject to Commission approval (transmitter location).

NEW—Elmira Star-Gazette, Inc., Elmira, N. Y.—Application for C. P. for new broadcast station at Elmira, N. Y., to operate on **1200 kc.,** 250 watts, daytime only. Transmitter site to be determined with Commission's approval.

NEW—Mid-Atlantic Corp., Washington, D. C.—Application for C. P. for new special broadcast station at Washington, D. C., to operate on **1570 kc.,** 1 KW, unlimited time. Transmitter site to be determined subject to Commission's approval.

WJAR—The Outlet Co., Providence, R. I.—Application for C. P. to install new equipment, increase day power from 1 KW to 5 KW.

WBNY—Roy L. Albertson, Buffalo, N. Y.—Application for modification of license to increase time of operation so as to include and embrace certain hours which are now assigned to, but not regularly used by WSVS, namely, 2 to 3 p. m. on Saturdays, 8:30 to 10 a. m. and 2 to 3 p. m. on legal holidays,

Thanksgiving, Christmas and Easter, and all hours on Sunday if WSVS is silent.

NEW—F. M. Gleason, d/b as North Georgia Broadcasting Co., Rossville, Ga.—Amended application for C. P. for new broadcast station at Rossville, Ga., to operate on **1200 kc.,** 100 watts, daytime only.

NEW—Associated Arkansas Newspapers, Inc., Hot Springs, Ark.—Amended application for C. P. for new broadcast station at Hot Springs, Ark., to operate on **1310 kc.,** 100 watts, day time only.

WCAD—St. Lawrence University, Canton, N. Y.—Application for Commission's consent for voluntary assignment of license of Station WCAD, from St. Lawrence University to the Brockway Company.

WCAD—The Brockway Co. (Lessee), Canton, N. Y.—Amended application for C. P. to move transmitter and studio from Canton, N. Y., to Watertown, N. Y.; to install new equipment; change frequency from **1220 kc.** to **1270 kc.;** and change time of operation from 500 watts, specified hours, to 500 watts, daytime only. Site and type of antenna are to be approved. This application is contingent upon granting of pending application for assignment of license from St. Lawrence University to The Brockway Co.

APPLICATIONS DISMISSED

The following applications heretofore designated for hearing were dismissed at the request of the applicants:

NEW—John E. Fetzer, Benton Harbor, Mich.—Application for C. P. for new station to operate on **1500 kc.,** 100 watts, daytime.

WSPR—Quincy A. Brackett, Lewis B. Breed, and Edmund A. Laport, co-partners, Springfield, Mass.—Application for modification of license to operate on **1140 kc.,** 500 watts, limited to LS at KVOO.

NEW—Eau Claire Broadcasting Co., Eau Claire, Wis.—Application for C. P. for new station to operate on **1210 kc.,** 100 watts, unlimited.

NEW—Ed Klies, Helena, Mont.—Application for C. P. for new station to operate on **1280 kc.,** 1 KW night, 5 KW day, unlimited time. Requested facilities of KFBB.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KADA, Ada Okla.; KASA, Elk City, Okla.; KDON, Del Monte, Calif.; KFJB, Marshalltown, Ia.; KFJI, Klamath Falls, Ore.; KFPW, Fort Smith, Ark.; KFVS, Cape Girardeau, Mo.; KFXD, South Nampa, Idaho; KFXJ, Grand Junction, Colo.; KFXM, San Bernardino, Calif.; KGFJ, Los Angeles; KGFW, Kearney, Neb.; KGEK, Sterling. Colo.; KGHI, Little Rock, Ark.; KIUL, Garden City, Kans.; KOOS, Marshfield, Ore.; KPPC, Pasadena, Calif.; KRQA, Santa Fe. New Mexico; KRMD, Shreveport, La.; KTSM, El Paso, Tex.; KWG, Stockton, Calif.; KXRO, Aberdeen, Wash.; WALR, Zanesville, Ohio; WBBL, Richmond, Va.; WBEO, Marquette, Mich.; WBRB, Red Bank, N. J.; WBRE, Wilkes-Barre, Pa.; WCAT, Rapid City, S. Dak.; WCMI, Ashland, Ky.; WCOL, Columbus, Ohio; WDAH, El Paso, Tex.; WEBQ, Harrisburg, Ill.; WEMP, Milwaukee, Wis.; WEST, Easton, Pa.; WFBG, Altoona, Pa.; WFDF, Flint, Mich.; WGBB, Freeport, N. Y.; WGH, Newport News, Va.; WHAT, Philadelphia. Pa.; WHBU, Anderson, Ind.; WJAC, Johnstown, Pa.; WJEJ, Hagerstown, Md.; WJBY, Gadsden, Ala.; WJW, Akron, Ohio; WKBO, Harrisburg, Pa.; WMFG, Hibbing, Minn.; WMPC, Lapeer, Mich.; WNBH, New Bedford, Mass.; WPAX, Thomasville, Ga.; WRAW, Reading, Pa.; WRBL, Columbus, Ga.; WSBC, Chicago; WSOC, Charlotte, N. C.; WTAX, Springfield, Ill.; WTHT, Hartford, Conn.; WTJS, Jackson, Tenn.

SPECIAL AUTHORIZATIONS

KFOX—Nichols & Warinner, Inc., Long Beach, Cal.—Granted special temporary authority to operate a 30-watt portable test transmitter between the hours of 12 midnight and 6 a. m., for the period November 20 to December 19, 1936, in order to locate new transmitter site.

WFIL—WFIL Broadcasting Co., Philadelphia, Pa.—Granted extension of special temporary authority to operate on **560 kc.,** with power of 1 KW at night, during the month of December, 1936, pending filing of and action on license application to cover C. P. for this authority.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted special temporary authority to operate simultaneously with station WLEG from 7:30 to 10 p. m., CST, December 4, 5, 11, 12, 18, 23 and 26 and 20, 1936, for the purpose of broadcasting High-school basketball games.

KOY—Nielsen Radio & Sporting Goods Co., Phoenix, Ariz.—Granted extension of special temporary authority to operate with former antenna system for period November 19 to December 18, 1936, pending application for new antenna and site.

WMAZ—Southeastern Broadcasting Co., Inc., Macon, Ga.—Granted special temporary authority to take auxiliary transmitter out of service while low temperature coefficient crystals are being installed in main and auxiliary automatic frequency control equipment by Western Electric Co., for period not to exceed 30 days.

WDBO—Orlando Broadcasting Co., Inc., Orlando, Fla.—Granted extension of special temporary authority to operate with additional power of 750 watts for period November 27 to December 26, 1936.

KSAC—Kansas State College of Agriculture and Applied Sciences, Manhattan, Kans.—Granted special temporary authority to operate station without antenna ammeter for a period not to exceed three days.

WBTM—Piedmont Broadcasting Corp., Danville, Va.—Granted special temporary authority to install and use frequency control apparatus, Type 52-A, for a period not to exceed 30 days, pending completion and installation of new equipment.

WMBG—Havens & Martin, Inc., Richmond, Va.—Granted extension of special temporary authority to operate from 5:30 to 7 p. m., EST, on Sundays, during month of December, 1936 (provided WBBL remains silent), in order to broadcast special programs.

WDEV—Chas. B. Adams, Administrator of the estate of Harry C. Whitehill, Waterbury, Vt.—Granted special temporary authority for Charles B. Adams, the Administrator of the estate of Harry C. Whitehill, to operate station WDEV instead of Mary M. Whitehill (deceased), Executrix of the estate of Harry C. Whitehill, pending receipt and action on application for assignment made by him as the duly authorized administrator, but for the period ending in no event later than March 1, 1937.

WSMK—WSMK, Inc., Dayton, Ohio.—Granted special temporary authority to operate simultaneously with KQV from 7:30 to 8:30 p. m., EST, Monday, November 16, for the purpose of broadcasting Community Chest program.

KTFI—Radio Broadcasting Corp., West Twin Falls, Idaho.—Granted special temporary authority to use new automatic frequency control equipment pending action on formal application, but in no event later than 30 days.

KMED—Mrs. W. J. Virgin, Medford, Ore.—Granted special temporary authority to use automatic frequency control equipment in present transmitter as granted in C. P. October 27, 1936, pending completion of construction under that C. P., in order to comply with Rule 132, for a period not to exceed 30 days.

WHEC—WHEC, Inc., Rochester, N. Y.—Granted special temporary authority to operate station without an approved frequency monitor for a period beginning November 13 and ending no later than November 22, 1936.

WNYC—City of New York, Department of Plant and Structures, New York City.—Granted extension of special temporary authority to use auxiliary transmitter located at 29 Ft. Greene Place, Brooklyn, N. Y., as main transmitter, while moving, in accordance with C. P., for the period December 6, 1936, to February 1, 1937.

RATIFICATIONS

The Broadcast Division ratified the following acts authorized on the dates shown:

W8XIR—WGAR Broadcasting Co., Cleveland, Ohio.—Granted temporary authority to operate station as licensed, for period of 30 days beginning November 17th to December 17th, 1936, inclusive, for relay broadcast of interviews with school children.

KRKO—Lee E. Mudgett, Everett, Wash.—Granted temporary authority to use temporary antenna ammeter for 10 days pending replacement with proper ammeter.

KFXJ—Radio Station KFXJ, Grand Junction, Colo.—Granted temporary authority to employ former licensed crystal oven pending repair new unit, for period not to exceed 30 days.

KFSG—Echo Park Evangelistic Association, Los Angeles, Calif.—Granted special temporary authority to suspend operation of auxiliary transmitter for a period not to exceed 2 weeks, pending rewiring of circuits.

WNYC—City of New York, Department of Plant and Structures, New York City.—Granted special temporary authority to rebroadcast Navy time signals from Naval Radio Station NAA at Washington, D. C., over radio station WNYC for the period ending in no event later than February 1, 1937.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted special temporary authority to operate simultaneous with WSMK from 5:15 to 5:30 p. m., EST, November 15, in order to broadcast Pittsburgh-Chicago football game; November 22, 1936, in order to broadcast Pittsburgh-New Haven hockey game; November 29, 1936, in order to broadcast Pittsburgh-Boston football game.

WGRC—North Side Broadcasting Corp., New Albany, Ind.—Granted special temporary authority to operate from 6:30 p. m., CST, Tuesday, November 17, using power of 100 watts, to conclusion of dedicatory program.

WTFI—Liberty Broadcasting Co., Athens, Ga.—Granted special temporary authority to operate a 100-watt portable test transmitter in the vicinity of Athens, Ga., between the hours of 12 midnight and 6 a. m., for the period November 16 to December 15, 1936, in order to determine new transmitter site. However, such tests not permitted during those hours prescribed for the Commission's monitoring schedule. Provided—no operation occurs from December 8 to 14, inclusive, except Sunday, December 13, 1936.

WTFI—Liberty Broadcasting Co., Athens, Ga.—Granted special temporary authority to install and use temporary antenna for period not exceeding 30 days pending completion of construction under C. P.

WTAW—Agricultural and Mechanical College of Texas, College Station, Tex.—Granted special temporary authority to suspend operation beginning 11/12/36 and ending no later than 12/11/36, pending rebuilding of transmitter and installation of automatic frequency control apparatus.

KSTP—National Battery Broadcasting Co., St. Paul, Minn.—Granted special temporary authority to use transmitter of WLB for period 11/16/36 and ending no later than 11/29/36, in order to permit removal and reinstallation of KSTP transmitter.

WLB—University of Minnesota, Minneapolis, Minn.—Granted special temporary authority to broadcast programs of WLB over transmitter of WCAL during period beginning 11/16/36 and ending no later than 11/29/36.

KTHS—Hot Springs Chamber of Commerce, Hot Springs, Ark.—Granted petition to intervene in the hearing on application of Radio Enterprises, Inc., Hot Springs, Ark., for C. P. to establish a new broadcast station in Hot Springs. (Docket 4004)

The Broadcast Division granted petition of L. L. Ashbury et al, as members of the Hot Springs Chamber of Commerce, requesting that they be permitted to intervene and participate in hearing on application of KTHS for authority to assign the license of that station (Docket No. 4100).

The Broadcast Division denied the petition of Arkansas Broadcasting Co. (KLRA), Little Rock, Ark., insofar as it prays intervention on the hearing of the application of the Hot Springs Chamber of Commerce, Hot Springs, Ark., for voluntary assignment of license, and granted the petition insofar as it requests intervention in the proceeding incident to the application of Hot Springs Chamber of Commerce for a C. P. to authorize removal of station to Little Rock, Ark. (Docket No. 4228).

The petition of the Centennial Broadcasting Corp. to intervene in the hearing on the application of the Dallas Broadcasting Co., Dallas, Tex., for C. P., Docket 3920, was granted by the Broadcast Division, and overruled the opposition to said petition filed on behalf of the Dallas Broadcasting Co.

The Broadcast Division granted petition filed by Dr. Geo. W. Young, Minneapolis, Minn., to intervene and be made a party to the hearing on the application of National Battery Broadcasting Co., Docket 4119, for 1 KW, unlimited time, and Docket 4120, for **580 kc.**, 1 KW, unlimited time.

The Broadcast Division granted petition filed by the Fresno Broadcasting Co., Fresno, Calif., to intervene in the hearing on the application of Geo. Harm, Fresno, Calif., for C. P., Docket 3944.

The Broadcast Division granted petition filed by the Missionary Society of St. Paul the Apostle (WLWL) to intervene in the hearing on the application of the Massachusetts Broadcasting Corp. (WCOP), for modification of license. Docket 3332.

The Law Department requested direction from the Broadcast Division upon the policy of stating a personnel problem in an opposition to be filed by the Commission against the motion of The Great Western Broadcasting Association, Inc., and the Intermountain Broadcasting Corp., appellants in Causes Nos. 6852, 6853 and 6854, in the U. S. Court of Appeals for the District of Columbia, for *leave to print the record under the provisions of Rule V, Paragraph 5, upon preparation by appellants of a narrative statement.*

The Broadcast Division directed the filing of the opposition without the proposed paragraph relating to personnel.

ACTION ON EXAMINERS' REPORTS

KLS—Ex. Rep. 1-124: S. W. Warner and E. W. Warner, d/b as Warner Bros., Oakland, Calif.—Granted modification of license to change frequency from **1440 kc.** to **1280 kc.**; change hours of operation from daytime to unlimited; 250 watts. Examiner John P. Bramhall sustained. Order effective December 1, 1936.

NEW—Ex. Rep. 1-147: Arthur Westlund and Jules Cohn, Santa Rosa, Calif.—Denied, Commissioner Case dissenting, application for C. P. for new station to operate on **1310 kc.**, 100 watts, unlimited time. Examiner R. L. Walker reversed. Order effective December 8, 1936.

WHB—Ex. Rep. 1-229: WHB Broadcasting Co., Kansas City, Mo.—Denied C. P. to install new equipment; install directional antenna; change frequency from **860 kc. to 1120 kc.**; change hours of operation from daytime to unlimited, using 500 watts power night, 1 KW day. Examiner Melvin H. Dalberg reversed. Order effective December 15, 1936.

KFOX—Ex. Rep. 1-233: Nichols & Warinner, Inc., Long Beach, Calif.—Granted C. P. to install new equipment and increase day power from 1 KW to 5 KW; **1250 kc.**, 1 KW night, unlimited time. Examiner R. L. Walker reversed. Order effective December 15, 1936.

NEW—Ex. Rep. 1-234: B. A. Thompson, Santa Cruz, Calif.—Denied C. P. for new broadcast station to operate on **1310 kc.**, 100 watts night, 250 watts day, unlimited time. Examiner M. H. Dalberg reversed.

NEW—Wm. B. Smullin, Sacramento, Calif.—Denied C. P. for new station to operate on **1310 kc.**, 100 watts night, 250 watts day, unlimited time (site to be determined subject to Commission's approval). Examiner Dalberg sustained.

NEW—Howard N. Mitchell, Sacramento, Calif.—Denied C. P. for new station to operate on **1310 kc.**, 100 watts, unlimited time (site to be determined subject to Commission's approval). Examiner Dalberg reversed.

The Press Democrat Publishing Co., Santa Rosa, Calif.—Granted C. P. for new broadcast station to operate on **1310 kc.**, 250 watts, daytime (site to be determined subject to Commission's approval). Examiner M. H. Dalberg reversed. Order in foregoing cases effective December 8. 1936.

NEW—Ex. Rep. 1-237: Julius Brunton & Sons Co., Fresno, Calif.—Denied C. P. for new broadcast station to operate on **980 kc.**, 250 watts, daytime (site to be determined subject to Commission's approval). Examiner Davis G. Arnold reversed.

NEW—Miles J. Hansen, Fresno, Calif.—Dismiss with prejudice application for C. P. for new station to operate on **1420 kc.**, 100 watts, unlimited time (site to be determined subject to Commission's approval). Examiner Arnold sustained. Order effective December 22, 1936.

NEW—Ex. Rep. 1-238: Harold H. Hanseth, Fresno, Calif.—Denied C. P. for new broadcast station to operate on **1410 kc.**, 1 KW, unlimited time. Examiner P. W. Seward sustained.

NEW—Fresno Broadcasting Co., Fresno, Calif.—Denied C. P. for new station to operate on **1410 kc.**, 500 watts night, 1 KW day, unlimited time. Examiner Seward sustained. Order effective December 22, 1936.

NEW—Ex. Rep. 1-292: Mrs. C. A. S. Heaton, Las Vegas, Nev.—Denied C. P. for new broadcast station to operate on **1420 kc.**, 100 watts, unlimited time. Examiner Robert L. Irwin sustained. Order effective December 1, 1936.

WHAZ—Ex. Rep. 1-293: Rensselaer Polytechnic Institute, Troy, N. Y.—Granted, subject to Rule 131, application for modification of license to increase power from 500 watts to 1 KW; **1300 kc.**; shares time with WFAB, WEVD and WBBR. Examiner Robert L. Irwin sustained. Order effective December 1, 1936.

NEW—Ex. Rep. 1-296: Wm. H. Davis, Dixon Pyles. W. H. Johnson, d/b as Magnolia Broadcasting Co., Jackson, Miss.—Dismiss with prejudice application for C. P. for new broad-

cast station to operate on **1420 kc.,** 100 watts, unlimited time. Examiner P. W. Seward sustained.

Ex. Rep. 1-298: The Ogdenshurg Advance Company, Inc., Ogdenshurg, N. Y.—Dismiss with prejudice application for authority to transmit programs to foreign countries, Radio Association of Prescott, Canada. Examiner George H. Hill sustained.

KSO—Ex. Rep. 1-299: Iowa Broadcasting Co., Des Moines, Iowa. —Granted C. P. to make changes in equipment and increase power from 500 watts night, 1 KW day, to 500 watts night, 2½ KW day; **1430 kc.,** unlimited time. Examiner Melvin H. Dalherg sustained. Order effective December 8, 1936.

ORAL ARGUMENTS

NEW—Ex. Rep. 1-286: Packard, Stebbins & Packard, d/h as Valley Broadcasting Co., Pomona, Calif.—Granted request for Oral Argument to he held January 7, 1937.

NEW—Ex. Rep. 1-291: Power City Broadcasting Corp., Niagara Falls, N. Y.—Granted request for Oral Argument to he held January 7, 1937.

NEW—Niagara Falls Gazette Puhlishing Co., Niagara Falls, N. Y.—Granted request for Oral Argument to be held January 7, 1937.

WMFF—Ex. Rep. 1-294: Plattsburg Broadcasting Corp., Plattshurg, N. Y.—Granted request for oral argument to be held January 7, 1937.

NEW—Ex. Rep. 1-295: A. Tornek, d/h as Metro Broadcasting Co., Los Angeles, Calif.—Granted request for Oral Argument to be held January 28, 1937.

KUJ—Ex. Rep. 1-300: KUJ, Inc., Walla Walla, Wash.—Granted request for Oral Argument to be held January 28, 1937.

WNRI—Ex. Rep. 1-303: S. George Webb, Newport, R. I.—Granted request for Oral Argument to he held January 28, 1937.

NEW—E. Anthony & Sons, Inc., Pawtucket, R. I.—Granted request for Oral Argument to he held January 28, 1937.

WTHT—The Hartford Times, Inc., Hartford, Conn.—Granted request for Oral Argument to be held January 28, 1937.

MISCELLANEOUS

NEW—Chauncey W. Hammond, Oakland, Calif.—Granted motion to continue hearing until January 6, 1937, upon application for C. P. to erect new station at Oakland, Calif., to operate on **1280 kc.,** 1 KW, unlimited. Hearing was originally scheduled for Decemher 9, 1936.

NEW—The Tribune Company, Tampa, Fla.—Granted petition to amend its application for new station at Tampa, Fla., with regard to the frequency requested and in minor respects, and ordered further hearing upon said amendments. Examiner recommended denial of original application for **550 kc.,** 1 KW, 5 KW LS, unlimited time.

WSAY—Gordon P. Brown, d/b as Brown Radio Service and Lahoratory, Rochester, N. Y.—Granted petition protesting against action of Commission of Octoher 20, 1936, in granting without hearing the application for assignment of license of WJTN, formerly WOCL, from A. E. Newton, licensee, to James Broadcasting Co., Inc., Jamestown, N. Y. The latter application was designated for hearing on the protest and will be heard the same time as application of WSAY for the nighttime facilities of WJTN. Motion to dismiss the protest was denied. Effective date of Commission action upon said application is postponed until date of Commission's decision after hearing on the protest.

WJAS—Pittsburgh Radio Supply House, Pittshurgh, Pa.—Granted petition protesting against Commission action of Septemher 22, 1936, in granting to station WATR, Waterhury, Conn., a C. P. authorizing change in location of the station and equipment, the use of directional antenna system day and night, change in frequency from **1190 kc.** to **1290 kc.,** and change in power from 100 watts limited time to 250 watts full time. Application of WATR is to he reconsidered and set for hearing on the protest. The effective date of Commission's action on WATR application is postponed to the date of decision after hearing.

NEW—Continental Radio Co., Washington, D. C.—Granted motion to postpone hearing of its application for C. P. to erect a new broadcast station at Washington. D. C.. to operate on **1230 kc.,** 1 KW, unlimited time, until the Commission can dispose of petition for rehearing on application of American Broadcasting Co. (WOL), to change frequency from **1310 kc.** to **1230 kc.** and increase power from 100 watts to 1 KW.

NEW—The Brockway Company, Watertown, N. Y.—Granted petition to withhold action on application of Black River Valley Broadcasts, Inc., Watertown, N. Y. (WNNY), for modification of C. P. to make changes in authorized equipment, until full Commission action is had on petition for rehearing filed by Watertown Broadcasting Corp. on its application for new station at Watertown to operate on **1270 kc.,** 250 watts, daytime.

WWAE—Hammond-Calumet Broadcasting Corp., Hammond, Ind. —Granted modification of license to operate on **1200 kc.,** 100 watts, unlimited day to LS, S-WFAM at night. This application was granted without hearing on 3-27-36, hut hecause of protests from WSBC, WEDC and WCRW, it was reconsidered and set for hearing. These protests have heen withdrawn at request of the stations.

KCMO—Lester E. Cox, Thomas L. Evans, and C. C. Payne, Kansas City, Mo.—Granted modification of license to operate on **1370 kc.,** 100 watts, unlimited. Application was originally granted without hearing on 6-20-36, but this action was reconsidered and designated for hearing on protests of KMBC and W9XBY. These protests have been withdrawn and dismissed.

KALE—KALE, Inc., Portland, Ore.—Reconsidered and granted special temporary authority, which was denied October 27, 1936, to operate unlimited time beginning November 1, 1936. and ending no later than November 30, 1936, pending action on formal application for modification of license for unlimited time, and pending construction of vertical radiator.

APPLICATIONS RECEIVED

First Zone

WEEI—WEEI Broadcasting Corp., Boston, Mass.—Voluntary as-
590 signment of license from WEEI Broadcasting Corporation to Columbia Broadcasting System, Inc.

WEEI—WEEI Broadcasting Corp., Boston, Mass.—Voluntary as-
590 signment of construction permit (B1-P-1196) from WEEI Broadcasting Corporation to Columbia Broadcasting System, Inc.

WABC-WBOQ—Atlantic Broadcasting Corp., New York, N. Y.—
860 Voluntary assignment of license from Atlantic Broadcasting Corporation to Columbia Broadcasting System, Inc.

WAWZ—Pillar of Fire, Zarephath, N. J.—License to cover con-
1350 struction permit (B1-P-1274) for new equipment.

W2XMN—Edwin H. Armstrong, North of Alpine, N. J.—Modification of construction permit for extension of completion date and approval of a definite transmitter site.

WIEL—Atlantic Broadcasting Corp., New York, N. Y.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columhia Broadcasting System. Inc.

WIEK—Atlantic Broadcasting Corp.. New York, N. Y.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W2XAX—Atlantic Broadcasting Corp., New York, N. Y.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

XXXX—Atlantic Broadcasting Corp., New York, N. Y.—Voluntary assignment of special permit to transmit programs through WABC-WBOQ to Canada from Atlantic Broadcasting Corporation to Columbia Broadcasting System, Inc.

W9XHW—Northwestern Broadcasting, Inc., Minneapolis, Minn.—Voluntary assignment of license from Northwestern Broadcasting, Inc., to Columhia Broadcasting System, Inc.

W2XDV—Atlantic Broadcasting Corp., New York, N. Y.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W2XE—Atlantic Broadcasting Corp., Wayne, N. J.—Voluntary assignment of construction permit (B1-PA-12) from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W2XE—Atlantic Broadcasting Corp., Wayne, N. J.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W10XGJ—Atlantic Broadcasting Corp., Mobile.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System. Inc.

W10XAL—Atlantic Broadcasting Corp., Mobile.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W10XZ—Atlantic Broadcasting Corp., Mobile.—Voluntary assignment of license from Atlantic Broadcasting Corp. to Columhia Broadcasting System, Inc.

Second Zone

WKRC—WKRC, Inc., Cincinnati, Ohio.—Voluntary assignment of
550 construction permit (B2-P-3282) as modified from WKRC, Inc., to Columbia Broadcasting System, Inc.

WKRC—WKRC, Inc., Cincinnati, Ohio.—Voluntary assignment of
550 license from WKRC, Inc., to Columbia Broadcasting System, Inc.

NEW—WRBC, Inc., Cleveland, Ohio.—Construction permit for a
780 new station to be operated on **780 kc.,** 1 KW, unlimited time. Amended to install directional antenna for night and day use and give transmitter and studio sites as Cleveland, Ohio (no street given).

NEW—Ohio Farmers Broadcasting Co., M. Smith Davis and C. A.
810 Thompson, Johnstown, Ohio.—Construction permit for a new station to be operated on **800 kc.,** 50 KW, limited time. Requests frequency of WTBO and that WTBO be removed to **810 kc.**

NEW—David J. Mercier and Geo. F. Warren, d/b as Northern
830 Broadcasting Co., Traverse City, Mich.—Construction permit for a new station to be operated on **830 kc.,** 500 watts, daytime. Amended: To make changes in equipment.

WQAN—The Scranton Times (co-partnership), E. J. Lynett, Wm.
880 R. Lynett, Elizabeth R. Lynett and Edward J. Lynett, Jr., Scranton, Pa.—Authority to make changes in automatic frequency control equipment.

WIBM—WIBM, Inc., Jackson, Mich.—Authority to make changes
1370 in automatic frequency control equipment.

WRAK—WRAK, Inc., Williamsport, Pa.—License to cover con-
1370 struction permit (B2-P-1034) for new antenna and transmitter and move of transmitter.

WJSV—Old Dominion Broadcasting Corp., Washington, D. C.—
1460 Voluntary assignment of license from Old Dominion Broadcasting Corp. to Columbia Broadcasting System, Inc.

W8XEO—Harold F. Gross, M. Bliss Keeler, L. A. Versluis, d/b as Capitol City Broadcasting Co., Mobile.—Voluntary assignment of license from Harold F. Gross, M. Bliss Keeler, L. A. Versluis, d/b as Capitol City Broadcasting Co., to Harold F. Gross.

W3XFJ—Lynchburg Broadcasting Corp., Lynchburg, Va.—License to cover construction permit for a new high frequency relay broadcast station.

Third Zone

WREC—WREC, Inc., Memphis, Tenn.—Modification of license to
600 increase night power from 1 KW to 5 KW.

NEW—Seaboard Investment Co., Inc., Montgomery, Ala.—Con-
610 struction permit for a new station to be operated on **610 kc.,** 250 watts, 500 watts day, unlimited time. Amended to give transmitter site as site to be determined, near Montgomery, Ala.

WBT—Station WBT, Inc., Charlotte, N. C.—Voluntary assign-
1080 ment of license from Station WBT, Inc., to Columbia Broadcasting System, Inc.

WTAW—Agricultural & Mechanical College of Texas, College
1120 Station, Tex.—Authority to make changes in automatic frequency control equipment.

WBHP—Wilton Harvey Pollard, Huntsville, Ala.—Modification of
1200 construction permit (B3-P-840) for a new station, requesting approval of transmitter site at Athens, Pike U. S. Highway No. 72, Huntsville, Ala.; change studio site from corner Washington and Clinton Sts., Twickenham Hotel, to Struve Bldg., corner Washington-Randolph St., Huntsville, Ala.; and approval of antenna.

WSIX—J. M. Draughon and L. R. Draughon, d/b as 638 Tire and
1210 Vulcanizing Co., Nashville, Tenn.—Voluntary assignment of license from J. M. Draughon and L. R. Draughon, d/b as 638 Tire Vulcanizing Co. to WSIX, Inc.

KFPW—Southwestern Hotel Co., Fort Smith, Ark.—License to
1210 cover construction permit (B3-P-1093) for changes in equipment.

WDAE—Tampa Times Co., Tampa, Fla.—Modification of license
1220 to increase night power from 1 KW to 5 KW.

WIOD-WMBF—Isle of Dreams Broadcasting Corp., Miami, Fla.—
1300 License to cover construction permit (B3-P-1361) for new antenna and move of transmitter.

WSMB—WSMB, Inc., New Orleans, La.—Construction permit to
1320 install new transmitter and increase power from 1 KW to 1 KW night, 5 KW day (directional antenna for day and night use).

WAPO—W. A. Patterson, Chattanooga, Tenn.—Construction per-
1420 mit to install new equipment, increase power from 100 watts to 100 watts night, 250 watts daytime, and change hours of operation from daytime to unlimited.

KRBC—The Reporter Broadcasting Co., Abilene, Tex.—Construc-
1420 tion permit to install new equipment, make changes in antenna, and increase power from 100 watts to 100 watts night, 250 watts day.

NEW—Phillip Jackson, Brunswick, Ga.—Construction permit for
1420 a new station to be operated on **1420 kc.,** 100 watts, daytime.

WAPO—W. A. Patterson, Chattanooga, Tenn.—License to cover
1420 construction permit (B3-P-588) as modified for a new station.

NEW—Frank N. Adcock, Childress, Tex.—Construction permit for
1500 a new station to be operated on **1500 kc.,** 100 watts, unlimited time.

WAAK—WSOC. Inc., Charlotte, N. C.—Modification of construction permit to change frequencies from **1646, 2090, 2190** and **2830 kc.** to **1622, 2058, 2150** and **2790 kc.**

NEW—Selma Broadcasting Co., Inc., Mobile, Selma, Ala.—Construction permit for a new low frequency relay broadcast station to be operated on **1622, 2058, 2150, 2790 kc.,** 10 watts.

Fourth Zone

WBBM—WBBM Broadcasting Corp., Chicago, Ill.—Voluntary as-
770 signment of license from WBBM Broadcasting Corp. to Columbia Broadcasting System, Inc.

WBBM—WBBM Broadcasting Corp., Chicago, Ill.—Voluntary as-
770 signment of special permit to transmit programs through WBBM to Canada from WBBM Broadcasting Corp., to Columbia Broadcasting System, Inc.

WCCO—Northwestern Broadcasting, Inc., Minneapolis, Minn.—
810 Voluntary assignment of license from Northwestern Broadcasting, Inc., to Columbia Broadcasting System, Inc.

KUSD—University of South Dakota, Vermillion, S. Dak.—Con-
890 struction permit to install a new transmitter.

NEW—George W. Young, St. Paul, Minn.—Construction permit
920 for a new station to be operated on **920 kc.,** 1 KW, 5 KW day, unlimited time. Directional antenna to be installed for night use.

KMOX—Voice of St. Louis, Inc., St. Louis, Mo.—Voluntary as-
1090 signment of license from Voice of St. Louis, Inc., to Columbia Broadcasting System, Inc.

KGDE—Charles L. Jaren, Fergus Falls, Minn.—Authority to install
1200 automatic frequency control equipment.

WJBL—Commodore Broadcasting, Inc., Decatur, Ill.—Construc-
1200 tion permit to install a new transmitter.

WFAM—The South Bend Tribune, South Bend, Ind.—License to
1200 cover construction permit (B4-P-1459) for new equipment.

KWTN—Greater Kampeska Radio Corp., Watertown, S. Dak.—
1210 Construction permit to install a new transmitter; erect a vertical antenna; change frequency from **1210 kc.** to **1340 kc.;** increase power from 100 watts to 250 watts night, 500 watts day; move transmitter from 502 Fifth Street, N. W., Watertown, S. Dak., to East Shore, Lake Kampeska, S. Dak. Requests frequency of KGDY (subject to KGDY's being granted **1210 kc.**). Amended to change hours of operation from unlimited time to daytime, requesting 500 watts power.

WIBU—Wm. C. Forrest, Poynette, Wis.—License to cover con-
1210 struction permit (B4-P-1321) for a new transmitter.

WSBC—WSBC, Inc., Chicago, Ill.—Construction permit to install
1210 new equipment and increase power from 100 watts to 100 watts night, 250 watts day.

NEW—Frank N. Dunham, Fort Dodge, Iowa.—Construction per-
1240 mit for a new station to be operated on **1500 kc.,** 100 watts, daytime. Amended to change frequency from **1500 kc.** to **1240 kc.,** power from 100 watts to 1 KW; install new equipment; and change studio site from 22 S. 10th Street to State Bank Bldg., Fort Dodge, Iowa.

WKBH—WKBH, Inc., La Crosse, Wis.—Authority to determine
1380 operating power by direct measurement of antenna.

WKBH—WKBH, Inc., La Crosse, Wis.—Authority to transfer
1380 control of corporation from Joseph C. Callaway to Harry Dahl (255 shares common stock).

WHFC—WHFC, Inc., Cicero, Ill.—License to cover construction
1420 permit (B4-P-300) for changes in equipment and increase in power.

WHFC—WHFC, Inc., Cicero, Ill.—Modification of license to
1420 change hours of operation from specified hours to unlimited time. Requests facilities of WEHS and WKBI.

WKBZ—Karl L. Ashbacker, Muskegon, Mich.—License to cover
1500 construction permit (B4-P-1156) for move of transmitter and new antenna.

W9XPN—WDZ Broadcasting Co., Tuscola, Ill.—License to cover construction permit for a new high frequency relay broadcast station.

NEW—Press Publishing Co., Sheboygan, Wis.—Construction permit for a new high frequency relay broadcast station to be operated on **39700, 39900, 40800, 41400 kc.,** 50 watts.

NEW—Press Publishing Co., Sheboygan, Wis.—License to cover above.

NEW—WDAY, Inc., Fargo, N. Dak.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 7 watts.

Fifth Zone

KSFO—Columbia Broadcasting System of California, Inc., San
560 Francisco, Calif.—Construction permit to install a new transmitter and vertical antenna; increase power from 1 KW to 1 KW night, 5 KW day; and move transmitter from 1410 Tenth Avenue, Oakland, Calif., to Block 490 South of Second Street, San Francisco, Calif. (Not in proper form.)

KNX—Columbia Broadcasting System of California, Inc., Los
1050 Angeles, Calif.—Voluntary assignment of license from Columbia Broadcasting System, of California, Inc., to Columbia Broadcasting System, Inc.

KFAC—Los Angeles Broadcasting Co., Inc., Los Angeles, Calif.—
1300 License to cover construction permit (B5-P-1387) for new equipment.

KMED—Mrs. W. J. Virgin, Medford, Ore.—Authority to install
1310 automatic frequency control equipment.

NEW—Pacific Acceptance Corp., San Diego, Calif.—Construction
1420 permit for a new station to be operated on **1420 kc.,** 100 watts, unlimited time. Amended to change type of equipment, install vertical antenna, and give exact transmitter and studio sites as 1520 South 30th Street, San Diego, Calif.

NEW—Harold M. Finlay and Mrs. Eloise Finlay, La Grande, Ore.
1420 —Construction permit for a new station to be operated on **1420 kc.,** 100 watts night, 250 watts day, unlimited time. Amended to change type of equipment to be installed.

KIEM—Redwood Broadcasting Co., Inc., Eureka, Calif.—Con-
1450 struction permit to install new equipment and increase power from 500 watts to 1 KW.

KPQ—Wescoast Broadcasting Co., Wenatchee, Wash.—License to
1500 cover construction permit (B5-P-1305) for changes in equipment.

NEW—Church of Jesus Christ of Latter Day Saints, Saltair, Salt Lake Co., Utah.—Construction permit for a new international broadcast station to be operated on **6080, 11830, 17780 kc.,** 50 KW power.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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IN THIS ISSUE

CHANGES RECOMMENDED ON CONDITIONS

Broadcasting station KIT, Yakima, Wash., applied to the Federal Communications Commission to change its frequency from 1310 to 1250 kilocycles and to increase its power from 100 watts, 250 watts LS to 250 watts, 500 watts LS. The station operates unlimited time.

Examiner Robert L. Irwin in Report No. I-311 recommended that the application be denied if the Commission grants the application of KUJ but that it be granted if the Commission denies the KUJ application. The Examiner found that KIT serves the area but that the change in frequency would improve the service. The operation of the station on the proposed changed frequency would not result in objectionable interference, unless the Commission granted the application of KUJ which has asked for authority to operate on 1250 kilocycles.

Attention Station Managers!

SALES MANAGERS' DIVISION

The Managing Director invites the attention of all station managers to the activities of the Sales Managers' Division, a part of the Commercial Section of the NAB. This division, under the leadership of Buryl Lottridge, KFAB-KOIN-KFOR, has scheduled several sectional meetings for the sales managers of stations. We confidently believe that these meetings offer an exchange of information of great value to the men whom you have employed to sell your facilities.

FRANK CRUMIT v. MARCUS LOEW BOOKING AGENCY (WHN)

The motion of the plaintiff, Frank Crumit, for a temporary injunction against the owners of radio station WHN, which was originally scheduled to be argued in July and which was postponed by a series of adjournments until November, was finally argued on Tuesday, November 24th, before Mr. Justice Valente in the Supreme Court of the State of New York in New York County. Maurice J. Speiser argued in support of the motion, claiming that Crumit had a common law right of property in the interpretation on the phonograph record; that the record in question at the time the contract was made with Decca was made for the purpose of home use and not for commercial use or broadcasting; that the use of the record by broadcasting stations interfered with the plaintiff's rights to make contracts for his exclusive services with broadcasting stations and that such use interfered with his right to receive royalties from Decca for the sale of such records. He then argued that the defenses interposed by WHN were not good. After an extensive talk by Speiser on the intangible rights he claims in the artist's performances, he closed with a statement to the effect that the Court might wish to dispose of the motion by setting the case down for an early trial. The Court then inquired of Isadore J. Frey, counsel for WHN, whether this would be satisfactory to the defendant. Mr. Frey replied that his adversary had argued the motion and that he thought he should argue it also because he felt that after the Court had ruled on this motion, there would be no necessity for a trial.

Mr. Frey then proceeded to argue in opposition to the motion showing the Court that if the plaintiff's theory were correct, that the results would be that every musician in an orchestra from the violin player to the drummer would have a property right and be able to prevent the use of phonograph records by purchasers thereof. He stated that the records were purchased like any other commodity from Decca and that Decca knew that they were to be broadcast and so did the plaintiff when he performed for the records. He showed that the plaintiff was not only paid by Decca for his services in the making of the record, but that he was also paid a fee by the Jerry Vogel Music Company and thirdly by the American Society of Composers, Authors and Publishers, from whom the defendant holds a license to broadcast renditions of musical selections, and that the plaintiff, as a member of ASCAP, shares in these royalties paid by the station. He then stated that by becoming a member of ASRA and NAPA the plaintiff was not the real party in interest and could not maintain this suit. On the question of plaintiff's alleged common law rights Mr. Frey told the Court that the Supreme Court of the United States had already passed upon similar situations and held that restrictions as to the use of property would not follow the property into the hands of the purchaser, and referred to several holdings of the Court to this effect. Finally he argued that there was nothing in the plaintiff's moving papers to show that the plaintiff had been damaged in any way; that in fact the papers showed that there was no deception to the public and that the plaintiff had a perfectly adequate remedy at law and that the motion should be denied.

At the conclusion of the argument by Mr. Frey, Mr. Speiser again stated to Mr. Justice Valente that he hoped the Court would see that this was a case which merited being tried at an early date.

Affidavits and briefs were submitted to the Court by both sides, and it is to be expected that the Court will render its decision within the next few weeks.

WKBB CHANGES RECOMMENDED

The *Telegraph Herald* applied to the Federal Communications Commission for a construction permit for the erection of a new station at Dubuque, Iowa, to use 1340 kilocycles, 500 watts and daytime operation. WKBB, East Dubuque, Ill., asked for permission to move its studio and transmitter to Dubuque, Iowa, and to install a new antenna. This station operates on 1500 kilocycles, unlimited time, with 100 watts and 250 watts LS.

Examiner John P. Bramhall in Report No. I-310 recommends the denial of the *Telegraph Herald* application and the granting of the application of Station WKBB. The Examiner found that the *Telegraph Herald* had failed to establish a need for additional daytime service in the area proposed to be served. He found that the changes suggested by WKBB would improve the service of that station.

RECOMMENDS AGAINST KVOS

Broadcasting station KVOS, Bellingham, Wash., applied to the Federal Communications Commission for a renewal license and for approval of the transfer of control of the licensee corporation from the Westcoast Broadcasting Company to Rogan Jones.

Examiner Ralph L. Walker in Report No. I-309 recommended against both the license renewal and the change of control. Many charges were made against programs broadcast over this station. In concluding his recommendations the Examiner says "upon consideration of all of the facts it is concluded that the applicant has failed to show that KVOS has in the past served or will serve in the future public interest, convenience and necessity."

BROADCAST ADVERTISING IN SEPTEMBER

Highlights of the Month

Broadcast advertising during September amounted to $8,541,218, an increase of 22.1% as compared to August. Gains were general throughout the medium. National networks showed the greatest increase in volume, rising 29.6% over August.

Total broadcast advertising volume in September was 50.6% greater than during the corresponding month of

the preceding year. This was the greatest gain to be experienced in many months. Increases were general, with national non-network volume increased to the greatest extent. Volume in this field rose 76.2% above the September 1935 level.

Total non-network advertising increased 13.7% as against August. This was due to substantial increases in the clear channel and regional group stations. While all portions of the country enjoyed increased volume of business, the New England-Middle Atlantic area led with a gain of 31.6%. Compared to last September greatest gains were shown in regional station business and in the South Atlantic-South Central area.

In the non-network field, all forms of rendition increased over the previous month, except announcements, which declined 1.0%. The most important gains over the preceding month were registered in the live talent field. Compared to last September all forms of rendition increased. Transcriptions increased 60.5% and live talent 73.3% as compared to September 1935.

Gains were general in the various sponsor groups compared to August. Automotive and clothing advertising showed the principal increases in the national network field. Regional network confectionery, soap and kitchen supplies, and financial advertising experienced significant gains. Department store advertising rose in both the national non-network and local fields. Radio set advertising increased 60.4% in the latter.

Compared to September of last year, automotive, soap and kitchen supplies, and tobacco advertising showed the greatest gains on the national networks. Gains were fairly general in the regional network and national non-network fields. Local tobacco and kitchen supply advertising showed gains of 73.5% and 161.4%, respectively.

Total Broadcast Advertising

Total broadcast advertising for the month of September is found in Table I.

TABLE I

TOTAL BROADCAST ADVERTISING

	1936 Gross Time Sales		
Class of Business	*August*	*September*	*Cumulative Jan.-Sept.*
National networks	$3,776,885	$4,894,494	$40,685,675
Regional networks	114,990	117,524	990,692
National non-network	1,518,200	1,697,900	16,405,160
Local	1,584,600	1,831,300	15,488,770
Total	$6,994,675	$8,541,218	$73,570,297

All forms of broadcast advertising increased as compared to August. Total broadcast advertising increased 22.1%. Gains among various portions of the medium were as follows: National networks 29.6%, regional networks 2.2%; national non-network advertising 11.8%, and local broadcast advertising 15.6%.

Increases were general as compared to the corresponding month of the preceding year. Total broadcast advertising increased 50.6%. National networks rose 46.7%, regional networks 44.9%, national non-network volume 76.2% and local advertising 42.1%.

Comparison with Other Media

Advertising volume by major media for the month is set forth in Table II.

TABLE II

ADVERTISING BY MAJOR MEDIA

	1936 Gross Time and Space Sales		
Advertising Medium	*August*	*September*	*Cumulative Jan.-Sept.*
Radio broadcasting	$6,994,675	$8,541,218	$73,570,297
National magazines[1]	8,505,337	11,118,077	103,287,309
National farm papers[1]	422,624	597,036	5,149,317
Newspapers[2]	41,084,000	46,247,000	407,122,000
Total	$57,006,636	$66,503,331	$589,128,923

[1] Publishers' Information Bureau.
[2] Estimated.

The usual upswing occurred in all media though at more than the usual seasonal rate. Compared with August, national magazine volume increased 30.7%. National farm paper advertising rose 41.3% and newspaper lineage increased 12.6%.

Compared with last September national magazine volume rose 20.2%, national farm paper advertising 22.7% and newspaper lineage 10.1%.

Non-network Advertising

Total non-network advertising increased 13.7% as compared with August and reached a level 56.7% higher than that of September 1935. Clear channel and high powered regional station non-network volume increased 18.5% over August. Regional station volume rose 14.5% and local station business 2.5%.

Compared to last September, regional stational business showed the greatest gain, rising 70.2%. Clear channel non-network volume increased 54.9% and local station volume 31.5%.

Non-network advertising by power of station is found in Table III.

TABLE III

NON-NETWORK ADVERTISING BY POWER OF STATION

	1936 Gross Time Sales		
Power of Station	*August*	*September*	*Cumulative Jan.-Sept.*
Over 1,000 watts	$1,121,800	$1,329,200	$13,596,740
250-1,000 watts	1,411,900	1,616,700	13,248,150
100 watts	569,100	583,300	5,049,040
Total	$3,102,800	$3,529,200	$31,893,930

Gains in all sections of the country were experienced in September. The New England-Middle Atlantic area showed the greatest gain of 31.6%. South Atlantic-South Central area business increased 1.8%, the North Central area 15.2% and the Pacific and Mountain area 2.5%.

Non-network advertising more than doubled in the Southern area when compared to September 1935. New England-Middle Atlantic area volume rose 79.8%, North Central 48.3% and Pacific and Mountain area 15.1%.

Non-network advertising by major geographical districts is found in Table IV.

TABLE IV

NON-NETWORK BROADCAST ADVERTISING BY GEOGRAPHICAL DISTRICTS

	1936 Gross Time Sales		
Geographical District	*August*	*September*	*Cumulative Jan.-Sept.*
New England-Middle Atlantic Area	$701,300	$922,900	$7,022,150
South Atlantic-South Central Area	671,800	683,900	6,387,770
North Central Area	1,175,600	1,354,400	12,493,730
Pacific and Mountain Area	554,100	568,000	5,990,280
Total	$3,102,800	$3,529,200	$31,893,930

Non-network Advertising by Type of Rendition

With the exception of announcements, which decreased approximately 1.0%, all forms of rendition increased during the month. Total transcription business increased 11.0%, live talent 24.0% and records 25.9%.

When compared to the corresponding month of last year increases were as follows: transcriptions 60.5%, live talent 73.3%, records 30.0% and announcements 32.8%.

In the national non-network field only announcements experienced a decrease. These declined 7.4% as against August. Records, though an unimportant factor in the national non-network field, showed an increased of 52.4%. Transcriptions rose 17.1% and live talent 16.4%. Compared to last September all types of rendition showed an increase. The gains were as follows: transcriptions 69.7%, live talent 73.9%, records 74.0% and announcements 98.5%.

With the exception of transcription volume which declined 7.3%, all types of rendition rose above the August level in the local field. Increases were as follows: live talent 30.9%, records 21.4%, and announcements 3.0%. Compared to last September local transcriptions rose 33.0%, live talent 72.8%, records 23.4% and announcements 15.1%.

Non-network broadcast advertising by type of rendition is found in Table V.

TABLE V

RADIO BROADCAST ADVERTISING BY TYPE OF RENDITION

Type of Rendition	1936 Gross Time Sales: National Non-network August	National Non-network Sept.	Local August	Local Sept.	Total August	Total Sept.	Cumulative Jan.-Sept.
Electrical transcriptions	$509,000	$595,790	$169,700	$157,290	$678,700	$753,080	$7,958,130
Live talent programs	679,500	791,180	738,500	966,930	1,418,000	1,758,110	15,299,880
Records	9,700	14,780	57,300	69,580	67,000	84,360	646,720
Announcements	320,000	296,150	619,100	637,500	939,100	933,650	7,989,200
Total	$1,518,200	$1,697,900	$1,584,600	$1,831,300	$3,102,800	$3,529,200	$31,893,930

Sponsor Trends in September

With the exception of confectionery and household furnishing advertising, which decreased 14.6% and 25.3%, respectively, the advertising of all sponsoring groups rose in the national network field as compared to the previous month. Automobile and clothing volume showed the greatest gains. Confections, soap and kitchen supplies, and financial advertising registered especially marked increases on regional networks. In the national non-network field, department store advertising tripled in volume while amusement business declined 54.9%. Radio set and department store advertising increased 60.4% and 45.3% respectively, in the local field. Drug and pharmaceutical volume declined 12.4%.

When compared to the corresponding month of last year, gains were experienced with but few exceptions. National network automobile advertising rose 106.8%, soap and kitchen supplies 128.3%, and tobacco volume 138.6%. Clothing volume decreased 38.9%. Gains were general among regional networks with the exception of clothing, household equipment, and tobacco advertising. All sponsoring groups showed gains in the national non-network field. Non-network volume doubled in a number of instances. Local tobacco and kitchen supply advertising increased 73.5% and 161.4% respectively, while confections dropped 43.7%.

Broadcast advertising during September on the part of various sponsoring groups is found in Table VI.

TABLE VI

RADIO BROADCAST ADVERTISING BY TYPE OF SPONSORING BUSINESS

(September 1936)

Type of Sponsoring Business	Gross Time Sales: National Networks	Regional Networks	National Non-network	Local	Total
1a. Amusements	—	$1,184	$8,160	$50,890	$60,234
1–2. Automobiles and accessories:					
(1) Automobiles	$344,102	960	164,960	81,840	591,862
(2) Accessories, gas and oil	426,071	21,100	110,430	90,530	648,131
3. Clothing and apparel	23,692	315	36,330	229,660	289,997
4–5. Drugs and toilet goods:					
(4) Drugs and pharmaceuticals	338,374	6,062	238,550	38,670	621,656
(5) Toilet goods	934,319	5,280	89,030	22,550	1,051,179
6–8. Food products:					
(6) Foodstuffs	921,131	30,127	394,930	229,560	1,575,748
(7) Beverages	329,026	7,920	62,090	103,600	502,636
(8) Confections	83,106	746	19,680	3,170	106,702
9–10. Household goods:					
(9) Household equipment and furnishings	26,856	3,561	63,690	170,090	264,197
(10) Soap and kitchen supplies	342,162	8,252	110,770	5,490	466,674
11. Insurance and financial	43,784	1,617	25,410	74,350	145,161
12. Radios	111,350	—	27,660	19,670	158,680
13. Retail establishments	—	426	12,880	190,080	203,386
14. Tobacco products	438,961	8,970	63,950	8,540	520,421
15. Miscellaneous	531,560	21,004	269,380	512,610	1,334,554
Total	$4,894,494	$117,524	$1,697,900	$1,831,300	$8,541,218

Detailed information regarding various sponsor groups during the month under consideration is as follows:

1a. ***Amusements.*** National non-network and local volume 54.9% and 18.3% below August. Regional network advertising amounted to $1,184. National non-network volume 221.3% and local 34.6% above last September. Total volume 49.3% above last September.

1. ***Automotive.*** Compared to August, national network up 173.3%, national non-network 1.7%, and local 1.6%. Regional network amounted to $960. National network 106.8% above last September. National non-network up 10.5% and local 77.4%. Total volume 63.6% above last September.

2. ***Gasoline and accessories.*** National network volume 24.6% above the preceding month; regional network up 8.4%; national non-network 6.7%; and local 36.1%. Gains as follows compared to September 1935: national network 9.6%; regional 111.9%; national non-network 108.8%, and local 21.7%. Total 23.2% above last September.

3. ***Clothing.*** National network volume six times as great as August. Regional network business amounted to $315. National non-network 56.5% and local 5.8% above August. Compared to last September, national network down 38.9% and regional down 95.8%. National non-network up 39.8% and local up 16.1%. Total volume up 7.4%.

4. ***Drugs and pharmaceuticals.*** National network and national non-network 5.2% and 19.3%, respectively, above August. Regional network volume down 7.8% and local down 12.4%. Compared to last year, national network down 13.7%, regional up 20.7%, national non-network up 86.5%, and local up 4.3%. Total increased 15.7%.

5. ***Toilet goods.*** National network advertising 42.8% above August. National non-network up 7.3% and local 9.1%. Regional network volume down 7.8%. Regional network twelve times as great as last September. National networks increased 27.8% over last September, national non-network 136.1%, and local 28.9%. Total volume 33.7% above last year.

6. ***Foodstuffs.*** Increases over August as follows: national networks 14.7%, regional networks 6.2%, national non-network 15.2%, and local 9.8%. Gains over last September were: national networks 24.4%, regional networks 65.6%, national non-network 67.1%, and local 34.1%. Total 35.1% over September 1935.

7. ***Beverages.*** National network 7.2% and national non-network advertising 1.8% ahead of August. Regional networks down 22.6% and local down 2.8%. Regional network advertising eight times as great as last September. National network volume up 46.7%, national non-network 11.0%, and local 39.9%. Total volume increased 41.5%.

8. ***Confectionery.*** Regional network and national non-network advertising more than tripled August. National networks down 14.6% and local up 83.2%. National networks 97.2%

above previous September, regionals up 223.0%, and national non-network 185.2% above. Local down 43.7%. Total increased 94.4%.

9. *Household equipment.* National networks 25.3% and regional networks 34.6% below August. National non-network up 112.1% and local up 8.6%. Compared to corresponding month of last year, regional network business declined 42.2%. National networks down less than 1.0%. National non-network volume up 52.2% and local 10.2%. Total increased 15.2%.

10. *Soaps and kitchen supplies.* National networks 21.2% and regionals 172.1% above August. National non-network down 31.4%. Local volume unchanged. Gains over last September as follows: National networks 128.3%, regional networks 140.4%, national non-network 128.8%, and local 161.4%. Total 129.0% over last September.

11. *Insurance and financial.* Gains over August as follows: national networks 13.8%, regional networks 151.5%, national non-network 34.1%, and local 15.6%. Increases over previous September were as follows: national networks 8.7%, regional networks 178.8%, national non-network 107.0%, and local 63.9%. Total 47.3% above last September.

12. *Radios.* National network business increased approximately 1.0%, while local rose 60.4% over August. National non-network down 3.1%. Gains over last September as follows: national networks 65.3%, national non-network 11.3%, and local 51.9%. Total up 50.9%.

13. *Department and general stores.* National non-network 232.8% and local 45.3% above August. Regional network advertising amounted to $426. Compared to last September, national non-network increased 65.9% and local 53.8%. Total 54.9% greater.

14. *Tobacco products.* National network business up 10.6% and regional networks down 9.8%. National non-network up 10.8% and local down 6.3% compared to August. Regional network volume 59.5% below last September. National network up 138.6%, national non-network 140.4%, and local 73.5%. Total volume up 118.9%.

15. *Miscellaneous.* Compared to August, national networks increased 105.7%, national non-network 23.2%, and local 29.0%. Regional network volume decreased 17.1%. Compared to last September, gains were as follows: national networks 268.4%, regional networks 225.3%, national non-network 153.6%, local 80.7%, and total 146.8%.

Retail Broadcast Advertising

Broadcast advertising by retail establishments of various types is set forth in Table VII.

TABLE VII

RETAIL BROADCAST ADVERTISING OVER INDIVIDUAL STATIONS

Type of Sponsoring Business	*1936 Gross Time Sales* August	Sept.
Automobiles and accessories:		
Automobile agencies and used car dealers	$80,540	$82,670
Gasoline stations, garages, etc.	37,300	43,250
Clothing and apparel shops	222,510	247,750
Drugs and toilet goods:		
Drug stores	11,660	15,340
Beauty parlors	7,410	6,670
Food products:		
Grocery stores, meat markets, etc.	40,510	36,000
Restaurants, eating places	16,700	20,090
Beverage retailers	1,000	370
Confectionery stores	1,030	1,530
Household goods:		
Household equipment dealers	60,640	65,850
Furniture stores	84,290	86,640
Hardware stores	11,510	18,760
Radio retailers	12,910	18,990
Department and general stores	134,690	202,950
Tobacco shops	—	—
Miscellaneous	102,240	144,730
Total	$824,940	$991,590

Total retail advertising increased 20.2% above the August level. Gains were fairly general during the month. Department store advertising increased 50.7% and radio volume 47.1%. Hardware volume rose 62.9% and confectionery stores 48.5%. Grocery store advertising declined 11.1% and beverage retailers 63.0%.

Total retail volume gained 39.6% over the corresponding month of last year. Principal increases were as follows: automotive dealers 73.1%, gasoline stations 36.8%, clothing stores 20.2%, confectionery stores 155.0%, household equipment 37.3%, radio retailers 120.5%, and department stores 54.6%.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2933. In an order to cease and desist issued against **P. A. Lefebvre & Co., Ltd.,** of **Alexandria, Ont.,** and **Malone, N. Y.,** that company is directed to stop certain unfair representations in the sale of "Magic Gas" used for mixture with gasoline or kerosene in internal combustion engines in motor vehicles. The order also names as a respondent, Zatique Lacomb, of Malone, N. Y.

These respondents are directed to cease and desist from representing, directly or indirectly, that their product, when mixed with gasoline or kerosene and used in internal combustion engines and motor vehicles, will increase the mileage, prevent or eliminate carbon and carbon troubles, make cars start and pick up easier and run more smoothly.

No. 2979. Associated Laboratories, Inc., 27-33 West Twentieth St., **New York City,** is named respondent in a complaint charging unfair competition in the sale of "Kelp-A-Malt" tablets for treatment of undernourished and underweight persons. The respondent corporation also operates under the names Allied Laboratories, Kelp-A-Malt Co. and Seedol Co.

Advertising its product as "a mineral concentrate derived from a huge 90-foot sea vegetable harvested off the Pacific coast," the respondent corporation is alleged to have represented that because of its iodine, mineral and vitamin content the use of this preparation by weak, emaciated persons would result in gaining weight, acquiring a well proportioned physique and gaining normal health.

The complaint charges that the respondent's preparation is not a health-giving or flesh-producing substance, and points out that in cases of iodine deficiency a self-diagnosis is dangerous and that ordinarily the supply of iodine and other minerals and vitamins necessary for normal health are present in the usual diet of normal persons.

No. 2980. Alleging unfair competition in the sale of luggage and other articles, a complaint has been issued against **Belmore Jewelry Co., Inc.,** 100 Fifth Ave., **New York,** and **Nathan Bernstein,** trading as **Excel Luggage Co.,** 31 West 26th St., **New York.**

Bernstein, a manufacturer of leather luggage, is alleged to have sold to the jewelry company for use in a sales plain, certain luggage branded at the request of the jewelry company as "selected grain cowhide" and as "top grain cowhide." However, such luggage, according to the complaint, was made of leather known to the trade as "machine buffed cowhide," which is described as being not as durable nor of as high a quality as leather made from the top grain or outer layer of the hide.

A separate count of the complaint alleges that the respondent, entering into agreements with fraternal, charitable and similar organizations desiring to raise funds, aided in promoting games of chance in which luggage and other articles were the premiums. On the face of a "pull" card were small stickers concealing names of girls. Persons selecting the lucky names received premiums, according to the complaint.

No. 2981. Charging unfair representations in the sale of cosmetics, a complaint has been issued against **Arabian Toilet Goods Company,** 225-227 West Huron St., **Chicago.**

According to the complaint, the respondent company's "Wrinkle Creme" was advertised as a nourisher and rejuvenator of skin, and as being capable of eradicating wrinkles, when this was not true. "Arabian Wrinkle Creme" was also represented as being guaranteed by the Government to contain pure turtle oil, the respondent company asserting that the Government had used such oil successfully in removing scar tissue and wrinkles from wounded soldiers. The complaint alleges that the Government has not used turtle oil in this manner, and has not endorsed it, as was advertised by the respondent.

No. 2982. Duquesne Brewing Company of **Pittsburgh,** with headquarters in **Pittsburgh,** is named respondent in a complaint

alleging unfair trade representations in the sale of beer packed in cans or metal containers.

Adopting the trade name "Keg-o-Beer," the respondent company is said to have advertised its product as having real "keg-beer" flavor, sealed in and protected by a special lining "that is to metal what pitch is to wood." The product was also advertised as "crown cap-sealed" and as having "guaranteed real 'keg-beer' taste and flavor."

The complaint points out the difference between keg beer and bottled beer in that the former is not pasteurized, but is drawn directly from the vat at the brewery into kegs. Beer packed in bottles, however, according to the complaint, is usually subjected to a pasteurizing process to prevent secondary fermentation of yeast or other bacilli. A substantial portion of the public is said to prefer draught beer.

No. 2983. Alleging unfair competition in the sale of home study psychology health courses, a complaint has been issued against **Robert Holmes, Inc.,** with headquarters in the Fuller Building, **Jersey City, N. J.,** and **Albert Goodman,** of the same address.

Distributing courses designed to enable persons to overcome bashfulness, nervousness and similar ailments, the respondents are alleged to have made unfair and misleading representations regarding the purported therapeutic value of their courses and their effect upon users.

Among these representations were assertions to the effect that constipation, indigestion, dizzy spells and bashfulness are caused by nervous exhaustion; that for 25 cents or any other nominal amount a person may learn how to conquer bashfulness or embarrassment; that one of the respondents' courses, if followed, would immunize one against contraction of colds and effectively eliminate poisons from the system, and other representations.

No. 2984. Use of unfair methods of competition in connection with the sale of blankets is alleged in a complaint issued against **Israel Zelkind,** trading as **Lawrence Blanket Mills,** 9-13 Winter St., **Worcester, Mass.**

The respondent's blankets allegedly are labeled "All Wool" or "Woolen" and "Fully Shrunk," when, according to the complaint, they do not contain wool in amounts sufficient to justify such designations, and are not fully shrunk.

On invoices and letterheads the respondent is said to represent that he is a manufacturer of blankets, with a "Mill at Wilsonville, Conn." The complaint charges that he does not manufacture the blankets sold by him and does not own or control any mill where blankets are made, although it sets out that the blankets he sells are manufactured at Wilsonville, Conn.

No. 2985. Allegedly maintaining a merchandising policy whereby it fixes specified uniform prices, discounts and "mark-ups" at which certain of its liquors are resold by wholesalers and retailers, **W. A. Taylor & Co.,** importer of alcoholic beverages, 15 Laight St., **New York City,** is named respondent in a complaint. The two imported products specified in the complaint are Martini & Rossi vermouth, made in Italy, and John Jameson Whiskey, distilled in Ireland.

From time to time, the complaint charges, the respondent corporation issued suggested minimum resale price lists for the wholesale and retail trade, and sells its products under definite understandings and agreements with purchasers that they will observe the suggested minimum resale prices, and, as to wholesalers, that they will sell only to retailers who abide by the established prices.

The complaint alleges that the respondent corporation, in making effective its merchandising policy, obtains assurances from retailers and wholesalers that they will maintain the suggested prices; obtains their cooperation in reporting the names of price-cutters, and acts upon the information so procured; induces them to raise their prices to the suggested resale minimum by threats that if they fail to do so their supplies will be cut off, and does cut off such supplies.

Nos. 2986 and **2987.** Two complaints alleging illegal price discrimination in the sale of yeast, in violation of Section 2 (a) of the Robinson-Patman Act, have been issued against **Standard Brands, Incorporated,** and its subsidiary, **Standard Brands of California,** with offices at 595 Madison Ave., **New York City,** and against **Anheuser-Busch, Inc., St. Louis, Mo.**

In both cases the respondent corporations are charged with discriminating in price between different purchasers of bakers' yeast of like grade and quantity by allowing certain purchasers different prices than those granted other of their purchasers competitively engaged in the manufacture and sale of bread and allied products.

Nos. 2988 to **2992.** Maintenance and enforcement of resale prices in the sale and distribution of liquors is alleged in complaints issued against five large manufacturers and distributors of liquor products. These respondents are as follows:

Seagram-Distillers Corporation, 405 Lexington Ave., New York City, and Seagram Distillers Corporation of Massachusetts; Gooderham & Worts, Ltd., 1930 East Jefferson St., Detroit, a wholly owned subsidiary of a Canadian corporation of the same name; Schenley Distillers Corporation, 20 West 40th St., New York City, and three affiliated companies; Hiram Walker, Inc., Detroit, and National Distillers Products Corporation, 120 Broadway, New York City, which controls subsidiary distilleries and rectifying plants formerly operated by the American Medicinal Spirits Corporation, Penn-Maryland Corporation, A. Overholt & Co., Inc., and the Old Taylor and Old Crow distilleries.

Joined as respondents with Gooderham & Worts, Ltd., National Distillers Products Corporation and Hiram Walker, Inc., are five incorporated trade associations of retail liquor dealers and two voluntary unincorporated trade associations, whose officers, directors and members also are named.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1833. Raymond Falduti, 9504 Foster Ave., Brooklyn, trading as Minerva Chemical Laboratories, agrees to stop use in advertising of the word "importers," unless the flavoring compounds he sells are imported by him, and of the word "laboratorio" or of its English equivalent "laboratory," as part of a trade name or as implying that he owns and controls a laboratory, when this is not a fact; and of the words "estratti importati" or their English equivalent "imported extract," alone or in connection with the words "Milan, Italy," to describe products not made in Milan, but originating in the United States.

No. 1834. Atlas Leather Case and Bag Manufacturing Co., trading as Atlas Leather Case Co., 1528 Armitage Ave., Chicago, agrees that in the sale of leather luggage it will stop using the words "Genuine Cowhide" or "Cowhide," alone or with any other words, as a label for its products, implying that such products are composed of leather made from the top or grain layer of cowhide, when in fact they are made from leather taken from the inner cut of the hide. When the products are composed of leather taken from the inner, or flesh cut of the hide, and the word "Cowhide" is used as descriptive thereof, then "Cowhide" shall be immediately accompanied by some other words in conspicuous type clearly indicating that the products are not composed of leather made from the top or grain cut of such skin.

No. 1835. Helen C. McCarthy, 158 Fletcher St., Tonawanda, N. Y., trading as Mulhall Remedy Company, in the sale of "Mulhall's Remedy," stipulates that she will cease advertising the preparation as a nerve tissue builder or as an effective treatment for nervous disorders. It was advertised as a treatment for neuralgia, multiple neuritis, rheumatism and various similar diseases, when in fact, according to the stipulation, the claims made for it in this regard were exaggerated and unwarranted, although the product did contain ingredients making it of some value as a tonic and remedy for malaria.

No. 1838. Commonwealth Shoe and Leather Company, Whitman, Mass., manufacturing and selling shoes, stipulates that it will abandon use of the words "hand sewed" or "hand sewn" to describe its products which are not wholly sewn by hand; and from using such words, alone or with other words or a pictorial representation, as a brand to advertise its shoes, so as to imply that the entire sole and welt of the shoes are attached by means of hand-stitching, when such is not a fact.

No. 1843. Dr. Johann Strasska Laboratories, Inc., Ltd., 820 McGarry St., Los Angeles, distributor of toothpaste, agrees to stop using the word "laboratories" as part of its corporate or trade name, or in any way to imply that it owns or operates a place or places devoted to scientific study and scientific preparation of drugs, chemicals or foods. The respondent corporation also will cease using the words "manufactured by" or similar words in connection with the name "Dr. Johann Strasska Laboratories," implying that it manufactures its products in laboratories which it owns, when this is not a fact.

The term, "a certified product," will no longer be used by the respondent corporation, implying that a product has been certified by a Government agency or by a dental, medical or other association qualified to pass on the quality of the product, when this is not a fact. The word "ivory" will no longer be used as descriptive of gift charms, when in fact such articles are not made of ivory.

No. 1845. State Luggage Company, Inc., 5 East 16th St., New York City, engaged in selling leather luggage, signed a stipulation similar to that entered into by the Atlas Leather Case & Bag Manufacturing Co. (1834), except that misuse of the words

"Genuine Leather" or "Genuine Walrus" is involved instead of the words "Cowhide" or "Genuine Cowhide."

Nos. 3764 and 2803. An order to cease and desist has been issued against **Majestic Distilling Co.,** and against **Morris Brown** and **Max M. Berkowitz,** trading as **Majestic Distilling Co.,** rectifiers of distilled spirits, 10 East Lombard St., **Baltimore,** requiring them to discontinue representing, through use of the word "Distilling" in their corporate names in advertising, that they are actual distillers of liquors, when in fact, according to the findings, they neither own nor operate a distillery.

An order to cease and desist against C. O. Taylor Distributing Co., 444 West Grand Ave., Chicago, a rectifier of liquors, directs that company to cease representing, through use of the letters "Dist." on stationery, advertising and labels, that it is a distiller of liquors, owning and operating a distillery.

Nos. 2412-2372. Orders to cease and desist have been issued against **Montebello Distillers, Inc.,** and **Interstate Distillers, Inc.,** both of **Baltimore,** requiring them to discontinue representing, through use of the word "Distillers" in their corporate names and in advertising, that they are actual distillers of liquors, when in fact, according to the findings, neither company owned or operated a distillery.

No. 2531. An association and its members, with headquarters at 1 Union Square, New York City, have been ordered to discontinue use of the name "A. F. of L. Trade Union Committee for Unemployment Insurance and Relief," or any other name suggesting that they have a connection with the American Federation of Labor.

The order also prohibits the respondent association and its members from using the name "A. F. of L. Rank and File Federationist" as a title for their monthly magazine, and from using any other name indicating that any publication sold by them is a publication of the American Federation of Labor.

Findings are that the initials "A. F. of L.," through their long use by the American Federation of Labor, its various unions and affiliated organizations, are the designation of the American Federation of Labor, which, since 1894, has published an official monthly magazine known as "American Federationist."

According to the findings, the use by the respondent association and its members of the names "A. F. of L. Trade Union Committee for Unemployment Insurance and Relief" and "A. F. of L. Rank and File Federationist" is without the authority or permission of the American Federation of Labor.

No. 2750. An order has been issued against **L. D. Caulk Company, Milford, Del.,** prohibiting unfair competition in the sale of a dental amalgam alloy sold under the trade name "The Twentieth Century Alloy Improved (Caulk)."

The order directs the respondent company to cease and desist from representing that its alloy, or any dental alloy of substantially the same composition, markedly resists the effects of over or under manipulation, and that it is adapted to any technic followed in the preparation of dental amalgam therefrom.

Representations of the respondent company prohibited in the order were said to have resulted in unfairly diverting trade to it and to have injured competitors.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, November 30

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—W. H. Marolf, Escanaba, Mich.—C. P., **1500 kc.,** 100 watts, unlimited time.

NEW—The Escanaba Daily Press Co., Escanaba, Mich.—C. P., **1500 kc.,** 100 watts, daytime.

Tuesday, December 1

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Vincennes Newspapers, Inc., Vincennes, Ind.—C. P., **1200 kc.,** 100 watts, 250 watts LS, unlimited time.

WGBI—Scranton Broadcasters, Inc., Scranton, Pa.—Modification of license, **880 kc.,** 500 watts, 1 KW LS, shares WQAN. Present assignment: **880 kc.,** 500 watts, shares WQAN.

KICA—Western Broadcasters, Inc., Clovis, New Mex.—Modification of license, **1370 kc.,** 100 watts, unlimited time. Present assignment: **1370 kc.,** 100 watts, specified hours.

Wednesday, December 2

HEARING BEFORE AN EXAMINER

(Broadcast)

KSFC—The Associated Broadcasters Inc., San Francisco, Calif.—Voluntary assignment of license to Columbia B/C System of Calif.; **560 kc.,** 1 KW, unlimited time.

FURTHER HEARING BEFORE AN EXAMINER

NEW—Hunt Broadcasting Association, Greenville, Tex.—C. P., **1200 kc.,** 100 watts, daytime.

Thursday, December 3

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-259:

NEW—Kidd Brothers, Taft, Calif.—C. P., **1420 kc.,** 100 watts, daytime.

Examiner's Report No. I-264:

NEW—Marysville-Yuba City Publishers, Inc., Marysville, Calif.—C. P., **1140 kc.,** 250 watts, daytime.

Examiner's Report No. I-266:

NEW—Fred A. Baxter, Superior, Wis.—C. P., **1200 kc.,** 100 watts, unlimited itme.

Examiner's Report No. I-267:

WJBO—Baton Rouge Broadcasting Co., Inc., Baton Rouge, La.—C. P., **1120 kc.,** 500 watts, specified hours (unlimited except from 8 to 9 p. m., Monday and Friday). Present assignment: **1420 kc.,** 100 watts, unlimited time.

Friday, December 4

FURTHER HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Harmon LeRoy Stevens & Herman LeRoy Stevens, d/b as Port Huron Broadcasting Co., Port Huron, Mich.—C. P., **1370 kc.,** 250 watts, daytime.

NEW—Stanley Reid & Charles Withnell Beagal, Jr., d/b as The Rapids Broadcasting Co., Cedar Rapids, Iowa—C. P., **1310 kc.,** 100 watts, unlimited time.

APPLICATIONS GRANTED

KDB—Santa Barbara Broadcasters, Ltd., Santa Barbara, Cal.—Granted C. P. to install new equipment and increase day power from 100 watts to 250 watts.

KGNC—Plains Radio Broadcasting Co., Amarillo, Tex.—Granted C. P. to make changes in composite equipment.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—Granted C. P. to install new equipment and increase day power from 100 watts to 250 watts.

KFYO—Plains Radio Broadcasting Co., Lubbock, Tex.—Granted C. P. to install new equipment and vertical radiator.

WSMB—WSMB, Inc., New Orleans, La.—Granted C. P. to install new equipment and directional antenna system for day and nighttime operation.

KUSD—University of South Dakota, Vermillion, S. D.—Granted C. P. to install new transmitter.

WKBZ—Karl L. Ashbacker, Muskegon, Mich.—Granted license to cover C. P. for move of transmitter site locally and installation of vertical radiator.

WAPO—W. A. Patterson, Chattanooga, Tenn.—Granted license to cover C. P. for new station; **1420 kc.,** 100 watts; daytime only.

KPQ—Wescoast Broadcasting Co., Wenatchee, Wash.—Granted license to cover C. P. for changes in composite equipment.

KFPW—Southwestern Hotel Co., Fort Smith, Ark.—Granted license to cover C. P. for new equipment.

KFBB—Buttery Broadcast, Inc., Great Falls, Mont.—Granted license to cover C. P. for move of transmitter, installation of vertical radiator and new equipment; also granted authority to determine operating power by direct measurement of antenna power.

KOBH—Black Hills Broadcast Co., Robt. Lee Dean, Rapid City, S. Dak.—Granted modification of C. P. as modified for change in equipment.

WFTC—Jonas Weiland, Kinston, N. C.—Granted modification of C. P. approving transmitter and studio sites at South

Queen St.; installation of new equipment and vertical radiator.

WKBH—WKBH Inc., La Crosse, Wis.—Granted authority to determine operating power by direct measurement of antenna power.

WQAN—E. J. Lynett, Wm. R. Lynett, Elizabeth R. Lynett and Edw. J. Lynett, Jr. (Copartnership), The Scranton Times, Scranton, Pa.—Granted authority to make changes in automatic frequency control equipment.

WIBM—WIBM, Inc., Jackson, Mich.—Granted authority to make changes in automatic frequency control equipment.

KTFI—Radio Broadcasting Corp., Twin Falls, Idaho.—Granted authority to install new automatic frequency control equipment, on condition it shall not be construed as a finding upon application for renewal of license of KTFI now pending before the Commission, nor that the Commission has found that the operation of this station is or will be in the public interest beyond the express terms of this authority.

KMED—Mrs. W. J. Virgin, Medford, Ore.—Granted authority to install automatic frequency control apparatus.

WTAW—Agricultural and Mech. College of Texas, College Station, Tex.—Granted authority to make changes in automatic frequency control equipment.

WMBO—WMBO, Inc., Auburn, N. Y.—Granted authority to transfer control of corporation from George I. Stevens to Roy L. Albertson; **1310 kc.,** 100 watts, unlimited time. Also granted renewal of license for the period Dec. 1, 1936 to June 1, 1937.

WMBO—WMBO, Inc., Auburn, N. Y.—Granted C. P. to move transmitter site locally to York St., Corner No. Dix St., install vertical radiator and new equipment and increase day power from 100 watts to 250 watts.

KSD—Pulitzer Publishing Co., St. Louis, Mo.—Granted renewal of license on a temporary basis for a period of 3 months.

WIRE—Indianapolis Broadcasting Inc., Indianapolis, Ind.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937; **1400 kc.,** 500 watts night, 100 watts day, unlimited.

KGFG—Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—Present license extended for a period of 1 month from Dec. 1, 1936, subject to such action as may be taken on pending application for renewal.

KGNC—Plains Radio Broadcasting Co., Amarillo, Tex.—Present license further extended for a period of 3 months from Dec. 1, 1936, on a temporary basis only, subject to such action as may be taken upon pending application for renewal.

KFYO—Plains Radio Broadcasting Co., Lubbock, Tex.—Present license further extended for a period of 3 months from Dec. 1, 1936, on a temporary basis only, subject to such action as may be taken upon pending application for renewal.

WLAK—Lake Region Broadcasting Co., Lakeland, Fla.—Present license further extended for a period of 3 months from Dec. 1, 1936, on a temporary basis only, subject to such action as may be taken upon pending application for renewal.

WTFI—Liberty Broadcasting Co., Athens, Ga.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937.

WFAB—Fifth Ave. Broadcasting Corp., New York City, N. Y.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937.

KSCJ—Perkins Bros. Co., The Sioux City Journal, Sioux City, Iowa—Granted renewal of license for auxiliary purposes only, for the period Nov. 1, 1936 to May 1, 1937.

WBBR—Peoples Pulpit Assn., Brooklyn, N. Y.—Granted renewal of license for the period Nov. 1, 1936 to May 1, 1937.

KROC—Southern Minn. Broadcasting Co., Rochester, Minn.—Granted extension of present license for a period of three months from Dec. 1, 1936, on a temporary basis only, subject to such action as may be taken upon pending application for renewal.

WOL—American Broadcasting Co., Washington, D. C.—Granted renewal of license for the period Dec. 1, 1936 to June 1, 1937.

NEW—A. W. Mills, Gallup, New Mex.—Granted amended C. P. for new station to operate on **1500 kc.,** 100 watts, unlimited time.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted C. P. to make changes in equipment, increase day power from 100 watts to 250 watts, change specified hours as follows: present specified hours daily except Sunday 12 noon to 1:30 p. m.; Mondays and Wednesdays 5 to 7 p. m.; Friday 5 to 10 p. m., EST; changed to: specified hours daily except Friday, Saturday and Sunday, 7:30 to 9 a. m.; 11:30 a. m. to 2 p. m.; 4:30 to 7 p. m.; Friday and Saturday 7:30 to 9 a. m.; 11:30 to 2 p. m.; 4:30 to 8 p. m., EST; **1200 kc.,** 100 watts night.

W3XFJ—Lynchburg Broadcasting Corp., Mobile, Lynchburg, Va.—Granted license to cover C. P. for new experimental relay b/c station, frequencies of **31100, 34600, 37600, 40600 kc.;** 40 watts.

W9XPN—WDZ Broadcasting Co., Mobile, Tuscola, Ill.—Granted license to cover C. P. for relay b/c station; frequencies of **31100, 34600, 37600, 40600 kc.,** 10 watts.

WAAK—WSOC, Inc., Mobile, Charlotte, N. C.—Granted modification of C. P. for change in frequencies from those under Group C to those under Group A of Rule 1003 (a).

NEW—Press Publishing Co., Sheboygan, Wis., Mobile—Granted C. P. and license for new relay b/c station; frequencies of **39700, 39900, 40800** and **41400 kc.,** on an experimental basis only; 50 watts.

ACTION ON EXAMINER'S REPORT

KLO—Ex. Rep. 1-221: Interstate Broadcasting Corp., Kaysville, Utah—Denied C. P. to make changes in equipment; install directional antenna and increase power from 500 watts to 1 KW night, 5 KW day; **1400 kc.,** unlimited time. Examiner R. L. Walker sustained. Order effective Jan. 5, 1937.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KCRJ, Jerome, Ariz.; KIT, Yakima, Wash.; WCPO, Cincinnati, Ohio; WCRW, Chicago; WEBR and auxiliary, Buffalo, N. Y.; WJNO, West Palm Beach, Fla.; WSJS, Winston-Salem, N. C.; KVOL, Lafayette, La.; KINY, Juneau, Alaska; KPDN, Pampa, Tex.; WABI, Bangor, Me.; WMFR, High Point, N. C.; WSGN, Birmingham, Ala.; WTEL, Philadelphia, Pa.

WSMB—WSMB, Inc., New Orleans, La.—Granted renewal of license for the period ending May 1, 1937.

KIDO—Frank L. Hill and C. G. Phillips, d/b as Boise Broadcast Station, Boise, Idaho—Present license further extended on a temporary basis only for the period Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

KFQD—Anchorage Radio Club, Inc., Anchorage, Alaska—Present license further extended on a temporary basis only for the period Dec. 1, 1936 to Jan. 1, 1937, subject to such action as may be taken upon pending application for renewal.

WHIO—Miami Valley Broadcasting Corp., Dayton, Ohio—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

KWTH—The Greater Kampeska Radio Corp., Watertown, S. Dak.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

WJTN—A. E. Newton, Jamestown, N. Y.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

WSAJ—Grove City College, Grove City, Pa.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

KMLB—Liner's Broadcasting Sta. Inc., Monroe, La.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

KVSO—The Ardmoreite Pub. Co., Inc., Ardmore, Okla.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

WBBZ—Howard Johnson, Representative of Estate of C. L. Carrell, Deceased, Ponca City, Okla.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1. 1937, pending receipt and/or action on renewal application.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Present license further extended on a temporary basis from Dec.

1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

WTAL—Fla. Capitol Broadcasters, Inc., Tallahassee, Fla.—Present license further extended on a temporary basis from Dec. 1, 1936 to Jan. 1, 1937, pending receipt and/or action on renewal application.

KGDE—Charles L. Jaren, Fergus Falls, Minn.—Granted renewal of license on a temporary basis only subject to whatever action may be taken by the Commission upon pending application for renewal.

KVOS—KVOS, Inc., Bellingham, Wash.—Granted renewal of license on a temporary basis only subject to whatever action may be taken by the Commission upon pending application for renewal.

WBNO—The Coliseum Place Baptist Church, New Orleans, La.—Granted renewal of license on a temporary basis only subject to whatever action may be taken by the Commission upon pending application for renewal, and upon applications of the Southern Broadcasting Corp., and Charles C. Carlson.

WHBC—Edward P. Graham, Canton, Ohio—Granted renewal of license on a temporary basis only subject to whatever action may be taken by the Commission upon pending application for renewal, and upon application of Nolan S. Walker.

The following stations were granted renewal of licenses for the regular period:

KBTM, Jonesboro, Ark.; KDLR, Devils Lake, N. D.; KFOR, Lincoln, Neb.; KFPL, Dublin, Tex.; KGEZ, Kalispell, Mont.; KGY, Olympia, Wash.; KMED, Medford, Ore.; KSUN, Lowell, Ariz.; WAIM, Anderson, S. C.; WAML, Laurel, Miss.; WBOW, Terre Haute, Ind.; WCAX, Burlington, Vt.; WCLO, Janesville, Wis.; WCLS, Joliet, Ill.; WEDC, Chicago; WEXL, Royal Oak, Mich.; WFAM, South Bend, Ind.; WFAS, White Plains, N. Y.; WGCM, Mississippi City, Miss.; WGNY, Chester Township, N. Y.; WHBF, Rock Island, Ill.; WHBY, Green Bay, Wis.; WIBU, Poynette, Wis.; WIBX, Utica, N. Y.; WIL, St. Louis, Mo.; WJBC, Bloomington, Ill.; WJBL, Decatur, Ill.; WJIM, Lansing, Mich.; WKOK, Sunbury, Pa.; WLBC, Muncie, Ind.; WLNH, Laconia, N. H.; WLVA, Lynchburg, Va.; WMBG and auxiliary, Richmond, Va.; WOMT, Manitowoc, Wis.; WROL, Knoxville, Tenn.; WSIX, Nashville, Tenn.; WTRC, Elkhart, Ind. (Action taken Nov. 17, 1936).

MISCELLANEOUS

The Commission, Broadcast Division, upon its own motion, suspended its order of October 20, 1936, in the following cases:

WLB—University of Minnesota, Minneapolis, Minn.—C. P. to install new equipment, change frequency from **1250 kc.** to **760 kc.**, and increase power from 1 KW night 1 KW day, specified hours, to 5 KW day, sharing time with station WCAL (WLB 2/3 daytime, WCAL 1/3 daytime).

WCAL—St. Olaf College, Northfield, Minn.—C. P. to make changes in equipment and install new antenna, change frequency from **1250 kc.** to **760 kc.**, and change power from 1 KW night, 2.5 KW day, specified hours, to 5 KW day, sharing time with WLB (1/3 daytime).

WTCN—Minn. Broadcasting Corp., Minneapolis, Minn.—Modification of license to change hours of operation from specified hours to unlimited time.

KLX—Tribune Building Co., Oakland, Calif.—Granted petition asking to intervene and be made a party to the hearing on the application of Chauncy W. Hammond for a C. P. for new station at Oakland, Calif., to operate on **1280 kc.**, 1 KW, unlimited.

KGNC—Plains Radio Broadcasting Co., Amarillo, Tex.—Granted petition to intervene in hearing of application of G. W. Gooch for C. P. for new broadcast station at Amarillo to operate on **1500 kc.**, 100 watts, daytime.

WROL—Stuart Broadcasting Corp., Knoxville, Tenn.—Granted petition to intervene in hearing of application of Journal Broadcasting Co. for new station at Knoxville, Tenn., to operate on **1200 kc.**, 100 watts night, 250 watts day, unlimited.

WCAD—St. Lawrence University, Canton, N. Y.—Granted petition requesting extension of effective date of Rules 132 and 139 pending action by the Commission on an application for voluntary assignment of license of WCAD to the Brockway Co., and on the application of the Brockway Co. for a C. P. to move station to Watertown, N. Y. Rule 132 requires equipment in use at broadcast stations be provided with safety features and Rule 139 deals with modulation monitors for broadcast stations.

Hammond Calumet Broadcasting Corp., Hammond, Ind.—Suspended order of September 22, 1936, Chairman Prall dissenting, granting application for C. P. to erect and operate new broadcast station at Hammond, Ind., using **1480 kc.**, 1 KW daytime, because of protest of WKBW, Buffalo. Application set for hearing.

Ernest Edward Ruehlen, Great Bend, Kans.—Reconsidered and granted application for new broadcast station at Great Bend, Kans., to operate on **1370 kc.**, 100 watts, unlimited time.

Bay County Publishers, Inc., Panama City, Fla.—Denied petition asking Commission to reconsider and grant without hearing application for authority to erect and operate broadcast station at Panama City, Fla., using frequency **1420 kc.**, 100 watts, daytime only.

Pacific Acceptance Corp., San Diego, Calif.—Denied petition asking Commission to "limit and define issues" at further hearing on its application for C. P. for new station at San Diego, Calif., to operate on **1200 kc.**, 100 watts, daytime only.

Ferris Hodge, Edward Hodge, Leon C. Rogers, Clifford J. Hood, John S. Michener, Frank Zimmerman and Karl M. Schneider, d/b as Lenawee Broadcasting Co., Adrian, Mich.—Granted request to postpone hearing on application to erect new broadcast station at Adrian to operate on **1440 kc.**, 250 watts daytime only, from December 15, 1936, to a date during last week in January, 1937.

WTAQ—WHBY, Inc., Green Bay, Wis.—Denied petition for reconsideration and for grant without hearing application for C. P. requesting authority to install new equipment and increase day power from 1 to 5 KW.

WOV—International Broadcasting Corp., New York City—Reconsidered action in setting for hearing application for Commission's consent to the transfer of control of the International Broadcasting Corp (licensee of WOV) from John Iraci, Guistina B. Iraci and Mariannina C. Iraci to Arde Bulova, and granted same on condition that "the authority contained in this consent to the transfer of control of International Broadcasting Corp., licensee of Station WOV, shall in no wise be construed as a finding by the Commission upon the proposal to transfer an interest in Station WNEW at this time or at any time in the future. Such action may only be taken upon formal application filed with the Commission, as contemplated by the Communications Act of 1934." Judge Sykes dissented. Grant effective December 15, 1936.

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Denied petition for reconsideration and for grant of its application for modification of license (as to daytime only), so as to authorize the use of 1 KW instead of 500 watts.

WNEW—Wodaam Corp., Newark, N. J.—Returned under authority of Rule 107.1, application for increase in day power from 2½ KW to 5 KW.

ACTION TAKEN ON CASES HEARD BY THE BROADCAST DIVISION

WWL—Loyola University, New Orleans, La.—Denied modification of license to change hours of operation from specified to unlimited time; **850 kc.**, 10 KW. Order effective December 15, 1936.

WWL—Loyola University, New Orleans, La.—Granted extension of special authorization; **850 kc.**, 10 KW, unlimited time. Order effective December 15, 1936.

WBAP—Carter Publications, Inc., Fort Worth, Tex.—Granted renewal of license; **800 kc.**, 50 KW, shares time with WFAA. Order effective December 15, 1936.

WFAA—A. H. Belo Corp., Dallas, Tex.—Granted renewal of license; **800 kc.**, 50 KW, shares time with WBAP. Order effective December 15, 1936.

WCCO—Northwestern Broadcasting, Inc., Minneapolis, Minn.—Granted renewal of license; **810 kc.**, 50 KW, unlimited time. Order effective December 15, 1936.

WOV—International Broadcasting Corp., New York City.—Granted renewal of license; **1130 kc.**, 1 KW, daytime. Order effective December 15, 1936.

WOV—International Broadcasting Corp., New York City.—Denied C. P. to install directional antenna, change hours of operation from daytime, 6 a. m. to 6 p. m., to unlimited, except hours assigned WLWL on **1100 kc.**; **1130 kc.**, 1 KW. Order effective December 15, 1936.

WPG—City of Atlantic City, Atlantic City, N. J.—Granted renewal of license; **1100 kc.**, 5 KW, specified hours. Order effective December 15, 1936.

WWL—Loyola University, New Orleans, La.—Granted renewal of license; **850 kc.,** 10 KW, specified hours. Order effective December 15, 1936.

KWKH—International Broadcasting Corp., Shreveport, La.—Granted renewal of license; **850 kc.,** 10 KW, specified hours. Order effective December 15, 1936.

WLWL—Missionary Society of St. Paul the Apostle, New York City.—Denied modification of license to change frequency from **1100 kc.** to **810 kc.;** change hours from specified to unlimited time; 5 KW (facilities WCCO and WNYC). Order effective December 15, 1936.

WNYC—City of New York, Dept. of Plant & Structures, New York City.—Granted renewal of license; **810 kc.,** 500 watts, daytime.

WJJD—WJJD, Inc., Chicago, Ill.—Dismissed with prejudice application for modification of license to increase power from 20 KW to 5 KW night, 20 KW-LS; change hours of operation from limited to specified hours; **1150 kc.** Order effective December 15, 1936.

NEW—J. David Stern, New York City.—Denied as in cases of default C. P. for new broadcast station to operate on **810 kc.,** 500 watts, 6 a. m. to sunset of station WCCO (facilities station WNYC). Order effective December 15, 1936.

SET FOR HEARING

NEW—Continental Radio Co., Washington, D. C.—Application for C. P. for new station in Washington, D. C., to operate on **1310 kc.,** 100 watts night, 250 watts day, unlimited time. Exact transmitter and studio sites to be determined with Commission's approval. Application was contingent upon the granting of application of WOL for a change of frequency to **1230 kc.**

NEW—H. W. Wilson and Ben Farmer, Wilson, N. C.—Amended application for C. P. for new broadcast station at Wilson, N. C., to operate on **1310 kc.,** 100 watts, daytime only.

NEW—United States Broadcasting Co., Washington, D. C.—Application for C. P. for new broadcast station at Washington, D. C., to operate on **1310 kc.,** 100 watts, unlimited time. This application was contingent upon the granting of the application of WOL for a change of frequency to **1230 kc.**

NEW—Curtis Radiocasting Corp., Indianapolis, Ind.—Application for C. P. for new broadcast station at Indianapolis, Ind., to operate on **1500 kc.,** 100 watts night, 250 watts day, specified hours—6 a. m. to 10 a. m., 12 noon to 6 p. m., and 10 p. m. to 12 midnight. Exact site to be determined subject to Commission approval.

NEW—Hearst Radio, Inc., Washington, D. C.—Application for C. P. for new broadcast station at Washington, D. C., to operate on **1310 kc.,** 100 watts night, 250 watts day, unlimited time. Transmitter site to be determined with Commission's approval. This application was contingent upon the granting of the application of WOL for change in frequency to **1230 kc.**

NEW—Utica Observer Dispatch, Inc., Utica, N. Y.—Application for C. P. for new broadcast station at Utica, N. Y., to operate on **950 kc.,** 1 KW, daytime only. Transmitter and studio sites to be determined with Commission's approval.

WBNO—J. E. Richards, John R. Maddox and Edward R. Musso, d/b as Pelican State Broadcasting Co., New Orleans, La.—Amended application for C. P. for authority to move transmitter and studio locally, make changes in equipment, erect an approved type of antenna system, change frequency from **1200 kc.** to **1500 kc.,** and increase operation to unlimited time.

KGB—Don Lee Broadcasting System, San Diego, Calif.—Application for C. P. for authority to move transmitter site locally, install new equipment and vertical radiator, and increase day power from 1 KW to 5 KW.

WSMB—WSMB, Inc., New Orleans, La.—Application for C. P. for authority to install new equipment and increase day power from 1 KW to 5 KW using directional antenna system for day and nighttime operation.

WDEV—Mary M. Whitehill, executrix of estate of Harry C. Whitehill, deceased, Waterbury, Vt.—Amended application for C. P. for authority to make changes in equipment and increase daytime power from 500 watts to 1 KW, commencement date to 60 days after grant, completion date six months thereafter.

WJBW—Charles C. Carlson, New Orleans, La.—Application for renewal of license for period 12-1-36 to 6-1-37.

KFXR—Exchange Avenue Baptist Church of Oklahoma City, Oklahoma City, Okla.—Application for renewal of license for period 12-1-36 to 6-1-37.

WOAI—Southland Industries, Inc., San Antonio, Texas—Application for Commission's consent to transfer of control of Southland Industries, Inc., licensee of WOAI, from G. A. C. Halff to Columbia Broadcasting System, Inc.

SPECIAL TEMPORARY AUTHORIZATIONS

WHDF—Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 6:30 p. m. to 9:30 p. m., CST, Nov. 30, 1936, in order to broadcast the 23rd Radio Revue and Barn Dance to be held at Laurium Town Hall, Laurium, Mich.

WSUI—State University of Iowa, Iowa City, Iowa—Granted special temporary authority to operate a minimum of six hours daily, instead of unlimited time, for period beginning Dec. 18, 1936, and ending in no event later than January 4, 1937, in order to observe the holiday vacation period at the State University of Iowa.

WBAM-WBAN—Bamberger Broadcasting Service, Inc., 131 Market St., Newark, N. J.—Granted special temporary authority to operate two low frequency relay broadcast stations on Nov. 26, 1936, for relaybroadcast description of duck hunting expedition, and on Dec. 17, 1936, for relaybroadcast aboard U. S. Navy Blimp description deer hunting expedition southern New Jersey.

WBBM—WBBM Broadcasting Corp., Chicago, Ill.—Granted special temporary authority to operate with KFAB simultaneously instead of synchronously for a maximum of three minutes at 10:30 p. m., EST, Dec. 13, 1936, in order to broadcast appeals of local Mayors for their local Community Chests.

KFAB—KFAB Broadcasting Co., Lincoln, Nebr.—Granted special temporary authority to operate with WBBM simultaneously insead of synchronously for a maximum of three minutes at 10:30 p. m., EST, Dec. 13, 1936, in order to broadcast appeals of local Mayors for their local Community Chests.

WCBA—B. Bryan Musselman, Allentown, Pa.—Granted extension of special temporary authority to use a 50 watt portable transmitter between the hours of 12 midnight, EST, and 6 a. m. for period beginning Nov. 17, 1936, and ending in no event later than Nov. 30, 1936.

WSAN—WSAN, Inc., Allentown, Pa.—Granted extension of special temporary authority to use a 50 watt portable transmitter between the hours of 12 midnight, EST, and 6 a. m. for period beginning Nov. 17, 1936, and ending in no event later than Nov. 30, 1936.

WALR—WALR Broadcasting Corp., Zanesville, Ohio—Granted special temporary authority to operate during program test period without approved frequency monitor for period beginning Nov. 12, 1936, and ending in no event later than Nov. 27, 1936, pending completion of recalibration.

WIBG—Seaboard Radio Broadcasting Corp., Glenside, Pa.—Granted special temporary authority to operate 100-watt test transmitter on **970 kc.** between hours of 12 midnight and 6 a. m., EST, for period not to exceed 30 days in order to make field intensity survey tests, provided such tests are not made during those hours prescribed for Commission monitoring schedule.

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Granted special temporary authority to remain silent on December 25, 1936, in order to observe Christmas Day.

WBRB—Monmouth Broadcasting Co., Red Bank, N. J.—Granted special temporary authority to remain silent on December 25, 1936, in order to observe Christmas Day.

KFDY—South Dakota State College, Brookings, S. Dak.—Granted special temporary authority to remain silent Thursday, November 26, 1936, in order to observe National Holiday.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted special temporary authority to operate simultaneously with station WSMK from 5:15 p. m. to 5:30 p. m., EST, Dec. 6, to broadcast the Pittsburgh-Philadelphia football game; Dec. 13, the Pittsburgh League hockey game; Dec. 20, the Pittsburgh-Cleveland hockey game, and Dec. 27, the Pittsburgh League hockey game.

WNAD—University of Oklahoma, Norman, Okla.—Granted special temporary authority to operate from 2 p. m. to 4 p. m., CST, Dec. 1, 2, 3, 7, 8, 9, 10, 14, 15, 16, 17, 1936 (provided KGGF remains silent), in order to broadcast special educational programs.

KGGF—High J. Powell & Stanley Platz, d/b as Powell & Platz, Coffeyville, Kans.—Granted special temporary authority to

operate from 7:15 p. m. to 9:15 p. m., CST, Dec. 22, 24, 29, 31, 1936, and from 8:15 p. m. to 9:15 p. m., CST, Dec. 23 and 30, 1936 (provided WNAD remains silent), in order to observe the Christmas holidays.

WFAS—Westchester Broadcasting Corp., White Plains, N. Y.—Granted special temporary authority to operate simultaneously with station WGNY from 11 a. m. to 1 p. m., EST, Thursday, Nov. 26, 1936, in order to broadcast intersectional football game from Parker Stadium.

KGNC—Plains Radio Broadcasting Co., Amarillo, Texas—Granted special temporary authority to broadcast a program originating on station W5XAR or W5XAS sometime between the 15th and 25th of November, 1936, and rebroadcast over radio station KGNC.

WLBC—Donald A. Burton, Muncie, Ind.—Granted special temporary authority to operate simultaneously with WTRC from 6 p. m. until 7:30 p. m., CST, nights of Dec. 4, 11, 16, 17, 18, 19, 21, and 22, 1936, for the purpose of broadcasting basketball games of Central High School and Ball State Teachers College.

WHDL—Olean Broadcasting Co., Inc., Olean, N. Y.—Granted special temporary authority to operate from local sunset (5 p. m.) to 10 p. m., EST, November 25, 1936, on frequency **1400 kc.**, 250 watts, in order to celebrate the movement of WHDL to the above frequency and power and to celebrate the second anniversary of the station.

WFBG—The Gable Broadcasting Co., Altoona, Pa.—Granted special temporary authority to operate simultaneously with WJAC from 4:45 p. m. to 6:15 p. m., EST, Dec. 5, 1936, in order to broadcast a football game.

WJAC—WJAC, Inc., Johnstown, Pa.—Granted special temporary authority to operate simultaneously with WFBG from 6:15 p. m. to 7 p. m., EST, Dec. 5, 1936, in order to broadcast a football game.

APPLICATIONS DISMISSED

The following applications, heretofore set for hearing, were dismissed at request of applicants:

WOWO—Westinghouse Radio Stations, Inc., Fort Wayne, Ind.—C. P., **1160 kc.**, 25 KW night, 10 KW day, simultaneous day, share WWVA night.

KFRO—Voice of Longview, Longview, Tex.—Special experimental authorization, **1210 kc.**, 100 watts, unlimited (facilities of KWEA).

WWVA—West Virginia Broadcasting Corp., Wheeling, W. Va.—C. P., **1160 kc.**, 25 KW night, 10 KW day, simultaneous day, share WOWO night.

W1XBS—American-Republican, Inc., Waterbury, Conn.—C. P., **1530 kc.**, 100 watts, unlimited.

W1XBS—American-Republican, Inc., Waterbury, Conn.—C. P., **1530 kc.**, 100 watts, unlimited.

WCOL—WCOL, Inc., Columbus, Ohio.—C. P., **1210 kc.**, 100 watts, 250 watts LS, unlimited.

APPLICATIONS RETIRED TO CLOSED FILES

KGB—Don Lee Broadcasting System, San Diego, Calif.—Application for C. P. to change equipment and increase day power to 2.5 KW, heretofore granted, was retired to the closed files for want of prosecution.

WPTF—WPTF Radio Co., Raleigh, N. C.—Application for authority to determine power by direct method, granted Oct. 20, 1936, was retired to the closed files as applicants on Oct. 21, 1936, requested withdrawal of application.

APPLICATION DENIED

KFRO—Voice of Longview, Longview, Tex.—Denied special temporary authority to operate from local sunset (November 5:15 p. m.) to 7:30 p. m., CST, beginning Nov. 18, 1936, and ending Nov. 30, 1936, in order to broadcast programs in the public interest of commercial and civic affairs.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

W8XHG—Radio Air Service Corp., Cleveland, Ohio—Granted authority to operate as licensed Nov. 24, 1936, special Cleveland program.

KOOS—Radio Station KOOS, Marshfield, Ore.—Granted authority to install and use Bliley type BC-46 automatic temperature control unit for 30 days pending filing and action on formal application.

WMBQ—Joseph Husid, Receiver Metropolitan Broadcasting Corp., Brooklyn, N. Y.—Granted extension of special temporary authority for Joseph Husid, Receiver for Metropolitan Broadcasting Corp., to operate broadcast station WMBQ for the period Nov. 23, 1936, and ending Jan. 1, 1937, pending action on application for involuntary assignment of license.

KGFX—Mrs. Dana McNeil, Pierre, S. Dak.—Granted extension of special temporary authority to Mrs. Dana McNeil to operate KGFX for period of 30 days from Nov. 15, 1936, upon condition that verified information as to her citizenship and as to her appointment as Administratrx of the Estate of Dana McNeil, deceased (certified copy of order of Probate Court), be submitted immediately to the Commission.

KID—KID Broadcasting Co., Idaho Falls, Idaho—Granted special temporary authority to operate with reduced power on old equipment of 100 watts during equipment test for period Nov. 20 to Nov. 29, 1936.

WBNY—Roy L. Albertson, Buffalo, N. Y.—Granted special temporary authority to operate from 2 to 3 p. m., EST, Nov. 21 and 28 (provided WSVS remains silent), to broadcast football games; also from 8:30 a. m. to 10 a. m., EST, and from 2 to 3 p. m., EST, Nov. 22 and 29, 1936 (provided WSVS remains silent), to broadcast religious programs of Catholic Evidence Guild.

Denied request filed on behalf of the Iowa Broadcasting Co., respondent, requesting that Commission subpoena certain witnesses for the purpose of compelling them to depose, in the hearing on the application of Stanley Reid and Chas. Witnell Bogel, Jr., d/b as The Rapids Broadcasting Co., for C. P. (Docket No. 3922).

APPLICATIONS RECEIVED

First Zone

WBEN—WBEN, Inc., Buffalo, N. Y.—Authority to determine
900 operating power of auxiliary transmitter by direct measurement of antenna.

WBEN—WBEN, Inc., Buffalo, N. Y.—Modification of license to
900 use former main transmitter (1 kilowatt) as an auxiliary transmitter.

WSPR—Quincy A. Brackett, L. B. Breed, Edmund Laport, co-
1140 partners, d/b as Connecticut Valley Broadcasting Company, Springfield, Mass.—Modification of license to change hours of operation from limited time, local sunset at station WAPI, to unlimited time, and change power from 500 watts to 250 watts night, 500 watts day.

WJTN—James Broadcasting Company, Inc., Jamestown, N. Y.—
1210 Construction permit to install new transmitter and antenna, increase power from 50 watts to 100 watts night and 250 watts day, and move transmitter from 840 North Main Street to near Silsby Street and Gifford Avenue, Jamestown, N. Y., and studio from 122 West Third Street to Wellman Building, Jamestown, N. Y.

WJTN—A. E. Newton, Jamestown, N. Y.—Voluntary assignment
1210 of construction permit (B1-P-1174) from A. E. Newton to James Broadcasting Company, Inc.

WJTN—James Broadcasting Company, Inc., Jamestown, N. Y.—
1210 License to cover construction permit (B1-P-1174) for equipment changes.

WBRB—Monmouth Broadcasting Company, Red Bank, N. J.—
1210 Construction permit to make changes in equipment.

WGBB—Harry H. Carman, Freeport, N. Y.—License to cover
1210 construction permit (B1-P-1441) for changes in equipment.

WNEL—Juan Piza, San Juan, P. R.—Modification of construction
1290 permit (B-P-661) for changes in equipment and increase in power, requesting extension of completion date from 11-29-36 to 12-29-36.

WABY—The Adirondack Broadcasting Company, Inc., Albany,
1370 N. Y.—License to cover construction permit (B1-P-1191) for new transmitter and antenna and to move studio and transmitter.

WCNW—Arthur Faske, Brooklyn, New York.—Modification of
1500 license to change specified hours to hours now used by WCNW plus all hours now used by station WMBQ, or share one half time on channel with WWRL by splitting time of WMBQ between WCNW and WWRL. Amended: To request time now used by WCNW plus all hours now used by WMBQ. Request facilities (hours of operation) of WMBQ.

W10XGC—National Broadcasting Co., Inc., Mobile—Construction permit to make changes in equipment and increase operating power from 20 watts to 30 watts.

W10XGC—National Broadcasting Co., Inc., Mobile—License to cover above.

NEW—National Broadcasting Co., Inc., Mobile—License to operate a new relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 100 watts, using the transmitter licensed to W2XHG (high frequency broadcast station).

NEW—National Broadcasting Co., Inc., Mobile—Construction permit for a new high frequency relay broadcast station to be operated on **25700, 26000, 27100, 31100, 34600, 31600, 35600, 37600, 40600, 41000 kc.,** 100 watts. Amended: To omit frequencies **25700, 26000, 27100, 31600, 35600, 41000 kc.**

NEW—National Broadcasting Co., Inc., Mobile—License to cover above.

NEW—National Broadcasting Co., Inc., Mobile—License for **25700, 26000, 27100, 31600, 35600, 38600, 41000, 86000-400000, 401000 kc.,** and above, 25 watts. (To use equipment licensed to station W10XV. Amended: To request license for experimental broadcast station giving frequencies **1614, 3492.5, 4797.5, 6425, 8655, 12862.5, 17310, 25700, 26000, 27100, 31100, 34600, 37600, 40600, 86000-400000, 401000 kc.** and above, 25 watts.

W3XEP—RCA Manufacturing Co., Inc., Camden, N. J.—Construction permit to install a new aural transmitter and increase operating power from 500 watts to 30 KW.

W3XEP—RCA Manufacturing Co., Inc., Camden, N. J.—License to cover above.

W2XBT—National Broadcasting Co., In vicinity of N. Y.—License for frequencies in the band **124000-130000 kc.,** 750 watts power.

NEW—RCA Manufacturing Co., Inc., Mobile—License for television broadcast station to be operated on **124000-130000 kc.,** 500 watts.

W8XAB—Olean Broadcasting Co., Inc., Mobile—License to cover construction permit for a new high frequency relay broadcast station.

NEW—Roy L. Albertson, Mobile—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 2.5 watts.

W3XAK—National Broadcasting Co., Portable, Bound Brook, N. J.—License to operate station as a facsimile broadcast (experimental) station on **2016 kc.,** 5 KW power, unlimited time. Rule 983. Station to be located at River Road, Bound Brook, N. J.

NEW—National Broadcasting Co., Inc., Bellmore, New York—License to operate the transmitter formerly licensed to W2XBS as a facsimile broadcast (experimental) station on **2016 kc.,** 500 watts power, unlimited time in accordance with Rule 983. (Request call letters W2XK.)

Second Zone

WKZO—WKZO, Inc., Kalamazoo, Mich.—License to cover con-
590 struction permit (B2-P-1291) for new equipment.

WIBG—Seaboard Radio Broadcasting Corp., Glenside, Pa.—Con-
970 struction permit to move transmitter to site to be determined, Montgomery County, Pennsylvania, install new transmitter, vertical antenna, increase power from 100 watts to 5 KW and change hours of operation from daytime to limited time, Chicago sunset. Amended: To give transmitter site as site to be determined, Conshohocken, Montgomery County, Pennsylvania, and specify night power as 5 KW.

NEW—Springfield Newspapers, Inc., Springfield, Ohio—Construc-
1120 tion permit for a new station to be operated on **1120 kc.,** 250 watts, daytime.

WALR—WALR Broadcasting Corp., Zanesville, Ohio—License to
1210 cover construction permit (B2-P-1435) for new equipment.

WBLK—The Exponent Co., Clarksburg, W. Va.—Modification of
1370 construction permit (B2-P-1127) as modified for a new transmitter, change in hours of operation from daytime to unlimited and power from 100 watts to 100 watts night, 250 watts daytime and extend commencement and completion dates.

WSMK—WSMK, Inc., Dayton, Ohio—Construction permit to in-
1380 stall a new transmitter and increase power from 200 watts to 500 watts.

NEW—Food Terminal Broadcasting Co., Cleveland, Ohio—Con-
1500 struction permit for a new station to be operated on **1500 kc.,** 100 watts, daytime.

NEW—National Broadcasting Co., Inc., Mobile.—Construction permit for a high frequency relay broadcast station to be operated on **25700, 26000, 27100, 31100, 31600, 34600, 35600, 37600, 38600, 40600, 41000, 86000-400000, 401000 kc.** and above, 25 watts. Amended to omit frequencies **25700, 26000, 27100, 31600, 35600, 38600, 41000, 86000-400000, 401000 kc.** and above.

NEW—National Broadcasting Co., Inc., Mobile.—License to cover above.

NEW—National Broadcasting Co., Inc., Chicago, Ill.—License for new high frequency relay broadcast station on **31100, 34600, 37600, 40600 kc.,** 2500 watts.

W8XKC—Miami Valley Broadcasting Corp., Mobile.—License to cover construction permit for a new high frequency relay broadcast station.

WGBD—WBNS, Inc., Mobile.—License to cover construction permit as modified for a new broadcast pickup station to be operated on **1646, 2090, 2190** and **2830 kc.,** 3 watts.

WJLF—WBNS, Inc., Mobile.—License to cover construction permit for a new broadcast pickup station.

NEW—American Broadcasting Corp. of Kentucky, Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 10.5 watts.

NEW—American Broadcasting Corp. of Kentucky, Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 2 watts.

Third Zone

WMC—Memphis Commercial Appeal, Inc., Memphis, Tenn.—
780 Modification of license to increase night power from 1 KW to 5 KW (using directional antenna night).

NEW—The Record Publishing Co., Okmulgee, Okla.—Construc-
1210 tion permit for a new station to be operated on **1210 kc.,** 100 watts, daytime.

WAIR—C. G. Hill, George D. Walker, Susan H. Walker, Winston-
1250 Salem, N. C.—Modification of construction permit (B3-P-808) for a new station, requesting changes in authorized equipment, approval of transmitter site at North Cherry Street, Extension, Winston-Salem, N. C., and approval of antenna.

WFBC—Greenville News-Piedmont Co., Greenville, S. C.—Au-
1300 thority to determine operating power by direct measurement of antenna power.

KRLD—KRLD Radio Corporation, Dallas, Tex.—Construction
1310 permit to make changes in equipment.

KOCA—Oil Capital Broadcasting Association (James G. Ulmer,
1370 President), Kilgore, Tex.—Modification of construction permit (B3-P-594) to make changes in authorized equipment, for approval of transmitter and studio sites at Laird Ave. between Duval and South Martin Streets, Kilgore, Tex., and for approval of antenna.

NEW—Beaumont Broadcasting Assn., B. A. Steinhagen, Pres.,
1420 Beaumont, Tex.—Construction permit to erect a new station to be operated on **1420 kc.,** 100 watts power, daytime operation.

WMFJ—W. Wright Esch, Daytona Beach, Fla.—Construction per-
1420 mit to install a new transmitter and vertical antenna.

NEW—WSMB, Inc., Mobile.—Construction permit for a new low frequency relay broadcast station to be operated on **1606, 2022, 2102, 2758 kc.,** 40 watts.

NEW—WSMB, Inc., Mobile.—Construction permit for a new low frequency relay broadcast station to be operated on **1606, 2022, 2102, 2758 kc.,** 40 watts.

Fourth Zone

KWTO—Ozarks Broadcasting Company, Springfield, Mo.—Au-
560 thority to determine operating power by direct measurement of antenna power.

KWTO—Ozarks Broadcasting Company, Springfield, Mo.—License
560 to cover construction permit (B4-P-230) as modified for equipment changes, new antenna, increase in power, and move of transmitter.

KMMJ—KMMJ, Inc., Clay Center, Nebr.—License to cover con-
740 struction permit (B4-P-1375) for new equipment.

WTAD—Illinois Broadcasting Corp., Quincy, Ill.—License to cover
900 construction permit (B4-P-1325) for new transmitter and antenna, move of transmitter locally.

WEAU—Central Broadcasting Co., Eau Claire, Wis.—Modification
1050 of construction permit (B4-P-736) as modified for new station on **1050 kc.,** 1 KW power, daytime operation, fur-

ther requesting approval of transmitter and studio sites at near junction of Bluff Street and Brockett Road, Eau Claire, Wis.

WEDC—Emil Denemark, Inc., Chicago, Ill.—Modification of
1210 license to change specified hours from daily, 8:30 to 10 a. m., 3:30 to 5 p. m., 7 to 8 p. m., 10 to 11 p. m., 1 to 3 a. m., to daily, 8:30 to 10 a. m., 3:30 to 5 p. m., 7 to 8 p. m., 10 to 11 p. m., midnight to 6 a. m., requesting 1 hour used by WCRW from midnight to 1 a. m. Amended to omit request for hours from midnight to 6 a. m. and request for one hour from WCRW (1 to 3 a. m. now in regular schedule).

KWOS—Tribune Printing Company, Jefferson City, Mo.—Modifi-
1310 cation of construction permit (B4-P-1023) for new station for change in equipment, approval of antenna, and transmitter site at St. Mary's Blvd., Jefferson City, Mo.; studio at 400 East Capital St., Jefferson City, Mo.

NEW—Don M. Lidenton and A. L. McCarthy, d/b as Fields Mc-
1310 Carthy Co., Poplar Bluff, Mo.—Construction permit for a new station to be operated on **1310 kc.,** 100 watts, daytime.

KWK—Thomas Patrick, Inc., St. Louis, Mo.—Modification of
1350 license to change power from 1 KW night, 5 KW day, to 5 KW day and night.

WMIN—Edward Hoffman, St. Paul, Minn.—Modification of
1370 license to change frequency from **1370 kc.** to **1360 kc.,** and increase night power from 100 watts to 250 watts.

KFJM—University of North Dakota, Grand Forks, N. Dak.—
1370 License to cover construction permit (B4-P-501) as modified for change in frequency, increase in power, changes in equipment, and move of transmitter.

WGL—Westinghouse Electric & Manufacturing Co., Fort Wayne,
1370 Ind.—License to cover construction permit (B4-P-1383) for new equipment.

WSAU—Northern Broadcasting Co., Inc., Wausau, Wis.—Modifi-
1370 cation of construction permit (B4-P-725) for a new station, requesting approval of transmitter site at 113-115 Third Street, Wausau, Wis., and approval of antenna.

KDAL—Red River Broadcasting Company, Inc., Duluth, Minn.—
1500 License to cover construction permit (4-P-B-3085) as modified for move of transmitter and studio, and antenna changes.

W9XAP—National Broadcasting Co., Inc., Addison, Ill.—License to operate station as a facsimile broadcast (experimental) station on **2016 kc.,** 2½ KW power, unlimited time. Rule 983.

Fifth Zone

NEW—J. Grant Iverson, Salt Lake City, Utah.—Construction
630 permit to erect a new broadcast station to be operated on **630 kc.,** 1 KW night, 5 KW day power, unlimited time.

KYOS—Merced Star Publishing Company, Inc., Merced, Calif.—
1040 Modification of license to change frequency from **1040 kc.** to **1280 kc.,** change hours of operation from daytime to unlimited time, using 250 watts power.

KOB—Albuquerque Broadcasting Company, Albuquerque, N. Mex.
1180 —Construction permit to install a new transmitter.

KOY—Salt River Valley Broadcasting Co., Phoenix, Ariz.—Con-
1270 struction permit to install vertical antenna, move transmitter from 621 North Central Avenue, Phoenix, Ariz., to 12th and Camelback Road, northeast of Phoenix, Ariz.

KRKO—Lee E. Mudgett, Everett, Wash.—License to cover con-
1370 struction permit (B5-P-1254) for change in equipment.

KRLC—H. E. Studebaker, Lewiston, Idaho.—Authority to make
1390 changes in automatic frequency control equipment.

NEW—Ward Walker, Seattle, Wash.—Construction permit for a
1530 new special broadcast station to be operated on **1530 kc.,** 1 KW, unlimited time. Amended: Studio site to be determined, Seattle, Wash.

NEW—Symons Broadcasting Co., Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 15 watts.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS ★ ★ ★ ★ ★

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DEC. 3, 1936

IN THIS ISSUE

ENGINEERING COMMITTEE APPOINTED

President Meyers has authorized the announcement of the personnel of the Engineering Committee as follows: J. H. DeWitt, Jr., WSM, Nashville, Tennessee, Chairman; L. A. Benson, WIL, St. Louis, Missouri; L. S. Bookwalter, KOIN, Portland, Oregon; E. K. Cohan, Columbia Broadcasting System, New York, N. Y.; Gerald W. Cooke, WBAL, Baltimore, Maryland; John E. Fetzer, WKZO, Kalamazoo, Michigan; E. L. Gove, WHK, Cleveland, Ohio; C. W. Horn, National Broadcasting Company, Inc.; Porter Houston, WCBM, Baltimore, Maryland; Carl Meyers, WGN, Chicago, Illinois; and John M. Sherman, WTCN, Minneapolis, Minnesota.

NEW STATIONS GRANTED

The Federal Communications Commission, through its Broadcast Division, took action this week granting construction permits for three new stations, one for television.

A construction permit for the erection of a new broadcast station was granted to the Southwest Broadcasting Company, Prescott, Ariz., to use 1500 kilocycles, 100 watts, nighttime operation.

The Broadcast Division also granted a construction permit for a new station to Dorrance D. Roderick, El Paso, Texas, to use 1500 kilocycles, 100 watts, unlimited time.

A construction permit was also granted to the Farnsworth Television Corporation of Springfield, Pa., for a new visual experimental station to operate with 1,000 watts, unlimited time, on 60000-86000 and 42000-56000 kilocycles.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

The Garford Corporation, Marion, Ind. (2-2630, Form A-1)
Chicago Times Company, Chicago, Ill. (2-2631, Form A-1)
Charles H. Wanzer et al., New York City. (2-2632, Form A-1)
Automobile Banking Corp., Philadelphia, Pa. (2-2633, Form A-2)
Eaton & Howard Management Fund, Boston, Mass. (2-2635, Form A-1)
Poor & Company, Chicago, Ill. (2-2636, Form A-2)
Houston Cotton Exchange Bldg. Co., Inc. (2-2637, Form A-1)
Louisiana Oil Producing Co., Boston, Mass. (2-2638, Form A-1)
Diversified Investment Fund, Inc., Detroit, Mich. (2-2639, Form A-1)
Lima Cord Sole & Heel Co., Lima, Ohio. (2-2641, Form A-2)
Ray Airconditioning Corp., New York City. (2-2642, Form A-1)
Standard Tube Company, Highland Park, Mich. (2-2644, Form A-2)
Packer Corporation, Cleveland, Ohio. (2-2645, Form A-2)
Universal-Cyclops Steel Corporation, Bridgeville, Pa. (2-2646, Form A-2)
Dictograph Products Co., Inc., New York City. (2-2647, Form A-1)
Ventura Mines, Inc., Nogales, Ariz. (2-2649, Form A-1)
Chevy Chase Club, Chevy Chase, Md. (2-2650, Form A-2)

KINDIG APPEAL DISMISSED

The Court of Appeals of the District of Columbia has dismissed the appeal of W. H. Kindig of Los Angeles, Calif., against the Federal Communications Commission.

In this case Kindig asked for half time used by Station KFAC, Los Angeles, while the station asked for license renewal. It operates on 1300 kilocycles, full time, 1,000 watts power. Following hearing the Commission granted the license renewal to the station. Kindig appealed but he later asked that the appeal be dismissed. Therefore the court dismissed the appeal on request of the appellant.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them.

No. 2993. A complaint has been issued against **American Lubricants Co., Inc.,** 1227 N. Deeds Ave., **Dayton, Ohio,** alleging use of unfair methods of competition in the wholesaling of motor oils.

Cans containing the respondent corporation's oils allegedly are branded with certain words and numbers and with an emblem adopted by the Pennsylvania Grade Crude Oil Association to signify that the distributor is a member of the association and that oil sold under the emblem is a pure, unadulterated oil produced from the Pennsylvania strata of oil fields. According to the complaint, the respondent corporation's oil is not a pure, unadulterated product of the Pennsylvania strata of oil fields, but is a blend of oils, and the respondent corporation is not a member of the association.

No. 2994. Use of a merchandising policy whereby it maintains suggested minimum resale prices for its product is alleged in a complaint issued against **Seminole Paper Corporation,** 111 West Washington St., **Chicago,** engaged in the sale of toilet paper. The respondent company's product is manufactured in mills at Marinette, Wis., Ashland, N. H., and Rumford, Me.

The respondent company allegedly sells its product, known as "Seminole Tissue," at a discount of 50 cents for each case of 100 rolls to those customers who agree to advertise and resell it to ultimate purchasers at prices equal to or in excess of the established minimum prices.

No. 2995. Charging unfair competition through misrepresentation of the prices of toilet soap sold in interstate commerce, a complaint has been issued against **J. W. McPheeters,** trading as **Mid-West Soap Co.** and as **Savon Products,** 901 High Street, **Indianapolis.**

The complaint alleges that prices marked on boxes in which the respondent's soap was sold were many times in excess of the actual value and of the actual selling prices to house-to-house canvassers, and were much greater than the prices charged the public by the canvassers. Such prices, according to the complaint, were not intended by the respondent to be the true retail prices and were false and fictitious, while the respondent's products were not of the high quality implied in the fictitious high prices.

No. 2996. Alleging misrepresentations in the sale of furs and fur coats, a complaint has been issued against **Hochschild, Kohn & Co.,** with headquarters at Howard and Lexington Streets, **Baltimore,** charging violation of section 5 of the Federal Trade Commission Act prohibiting unfair competition.

Selling garments made from furs and skins other than those of the seal and beaver, the respondent company is alleged to have advertised them by such names as "sealine," "bay seal," "Canadian beaver," and "Hudson Seal." The complaint points out that some of these garments were made from rabbit skins so dressed and dyed

as to resemble the seal or beaver in appearance only, while others were made from muskrat skins to resemble seal.

No. 2998. A complaint has been issued against **Birconjel Corporation, Inc.,** with offices at 420 Lexington Ave., and 37 East 28th St., **New York City,** alleging unfair methods of competition in connection with the sale of "Birconjel," offered as a hygienic product for use by women. The respondent corporation is said to advertise the product in radio broadcasts, newspapers, on cartons, and by other means.

According to the complaint, the product will not, as the respondent corporation allegedly represents, accomplish the results claimed for it; it is not a scientific prophylactic for feminine hygiene; has not received the approval of the American medical profession and is not prescribed by thousands of physicians; its use is not absolutely harmless, and its formula is not "open" since its ingredients are not disclosed by the manufacturers.

No. 2999. Hawaiian Distilleries, Ltd., 810-812 Kawaiahao St., **Honolulu, Hawaii,** is charged in a complaint with misuse of the word "Distilleries" in its corporate name, in violation of Section 5 of the Federal Trade Commission Act. The respondent corporation is engaged in rectifying, blending bottling and wholesaling alcoholic beverages, including Okolehao, a liquor originally distilled exclusively in Hawaii and widely known there and in other parts of the world.

The respondent corporation, through use of the word "Distilleries," is said to represent that it distills the liquors it sells, when, the complaint charges, such is not a fact.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 1836. R. T. Miller, Jr., Drexel Ave. at 58th St., Chicago, trading as American Technical Society, in connection with selling courses in business administration and publishing books for home study in that subject, agrees to stop representing, directly or through his agents, that these courses cannot be purchased elsewhere for less than $158. Miller agrees to cease holding out as an inducement for purchase of the textbooks the representation that they are being offered at a greatly reduced price, when this is not true. He also stipulates that he will cease representing to high school graduates that they have been selected as "reference students," and will discontinue any representation implying that such "reference students" receive special concessions, when this is not a fact.

No. 1837. Daniel Goodman, trading as Goodman's Watch Repair Factory and as Goodman's Watch Factory Service, 19 South Perry St., Montgomery, Ala., stipulates that in operating his watch repair business he will stop using the word "factory" as part of his trade name or names, when in fact he does not manufacture the parts used by him in repairing watches. He also agrees to cease employing the words "factory" or "manufacturers" in advertising, implying thereby that he actually owns and operates a factory in which the repair parts used by him are manufactured. Goodman agrees to discontinue using the word "importers" in advertising with the effect of causing customers to believe that he obtains watch repair parts from a foreign country, and agrees to abandon, as descriptive of his business, use of the phrase "the largest watch repair factory in the United States," or any other similar representation, when in fact that business cannot be accurately so described.

No. 1839. George D. Jenison, 240 North College St., Decatur, Ill., trading as Gun Metal Finish Company, selling formulas for nickel-plating of metals and silvering of mirrors, agrees to stop using false or misleading representations respecting the value of formulas sold by him or regarding the possibilities of earnings by their use, and of exaggerated assertions respecting the uses to which a nickel-plating apparatus he sells can be put or the range of work that can be accomplished by its use.

No. 1842. Gulbransen Co., 816 N. Kedzie Ave., Chicago, piano manufacturer, stipulates that in the interstate sale of its products it will cease using the word "grand," either independently or in connection with comparisons made between its so-called "vertical grand" pianos and other pianos. The word "grand" will not be employed as a trade name or part of a trade name to describe a piano not having the qualities understood by the trade and purchasing public to be inherent in grand pianos. These qualities are noted in the stipulation as being the horizontal placing of strings, gravity action and special tonal and other qualities. The stipulation sets out that the so-called "Gulbransen Vertical Grand" piano was not a grand piano, according to this understanding.

No. 1850. Under a stipulation entered into, **The Linen Thread Co., Inc.,** 60 East 42nd St., **New York City,** has agreed that in the sale of threads for sewing and repairing shoes it will cease and desist from the use in advertising matter of any inaccurate and misleading representations implying that shoes made with cemented-on soles are inferior or undesirable.

The company will discontinue representations that shoes manufactured with cemented-on soles cripple or "burn" the feet, produce pain or suffering, and cause the wearers to limp; that such shoes are poor fitting, cheaply constructed and are viewed with aversion by the public; that they are not properly ventilated, and that the wearers' feet come in contact with glue or cement.

Nos. 2462 and **2422.** Orders to cease and desist have been issued against two groups engaged in rectifying and wholesaling of liquors. The orders direct these respondents to stop representing through use of the words "distilleries" or "distilling" in their corporate names, on stationery and in advertising, that they are actually engaged in distilling liquors, when this is not the fact.

Respondents in these cases are:

Irish Hills Distilleries, Inc., 439 E. Congress St., **Detroit,** and **J. M. Tonkin** and **S. M. Modlin,** trading as **Columbia Distilling Co., Tonkin Distributing Co.,** and **Old Abbey Distilling Co.,** 440 Ninth St., **San Francisco.**

In the case of J. M. Tonkin and others, the provisions of the order to cease and desist do not apply to gins produced by these respondents through a process of rectification in which alcohol, purchased but not produced by the respondents, is redistilled over juniper berries and other aromatics.

No. 2594. Afta Solvents Corporation, 460 W. 128th St., **New York City,** manufacturer of a cleaning fluid, has been ordered to discontinue certain unfair representations in the interstate sale of its product.

In the sale of "Afta" or "Afta Spot Remover" or any cleaning fluid of the same composition, the respondent company is ordered to cease representing that such fluid will remove spots from fabrics or other articles and leave no spot or ring visible in the place from which foreign matter has been removed. The order also prohibits the representation that this fluid will not injure the color of fabrics to which it is applied.

No. 2630. Clopay Corporation, located at York, McLean and Exeter Sts., **Cincinnati,** has been ordered to cease and desist from unfair representations in the sale of various types of oiled cellulose pulp-backed, or paper-backed, products designated "Fabray" and used in the manufacture of window shades and shelf and wall coverings.

The respondent corporation is ordered to discontinue advertising that "Fabray" is oilcloth or fiber-backed oilcloth, possessing wearing qualities as great as the more expensive grades of oilcloth; that it is wash-proof, fray-proof and crack-proof, and that "Fabray" window shades do not fade, when such is not a fact.

Said to be in competition with firms manufacturing and selling oilcloth, the respondent corporation is directed to stop representing that all grades of oilcloth are backed with coarsely woven cheesecloth, will crack or peel, and that laboratory tests reveal that oilcloth generally does not have wearing qualities as great as "Fabray."

No. 2672. Trading as **National Civil Service Training Bureau, William W. Babcock,** 1040 N. Kenmore Ave., **Los Angeles,** has been ordered to discontinue use of the term "Civil Service" and the word "Bureau" in his trade name. He also is directed to cease and desist using in his trade name any other words implying that his correspondence school, which purports to train students for government positions, has any connection with the United States Civil Service Commission.

Among representations the respondent is ordered to discontinue are that civil service positions are open and available, unless the United States Civil Service Commission has advertised that fact and announced that examinations for such positions will be held at definite times stated; that his course of study affords adequate training for civil service examinations; that students who pursue or complete a course will be placed in government jobs; that the price for a course of instruction is a special price or that the regular price charged is greater than that offered any particular student, and that any part of the payments made by students goes to the government.

No. 2739. An order has been entered directing **Sutton Laboratories, Inc., Chapel Hill, N. C.,** to discontinue misrepresenting the therapeutic value of "Linoil," a proprietary preparation intended for use in the treatment of skin diseases.

The respondent corporation is ordered to cease representing in radio advertising, counter displays, circulars, or in any other man-

ner that "Linoil" or any product of substantially the same composition, is a cure for eczema or an effective remedy for all skin ailments or for any disease resulting from a metabolic disorder.

FTC CLOSES CASE

No. 2472. The Federal Trade Commission has entered an order closing its case against **Massachusetts Breweries and Distilleries Corporation,** 43 W. Canton St., **Boston.**

The Commission reserved the right to reopen the case should the facts warrant.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, December 7

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Hannibal Broadcasting Co., Hannibal, Mo.—C. P., **1310 kc.,** 100 watts, unlimited time.

NEW—The Courier-Post Publishing Co., Hannibal, Mo.—C. P., **1310 kc.,** 100 watts, 250 watts LS, unlimited time.

NEW—C. S. Gooch, d/b as Amarillo Broadcasting Co., Amarillo, Tex.—C. P., **1500 kc.,** 100 watts, daytime.

NEW—C. W. Corkhill, Sioux City, Iowa.—C. P., **1420 kc.,** 100 watts, unlimited time.

NEW—Sioux City Broadcasting Co., Sioux City, Iowa.—C. P., **1420 kc.,** 100 watts, 250 watts LS, unlimited time.

Tuesday, December 8

HEARING BEFORE AN EXAMINER

(Broadcast)

WCAP—Radio Industries Broadcast Co., Asbury Park, N. J.—Modification of license, **1280 kc.,** 1 KW, shares with WTNJ and WCAM. Present assignment: **1280 kc.,** 500 watts, shares with WTNJ and WCAM.

Wednesday, December 9

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Ed Klien, Helena, Mont.—C. P., **1280 kc.,** 1 KW, 5 KW LS, unlimited time (requests facilities of KFBB).

Thursday, December 10

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-268:

NEW—Tulare-Kings Counties Radio Association, Visalia, Calif.—C. P., **1190 kc.,** 250 watts, daytime.

Examiner's Report No. I-269:

NEW—Jack E. Bruntley, Mrs. Jack E. Bruntley and Jack E. Bruntley, Jr., Savannah, Ga.—C. P., **1310 kc.,** 100 watts, unlimited time.

NEW—W. T. Knight, Jr., Savannah, Ga.—C. P., **1310 kc.,** 100 watts, unlimited time.

Examiner's Report No. I-272:

NEW—Gulf Coast Broadcasting Co., Corpus Christi, Tex.—C. P., **1330 kc.,** 250 watts, 500 watts LS, unlimited time.

Examiner's Report No. I-250:

KSEI—Radio Service Corp., Pocatello, Idaho.—Renewal of license, **900 kc.,** 250 watts, 500 watts LS, unlimited time.

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Knoxville Journal Broadcasting Co., Knoxville, Tenn.—C. P., **1200 kc.,** 100 watts, 250 watts LS, unlimited time.

NEW—Richard M. Caste, Johnson City, Tenn.—C. P., **1200 kc.,** 100 watts, 250 watts LS, unlimited time.

WELI—City Broadcasting Corp., New Haven, Conn.—Modification of license, **930 kc.,** 250 watts, 500 watts LS, unlimited time. Present assignment: **900 kc.,** 500 watts, daytime.

NEW—Walter H. McConty, Rice Lake, Wis.—C. P., **1210 kc.,** 250 watts, daytime.

NEW—Lawrence K. Miller, Pittsfield, Mass.—C. P., **930 kc.,** 250 watts, daytime.

APPLICATIONS GRANTED

WGBB—Harry H. Carman, Freeport, N. Y.—Granted license to cover C. P. authorizing changes in equipment.

KDAL—Red River Broadcasting Co., Inc., Duluth, Minn.—Granted license to cover C. P. as modified for move of station from Moorhead, Minn., to Duluth, Minn.; **1500 kc.,** 100 watts, unlimited.

KMMJ—KMMJ, Inc., Clay Center, Nebr.—Granted license to cover C. P. authorizing installation of new equipment.

WIBU—Wm. C. Forrest, Poynette, Wis.—Granted license to cover C. P. authorizing installation of new equipment.

WRAK—WRAK, Inc., Williamsport, Pa.—Granted license to cover C. P. authorizing installation of new equipment and vertical radiator, move of transmitter locally to 1561 W. 4th St., Williamsport; **1370 kc.,** 100 watts night, 250 watts day, unlimited.

KWTO—Ozarks Broadcasting Co., Springfield, Mo.—Granted license to cover C. P. and modifications authorizing installation of new equipment; increase in day power from 1 KW to 5 KW; move of transmitter site to Highway No. 13; and install vertical radiator. Also granted authority to determine operating power by direct measurement of antenna input in compliance with Rule 137.

WFAM—The South Bend Tribune, South Bend, Ind.—Granted license to cover C. P. authorizing installation of new equipment.

WBCM—James E. Davidson, Bay City, Mich.—Granted authority to determine operating power by direct measurement of antenna input in compliance with Rule 137.

W8XEO—Harold F. Gross, M. Bliss Keeler, L. A. Versluis, d/b as Capitol City Broadcasting Co., Lansing, Mich.—Granted voluntary assignment of license of relay broadcast station to Harold F. Gross.

KRLD—KRLD Radio Corp., Dallas, Tex.—Granted C. P. to change equipment.

KOB—Albuquerque Broadcasting Co., Albuquerque, N. Mex.—Granted C. P. to install new equipment.

WGL—Westinghouse Electric and Manufacturing Co., Fort Wayne, Ind.—Granted C. P. to install new equipment.

KFJM—University of North Dakota, Grand Forks, N. Dak.—Granted license to cover C. P. authorizing move of transmitter locally to University Campus; install new equipment; change in assignment from **1370 kc.,** 100 watts, unlimited, to **1410 kc.,** 500 watts night, 1 KW day, unlimited.

WKZO—WKZO, Inc., Kalamazoo, Mich.—Granted license to cover C. P. for new transmitter; **590 kc.,** 1 KW, daytime only.

KMLB—Liner's Broadcasting Station, Inc., Monroe, La.—Granted license to cover C. P. for move of station locally, change equipment, and increase day power to 250 watts; **1200 kc.,** 100 watts night, unlimited.

WTAD—Illinois Broadcasting Corp., Quincy, Ill.—Granted license to cover C. P. for move of transmitter to North 24th St. and install new equipment.

WNEL—Juan Piza, San Juan, P. R.—Granted modification of C. P. as modified extending completion date to December 29, 1936.

WBEN—WBEN, Inc., Buffalo, N. Y.—Granted modification of license to employ former main transmitter as auxiliary transmitter, increasing power of auxiliary from 250 watts to 1 KW. Also granted authority to determine operating power of auxiliary transmitter by direct measurement of antenna power.

WFBC—Greenville News-Piedmont Co., Greenville, S. C.—Granted authority to determine operating power by direct measurement of antenna power.

WABC-WBOQ—Atlantic Broadcasting Corp., New York, N. Y.—Granted voluntary assignment of license to Columbia Broadcasting System, Inc.; **860 kc.,** 50 KW, unlimited. Effective December 5, 1936.

W2XE—Atlantic Broadcasting Corp., Wayne, N. J.—Granted voluntary assignment of C. P. of international broadcast station from Atlantic Broadcasting Corp. to Columbia Broadcasting System, Inc.

W2XDV—Atlantic Broadcasting Corp., New York City.—Granted voluntary assignment of high frequency broadcast experimental station to Columbia Broadcasting System, Inc.

W10XAL—Atlantic Broadcasting Corp., Mobile (Alabama).—Granted voluntary assignment of relay broadcast experimental station to CBS, Inc.

W10XZ—Atlantic Broadcasting Corp., Mobile (Alabama).—Granted voluntary assignment of relay broadcast experimental station to CBS, Inc.

W10XGJ-WIEK-WIEL—Atlantic Broadcasting Corp., Mobile (Alabama).—Granted voluntary assignment of relay broadcast experimental station to CBS, Inc.

W2XAX—Atlantic Broadcasting Corp., New York City.—Granted voluntary assignment of license of experimental television station to CBS, Inc. Also granted voluntary assignment of special permit to transmit programs through WABC-WBOQ to Canada to CBS, Inc.

KNX—Columbia Broadcasting System of California, Inc. (Calif. corp.), Los Angeles, Calif.—Granted voluntary assignment of license to CBS, Inc.; **1050 kc.,** 50 KW, unlimited.

WCCO—Northwestern Broadcasting, Inc., Minneapolis, Minn. (Delaware corp.).—Granted voluntary assignment of license to CBS, Inc.; **810 kc.,** 50 KW, unlimited; effective December 15, 1936.

W9XHW—Northwestern Broadcasting, Inc., Minneapolis, Minn. (Delaware corp.).—Granted voluntary assignment of license of bigb frequency broadcast (exp.) station to CBS, Inc.

WJSV—Old Dominion Broadcasting Co., Wasbington, D. C. (Delaware corp.).—Granted voluntary assignment of license to CBS, Inc.; **1460 kc.,** 10 KW, unlimited.

WBT—Station WBT, Inc., Charlotte, N. C. (New York corp.).—Granted voluntary assignment of license to CBS, Inc.; **1080 kc.,** 50 KW, unlimited.

KMOX—Voice of St. Louis, Inc., St. Louis, Mo. (Mo. corp.).—Granted voluntary assignment of license to CBS, Inc.; **1090 kc.,** 50 KW, unlimited.

WBBM—WBBM Broadcasting Corp., Chicago, Ill. (Ill. corp.).—Granted voluntary assignment of license to CBS, Inc.; **770 kc.,** 50 KW, simultaneous day KFAB, share nigbt KFAB (SA-syncb. night KFAB from LS to midnigbt).

WBBM—WBBM Broadcasting Corp., Chicago, Ill. (Ill. corp.).—Granted voluntary assignment of special permit to transmit programs tbrough WBBM to Canada to CBS, Inc.

WEEI—WEEI Broadcasting Corp., Boston, Mass. (Mass. corp.).—Granted voluntary assignment of license to CBS, Inc.; **590 kc.,** 1 KW, unlimited; under C. P., **590 kc.,** 1 KW night, 5 KW day, unlimited, using directional antenna day and night.

WEEI—WEEI Broadcasting Corp., Boston, Mass. (Mass. corp.).—Granted voluntary assignment of C. P. as modified to CBS, Inc.

WKRC—WKRC, Inc., Cincinnati, Ohio (Ohio corp.).—Granted voluntary assignment of license to CBS, Inc.; **550 kc.,** 500 watts, unlimited, S.A., 1 KW unlimited under C. P., **550 kc.** (1 KW night, 5 KW day, unlimited).

WKRC—WKRC, Inc., Cincinnati, Ohio (Ohio corp.).—Granted voluntary assignment of C. P. as modified to CBS, Inc.; **500 kc.,** 500 watts, unlimited, S.A., 1 KW, unlimited (under C. P., **500 kc.,** 1 KW night, 5 KW day, unlimited).

KFRO—Voice of Longview, Longview, Tex.—Granted special temporary authority to operate from local sunset (5:15 p. m., CST) to 9 p. m., December 6, 13, 20 and 27. 1936, to broadcast services of Kelly Memorial Methodist Church of Longview, and denied special temporary authority for operation from local sunset (5:15 p. m., CST) to 7:30 p. m., December 1 to December 26, 1936.

NEW—Selma Broadcasting Co., Inc., Mobile, Selma, Ala.—Granted C. P. for new low frequency broadcast station; **1622, 2058, 2150** and **2790 kc.,** 10 watts.

W10XGC—National Broadcasting Co., Inc., New York City.—Granted C. P. for changes in transmitting equipment and increase in power from 20 watts to 30 watts. Also granted license covering same; frequencies **31100, 34600, 37600, 40600 kc.**

APPLICATIONS DISMISSED

The following applications, heretofore set for hearing, were dismissed at request of applicants:

WSAY—Brown Radio Service & Lab., Rochester, N. Y.—Modification of license to change hours of operation and increase power (facilities of WOCL).

NEW—H. E. Studebaker, La Grande, Ore.—C. P. for new station, **1420 kc.,** 100 watts night, 250 watts LS, unlimited.

WJTN (formerly WOCL)—A. E. Newton, Jamestown, N. Y.—Dismissed protest of WSAY to the granting of voluntary assignment of license to James Broadcasting Co., Inc., which the Commission granted on October 20, 1936, later reconsidered said grant and designated the application for hearing on protest of WSAY, whicb protest has been withdrawn.

SET FOR HEARING

NEW—The Bend Bulletin, Bend, Oregon.—Application for C. P. for new broadcast station at Bend, Ore., to operate on **1310 kc.,** 100 watts night, 250 watts day, unlimited time.

NEW—W. H. Hartman Co., publisher, Waterloo Daily Courier, Waterloo, Iowa.—Application for C. P. for new broadcast station at Waterloo, Iowa, to operate on **1420 kc.,** 100 watts, unlimited time.

NEW—Fayette Broadcasting Corp., Uniontown, Pa.—Application for C. P. for new broadcast station at Uniontown, Pa., to operate on **1420 kc.,** 250 watts, daytime only.

NEW—S. H. Patterson, Denver, Colo.—Application for C. P. for new special broadcast station on an experimental basis in accordance with Rule 970, to be located near Denver, Colo., to operate on **1570 kc.,** 1 KW, unlimited time.

NEW—Central Broadcasting Corp., Centralia, Wash.—Application for C. P. for new broadcast station at Centralia, Wash., to operate on **1440 kc.,** 1 KW, unlimited time. Transmitter site to be determined with Commission's approval.

NEW—Mile High Radio Corp., Denver, Colo.—Amended application for C. P. for new broadcast station at Denver, Colo., to operate on **1210 kc.,** 100 watts night, 250 watts day, unlimited time. Transmitter site and type of antenna are to be approved.

NEW—Harold M. Finlay and Mrs. Eloise Finlay, La Grande, Ore.—Amended application for C. P. for new broadcast station at La Grande, Ore., to operate on **1420 kc.,** 100 watts night, 250 watts day, unlimited time; exact transmitter site and type of antenna to be determined with Commission's approval.

NEW—Berks Broadcasting Co., Pottsville, Pa.—Amended application for C. P. for new broadcast station at Pottsville, Pa., to operate on **580 kc.,** 250 watts, daytime only; site to be determined with Commission's approval.

WAPO—W. A. Patterson, Chattanooga, Tenn.—Application for C. P. to install new equipment and increase power and time of operation from 100 watts daytime to 100 watts night, 250 watts day, unlimited time.

WSBC—WSBC, Inc., Chicago, Ill.—Application for C. P. to make changes in equipment and increase day power from 100 watts to 250 watts.

KYOS—Merced Star Publishing Co., Inc., Merced, Calif.—Application for modification of license and change frequency from **1040 kc.** to **1280 kc.** and increase power from 250 watts daytime to 250 watts unlimited time.

WREC—WREC, Inc., Mempbis, Tenn.—Application for modification of license to increase night power from 1 KW to 5 KW. Hearing is to be before Broadcast Division.

WDAE—Tampa Times Co., Tampa, Fla.—Application for modification of license to increase night power from 1 KW to 5 KW. Hearing is to be before Broadcast Division.

SPECIAL TEMPORARY AUTHORIZATIONS

WPHR—WLBC, Inc., Petersburg, Va.—Granted special temporary authority to operate from local sunset (5 p. m., EST) until 6 p. m., Saturday evening, December 5, 1936, in order to assure completion of a football game to be played between Petersburg Higb School and a high school from Jacksonville, Fla.

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Granted special temporary authority to operate from 7:30 p. m. to 10:30 p. m., December 5, 1936, and from 10 p. m. to 10:30 p. m., December 11, 1936, in order to broadcast University basketball games.

KPDN—R. C. Hoiles, Pampa, Tex.—Granted special temporary authority to operate from 8 p. m. to 10:30 p. m., CST, December 5, 1936, in order to broadcast civic celebration.

WHBF—Rock Island Broadcasting Co., Rock Island, Ill.—Granted extension of special temporary authority to maintain the main studio of WHBF at 1630 5th Avenue, Moline, Ill., instead of 102 18tb Street, Rock Island, Ill., for a period

beginning December 3, 1936, and ending in no event later than January 1, 1937.

KSFO—The Associated Broadcasters, Inc., San Francisco, Calif.—Granted special temporary authority to operate a mobile 100-watt transmitter on **560 kc.** between the hours of 1 a. m. and 6 a. m., PST, for period beginning December 7, 1936, and ending in no event later than December 13, 1936, in order to make transmitter site survey, provided no operation occurs during hours prescribed for Commission monitoring schedule.

KTUL—Tulsa Broadcasting Co., Inc., Tulsa, Okla.—Granted special temporary authority to operate a 50-watt portable transmitter on **1400 kc.** in and near Tulsa, Okla., for period ending in no event later than December 24, 1936, for purpose of making location measurements.

WRR—City of Dallas, Texas, Dallas, Tex.—Granted special temporary authority to suspend tests on KVPA's transmitter, used by WRR as an auxiliary transmitter, as required by Section D of Rule 148, for period not to exceed 30 days, pending necessary changes to comply with Rule 132.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Granted special temporary authority to operate simultaneously with station WSMK from 10 p. m. to 12:30 a. m., EST, the night of December 1, 1936, in order to broadcast a Community Chest program.

WELI—City Broadcasting Corp., New Haven, Conn.—Granted special temporary authority to operate unlimited time December 2, 1936, in order to broadcast a testimonial dinner given by the Democratic Women of Connecticut to Democratic National Committeeman David E. Fitzgerald at Hotel Taft in New Haven.

RATIFICATIONS

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—Granted extension equipment test period 10 days from November 21, 1936.

KJR—Fisher's Blend Station, Inc., Seattle, Wash.—Granted extension program test period 30 days from November 25, 1936.

W10XN-W10XY-W10XAK—National Broadcasting Co., Inc., New York, N. Y.—Granted authority to operate as licensed November 30 to December 4, inclusive, relay broadcast description International Livestock Show in Chicago, Ill.

WIEF—Miami Broadcasting Co., Miami, Fla.—Granted authority to operate as licensed December 6 to 12, 1936, inclusive, relay broadcast All American Air Maneuvers, Hialeah, Fla.

W9XHD-W9XHE-W9XHF—Agricultural Broadcasting Co., Chicago, Ill.—Granted authority to operate as licensed December 1 to 4, 1936, inclusive, relay broadcast International Live Stock Show.

WMCA—Knickerbocker Broadcasting Co., Inc., New York, N. Y.—Granted special temporary authority to operate power of 1 KW, with directional antenna, between hours of 12 midnight and local sunset for period not to exceed 10 days in order to make field intensity survey tests, provided no operation occurs during hours prescribed for Commission's monitoring schedule.

ACTION ON EXAMINERS' REPORTS

KDYL—Ex. Rep. 1-242: Intermountain Broadcasting Corp., Salt Lake City, Utah.—Granted C. P. to install new equipment (antenna to be determined); move transmitter from Twp. No. 1, So. Range 1 West, Salt Lake City, to near Salt Lake City (site to be determined subject to Commission's approval); and increase power from 1 KW to 1 KW night, 5 KW day; **1290 kc.**, unlimited time. Examiner P. W. Seward sustained. Order effective December 15, 1936.

NEW—Ex. Rep. 1-245: Southwest Broadcasting Co., Prescott, Ariz.—Granted C. P. for new broadcast station to operate on **1500 kc.**, 100 watts night, 250 watts day, unlimited time. Examiner P. W. Seward sustained.

NEW—W. P. Stuart, Prescott, Ariz.—Denied C. P. for new broadcast station to operate on **1500 kc.**, 100 watts, unlimited time (site to be determined subject to Commission's approval) (antenna to be determined). Order effective January 12, 1937. Examiner Seward sustained.

NEW—Ex. Rep. 1-256: Dorrance D. Roderick, El Paso, Tex.—Granted C. P. for new broadcast station to operate on **1500 kc.**, 100 watts, unlimited time. Examiner George H. Hill sustained. Order effective January 12, 1937.

NEW—Ex. Rep. 1-304: Farnsworth Television, Inc., of Pennsylvania, Springfield, Pa.—Granted C. P. for new experimental visual broadcast station to operate on **60000-86000** and **42000-56000 kc.**, 1 KW, unlimited time, A3 emission. Examiner R. H. Hyde sustained. Order effective January 5, 1937.

ORAL ARGUMENT

NEW—Ex. Rep. 1-305: The Pottsville Broadcasting Co., Pottsville, Pa.—Granted oral argument to be held January 28, 1937, before the Broadcast Division.

MISCELLANEOUS

WKRC—WKRC, Inc., Cincinnati, Ohio.—Granted voluntary assignment of special experimental authorization from WKRC, Inc., to Columbia Broadcasting System, Inc.

WBBM—WBBM Broadcasting Corp., Chicago, Ill.—Granted voluntary assignment of special experimental authorization from WBBM Broadcasting Corp. to Columbia Broadcasting System, Inc.

NEW—Lincoln Memorial University, Middlesboro, Ky.—Granted petition asking Commission to waive Rule 105.25 with respect to time within which to file appearance and statement of desire to be heard and accepted under such waiver its appearance and statement of facts to be proved at hearing. Application is for new station to operate on **1210 kc.**, 100 watts, unlimited time.

NEW—Bay State Broadcasting Corp., Providence, R. I.—Reinstated on hearing docket and a new hearing date ordered in re application for C. P. to erect a new daytime radio station at Providence, R. I., to operate on **720 kc.**, 1 KW, limited time.

WPAR—Ohio Valley Broadcasting Corp., Parkersburg, W. Va.—Denied petition asking Commission to reconsider action after hearing in denying application to increase daytime power from 100 watts to 250 watts and to grant the same.

WBNO—Coliseum Place Baptist Church, New Orleans, La.—Granted request to extend effective dates of Rules 132 and 139 (Rule 132 deals with design and construction of transmitter, and 139 deals with modulation of transmitter). Also, denied petition for reconsideration and for grant without hearing of application for renewal of license of WBNO, assignment of license to Pelican State Broadcasting Co., and application of the latter Co. for change in frequency from **1200 kc.** to **1500 kc.**, 100 watts, unlimited.

KGFW—Central Nebraska Broadcasting Corp., Kearney, Nebr.—Granted petition to dismiss without prejudice application for C. P. to install new equipment and to move transmitter and studio to Omaha, Nebr.

NEW—Ted R. Woodward, Kingsport, Tenn.—Denied petition to cancel and declare a default in application of Lincoln Memorial University for new station at Middlesboro, Ky., to operate on **1210 kc.**, 100 watts, unlimited time.

APPLICATIONS RECEIVED

First Zone

WBNX—Standard Cahill Co., Inc., New York, N. Y.—Construc-
1350 tion permit to install a new transmitter, install new directional antenna for day and night use, increase power from 1 to 5 KW, and move transmitter from 138 Pine St., Cliffside Park, N. J., to near Secaucus, N. J.

WHEC—WHEC, Inc., Rochester, N. Y.—License to cover con-
1430 struction permit (B1-P-819) as modified for new equipment and move of transmitter.

WBAM—Bamberger Broadcasting Service, Inc., Mobile.—Modification of construction permit for changes in equipment and increase in power from 26.4 watts to 30 watts.

WBAM—Bamberger Broadcasting Service, Inc., Mobile.—License to cover above.

WBAM—Bamberger Broadcasting Service, Inc., Mobile.—Modification of construction permit to make changes in equipment and change power from 50 watts to 30 watts.

WBAM—Bamberger Broadcasting Service, Inc., Mobile.—License to cover above.

National Broadcasting Co., Inc., New York, N. Y.—Modification of permit (B1-FP-27) for extension of authority to transmit recorded programs to foreign radio stations by adding "ALL broadcast stations in Canada licensed to operate by the

Canadian Government which may be heard consistently in the United States."

W1XK—Westinghouse Electric & Manufacturing Co., Mobile, Massachusetts.—Construction permit to make changes in equipment and add the frequencies **6140, 11870, 15210, 17780, 21540 kc.,** and increase power to 50 KW.

NEW—Westinghouse Electric & Manufacturing Co., Mobile.—Construction permit for a new low frequency relay broadcast station to be operated on **1606, 2022, 2102, 2758 kc.,** 15 watts.

NEW—Westinghouse Electric & Manufacturing Co., Springfield, Mass.—License to cover above.

Second Zone

NEW—WRBC, Inc., Cleveland, Ohio.—Construction permit for a **880** new broadcast station to be operated on **780 kc.,** 1 KW power, unlimited time. Amended to change frequency from **780 kc.** to **880 kc.,** and give antenna and transmitter site to be determined.

NEW—Voice of Detroit, Detroit, Mich.—Construction permit for **1120** a new station to be operated on **1120 kc.,** 500 watts night, 1 KW daytime, unlimited time. Amended to give transmitter site as north of Detroit, Mich.

NEW—Frank O. Klapp, Zanesville, Ohio.—Construction permit **1210** for a new station to be operated on **1210 kc.,** 100 watts, unlimited time. Requests facilities of WALR.

NEW—Valley Broadcasting Co., Youngstown, Ohio.—Construc- **1350** tion permit for a new station to be operated on **1370 kc.,** 100 watts, 250 watts day, unlimited time. Amended to change frequency from **1370 kc.** to **1350 kc.,** power from 100 watts night, 250 watts day, to 1 KW, make changes in equipment and specify antenna to be determined.

NEW—Wm. W. Ottaway, Port Huron, Mich.—Construction per- **1370** mit for a new station to be operated on **1370 kc.,** 250 watts, daytime.

WMBC—Michigan Broadcasting Co., Detroit, Mich.—License to **1420** cover construction permit (B2-P-910) as modified for changes in equipment.

NEW—Keystone Broadcasting Corp., Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 50 watts.

NEW—Keystone Broadcasting Corp., Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 5 watts.

Third Zone

WPTF—WPTF Radio Company, Raleigh, N. C.—Extension of **680** special experimental authorization to operate with 5 KW power from sunset at KPO to 11 p. m., EST, using directional antenna after sunset, for period 2-1-37 to 8-1-37.

WSGN—The Birmingham News Co., Birmingham, Ala.—License **1310** to cover construction permit (B3-P-1268) for new equipment.

NEW—B. H. Hopson, Birmingham, Ala.—Construction permit to **1310** erect a new station to be operated on **1310 kc.,** 100 watts night, 250 watts day, unlimited time, requesting facilities of WSGN, contingent upon B3-P-997 being granted to The Birmingham News Co. Amended: Transmitter site to be determined, Birmingham, Ala.

KRRV—Red River Valley Broadcasting Corporation, Sherman, **1310** Tex.—Construction permit to make changes in equipment and increase power from 100 to 250 watts.

NEW—West Texas Broadcasting Co., Wichita Falls, Tex.—Con- **1380** struction permit for a new station to be operated on **1380 kc.,** 1 KW, unlimited time, to use directional antenna at night. Amended to change from the partnership, J. H. Allison, Rhea Howard and B. D. Donnel, d/b as West Texas Broadcasting Co., to the corporation, West Texas Broadcasting Co.

KLRA—Arkansas Broadcasting Co., Little Rock, Ark.—Construc- **1390** tion permit to make changes in equipment; install a vertical antenna; increase power from 1 KW night, 2½ KW day, to 1 KW night and 5 KW day.

NEW—Malcolm H. Clack (Clack Radio Service), Amarillo, Tex.— **1500** Construction permit for a new station on **1500 kc.,** 100 watts power, unlimited.

Fourth Zone

WTAD—Illinois Broadcasting Corp., Quincy, Ill.—License to cover **900** modification of construction permit (B4-MP-407) for increase in power from 500 watts to 1 KW.

WEAU—Central Broadcasting Co., Eau Claire, Wis.—Modifica- **1050** tion of construction permit (B4-P-736) as modified for a new station, requesting approval of transmitter and studio sites at near junction of Bluff Street and Breckett Road, Eau Claire, Wis. Amended to change requested transmitter and studio sites to 26th Street and Crescent Road, Eau Claire, Wis., and change hours of operation from daytime to limited time, sunset at Abilene, Kans.

WGL—Westinghouse Electric & Manufacturing Co., Chicopee Falls, **1370** Mass.—Construction permit to install a new antenna and move transmitter and studio from 213 W. Main Street to 925 S. Harrison Street, Fort Wayne, Ind.

WIRE—Indianapolis Broadcasting, Inc., Indianapolis, Ind.—Au- **1400** thority for consent to transfer of control of corporation from William E. Vogelback and Douglas E. Kendrick to Central Newspapers, Inc., 6167 shares of common stock.

Fifth Zone

KMJ—McClatchy Broadcasting Co., Fresno, Calif.—Modification **580** of license to change power from 500 watts night, 1 KW day, to 1 KW night and day.

NEW—Continental Radio Co., Denver, Colo.—Construction per- **630** mit for a new broadcast station to be operated on **630 kc.,** 500 watts power night and 1 KW power day, unlimited hours of operation.

NEW—Continental Radio Co., Denver, Colo.—Construction per- **880** mit for a new broadcast station to be operated on **880 kc.,** 500 watts night power, 1 KW day, shares with KPOF. Contingent upon KFKA being granted another frequency.

KVOV—Golden Empire Broadcasting Co., Redding, Calif.—License **1200** to cover construction permit (B5-P-546) as modified, for new station on **1200 kc.,** 100 watts, unlimited time.

KXRO—KXRC, Inc., Aberdeen, Wash.—Construction permit to **1310** make changes in transmitting equipment; install new antenna; increase day power from 100 watts to 250 watts; and move transmitter from Morck Hotel, corner K and Heron Sts., Aberdeen, Wash., to Lots 1-11, inclusive, in Farm 9 of the revised part of Finch Farms, Aberdeen, Wash.

KRKO—Lee E. Mudgett, Everett, Wash.—License to cover con- **1370** struction permit (B5-P-1254) for changes in equipment. Amended to make changes in authorized equipment.

KUJ—KUJ, Inc., Walla Walla, Wash.—License to cover construc- **1370** tion permit (B5-P-1455) for equipment changes.

The National Association of Broadcasters

NATIONAL PRESS BUILDING * * * * * WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

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BROADCAST ADVERTISING DURING THE THIRD QUARTER OF 1936

Principal Developments

Broadcast advertising during the third quarter of the current year showed an increase of 32.7% over the corresponding period of last year. Gross time sales for the first nine months of 1936 were ahead of the corresponding period of 1935 by 18.2%. All portions of the medium experienced gains both when compared to the third quarter and the first nine months of last year.

Non-network advertising for the third quarter increased 33.2% over the corresponding period of last year. All sizes of stations as well as all sections of the country experienced increases. The greatest gains were in the regional and local groups and in the South Atlantic-South Central Area.

Total transcription, live talent, and announcement volume increased approximately one-third over the corresponding period of last year. In the national non-network field, announcement and record business showed the greatest gains, while transcriptions and live talent business enjoyed the greatest increases in the local field.

All types of sponsorship showed increases over the third quarter of 1935. Principal gains were shown in the automotive, beverage, confectionery, financial, soap and kitchen supply, radio set and tobacco sponsor groups.

Retail broadcast advertising increased 25.3% as compared to the third quarter of 1935. Automotive, clothing, household equipment, radio dealers, and department stores showed the greatest increases.

Total Broadcast Advertising

Broadcast advertising volume over various portions of the medium during the third quarter of the current year is found in Table I.

TABLE I

TOTAL BROADCAST ADVERTISING VOLUME

Class of Business	*Gross Time Sales Third Quarter 1935*	*1936*
National networks	$9,451,157	$12,503,699
Regional networks	256,203	346,219
National non-networks	3,607,935	4,877,300
Local	3,840,055	5,040,900
Total	$17,155,350	$22,768,118

Gains during the third quarter were consistent in all portions of the medium when compared to the corresponding period of the preceding year. National network volume increased 32.3%, regional network volume 35.1%, national non-network volume 35.2% and local advertising 31.3%.

Gross time sales for the first nine months of the current year exceeded those of the corresponding period of 1935 by 18.2%. Regional network and national non-network advertising showed the greatest gains, rising 37.2% and 34.5%, respectively. National network volume gained 14.4% and local advertising 12.7%.

Comparison with Other Media

When compared to the corresponding period of last year, radio broadcasting for the third quarter showed the greatest improvement of any medium. Broadcast advertising increased 32.7% whereas national magazine advertising rose 15.4%, national farm paper advertising 25.3% and newspaper advertising 12.9%.

Total broadcast advertising for the first nine months of the current year was 18.2% ahead of the corresponding period of 1935. National magazine volume rose 11.4%, farm paper advertising 25.4% and newspaper lineage 9.8%.

Advertising volume by major media for the third quarter is found in Table II.

TABLE II

ADVERTISING VOLUME BY MAJOR MEDIA

Advertising Medium	*Gross Time and Space Sales Third Quarter 1935*	*1936*
Radio broadcasting	$17,155,350 [3]	$22,768,118
National magazines [1]	24,713,755	28,530,425
National farm papers [1]	1,132,083	1,418,552
Newspapers [2]	116,377,000 [3]	131,416,000
Total	$159,378,188 [3]	$184,133,095

[1] Publishers' Information Bureau.
[2] Estimated.
[3] Adjusted Vol. 3, No. 52.

Non-network Advertising

Total non-network advertising for the third quarter increased 33.2% over the corresponding period of the preceding year. The classes of stations to register the greatest gains were the regional and local groups, which increased 46.9% and 44.7%, respectively. Clear channel non-network advertising rose 15.9%.

Gains in non-network advertising over various sizes of stations during the first nine months of the current year as compared with the corresponding period of 1935 were as follows: clear channel stations 13.0%, regional stations 29.1%, and local stations 38.4%.

Non-network broadcast advertising by power of station is shown in Table III.

TABLE III

NON-NETWORK BROADCAST ADVERTISING BY POWER OF STATION

Power of Station	*Gross Time Sales Third Quarter 1935*	*1936*
Over 1,000 watts	$3,219,350	$3,732,400
250-1,000 watts	3,028,440	4,449,400
100 watts	1,200,200	1,736,400
Total	$7,447,990	$9,918,200

Non-network advertising in the South Atlantic-South Central Area showed the greatest increase when compared to the third quarter of the preceding year, rising 88.9%. Non-network volume in the New England-Middle Atlantic Area rose 24.9%, North Central Area 29.7%, and Pacific and Mountain Area 10.7%.

Comparing non-network advertising for the first nine months of 1936 with that of a similar period in the preceding year, the following increases were shown: New England-Middle Atlantic Area 5.4%, South Atlantic-South Central Area 59.5%, North Central Area 25.9% and Pacific and Mountain Area 11.9%.

Non-network advertising by geographical districts is found in Table IV.

TABLE IV

NON-NETWORK BROADCAST ADVERTISING BY GEOGRAPHICAL DISTRICTS

Geographical District	*Gross Time Sales Third Quarter 1935*	*1936*
New England-Middle Atlantic Area	$1,777,065	$2,219,500
South Atlantic-South Central Area	1,102,390	2,083,200
North Central Area	2,943,600	3,816,800
Pacific and Mountain Area	1,624,935	1,798,700
Total	$7,447,990	$9,918,200

Non-network Advertising by Type of Rendition

Gains were fairly consistent in all types of rendition. Total transcription volume increased 36.8% over the third quarter of the preceding year, live talent volume 31.3% and announcement business 34.6%. Record volume rose 19.7%.

In the local field, transcription and live talent volume showed the greatest increases. Transcriptions rose 43.4% as compared with the third quarter of 1935, while live talent volume increased 40.9%. Record volume and announcement business increased 13.7% and 19.2%, respectively.

Announcement and record volume registered marked increases in the national non-network field as compared to the third quarter of the preceding year. Announcement volume increased 78.5% and record volume 71.9%. Transcription and live talent volume rose 35.0% and 21.8%, respectively.

Compared with the first nine months of 1935, transcription volume rose 46.3%, live talent business 23.8%, records 3.1% and announcements 6.3%.

Non-network advertising by type of rendition for the third quarter is found in Table V.

TABLE V

NON-NETWORK BROADCAST ADVERTISING BY TYPE OF RENDITION

Type of Rendition	*Third Quarter Gross Time Sales National Non-network 1935*	*1936*	*Local 1935*	*1936*	*Total 1935*	*1936*
Electrical transcriptions	$1,264,750	$1,705,890	$368,190	$528,290	$1,632,940	$2,234,180
Live talent programs	1,780,765	2,168,520	1,764,860 [1]	2,487,590	3,545,625	4,656,110
Records	19,360 [1]	33,280	167,440	190,320	186,800	223,600
Announcements	543,060 [1]	969,610	1,539,565	1,834,700	2,082,625	2,804,310
Total	$3,607,935 [1]	$4,877,300	$3,840,055	$5,040,900	$7,447,990	$9,918,200

[1]Adjusted Vol. 3, No. 52.

Broadcast Advertising Sponsorship

Gains were fairly general in this field during the third quarter of the current year as compared with the same period last year. Total automotive advertising increased 29.2%, beverage volume 41.7%, confectionery advertising 84.3%, financial advertising 34.4%, soap and kitchen supply advertising 59.6%, radio advertising 82.9% and tobacco volume 97.9%.

Volume of advertising placed by various types of sponsors is found in Table VI.

TABLE VI

RADIO BROADCAST ADVERTISING BY TYPE OF SPONSORING BUSINESS

Type of Sponsoring Business	*Third Quarter Gross Time Sales National network 1935*	*1936*	*Regional network 1935*	*1936*	*National non-network 1935*	*1936*	*Local 1935*	*1936*	*Total 1935*	*1936*
1a. Amusements	—	—	—	$ 1,184	$ 17,815	$39,840	$128,420	$153,550	$146,235	$194,574
1–2. Automobiles and accessories.										
(1) Automobiles	436,926	620,877	1,684	960	507,470	545,590	178,225	284,830	1,124,305	1,452,257
(2) Accessories, gas and oils	1,132,201	1,108,538	38,898	62,715	208,495	358,290	211,230	213,750	1,590,824	1,743,293
3. Clothing and apparel	73,557	32,919	15,496	315	79,620	87,990	517,400	619,480	686,073	740,704
4–5. Drugs and toilet goods:										
(4) Drugs and pharmaceuticals	1,042,179	980,216	13,709	19,630	415,700	672,260	117,145	120,530	1,588,733	1,792,636
(5) Toilet goods	2,184,615	2,250,624	440	15,130	105,520	273,890	55,045	63,740	2,345,620	2,603,384
6–8. Food products:										
(6) Foodstuffs	2,208,737	2,583,774	61,606	93,362	892,075	1,060,870	536,555	657,970	3,698,973	4,395,976
(7) Beverages	605,794	968,051	3,794	33,911	197,380	178,360	263,115	336,950	1,070,083	1,517,272
(8) Confections	100,531	278,722	650	1,146	46,935	30,670	24,105	6,900	172,221	317,438
9–10. Household goods:										
(9) Household equipment and furnishings	77,692	107,328	18,613	14,739	126,355	145,660	466,380	518,610	689,040	786,337
(10) Soap and kitchen supplies	484,769[1]	932,578	13,626	14,060	362,990	426,970	12,325	21,490	873,710	1,395,098
11. Insurance and financial	96,494	118,139	1,508	2,774	57,615	65,640	132,720	201,010	288,337	387,563
12. Radios	172,202	325,515	—	—	36,855[1]	72,950	34,235	46,630	243,292	445,095
13. Retail establishments	—	—	860	426	22,670	20,550	337,370	439,900	360,900	460,876
14. Tobacco products	554,490	1,256,655	66,168	24,130	120,840	198,610	16,705	21,650	758,203	1,501,045
15. Miscellaneous	280,970	939,763	19,151	61,737	409,600	699,160	809,080	1,333,910	1,518,801	3,034,570
Total	$9,451,157	$12,503,699	$256,203	$346,219	$3,607,935	$4,877,300	$3,840,055[1]	$5,040,900	$17,155,350	$22,768,118

[1] Adjusted Vol. 3, No. 52.

Detailed analysis of the trends in the various fields of sponsorship is as follows:

1a. ***Amusements.*** Total volume up 33.1% compared to the third quarter of the preceding year. National non-network up 123.6% and local up 19.6%.

1. ***Automotive.*** Compared to the third quarter of 1935, national network volume up 42.1%, national non-network 7.5%, and local 59.8%. Regional volume down 42.9%. Total increased 29.2%.

2. ***Gasoline and accessories.*** Total volume increased 9.6%. National non-network up 71.8%, regional network volume 61.2%, and local 1.2%. National network volume declined 2.1%.

3. ***Clothing.*** National non-network up 10.5% and local 19.7% compared to preceding third quarter. National network volume down 55.2%, with material decline in regional network volume. Total up 7.9%.

4. ***Drugs and pharmaceuticals.*** Total volume up 12.8%. Regional networks up 43.2%, national non-networks 61.7%, and local advertising 2.9%. National network volume down 5.9%.

5. ***Toilet goods.*** Total volume increased 10.9% over corresponding quarter of last year. Gains as follows: national networks 3.0%, national non-network 159.5%, and local 15.8%. Regional network volume increased materially.

6. ***Foodstuffs.*** Total volume up 18.8%, with gains in all groups. Increases as follows: national network volume 16.9%, regional network volume 51.5%, national non-network volume 18.9%, and local advertising 22.6%.

7. ***Beverages.*** National network and local volume up 59.7% and 28.1%, respectively. National non-network down 9.6%.

Regional network advertising increased materially. Total up 41.7%.

8. ***Confectionery.*** Total volume increased 84.3% as compared with the third quarter of last year. National network volume up 177.2% and regional network advertising 76.3%. National non-network volume down 34.6% and local business 71.3%.

9. ***Household equipment.*** National networks up 38.2%, national non-networks 15.3%, and local advertising 11.2%. Regional volume down 26.3%. Total increased 14.1%.

10. ***Soaps and kitchen supplies.*** Total volume in this field increased 59.6% as compared with the third quarter of last year. Increases were as follows: national networks 92.3%, regional networks 3.2%, national non-networks 17.6%, and local 74.3%.

11. ***Insurance and financial.*** Gains registered in all groups. National network volume up 22.4%, regional network volume 83.9%, national non-network 13.9%, and local advertising 51.4%. Total increased 34.4%.

12. ***Radio.*** National network and national non-network volume almost double third quarter of last year. Local advertising increased 36.2% and total volume up 82.9%.

13. ***Department and general stores.*** Total volume in this field increased 27.7% as compared with the third quarter of last year. Local business up 30.4%, while national non-network volume declined 9.4%.

14. ***Tobacco products.*** Total rose 97.9% as compared to the third quarter of 1935. National network increased 126.6%, national non-network 64.3%, and local volume 29.6%. Regional network volume declined 63.5%.

15. ***Miscellaneous.*** Total volume increased 99.8%. National network volume rose 234.4%, regional network volume 222.3%, national non-network 61.1%, and local advertising 64.8%.

Retail Broadcast Advertising

Total retail broadcast advertising increased 25.3% as compared to the third quarter of 1935. Principal gains were as follows: Automotive 54.1%, clothing and apparel shops 24.2%, household equipment dealers 33.7%, radio retailers 41.1%, and department and general stores 27.5%.

Retail broadcast advertising volume is found in Table VII.

TABLE VII

RETAIL ADVERTISING OVER INDIVIDUAL STATIONS

Type of Sponsoring Business	*Gross Time Sales Third Quarter* 1935	1936
Automobiles and accessories:		
Automobile agencies and used car dealers	$189.025	$291,310
Gasoline stations, garages, etc.	126,045	110,750
Clothing and apparel shops	523,860	650,610
Drugs and toilet goods:		
Drug stores	45,700	38,210
Beauty parlors	22,830	22,130
Food products:		
Grocery stores, meat markets, etc.	108,225	124,330
Restaurants and eating places	63,191	54,290
Beverage retailers	6,270	2,070
Confectionery stores, etc.	3,374	3,450
Household goods:		
Household equipment retailers	155,640	208,170
Furniture stores	244,220	262,830
Hardware stores	44,730	43,770
Radio retailers	31,248	44,100
Department and general stores	360,900	460,440
Tobacco shops	580	—
Miscellaneous	198,020	344,370
Total	$2,123,858	$2,660,830

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

★ ★ ★ ★ ★

Vol. 4--No. 71
DEC. 10, 1936

IN THIS ISSUE

HETTINGER RESIGNS

Dr. Herman S. Hettinger has tendered his resignation as Economic Consultant for the NAB. Dr. Hettinger has expressed the desire to devote more time to the writing of a book on the principles of radio advertising.

CONFERENCE ON BLANKET FIELD INTENSITY

The Federal Communications Commission has called an informal engineering conference for January 18 to which all persons and organizations interested in broadcast allocation have been invited to discuss the definition of blanket field intensity.

In connection with the calling of this conference the Commission says:

At the informal engineering hearing on broadcasting held before the Federal Communications Commission beginning October 5th, 1936, representatives of the radio industry presented testimony to the effect that the field intensity now taken as the limit of the blanket area of a broadcast station should be increased. The intensity now used as a reference for allocation problems is from 125 to 175 mv/m. Certain engineers, representing their respective groups, recommended that a field intensity of 1 v/m be selected as the limit of the blanket area, in view of improvements in broadcast receivers during the last few years. Others stated that they did not care to commit themselves at the present time since they had not studied this subject in detail.

The Engineering Department of the Federal Communications Commission is not satisfied that sufficient evidence was presented in support of the 1 v/m recommendation, nor was sufficient evidence presented to determine just what value of field intensity should be employed. The Engineering Department therefore desires to obtain further information on this subject from organizations not present at the hearing and which have intimate contact with field problems on blanketing. The opinions of, and data from, radio receiver service organizations, receiver manufacturers, the Commission's inspectors, and a summary of the many letters the Commission's offices receive complaining of blanketing, will be useful. Also, any further data that broadcast station licensees, broadcast system engineering departments, the Radio Manufacturers Association, the Institute of Radio Engineers, consulting radio engineers, and other interested parties care to submit will be considered.

CONFERENCE ON EDUCATIONAL BROADCASTING

A three day educational conference will be convened under the auspices of the First National Conference on Educational Broadcasting at the Mayflower Hotel, December 10th.

D. R. BILL OFFITT

Anyone contemplating the employment of D. R. Bill Offitt should first communicate with Radio Station KGIR, Butte, Montana.

SOCIAL SECURITY

It is suggested that members request the Bureau of Internal Revenue to furnish them with copies of Regulations 90 and 91. These circulars should furnish valuable information on questions relating to the Social Security Act.

NEW CALIFORNIA STATION RECOMMENDED

The News-Press Publishing Company applied to the Federal Communications Commission for a construction permit for the erection of a new broadcasting station at Santa Barbara, Calif., to use 1220 kilocycles, 500 watts and unlimited time on the air.

Examiner George H. Hill in Report No. I-312 recommends that the application be granted. He states that a need for additional radio service such as is proposed by the applicant exists at Santa Barbara. Also the construction of the proposed station would not cause any interference.

ANOTHER INDIANA STATION RECOMMENDED

Glenn Van Auken, applied to the Federal Communications Commission for a construction permit for the erection of a new broadcast station at Indianapolis, Ind., to use 1050 kilocycles, 1,000 watts power and daytime operation.

Examiner P. W. Seward in Report No. I-313 recommended that the application be granted. He states that the area proposed to be served needs additional radio service, and that the operation of the station would not be expected to cause any interference. It would be in the public interest.

BROADCAST STATION CHANGES

The Federal Communications Commission has just made public a list containing alterations and corrections (italicized) of broadcast stations to the edition dated January 1 for the month of November.

Call Letters	*Main Studio Location*	*Name of Licensee*	*Power*	*Frequency (kc)*	*Time Designation*
KALE	Portland, Ore.	KALE, Incorporated	500w	1300	S. H. **U S.A.U
KAND *Call letters assigned*	Corsicana, Texas	Navarro Broadcasting Association (J. C. West, Pres.) Effective 10–20–36	100w	1310	D(C. P. only)
KAWM	*Gallup, N. Mex.*	*A. W. Mills*	*100w*	*1500*	*U (C. P. only)*
KCMC	Texarkana, Ark. *C. P. Texarkana, Texas*	KCMC, Incorporated	100w	1420	U

Call Letters	*Main Studio Location*	*Name of Licensee*	*Power*	*Frequency (kc)*	*Time Designation*
KCMO	Kansas City, Mo.	Lester E. Cox, Thos. L. Evans and C. C. Payne *Strike out S. A. U*	100w	1370	*U*
KDB	Santa Barbara, Calif.	Santa Barbara Broadcasters, Ltd.	100w *C. P. 250w-LS*	1500	U
KEUB	Price, Utah	Eastern Utah Broadcasting Co. (Sam G. Weiss) *C. P. covered by license* *Strike out Effective 3-3-36*	100w	1420	U
KFOX	Long Beach, Calif.	Nichols and Warriner, Inc.	1kw *C. P. 5kw-LS*	1250	U
KFPY	Spokane, Wash.	Symons Broadcasting Co.	1kw *5kw-LS*	890	U
KFVD	Los Angeles, Calif.	Standard Broadcasting Co.	250w *C. P. 1kw*	1000	L-WHO
KGB	San Diego, Calif.	Don Lee Broadcasting System *Strike out C. P. 2½kw-LS*	1kw	1330	U
KGCX	Wolf Point, Mont.	E. E. Krebsbach	*1kw*	*1450*	*U*
KGFX	Pierre, S. Dak.	Dana McNeil *S. A. Mrs. Dana McNeil to operate station*	200w	630	S. H.
KGHL	Billings, Mont.	Northwestern Auto Supply Co., Inc.	1kw *5kw-LS*	780	U
KGKB	Tyler, Texas	East Texas Broadcasting Co.	100w *C. P. 250w-LS*	1500	U-D S. H. night *U*
KGKO	Wichita Falls, Tex. *C. P. Ft. Worth*	Wichita Falls Broadcasting Co.	250w 1kw-LS	570	U
KLS	Oakland, Calif.	E. N. & S. W. Warner d–b as Warner Bros.	250w	1440 ***1280*	D *U*
KMA	Shenandoah, Iowa	May Seed & Nursery Co. *Strike out **U-S. A. U-C. P. U*	1kw 5kw-LS	930	*U*
KMAC	San Antonio, Texas	W. W. McAllister	100w *C. P. 250w-LS*	1370	S-KONO
KOOS	Marshfield, Ore.	Pacific Radio Corp. *Strike out **1390*	250w	1200	D
KOVC	Valley City, N. D.	George B. Bairey *C. P. covered by license* *Strike out effective 7-2-36*	100w	1500	U
KOY	Phoenix, Ariz.	*Salt River Valley Broadcasting Co.*	500w 1kw-LS	1390	U
KPLC	Lake Charles, La.	T. B. Langford, R. M. Dean, and L. M. Sepaugh, Calcasieu Broadcasting Co.	100w *C. P. 250w-LS*	1500	U
KRBC	Abilene, Texas	Reporter Broadcasting Co. *C. P. covered by license* *Strike out effective 8-4-36*	100w *C. P. 250w-LS*	1420	U
KRMC	Jamestown, N. D.	Roberts MacNab Co. (Arthur L. Roberts, R. B. MacNab and A. J. Breitbach, Gen. Mgr.) *Effective 12-8-36*	100w	1310	Simultaneous D. S-KVOX night (C. P. only)
KRNR	Roseburg, Ore.	Southern Oregon Publishing Co.	100w *C. P. 250w-LS*	1500	D *U*
KRNT	Des Moines, Iowa T-N. of Des Moines	Iowa Broadcasting Co.	500w 1kw-*LS* *C. P. 1kw-5kw-LS*	1320	U
KSCJ	Sioux City, Iowa	Perkins Brothers Co. (The Sioux City Journal)	1kw 2½kw-LS *C. P. 5kw-LS*	1330	U
KSO	Des Moines, Iowa T-N. of Des Moines	Iowa Broadcasting Co.	500w 1kw-LS *C. P. 2½kw-LS*	1430	U
KSRO	*Santa Rosa, Calif.*	*The Press Democrat Publishing Co.* *Effective 12-8-36*	*250w*	*1310*	*D (C. P. only)*
KSUN	Lowell, Ariz.	Copper Electric Co., Inc.	100w *250w-LS*	1200	U
KTAT	Fort Worth, Tex. T-Birdville	*Tarrant Broadcasting Co.*	1kw	1240	U
KTSM	El Paso, Tex.	Tri-State Broadcasting Co., Inc.	100w *C. P. 250w-LS--Permanent WDAH's schedule*	1310	S-WDAH *authority to carry*
KVGB	*Great Bend, Kansas*	*Ernest Edward Ruehlen*	*100w*	*1370*	*U (C. P. only)*

Call Letters	*Main Studio Location*	*Name of Licensee*	*Power*	*Frequency (kc)*	*Time Designation*
KVOX	Moorhead, Minn.	Robert K. Herbst	100w	1310	Simultaneous D. S-KRMC night (C. P. only)
		Effective 12-8-36			
KWYO	Sheridan, Wyo.	Big Horn Broadcasting Co., Inc.	100w *250w-LS*	1370	U
KYOS	Merced, Calif.	Merced Star Publishing Co. *C. P. covered by license*	250w	1040	D
WAGF	Dothan	*John T. Hubbard, Julian C. Smith and Fred C. Moseley, a partnership, d-b as Dothan Broadcasting Co.*	250w	1370	D
WAML	Laurel, Miss.	New Laurel Radio Station	100w	1310	*U*
WAPO	Chattanooga, Tenn.	W. A. Patterson *C. P. covered by license* *Strike out effective 9-8-36*	100w	1420	D
WATL	Atlanta, Ga.	J. W. Woodruff, tr. as Atlanta Broadcasting Co.	100w *C. P. 250w-LS*	1370	U
WATR	Waterbury, Conn.	The WATR Company, Inc. *Strike out C. P. 250w--1290-U*	100w	1190	L-WOAI
WAYX	Waycross, Ga.	E. F. Sapp and S. F. Sapp, *d-b* as Waycross Broadcasting Co. *C. P. covered by license* *Strike out Effective 7-7-36*	100w	1200	U
WBBZ	Ponca City, Okla.	Estate of C. L. Carrell, Deceased, Howard Johnson, (Rep.) *S. A. to Adelaide Lillian Carrell to operate station*	100w	1200	U
WBCM	Bay City, Mich. T-Hampton Twp.	James E. Davidson	500w ***1kw*	1410	U
WBEN	Buffalo, N. Y. T-Martinsville	WBEN, Incorporated	1kw *5kw-LS*	900	U
WCAL	Northfield, Minn.	St. Olaf College *Strike out C. P. 5kw-760-D-S-WLB*	1kw 2½kw-LS	1250	S. H.
WCAX	Burlington, Vt.	Burlington Daily News, Inc.	100w *C. P. 250w-LS*	1200	S. H.
WCAZ	Carthage, Ill.	Superior Broadcasting Service, Inc.	100w *C. P. 250w*	1070	D
WCMI	Ashland, Ky.	The Ashland Broadcasting Co.	100w *250w-LS*	1310	U
WDAF	Kansas City, Mo. *C. P. T-nr. Kansas City*	Kansas City Star Co.	1kw 5kw-LS	610	U
WDEV	Waterbury, Vt.	Mrs. Mary M. Whitehill, Executrix, Estate of Harry C. Whitehill. *S. A. Charles B. Adams, Adm., Estate Harry C. Whitehill (deceased) to operate station instead of Mary M. Whitehill (deceased)*	500w	550	D
WEAU	Eau Claire, Wisc.	Central Broadcasting Co. *Strike out Effective 9-15-36*	*1kw*	1050	D (C. P. only)
WEHS	Cicero, Ill.	*Strike out all particulars*			
WFBG	Altoona, Pa.	The Gable Broadcasting Co. (Lessee)	100w *C. P. 250w-LS*	1310	S-WJAC
WGRC	New Albany, Ind	North Side Broadcasting Corp. *C. P. covered by license* *Strike out Effective 5-12-36*	250w	1370	D
WGST	Atlanta, Ga.	Georgia School of Technology	500w-1kw-LS *C. P. 1kw*-5kw-LS **1kw	890	U
WHAZ	Troy, N. Y.	Rensselaer Polytechnic Institute	500w ***1kw*	1300	S-WBBR,WEVD, WFAB
WHFC	Cicero, Ill.	WHFC, Incorporated	100w C. P. 250w-LS	1420	*U*
WHIP	Hammond, Ind.	*Strike out all particulars*			
WIBX	Utica, N. Y.	WIBX, Incorporated	100w 300w-LS	1200	U
	C. P. T-Town of Marcy		*250w-LS*		
WJRD	Tuscaloosa, Ala.	James R. Doss, Jr. *C. P. covered by license* *Strike out effective 8-11-36*	100w	1200	D
WKBI	Cicero, Ill.	*Strike out all particulars*			

Call Letters	Main Studio Location	Name of Licensee	Power	Frequency (kc)	Time Designation
WLB	Minneapolis, Minn. T-St. Paul	University of Minnesota	1kw	1250	S. H.
		Strike out C. P, 5kw-760-D-S-WCAL			
WMBO	Auburn, N. Y.	WMBO, Incorporated	100w *C. P. 250w-LS*	1310	U
WPRO	Providence, R. I. T-East Providence	Cherry and Webb Broadcasting Co.	250w *C. P. 500w-1kw-LS*	630	U
WTAD	Quincy, Ill.	Illinois Broadcasting Corp.	500w *C. P. 1kw*	900	D
WTCN	Minneapolis, Minn. T-Rose Twp.	Minnesota Broadcasting Corp.	1kw 5kw-LS	1250	S. H.
		*Strike out ** U*			
WWAE	Hammond, Ind.	Hammond-Calumet Broadcasting Corp.	100w	1200	*U-D.* *S-WFAM night*

**See Abbreviations—Lists of January 1, 1936.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity for hearing to show cause why cease and desist orders should not be issued against them:

No. 2997. A complaint has been issued against **National Hops Co.,** 664 North Michigan Ave., **Chicago,** a broker dealing with members of the brewery trade, charging unfair competition in promoting the sale of hops, in violation of the Federal Trade Commission Act.

Among unfair practices charged in the complaint were the circularization by the respondent company, trading as National Hops Clearing House, of bulletins and other forms of publicity to the brewing trade in which it allegedly disparaged competitor brokers and dealers by charging that contracts made between brewers and competitor brokers and dealers were illegal and were the means of exacting excessive profits and tribute from brewers.

The respondent company is charged with asserting that brewers having contracts with hops producers and dealers for supplying the brewers with their requirements for a fixed period of time would pay a total of $10,000,000 to $12,000,000 more for hops than they would if dealing in the open market.

Nos. 3000-3007, inc. False and misleading representations as to the amount of interest charged purchasers of automobiles under deferred payment plans are alleged in eight complaints charging violation of Section 5 of the Federal Trade Commission Act, which forbids unfair competition in commerce.

The eight complaints name 21 respondents, including both automobile companies and automobile financing companies. In addition to the automobile manufacturing companies, the list of respondents includes the **General Motors Corporation** and the sales corporation of the **Chrysler** group. Respondent automobile companies are:

The Nash Motors' Company, Kenosha, Wis.; General Motors Corporation, Detroit, and its subsidiaries which produce **Chevrolet, Olds, Pontiac, Buick** and **Cadillac cars; Chrysler Corporation, Detroit,** and its subsidiaries, **Chrysler Sales Corporation,** and those manufacturing **DeSoto, Dodge** and **Plymouth cars; Graham-Paige Motors Corporation, Detroit; Hudson Motor Car Company, Detroit; Ford Motor Company, Dearborn, Mich.; Reo Motor Car Company, Lansing, Mich.,** and **Packard Motor Car Company, Detroit.**

Financing companies named as respondents in the complaints are:

General Motors Acceptance Corporation, New York City, joined with the **General Motors** group; **Commercial Credit Company, Baltimore,** joined with **Chrysler Corporation** and its subsidiaries; **Universal Credit Corporation, Detroit,** with **Ford Motor Company,** and **Commercial Investment Trust Corporation, New York City,** with **Graham-Paige Motors Corporation** and **Hudson Motor Car Company.**

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

Nos. 1773-1790-2709-2763-2871-2890-2920. Five companies and two individuals have been ordered to discontinue selling candy so packed and assembled that sales to ultimate purchasers are made, or may be made, by means of a lottery, gaming device or gift enterprise. The respondents are:

Quaker City Chocolate & Confectionery Co., 2134 Germantown Ave., **Philadelphia; Pasquale Margarella,** 477 Broome St., **New York City; John H. Dockman & Son, Inc.,** 32 E. Montgomery St., **Baltimore; Kroekel-Oetinger, Inc.,** 4655 Stenton Ave., **Philadelphia; South Bend Distributing Co., Inc.,** 210 E. Jefferson St., **South Bend, Ind.; Queen Anne Candy Co.,** 1039 Sixth Ave., South, **Seattle, Wash.;** and **Jerome C. Claeys,** trading as **J. C. Claeys,** 510 Leland Ave., **South Bend, Ind.**

Some of the respondents had been charged with packing in the same assortment pieces of candy of uniform size and shape having centers of a different color, together with a number of larger pieces and a box of candy which were given as prizes to the purchaser procuring a piece of candy with a center of a particular color.

No. 1847. E. H. Snow, trading as Snow's Hatcheries and as Snow's Incubator Co., Sleepy Eye, Minn., signed a stipulation to cease advertising that the blood-testing method he uses will make baby chicks sold by him grow faster, start laying earlier or become better egg producers than those which have not been blood-tested, and that his method of blood-testing is a protection against pullorum in chicks, unless other measures recommended in the regulations of the Bureau of Animal Industry of the United States Department of Agriculture or of the Livestock Sanitary Board of the State of Minnesota are observed. He also will stop making representations implying that employees who make the blood tests are qualified veterinarians or licensed by the Minnesota board referred to, or that his so-called "Snow's Hatcheries Improvement Association" has any official connection with that board, when such is not a fact.

No. 1848. Morris Meyrowitch, trading as Em Em Knitting Mills, 1370 Broadway, New York, stipulates that in the sale of knitted garments, such as sweaters, bathing suits, jackets and suits, he will cease using the words "Knitting Mills" as part of his trade name, in printed matter or on boxes shipped in interstate commerce so as to imply that he makes the products sold by him or that he owns or controls a factory in which such products are manufactured, when such is not the fact.

No. 1849. E. Frederics, Inc., 235-247 E. 45th St., New York, engaged in the manufacture and sale of a machine designated Frederics' "One-Minute Wireless Wave", will stop advertising that his machine will produce a complete permanent wave in one minute and one as lasting as naturally curly hair, and that no heat is used when permanent waves are given with the machine.

No. 1851. Mathushek Piano Manufacturing Co., 132nd St. and Alexander Ave., New York, manufacturing and selling pianos, advertises one type as "Cabinet Model Spinet Grand." Under its stipulation, the company agrees to discontinue use of the word "grand" as a trade name, or part thereof, by which to designate any piano not having its strings placed horizontally, with gravity action, and not possessing those tonal and other qualities associated by the trade and the purchasing public with grand pianos.

No. 1852. Form Maid Coat Co., Inc., 545 Eighth Ave., New York, stipulates that in the sale of women's cloth coats it will cease using on labels the coined word "Kam-L-Kloth" as descriptive of a product not composed of camel's hair. The company also will discontinue use of that coined word or any simulation of the word "camel", alone or with a picture of a camel, and in combination with the word "wool", so as to imply that the product is composed

of both wool and camel's hair and contains each of such material in substantial quantity, when such is not a fact. The stipulation provides that if the coat is composed in substantial part of both wool and camel's hair and the words "wool" and "Kam-L-Kloth" are used to designate its content, then such words shall be displayed in type equally conspicuous and in a manner so as not to improperly indicate that the content of one of the materials is substantially greater than the content of the other.

No. 2237. Paul F. Beich Co., with offices and manufacturing plants at **Chicago** and **Bloomington, Ill.,** has been ordered to cease and desist from selling and distributing to jobbers and wholesalers candy so packed and assembled that sales to the general public are to be made by means of a lottery, gaming device or gift enterprise.

The order also prohibits the respondent company from furnishing dealers with push cards, either with assortments of candy or separately, and bearing statements informing purchasers that the candy is being sold by lot or chance.

No. 2248. Discontinuance of false representations concerning "Avery Sugar Curing Smoke Salt" has been directed in an order to cease and desist entered against **Avery Salt Company, Scranton, Pa.**

The order prohibits the respondent company from using the word "smoke", or any other words implying the use of smoke, to designate salt sold for curing, preserving, smoking or flavoring meat, unless the salt so described has been directly subjected to the action of smoke from burning wood, during the course of its combustion, sufficiently to acquire from such source alone all of its smoke effects for use in curing, preserving, smoking or flavoring meats.

Nos. 2326 and **2324. The Springfield Metallic Casket Co., Springfield, Ohio,** and **National Grave Vault Co., of Galion, Ohio,** have been served with orders to cease and desist from certain unfair representations in the sale of metal burial vaults.

The order prohibits the Springfield Company from representing in purported certificates of warranty or in advertising that the metal of which its vaults are made withstands the ravages of time, and resists rust and corrosion; that the vaults will remain waterproof and airtight when placed underground, for fifty years or any fixed duration of time; and that they are waterproof or airtight.

No. 2399. Conde Nast Publications, Inc., of **New York City** and **Greenwich, Conn.,** publisher of *Vogue* magazine, has been ordered to discontinue certain unfair competitive practices in promoting the sale of women's garments through use of Vogue magazine, in violation of the Federal Trade Commission Act.

The order directs cessation of a plan whereby the Nast company enters into contracts with selected manufacturers and retailers of women's garments, choosing certain models and featuring them in Vogue magazine, and publishing the names of the selected retailers in various cities who handle such merchandise. These contracts require the manufacturers not to sell such garments in a particular city where Vogue has agreements with retailers to any retailer except those selected by the publisher. The plan also includes contracts with the selected retailers requiring them to observe and maintain the resale prices fixed and quoted by the publishing company for each garment, the name of the retailer's store to be published as a retail outlet for the garments featured.

Nos. 2425-2478-2486. Three companies have been ordered to discontinue representing through use of the words "Distillers" or "Distillery" in their corporate names, on labels, or in any other manner, that they are distillers of the whiskies, gins or other spirituous beverages they sell, that they manufacture such products through the process of distillation, or that they own or operate places where they distill spirituous beverages, unless and until they actually own or operate such places.

Named as respondents in the three orders to cease and desist are **Gold Seal Distillers, Inc.,** 78 W. Van Buren St., **Chicago; Valley Springs Distillery, Inc.,** 3512-26 Carroll Ave., **Chicago;** and **United Distillers & Winers, Inc.,** 451 W. Larned St., **Detroit.**

No. 2481. Ambur Distilleries, Inc., 523 N. Jackson St., **Milwaukee,** has been ordered to discontinue representing through use of the word "Distilleries" in its corporate name or in advertising matter that it is a distiller of the whiskies, gin or other spirituous beverages it sells, that such products are manufactured by it through the process of distillation, or that it owns or operates a plant in which its spirituous beverages are distilled, until it actually does own or operate such a plant.

No. 2516. Carey Salt Co., of **Hutchinson, Kans.,** has been ordered to discontinue, in connection with the sale of salt, certain unfair representations deemed to be in violation of the Federal Trade Commission Act.

The respondent company is directed to cease using the word "smoke", or any word signifying smoke, to describe salt sold for curing, preserving, smoking or flavoring meats, except under certain conditions. The conditions are that the salt so described shall have been directly subjected to the action and effect of smoke from burning wood during the process and course of its combustion sufficiently to acquire from such source alone all of its smoke or smoke effects.

No. 2712. The Marion Vault Manufacturing Company, Marion, Ohio, has been ordered to discontinue, in the sale of metal burial vaults, certain unfair representations deemed to be in violation of the Federal Trade Commission Act.

The respondent company is directed to cease representing, in purported certificates of warranty or guarantees, or in advertising, that its new "Imperial Air Seal Vaults" are water-tight either at the time of interment or after burial, or that these vaults will endure as water-proof under all burial conditions for 50 years or for any fixed period of time.

Other representations prohibited are that the new "Imperial Air Seal Vaults" will give permanent protection after burial; that the double seal of its "Gold Seal Burial Vaults" is permanently secure and gives permanent protection; that such vaults will endure against vermin, moisture and water, and are air-proof when buried.

FTC CASES DISMISSED

No. 2436. An order closing its case against **C. Rosenblum, Inc., Baltimore, Md.,** charged with using unfair methods of competition in the sale of paint, has been entered by the Federal Trade Commission.

The case was closed without prejudice to the right of the Commission to reopen it should the facts so warrant.

No. 2746. The Commission has also entered an order of dismissal in the matter of Friedman Silver Co., Inc., 1226 Flushing Ave., Brooklyn, N. Y., charged in a Commission complaint with using unfair competition in connection with the sale of silverplated hollow ware.

It was ordered that the allegations of the complaint with respect to the alleged misleading use by the respondent of the letters "E. P. N. S." to signify that the article so designated was electroplated nickel silver, be dismissed because of failure of proof.

The Commission ordered that the case growing out of the alleged misleading use of the letters "W. M. M." to signify that embossed decorations on an article consist of white metal, be closed without prejudice to the Commission's right to reinstate and resume prosecution of the case should the facts so warrant.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, December 14

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Virgil V. Evans, Gastonia, N. C.—C. P., **1420 kc.,** 100 watts, unlimited time.

WJBR—J. B. Roberts, Gastonia, N. C.—Modification of C. P., **1420 kc.,** 100 watts, unlimited time.

KMPC—Beverly Hills Broadcasting Corp., Beverly Hills, Calif.—Transfer of control of corporation; **710 kc.,** 500 watts, limited time.

Tuesday, December 15

HEARING BEFORE AN EXAMINER

(Broadcast)

WAAB—Bay State Broadcasting Corp., Boston, Mass.—Modification of license, **1410 kc.,** 500 watts, 1 KW LS, unlimited time. Present assignment: **1410 kc.,** 500 watts, unlimited time.

WLLH—Merrimac Broadcasting Co., Inc., Lawrence, Mass.—Special experimental authority, **1370 kc.,** 10 to 100 watts, unlimited time, synchronously with WLLH. Special assignment: **1370 kc.,** 100 watts, 250 watts LS, unlimited time.

NEW—New England Radio Corp., Bridgeport, Conn.—C. P., **1420 kc.,** 100 watts, daytime.

WNBC—State Broadcasting Corp., New Britain, Conn.—C. P., **1380 kc.**, 250 watts, 1 KW LS, unlimited time. Present assignment: **1380 kc.**, 250 watts, daytime.

Wednesday, December 16

HEARING BEFORE AN EXAMINER

(Broadcast)

NEW—Falls City Broadcasting Corp., Falls City, Nebr.—C. P., **1310 kc.**, 100 watts, unlimited time.

KGFW—Central Nebraska Broadcasting Corp., Omaha, Nebr.—C. P., **1310 kc.**, 100 watts, unlimited time.

WMBR—Florida Broadcasting Co., Jacksonville, Fla.—C. P., **1120 kc.**, 1 KW, unlimited time.

FURTHER HEARING BEFORE AN EXAMINER

WCCP—Massachusetts Broadcasting Corp., Boston, Mass.—Modification of license, **1130 kc.**, 500 watts, limited until LS at KSL, Salt Lake City.

Thursday, December 17

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-274:

NEW—Cache Valley Broadcasting Co., Logan, Utah.—C. P., **1200 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-277:

NEW—J. T. Bilben and N. G. Barnard, Walker, Minn.—C. P., **1310 kc.**, 100 watts, unlimited time.

Examiner's Report No. I-287:

NEW—C. A. Rowley, Ashtabula, Ohio.—C. P., **940 kc.**, 250 watts, daytime.

Examiner's Report No. I-279:

NEW—Eastern States Broadcasting Corp., Bridgeton, N. J.—C. P., **1210 kc.**, 100 watts, daytime.

Examiner's Report No. I-289:

NEW—Saginaw Broadcasting Co., Saginaw, Mich.—C. P., **1200 kc.**, 100 watts, 250 watts LS, specified hours.

NEW—Harold F. Gross and Edmund C. Shields, Saginaw, Mich.—C. P., **950 kc.**, 500 watts.

Friday, December 18

HEARING BEFORE AN EXAMINER

(Broadcast)

WLMU—Lincoln Memorial University, Middlesboro, Ky.—C. P., **1210 kc.**, 100 watts, unlimited time.

WLMU—Lincoln Memorial University, Middlesboro, Ky.—Modification of C. P., **1210 kc.**, 100 watts, 250 watts LS, unlimited time. Present assignment: **1210 kc.**, 100 watts, unlimited time.

KRLH—Clarence Scharbauer, Midland, Tex.—Modification of license, **1210 kc.**, 100 watts, daytime.

KALB—Alexandria Broadcasting Co., Inc., Alexandria, La.—Modification of license, **1210 kc.**, 100 watts, unlimited time.

APPLICATIONS GRANTED

WGCM—WGCM, Inc., Gulfport, Miss.—Granted C. P. to install new equipment.

WOV—International Broadcasting Corp., New York City.—Granted C. P. to install new equipment and vertical radiator, effective December 15, 1936.

WMBC—Michigan Broadcasting Co., Detroit, Mich.—Granted license to cover C. P. as modified for authority to install new equipment, extend commencement date to 9-22-36 and completion date to 12-21-36.

KJR—Fisher's Blend Station, Inc. (Lessee), Seattle, Wash.—Granted license to cover C. P. authorizing installation of new equipment and local move of station to 26th Ave. S. W. and Florida Street, West Waterway (using antenna system of KOMO). Also granted authority to determine operating power by direct measurement of antenna power.

KOMO—Fisher's Blend Station, Inc., Seattle, Wash.—Granted authority to determine operating power by direct measurement of antenna power.

KUJ—KUJ, Inc., Walla Walla, Wash.—Granted license to cover C. P. for changes in composite equipment.

WTAD—Illinois Broadcasting Co., Quincy, Ill.—Granted license to cover C. P. and modifications for increase in power from 500 watts to 1 KW; **900 kc.**, daytime.

WBHP—Wilton Harvey Pollard, Huntsville, Ala.—Granted modification of C. P. approving transmitter at Athens, Pike U. S. Highway No. 72; studio at Struve Bldg., and approval of vertical radiator.

WHAS—The Courier Journal Co. and The Louisville Times Co., Louisville, Ky.—Granted voluntary assignment of license to the Louisville Times Co.; **820 kc.**, 50 KW, unlimited time.

WGL—Westinghouse Electric and Manufacturing Co., Fort Wayne, Ind.—Granted voluntary assignment of license to Westinghouse Radio Stations, Inc.; **1370 kc.**, 100 watts, unlimited time.

KGDE—Charles L. Jaren, Fergus Falls, Minn.—Granted authority to install automatic frequency control; **1200 kc.**, 100 watts night, 250 watts day; unlimited.

W3XEP—RCA Mfg. Co., Inc., Camden, N. J.—Granted C. P. to install new aural equipment; increase power of aural transmitter to 330 KW; also granted license covering same.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KAST, Astoria, Ore.; KBPS, Portland, Ore.; KELD, El Dorado, Ark.; KERN, Bakersfield, Calif.; KNOW, Austin, Texas; KONO, San Antonio, Texas; KOTN, Pine Bluff, Ark.; KSLN, Midland, Texas; KSLM, Salem, Ore.; KWBG, Hutchinson, Kans.; KXO, El Centro, Calif.; WACO, Waco, Texas; WAGM, Presque Isle, Maine; WATL, Atlanta, Ga.; WBNY, Buffalo, N. Y.; WCNW, Brooklyn, N. Y.; WDNC, Durham, N. C.; WELL, Battle Creek, Mich.; WEOA, Evansville, Ind.; WGAL, Lancaster, Pa.; WGL, Fort Wayne, Ind.; WHBB, Edgewood, Selma, Ala.; WHBQ, Memphis, Tenn.; WHDF, Calumet, Mich.; WHDL, Olean, N. Y.; WHEF, Kosciusko, Miss.; WHFC, Cicero, Ill.; WKBZ, Muskegon, Mich.; WOPI, Bristol, Tenn.

KIDO—Frank L. Hill and C. G. Phillips, d/b as Boise Broadcast Station, Boise, Idaho.—Granted renewal of license for the period ending May 1, 1937.

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Granted renewal of license for the period ending June 1, 1937.

SPECIAL AUTHORIZATIONS

WRAX—WRAX Broadcasting Co., Philadelphia, Pa.—Granted special temporary authority to operate during daylight hours for the period of 1 day, effective December 11, with power of 250 watts using directional antenna.

KGKO—Wichita Falls Broadcasting Co., Wichita Falls, Texas.—Granted extension of special temporary authority to operate a 50-watt portable test transmitter between the hours of 12 midnight and 6 a. m., CST, for the period December 10, 1936, to January 8, 1937, for the purpose of selecting a transmitter site in Fort Worth area.

WLBC—Donald A. Burton, Muncie, Ind.—Granted special temporary authority to operate simultaneously with WTRC from 6 to 7:30 p. m., CST, on the nights of January 1, 2, 4, 8, 12, 13, 15, 16, 19, 22, 23, 28, 29 and 30, 1937, in order to broadcast basketball games of Ball State Teachers College, Muncie Central High School and Burris High School.

WSYB—Philip Weiss, trading as Philip Weiss Music Co., Rutland, Vt.—Granted special temporary authority to operate from 9 to 10 a. m., EST, for the period beginning December 15, 1936, and ending no later than January 1, 1937, in order to broadcast Rutland County Community programs.

KFDY—South Dakota State College, Brookings, S. Dak.—Granted special temporary authority to operate from 7 to 9:15 p. m., CST, Thursday, December 10, in order to broadcast District Parent Teachers Association program.

WHDF—The Upper Michigan Broadcasting Co., Calumet, Mich.—Granted special temporary authority to operate from 12:30 to 1 p. m., CST, December 9, 16, 23 and 30, 1936, in order to broadcast a religious program of Calvary Northland Missions Stations of Ontonagen, Mich., and vicinity; also operate from 8 to 10:30 a. m., and 12:30 p. m. to 3:30 p. m.,

CST, Cbristmas Day, December 25, in order to broadcast Cbristmas music.

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Granted special temporary authority to remain on the air from local sunset (4:15 p. m., EST) until 5 p. m. eacb Tbursday, Saturday and Sunday, during montb of December, namely, December 5, 6, 10, 12, 13, 17, 19, 20, 24, 26, 27 and 31, 1936, in order to broadcast programs of the 26th Infantry Band at Plattsburg Barracks, and hocky games from Lake Placid Arena. To operate on **1310 kc.,** witb 100 watts only.

KGEK—Elmer G. Beehler, Sterling, Colo.—Granted special temporary authority to operate from 1:30 to 5 p. m., EST, December 23, 1936, in order to take care of request for time by cburches and towns to put on Christmas Day program from KGEK, as good will programs.

KGU—Marion A. Mulrony & Advertiser Publishing Co., Ltd., Honolulu, T. H.—Granted special temporary authority to operate from 10:45 p. m. to 12:45 p. m., LST, on tbe nights of December 11 and 16, in order to broadcast two football games for the benefit of Widows and Orpbans of Police Officers, and for the benefit of the Sbriners Hospital for Crippled Children, and to operate from 10:45 p. m. to 12:45 p. m., LST, on the nights of December 24 and 31, 1936, in order to broadcast special programs in connection with Christmas and New Year celebrations.

WAGF—Dotban Broadcasting Co., Dothan, Ala.—Granted special temporary authority to operate unlimited time, Wednesday, December 23, with reduced power of 100 watts at local sunset, in order to broadcast annual Cbristmas Party in cooperation with all local civic organizations in their drive for Christmas funds for the needy.

APPLICATIONS DENIED

KRSC—Radio Sales Corp., Seattle, Wash.—Denied special temporary autbority to operate unlimited time for the period December 1 to 31, 1936, pending construction of vertical radiator.

Tbe following applications, heretofore set for hearing, were denied as in cases of default:

NEW—Curtis P. Ritchie, Trinidad, Colo.—C. P., **1310 kc.,** 100 watts, unlimited.

NEW—William Avera Wynne, Wilson, N. C.—C. P., **1310 kc.,** 100 watts, daytime.

APPLICATIONS DISMISSED

Tbe following applications, heretofore set for hearing, were dismissed at request of applicants:

WCBA—B. Bryan Musselman, Allentown, Pa.—Modification of license, **1440 kc.,** 1 KW, sbares WSAN.

WSAN—WSAN, Inc., Allentown, Pa.—Modification of license, **1440 kc.,** 1 KW, shares WCBA.

WAWZ—Pillar of Fire, Zarepbatb, N. J.—Modification of license, **1330 kc.,** 1 KW, shares with WBNX.

SET FOR HEARING

NEW—The Service Life Insurance Company, Omaha, Nebr.—Application for C. P. for new broadcast station at Omaha, Nebr., to operate on **1500 kc.,** 100 watts, unlimited time, exact transmitter site and antenna design to be determined subject to Commission approval.

NEW—Northwest Publications, Inc., Duluth, Minn.—Application for C. P. for new broadcast station at Duluth, Minn., to operate on **920 kc.,** 250 watts, daytime only, exact transmitter site to be determined subject to Commission approval.

NEW—Paul J. Gollhofer, Brooklyn, N. Y.—Application for C. P. for new broadcast station at Brooklyn, N. Y., to operate on **1500 kc.,** 100 watts night, 100 watts day, specified hours (hours of WMBQ), exact transmitter and studio sites to be determined with Commission approval.

NEW—Eugene Meyer & Co., d/b as Tbe Washington Post, Washington, D. C.—Amended application for C. P. for new broadcast station at Washington, D. C., to operate on **1310 kc.,** 100 watts nigbt, 250 watts day, unlimited time, exact transmitter site to be determined with Commission's approval.

NEW—Hearst Radio, Inc., Albany, N. Y.—Amended application for C. P. for new broadcast station at Albany, N. Y., to operate on **1240 kc.,** 1 KW, unlimited time, using directional antenna system for botb day and nigbttime operation.

NEW—The Metropolis Co., Jacksonville, Fla.—Application for C. P. for new broadcast station at Jacksonville, Fla., whicb was amended on 10-28-36 requesting authority to operate on **1290 kc.,** 250 watts, unlimited time, exact transmitter site to be determined with Commission's approval.

NEW—The Waterloo Times-Tribune Publishing Company, Waterloo, Iowa.—Amended application for C. P. for new broadcast station at Waterloo, Iowa, to operate on **1370 kc.,** 100 watts, day only.

NEW—Loyal E. King, d/b as Radio & Television Research Co., Los Angeles, Calif.—Amended application for new special broadcast station on an experimental basis at Los Angeles, Calif., to operate on **1570 kc.,** 1 KW, unlimited time.

KWK—Thomas Patrick, Inc., St. Louis, Mo.—Hearing before Broadcast Division on application for modification of license to increase nigbttime power to 5 KW from 1 KW.

WSPR—Quincy A. Brackett, Lewis B. Breed and Edmund A. Laport, co-partners d/b as Connecticut Valley Broadcasting Co., Springfield, Mass.—Hearing before Broadcast Division on application for modification of license to cbange assignment to **1140 kc.,** 250 watts night, 500 watts day, unlimited time.

WMIN—Edward Hoffman, St. Paul, Minn.—Application for modification of license to change from local channel **1370 kc.** to regional cbannel **1360 kc.,** increase power from 100 watts night, 250 watts day, unlimited, to 250 watts, unlimited.

WKZO—WKZO, Inc., Kalamazoo, Mich.—Application for special experimental authorization to operate witb 250 watts night, 1 KW day, unlimited time for period from date of approval to March 1, 1937.

NEW—Wichita Broadcasting Co., Wichita Falls, Tex.—Amended application for C. P. for new station at Wichita Falls, Tex., to operate on **620 kc.,** 250 watts nigbt, 1 KW day, unlimited time.

NEW—West Texas Broadcasting Co., Wichita Falls, Tex.—Amended application for C. P. for new broadcast station to operate on **1380 kc.,** 1 KW, unlimited time, employing directional antenna for nighttime use.

ORAL ARGUMENTS CANCELLED

NEW—Ex. Rep. No. 1-272: Gulf Coast Broadcasting Co., Corpus Christi, Texas.—Oral argument scheduled for December 10, 1936, cancelled.

NEW—Ex. Rep. No. 1-283: Comer Thomas, Bellingham, Wash.—Oral argument scheduled for Jannuary 7, 1937, cancelled.

NEW—Ex. Rep. No. 1-279: Eastern States Broadcasting Corp., Bridgeton, N. J.—Oral argument scheduled for December 10, 1936, cancelled.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

WIOD—Isle of Dreams Broadcasting Corp., Miami, Fla.—Granted extension of program test period 30 days from December 1, 1936.

KMLB—Liner's Broadcasting Station, Inc., Monroe, La.—Granted extension of program test period 30 days from November 27, 1936.

W9XPV-W9XPN—WDZ Broadcasting Co., Tuscola, Ill.—Granted authority to operate W9XPV as licensed, W9XPN under service tests to relay broadcast material connection WPA construction projects on December 6, 7, 9, 11, 13, 14, 16, 18, 20, 21, 23, 25, 27, 28, 30 and January 1, 1937.

WCBA—B. Bryan Musselman, Allentown, Pa.—Granted extension special temporary authority to use 50-watt portable test transmitter between the hours of 12 midnight and 6 a. m., EST, for a period beginning December 1 to December 10, 1936; provided no operation occurs during silent periods designated for montbly monitoring scbedule.

WSAN—WSAN, Inc., Allentown, Pa.—Granted extension of special temporary authority to use 50-watt portable test transmitter between hours of 12 midnight and 6 a. m., EST, for period December 1 to December 10, 1936, provided no operation occurs during silent periods designated for monthly monitoring scbedule.

WBBZ—Adelaide L. Carrell, Ponca City, Okla.—Granted extension of special temporary authority for Adelaide Lillian Carrell to operate station WBBZ for period December 1, 1936, to January 1, 1937.

KALE—KALE, Inc., Portland, Ore.—Granted extension of special temporary autbority to operate unlimited time for tbe period

December 1 to December 30, 1936, pending construction of vertical radiator.

KGCX—E. E. Krebsbach, Wolf Point, Mont.—Granted extension of special temporary authority to rebroadcast Naval Observatory time signals from NAA at Washington, D. C., for period December 1, 1936, to May 1, 1937.

KFNF—KFNF, Inc., Shenandoah, Iowa.—Granted extension of special temporary authority to operate simultaneously with WILL from 8 to 11 a. m., CST, daily except Sundays during month of December, 1936.

WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Granted extension of special temporary authority to operate with 50 watts power from local sunset to 11 p. m., EST, Tuesdays, Thursdays, Saturdays and Sundays during month of December, 1936, pending compliance with Rule 131.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted special temporary authority to operate simultaneously with WLBC from 7:30 p. m. to 9 p. m., CST, December 7, 1936, to broadcast high school football banquet.

WJTN—A. E. Newton, Jamestown, N. Y.—Granted voluntary assignment of C. P. from A. E. Newton to James Broadcasting Co., Inc.

Mutual Broadcasting System, Inc., Chicago, Ill.—Granted extension of authority to transmit commercial and sustaining programs by means of commercial telephone wire and through the telegraph office of the Canadian Pacific Railway at Windsor, Ontario, to station CKLW and the Canadian Broadcasting Corp. for period December 1, 1936, to June 1, 1937.

The Broadcast Division, upon its own motion, extended the effective date of its order of October 13, 1936, in granting the application of American Broadcasting Co. (WOL) for C. P. from December 1 to December 8, 1936.

The Broadcast Division, upon its own motion, extended the effective date of its order of November 17, 1936, in granting the application of Rensselaer Polytechnic Inst. (WHAZ) for modification of license, from December 1 to December 8, 1936.

The Broadcast Division, upon its own motion, extended the effective date of its order of November 17, 1936, in granting the application of Mrs. C. A. S. Heaton for C. P. from December 1 to December 8, 1936.

The Broadcast Division, upon its own motion, extended the effective date of its order of November 17, 1936, in granting the application of S. W. Warner and E. W. Warner, d/b as Warner Bros., for modification of license, from December 1 to December 8, 1936.

In the matter of the application of the Rensselaer Polytechnic Institute (WHAZ), Troy, N. Y., for modification of license, on which an order was heretofore entered on November 17, 1936, the Broadcast Division adopted and published a statement of facts and grounds for decision.

In the matter of the application of the American Broadcasting Co. (WOL), Washington, D. C., for C. P., on which an order was heretofore entered on October 13, 1936, the Broadcast Division adopted and published a statement of facts and grounds for decision.

Granted permission to Arthur T. George, Attorney, to file a brief in support of exceptions to the Examiner's proposed decisions in the matters of the applications of H. D. Pillsbury, N. R. Powley, C. E. Fleager, C. S. Casassa, F. J. Reagan, M. R. Sullivan and H. K. Taylor, Dockets Nos. 3383 to 3388, inclusive, and 3737, said brief to be filed concurrently with the filing of the exceptions. The Commission approved a telegram notifying Mr. George of its action.

ORAL ARGUMENTS

WKZO—Ex. Rep. 1-306: WKZO, Inc., Kalamazoo, Mich.—Oral argument granted to be held February 4, 1937.

NEW—Ex. Rep. 1-307: North Jersey Broadcasting Co., Inc., Paterson, N. J.—Oral argument granted to be held February 4, 1937.

MISCELLANEOUS

WPRO—Ex. Rep. 1-248: Cherry & Webb Broadcasting Co., Providence, R. I.—Extended effective date of order from December 15 to December 22, 1936.

KFOX—Ex. Rep. 1-233: Nichols & Warinner, Inc., Long Beach, Calif.—Extended effective date of order from December 15 to December 22, 1936.

KDYL—Ex. Rep. 1-242: Intermountain Broadcasting Corp., Salt Lake City, Utah.—Extended effective date of order from December 15 to December 22, 1936.

WHB—Ex. Rep. 1-229: WHB Broadcasting Co., Kansas City, Mo.—Extended effective date of order from December 15, 1936, to January 12, 1937.

NEW—United States Broadcasting Co., Columbus, Ohio.—Granted petition to waive Rule 104.6(b) regarding time for filing notice of appearance and decided to permit applicant's appearance to be received in re application for new radio station at Columbus, Ohio, to operate on **1310 kc.,** 100 watts, unlimited.

KFUO—Evangelical Lutheran Synod, St. Louis, Mo.—Granted petition asking Commission to withhold proceedings on application of KSD, Pulitzer Publishing Company, St. Louis, Mo., for modification of license. Directed Examiner to withhold the report on KSD hearing until the application of KFUO for authority to operate one-half time on **550 kc.,** sharing with KSD, is heard. KFUO application also requests change in equipment and operation with 5 KW day, 1 KW night using directional antenna.

The Commission, on its own motion, ordered a hearing de novo, on the applications of the Watertown Broadcasting Corp. (Docket 3374), and the Black River Valley Broadcasts, Inc. (Docket 3972), to be heard together with the applications of the Brockway Company for assignment of license and C. P. to move station WCAD from Canton, N. Y., to Watertown, N. Y.

APPLICATIONS RECEIVED

First Zone

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—License to cover construction permit (B1-P-109) as modified for new equipment, increase in power, and move of transmitter. **570**

WMBO—WMBO, Inc., Auburn, N. Y.—Authority to transfer control of corporation from Roy L. Albertson to Auburn Publishing Co., 180 shares common stock. **1310**

WHDL—Olean Broadcasting Co., Inc., Olean, N. Y.—License to cover construction permit (B1-P-787) for changes in equipment, change frequency, increase power, and move transmitter. **1420**

WNBF—Howitt-Wood Radio Co., Inc., Binghamton, N. Y.—License to cover construction permit (B1-P-1271) for new antenna and move of transmitter. **1500**

Second Zone

WKRC—WKRC, Inc., Cincinnati, Ohio.—Voluntary assignment of special experimental authorization (B2-SA-213) from WKRC, Inc., to Columbia Broadcasting System, Inc. **550**

WHAS—The Courier Journal Co. and The Louisville Times Co., Louisville, Ky.—Construction permit to install a vertical antenna; move transmitter from Rural Route No. 1, near Jeffersontown, Ky., to site to be determined, Oldham County, Ky. Amended: Changes in transmitter, and give definite transmitter site as 18⅞ miles from center of Louisville, Ky.; change name by omitting name of The Courier-Journal Company. **820**

WPAR—Ohio Valley Broadcasting Corp., Parkersburg, W. Va.—Authority to transfer control of corporation from Harold McWhorter, Marion McDowell and Wayne Van Gilder to The Exponent Co., 89 shares of common stock. **1420**

Third Zone

NEW—Wichita Broadcasting Co., Wichita Falls, Tex.—Construction permit for a new station to be operated on **620 kc.,** 1 KW, unlimited time. Amended to change requested power from 1 KW to 250 watts night, 1 KW day, and install vertical antenna instead of directional antenna. **620**

NEW—Wichita Broadcasting Co., Wichita Falls, Tex.—Construction permit for a new station to be operated on **630 kc.,** 1 KW, unlimited time. Amended to change frequency from **630 kc.** to **620 kc.** **620**

WKY—WKY Radiophone Co., Oklahoma City, Okla.—Authority to determine operating power by direct measurement of antenna. **900**

NEW—The Tribune Co., Tampa, Fla.—Construction permit for a
940 new station to be operated on **550 kc.,** 1 KW night, 5 KW daytime, unlimited time. Amended to change frequency from **550 kc.** to **940 kc.** and make changes in antenna.

KUOA—KUOA, Inc., Siloam Springs, Ark.—License to cover con-
1260 struction permit (B3-P-1070) for equipment changes, new antenna, increase in power, and move of station.

WATL—J. W. Woodruff and S. A. Cisler, d/b as Atlanta Broad-
1370 casting Company, Atlanta, Ga.—Voluntary assignment of construction permit (B3-P-1228) from S. A. Cisler, Jr., and J. W. Woodruff, d/b as Atlanta Broadcasting Co., to J. W. Woodruff, tr. as Atlanta Broadcasting Company.

KTEM—Bell Broadcasting Co., Temple, Tex.—License to cover
1370 construction permit (B3-P-657) as modified for a new station.

WGPC—Americus Broadcast Corp., Albany, Ga.—License to cover
1420 construction permit (B3-P-1077) as modified for new equipment, changes in antenna, and move of studio and transmitter.

KPLC—Calcasieu Broadcasting Co. (T. B. Lanford, R. M. Dean,
1500 L. M. Sepaugh), Lake Charles, La.—Modification of construction permit (B3-P-1407) for equipment changes, increase in day power and move of transmitter, further requesting approval of transmitter site at corner LaGrange and Ernest St., Lake Charles, La.

NEW—Eustace H. Taylor, Shawnee, Okla.—Construction permit for a new experimental broadcast station to be operated on **6425, 8655 kc.,** 5 watts (not in proper form).

Fourth Zone

KFRU—KFRU, Inc., Columbia, Mo.—License to cover construc-
630 tion permit (B4-P-1344) for new equipment.

WBBM—WBBM Broadcasting Corp., Chicago, Ill.—Voluntary
770 assignment of special experimental authorization (B4-SA-202) from WBBM Broadcasting Corp. to Columbia Broadcasting System, Inc.

KMA—May Seed and Nursery Co., Shenandoah, Iowa.—Modifica-
930 tion of license to change power from 1 KW night, 5 KW day, to 5 KW day and night.

WMFG—Head of the Lakes Broadcasting Company, Hibbing,
1210 Minn.—License to cover construction permit (B4-P-1213) for equipment changes, and increase in power.

WOC—Tri-City Broadcasting Co., Davenport, Iowa.—Construc-
1370 tion permit to change frequency from **1370 kc.** to **1450 kc.** and increase power from 100 watts night, 250 watts daytime, to 250 watts day and night (wrong form).

KCKN—The WLBF Broadcasting Co., Kansas City, Kans.—
1420 License to cover construction permit (B4-P-1377) for changes in equipment.

KSTP—National Battery Broadcasting Co., St. Paul, Minn.—
1460 License to cover construction permit (B4-P-888) for changes in equipment and move of transmitter.

Fifth Zone

KVI—Puget Sound Broadcasting Co., Inc., Tacoma, Wash.—Au-
570 thority to determine operating power by direct measurement of antenna.

KVI—Puget Sound Broadcasting Company, Inc., Tacoma, Wash.—
570 License to cover construction permit (B5-P-602) for new equipment, increase in power, and move of transmitter.

NEW—Vancouver Radio Corp., Vancouver, Wash.—Construction
880 permit for a new station to be operated on **880 kc.,** 250 watts, daytime.

KFVD—Standard Broadcasting Co., Inc., Los Angeles, Calif.—
990 Modification of license to change frequency from **1000 kc.** to **990 kc.**

KFVD—Standard Broadcasting Co., Inc., Los Angeles, Calif.—
1000 License to cover construction permit (B5-P-1389) for a new transmitter.

KSL—Radio Service Corporation of Utah, Salt Lake City, Utah.—
1130 Construction permit to make changes in transmitting equipment, install a vertical antenna, and increase power from 50 to 500 KW. Amended to make antenna changes.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Authority to in-
1200 stall a new automatic frequency control apparatus.

KDON—Monterey Peninsula Broadcasting Co., Del Monte, Calif.
1210 —Construction permit to change frequency from **1210 kc.** to **1280 kc.,** install a new transmitter, and increase power from 100 watts to 250 watts, 1 KW daytime. Amended to change requested frequency from **1280 kc.** to **1400 kc.**

KVOR—Out West Broadcasting Co., Colorado Springs, Colo.—
1270 Construction permit to install a new transmitter.

KGEZ—Donald C. Treloar, Kalispell, Mont.—Construction permit
1310 to install a new antenna and move transmitter from 1200 block Fourth Avenue, E., to 2¼ miles south of city limits, on Highway 93, Kalispell, Mont.

NEW—Chase S. Osborn, Jr., Fresno, Calif.—Construction permit
1440 for a new station to be operated on **1440 kc.,** 500 watts, unlimited.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

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DEC. 17, 1936

SEASON'S GREETINGS
to all
NAB MEMBERS
from the
WASHINGTON OFFICE STAFF

IN THIS ISSUE

DENIAL OF NEW STATION RECOMMENDED

Walker Jamar filed an application with the Federal Communications Commission asking for a construction permit for a new station to be erected at Duluth, Minn., to use 1200 kilocycles, 100 watts and unlimited time on the air.

Examiner Robert L. Irwin in Report No. I-314 recommended that the application be denied inasmuch as "the Commission having considered and denied the applicant's petition to withdraw the application, and the applicant having failed to submit evidence in support of his application, it is recommended that the same be denied."

NAB REPORTS BINDERS

New NAB REPORTS Binders for 1937-38 will be mailed to all members this month. The cost of the binders viz: $2.00, will be added to the invoices for dues as of January 1, 1937.

SUPREME COURT REMANDS KVOS CASE TO LOWER COURT BY UNANIMOUS DECISION

The United States Supreme Court in a decision rendered Monday in the case of broadcasting station KVOS, Bellingham, Wash., against the Associated Press, remanded the case to the lower court without taking jurisdiction itself. The unanimous decision was as follows:

SUPREME COURT OF THE UNITED STATES

No. 28.—October Term, 1936.

KVOS, Inc., Petitioner, *vs.* The Associated Press. } On Writ of Certiorari to the United States Circuit Court of Appeals for the Ninth Circuit.

[December 14, 1936.]

Mr. Justice Roberts delivered the opinion of the Court.

This suit was brought to enjoin petitioner, the proprietor of a radio station at Bellingham, Washington, from appropriating, using, or disseminating news gathered by the respondent or its members during the period such news has commercial value to respondent and its members. The prayers were for temporary and permanent relief. The district court directed the petitioner to show cause why an injunction should not be granted and entered a temporary restraining order.

In summary, the allegations of the bill follow.

Respondent is a New York corporation and petitioner a Washington corporation; "the damage to which complainant is being subjected . . . is in excess of the sum of Three Thousand ($3000.00) Dollars, exclusive of interest and costs, and the amount involved herein and in controversy herein is in excess of said sum of Three Thousand ($3000.00) Dollars, exclusive of interest and costs.

The respondent, a membership corporation, is composed of proprietors or representatives of newspapers published throughout the United States whose business is the gathering, by its own instrumentalities, and by exchange with members, and other means, news, intelligence, and information from all over the world for the benefit of its members, and distribution of the material so gathered amongst them for newspaper publication, conformably to the by-laws.

The respondent has respresentatives in every important capital and city in the world and has reciprocal arrangements for interchange of news with many important agencies in foreign countries; has more than twelve hundred members, each owning or representing a daily newspaper, each supplying respondent, as required by the by-laws, with the news gathered locally by the newspaper he represents; the cost of respondent's transactions, amounting yearly to many millions of dollars, is equitably divided among the members; the association's service to members is of financial and business importance to them, due to its promptness, accuracy, and impartiality; the by-laws require that the news furnished shall

remain confidential until publication has been fully accomplished by all members.

The petitioner conducts a radio station at Bellingham, Washington, and, as part of its daily broadcast, sends out, three times a day, morning, noon, and evening, what is styled "The Newspaper of the Air" in which petitioner announces what it claims to be, and what usually is, the leading and most interesting news of the day. The *Bellingham Herald,* published at Bellingham, is a member of the association and, under the by-laws, the respondent is entitled to be furnished by the *Herald* with all the news from the territory served by that paper; the *Seattle Post Intelligencer* and the *Seattle Daily Times* are published at Seattle, Washington, and are represented by memberships in the association which has the same rights to news gathered by those papers.

The petitioner broadcasts news as part of its business and, by so doing, enhances the profits obtained from advertising broadcasts; the newspapers affiliated with the respondent derive a large portion of their revenues from the sale of advertising space, the value of which depends in great measure upon the freshness and interest of the news furnished by them. The petitioner, in the conduct of its station, has become, and is, a competitor of respondent and its members in the obtaining and early distribution of news, for the purpose of popularizing advertising.

The petitioner has no organization of its own for gathering news, but adopts the practice of "pirating" news gathered by the respondent and its members. This practice consists in procuring copies of the *Herald,* the *Post Intelligencer,* and the *Daily Times* and broadcasting parts, or all, of items therein published, whether gathered by these newspapers or received by them from the respondent, the repetition being sometimes verbatim and sometimes a rearrangement of the wording. The copies of the three newspapers do not reach their subscribers for some time (in some cases as much as twenty-four hours) after publication; whereas petitioner, promptly obtaining the papers, is able to pirate and broadcast their contents and to anticipate the receipt of the news by the newspapers' subscribers. This practice constitutes unfair competition with the respondent; wrongfully deprives the respondent of the just benefits of its labors and expenditures; similarly injures respondent's members; and prejudices the respondent with its members.

The petitioner, though repeatedly requested to desist from the practice, has refused so to do, although neither the association nor any member has granted permission to make use of the news gathered by them; and the continuance by the petitioner of its practice will increasingly cause irreparable injury and damage to the respondent because the effort and expenditures to gather and and obtain news will be rendered largely without reward or value so far as concerns the territory served by petitioner's station.

Prior to the return day of the order to show cause why a temporary injunction should not issue, the petitioner filed a motion to dismiss, assigning the following grounds, amongst others: the bill fails to recite facts entitling the plaintiff to the relief prayed and is without equity; there is a non-joinder of parties plaintiff since the bill discloses that the *Bellingham Herald, Seattle Post Intelligencer,* and *Seattle Daily Times* are necessary parties; the court is without jurisdiction because the matter in controversy does not exceed three thousand dollars, exclusive of interest and costs, and an inspection of the allegations of the complaint shows the complainant cannot recover any amount in excess of three thousand dollars or any other amount and the sum named in the ad damnum clause of the complaint is not a true statement of complainant's damages and is not alleged in good faith, the facts being that the amount paid to the complainant for furnishing the Associated Press news in the city of Bellingham, to any of its members, is fixed and determined by the size of the city's population, and is not affected by any other condition and complainant has not lost any amount and never will lose any amount by reason of this controversy, and defendant is not a competitor of complainant in any sense of the word; the *Bellingham Herald* is the real party in interest and the Associated Press has no interest in the cause.

Affidavits were presented in support of and in opposition to the granting of an injunction, and counsel were heard upon the prayer for preliminary injunction and upon the motion to dismiss. The court found the allegations as to citizenship of the parties were true; found "the amount in controversy herein, by reason of defendant's motion to dismiss, must be construed to be in excess of $3,000.00, exclusive of interest and costs"; found the facts as to the business and conduct of the parties substantially as alleged in the complaint; but found that the petitioner had not interfered with the normal operation of respondent's business or diverted any of respondent's profit.

As conclusions of law the court held that it had jurisdiction of the parties and the subject matter "since defendant's motion to dismiss admits for the purpose of pleading all facts well pleaded in the bill of complaint and particularly the necessary diverse citizenship between complainant and defendant and the allegation that there is involved in the controversy herein more than $3,000.00, exclusive of interest and costs" and that "the complainant is a proper party to prosecute this action on its own behalf and on behalf of its members." Based upon certain of the findings of fact the court concluded the acts of the petitioner did not amount to unfair competition with respondent or any of its members and did not violate their property rights; held, therefore, that the complaint failed to state facts sufficient to constitute a cause of action; vacated the temporary restraining order, refused a preliminary injunction, and granted the petitioner's motion to dismiss with prejudice.[1]

The Circuit Court of Appeals reversed[2] and ordered that a preliminary injunction issue restraining the petitioner from appropriating and broadcasting any of the news gathered by the respondent for the period following publication in respondent's newspapers during which the broadcasting of the pirated news to petitioner's most remote auditors may damage the business of respondent's papers in procuring and maintaining their subscriptions and advertising. On the merits the court thought the case controlled by *International News Service* v. *Associated Press,* 248 U. S. 215. Dealing with the petitioner's insistence that the amount in controversy was not shown to exceed three thousand dollars the court held that the *International News Service* case required the conclusion that the respondent was in competition with the petitioner because the decision in that case indicated that the profit seeking business of the constituent newspapers is an integral part of the corporate purpose of the respondent; and that "The several millions of dollars here alleged to be invested in the Association's business (the bill contains no such allegation) may well be damaged to the extent of $3,000 by the pirating practices described." After referring to the character and scope of the respondent's activities the court states:

"It is obvious that the business of gathering and distributing to members, *before* profitable publication, could conceivably be damaged to the extent of $3,000 by the misappropriation and premature publication of the news material. To hold otherwise would warrant the inference that no corporation could be damaged by a wrongful attack on its business, when that business happened to be run at no profit or at a loss. Also, we are unable to hold irrational the claim that the piracy caused a $3,000 damage to the Association's quasi property right in the news."

Although the decision with respect to the amount in controversy was assigned as error in this court, the parties have in the main directed their arguments to the merits; the respondent insisting that *International News Service* v. *Associated Press* fully sustains the decree below; the petitioner contending this cause may be distinguished from the one there adjudicated, or, if not, that decision should be modified. We have no occasion to consider the soundness of these conflicting contentions, for we hold that in the circumstances the respondent had the burden of showing that the case was within the District Court's jurisdiction, and failed to carry it.

The bill seeks redress for damage to the respondent's business and for damage to the business of some or all of its members. The right for which the suit seeks protection is, therefore, the right to conduct those enterprises free of the alleged unlawful interference by the petitioner. No facts are pleaded which tend to show the value of that right. The complaint contains nothing to the purpose save the general statement that the damage to which the respondent is being subjected is in excess of three thousand dollars and the amount involved is in excess of that sum. Such a formal allegation is sufficient, unless the bill contains others which qualify or detract from it in such measure that when all are considered together it cannot fairly be said that jurisdiction appears on the face of the complaint, in which case the suit should be dismissed by the court *sua sponte*[3] or upon the defendant's motion.[4] In this case the formal allegation is not reenforced or strengthened by other portions of the complaint; neither is it neutralized or weakened by qualifying or detracting allegations. In effect it stands alone. Therefore the court would not have been bound to dismiss upon a motion based solely on alleged insufficient pleading of the amount in controversy; though it might, of its own motion, have entered

[1] 9 F. Supp. 279.

[2] 80 F. (2d) 575.

[3] *Mansfield, C. & L. M. Ry.* v. *Swan,* 111 U. S. 379, 382, 383; *Bucyrus Co.* v. *McArthur,* 219 Fed. 266.

[4] *Coal Co.* v. *Blatchford,* 11 Wall. 172; *Ladew* v. *Tennessee Copper Co.,* 179 Fed. 245; affirmed 218 U. S. 357.

upon an inquiry to ascertain whether the cause was one over which it had jurisdiction.[5] But where the allegations as to the amount in controversy are challenged by the defendant in an appropriate manner, the plaintiff must support them by competent proof.[6] The petitioner's motion was an appropriate method of challenging the jurisdictional allegations of the complaint. It did not operate merely as a demurrer, for it did not assume the truth of the bill's averments and assert that in spite of their truth the complaint failed to state a case within the court's jurisdiction. On the contrary the motion traversed the truth of the allegations as to amount in controversy and in support of the denial recited facts dehors the complaint. This could have been done by answer but the time for answer had not arrived when the rule to show cause was issued and petitioner was faced with the possibility of an injunction. The motion required the trial court to inquire as to its jurisdiction before considering the merits of the prayer for preliminary injunction. And in such inquiry complainant had the burden of proof.[7] The only attempt to meet that burden is a reply affidavit filed on behalf of respondent, wherein it is deposed "that the payments made by newspapers for said news sold to them by complainant in the territory served by said radio station is upwards of $8,000 per month, which is being imperilled and jeopardized by the acts of defendant . . . by its unlawful and wrongful appropriation of complainant's news, and said sum greatly exceeds the sum of Three Thousand Dollars, exclusive of interest and costs, and complainant is in danger of losing said memberships and payments if defendant's practices in respect to pirating said news is not enjoined." This deposition must be read in connection with the statement in the bill that the respondent makes no profit from furnishing news to its members but equitably divides the expense amongst them. The association cannot therefore lose the $8,000 in question. If the three newspapers in the affected territory cease to pay the sum, they will save it, not lose it, and, as to any other damage they may suffer from petitioner's competition, the affiant is silent. Assuming, without deciding, that in the circumstances disclosed the respondent has standing to maintain a suit to redress or prevent damage caused its members by petitioner's conduct, the allegation of possible damage to them is wholly inadequate, because the asserted danger of loss of members is a mere conclusion unsupported by even a suggestion that withdrawal has been threatened by any newspaper, and no intimation is given of the character or extent of the damage they would suffer by such withdrawal. The respondent having failed to support the allegations as to amount in controversy the District Court should have dismissed the bill.

The suggestion is made in the respondent's argument, and in the opinion below, that, as the allegations in the *International News Service* case, *supra,* were substantially like those of the bill now before us, this court must have been of opinion that the District Court had jurdisdiction in the *International* case or it would not have considered the merits. But in that case the answer did not challenge the jurisdiction, there was no assignment of error raising the question and no argument on the subject was presented to this court. "The most that can be said is that the point was in the case if anyone had seen fit to raise it. Questions which merely lurk in the record, neither brought to the attention of the court nor ruled upon, are not to be considered as having been so decided as to constitute precedents." *Webster* v. *Fall,* 266 U. S. 507, 511.

The Circuit Court of Appeals sustained the District Court's jurisdiction on the ground that the finding upon that point was not without support, and the appellate tribunal could not say it was wrong, in view of the magnitude of the respondent's operations and expenditures. As pointed out in *McNutt* v. *General Motors &c. Corporation, supra,* at pages 180 and 181, these factors are irrelevant upon the issue of the value of the right for which protection is here sought.

Since the allegation as to amount in controversy was challenged in appropriate manner, and no sufficient evidence was offered in support thereof, the bill should have been dismissed. *McNutt* v. *General Motors &c. Corp., supra,* p. 190. The Circuit Court of Appeals had jurisdiction of the appeal and as the District Court lacked jurisdiction its decree dismissing the bill should have been affirmed on that ground.

The decree of the Circuit Court of Appeals is reversed and the cause is remanded to the District Court with directions to dismiss the bill of complaint for want of jurisdiction.

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[5] Act of March 3, 1875, § 5, c. 137, 18 Stat. 470, 472; Jud. Code, § 37, 28 U. S. C. § 80; *McNutt* v. *General Motors &c. Corp.,* 298 U. S. 178, 182, 184.

[6] *McNutt* v. *General Motors &c. Corp., supra,* p. 189.

[7] *McNutt* v. *General Motors &c. Corp., supra.* p. 189.

WARING AGAINST WDAS

The final decree of the Court of Common Pleas in this case was signed Saturday, December 12th. The station immediately appealed from the decree to the Supreme Court of Pennsylvania, the appeal being taken Monday, December 14th. It is expected that the appeal will be heard by the Pennsylvania Supreme Court in April, 1937.

BROADCASTING STUDIO DECISION

The owners of the New Amsterdam Theatre in New York City who lease the roof to some of the networks for use as a broadcasting studio were required by the City of New York to procure a license from the city for the use of said premises as a studio. This the owners did under protest following which they brought suit in the New York Supreme Court for a declaratory judgment. The following is the decision just handed down by Mr. Justice Valente on a preliminary motion in the case "Dry Dock Sav. Institution v. Valentine. This motion is made to dismiss the amended complaint in an action for a declaratory judgment. Plaintiff is using the roof of the New Amsterdam Theatre, formerly used as a public theatre, for radio broadcasting purposes. The city authorities insist that under the code of ordinances a broadcasting studio requires a license. Plaintiff has complied with the city's demand under protest, and now asks for a declaration of its rights to continue without a license and to obtain the return of the license fee heretofore paid. The ground of the motion is that the complaint does not state facts sufficient to constitute a cause of action. Plaintiff has made allegations in its complaint to show that in the conduct of the broadcasting studios its lessees do not give any public exhibitions within the language of the statute. What do they perform? The term 'Broadcasting Studio' is not an expression of sufficiently general connotation to enable the court to take judicial notice of its general character. Plaintiff should give a general statement of the lessee's activities so that the court may judge whether their work is of the nature of public performances. Such description is a part of the ultimate facts and not a pleading of evidence. It is for the court then to judge whether such activities constitute theatrical performances. This may not necessarily appear from the pleadings, but may require the presentation of evidence at a trial of disputed facts. Possibly no issues of fact may appear, but on the conceded facts in the pleadings a determination may be possible as a matter of law. In any event, the complaint should tell what a broadcasting radio studio does. The mere statement that it broadcasts radio programs over the air is insufficient. It does not enable the court to judge whether the physical situation at the initiation of the broadcast is such as to justify police and licensing regulations within the intent of the ordinances. Motion to dismiss is granted with leave to amend settle order" (New York Law Journal, December 15, 1936).

RECOMMENDS DENIAL OF NEW STATION

Dr. E. P. Cerniglia applied to the Federal Communications Commission for a construction permit for the erection of a new broadcasting station at Monroe, La., to use 1500 kilocycles, 100 watts power and unlimited time.

Examiner George H. Hill in Report No. I-316 recommended that the application be denied. The Examiner states that objectionable interference would be caused with existing facilities if the applicant were allowed nighttime service. While some showing was made, the Examiner states, as to the need for additional broadcast facilities at Monroe "there is not such a showing as will warrant the establishment of an additional 100 watt station."

FTC RADIO ADVERTISING CASES

The Federal Trade Commission in its annual report released this week devotes a part of the report to its special procedure in certain types of advertising cases including radio. On the question of radio advertising the Commission says:

The Commission began the review of advertising copy broadcast over the radio at the beginning of the fiscal year 1934-35. At the outset, the Commission, through the Special Board of Investigation, made a survey of all commercial continuities, covering the broadcasts of all radio stations during July 1934. The volume of returns received and the character of the announcements indicated that a satisfactory continuous scrutiny of current broadcasts could be maintained with a limited force and at small expense, by adopting a plan of grouping the stations for certain specific periods.

Consequently, beginning with September 1934, quarterly calls have been issued to individual radio stations according to their

licensed power and location in the five radio zones established by the Federal Communications Commission. These returns cover specified 15-day periods.

National and regional networks, however, respond on a continuous weekly basis, submitting copies of commercial continuities for all programs wherein linked hook-ups are used involving two or more affiliated or member stations.

Producers of electrical-transcription recordings submit regular weekly and monthly returns of typed copies of the commercial portions of all recordings manufactured by them for radio broadcast. As the actual broadcast of a commercial recording is not always known to the manufacturer of a commodity being advertised, the Commission's knowledge of current transcription programs is supplemented by special reports from individual stations from time to time, listing the programs of recorded transcriptions with essential data as to the names of the advertisers, and the articles sponsored.

The combined material received from the individual stations for specified periods, from the weekly returns on regional and national network broadcasts, and from the special transcription reports, furnishes the Commission with representative and specific data on the character of radio advertising which has proven of great value in its efforts to curb false and misleading trade representations.

During the last fiscal year, the special board received copies of 299,334 commercial broadcasts by individual radio stations and 38,109 commercial broadcasts by networks, or chain originating key stations. The broadcasts from the independent stations averaged 1½ pages each and from the networks 10 pages each.

The special board and its staff read and marked about 947,000 pages of typewritten copies during the year, an average of 3,105 pages every working day. Of these, 19,572 commercial broadcasts were marked as containing representations that appeared to be false or misleading. These broadcasts were assembled in 1,314 prospective cases for further review and procedure in instances that appeared to require it.

In its examination of advertising, the Commission's purpose is to prevent false and misleading representations. It does not undertake to dictate what an advertiser shall say, but rather indicates what he may not say. Jurisdiction is limited to cases which have a public interest as distinguished from a mere private controversy, and which involve practices held to be unfair to competitors in interstate commerce.

The Commission is receiving the helpful cooperation of the nearly 600 active commercial and radio stations and of newspaper and magazine publishers generally, and notes a desire on the part of these broadcasters and publishers to aid the Commission in the elimination of false and misleading advertising.

DENIAL OF STATION CHANGES RECOMMENDED

Broadcasting Station WSBT, South Bend, Ind., applied to the Federal Communications Commission to change its frequency from 1360 to 1010 kilocycles, to increase its power from 500 to 1,000 watts and to increase from sharing time to unlimited time. Also station WEMP, Milwaukee, Wis., asked to change its frequency from 1310 to 1010 kilocycles, to increase its power from 100 to 250 watts and 500 watts LS and to increase its operation time from daytime to unlimited time.

Examiner Melvin H. Dalberg in Report No. I-315 recommends that both of the applications be denied. The Examiner found that granting these changes would cause interference in both cases. He states that "the authorization of additional stations to regional facilities under circumstances such that their service will be limited to the extent described, is undesirable allocation practice and represents an uneconomic use of facilities involved."

ANNUAL CONVENTION

Under date of November 23rd the NAB office sent a mimeographed letter to members asking for suggestions as to what month would be most desirable for holding the 1937 Annual Convention. Since replies have been received from only about fifty per cent of the members you are urged to forward your preference at once.

RECOMMENDATION AGAINST WHAT CHANGE

Broadcasting station WHAT, Philadelphia, applied to the Federal Communications Commission asking that its frequency be changed from 1310 to 1220 kilocycles, and its power increased from 100 to 1,000 watts. It now shares time with WTEL and the application asked for full time operation.

Examiner Melvin H. Dalberg in Report No. I-317 recommended that the application be denied. In connection with the recommendation of denying this application the Examiner says "it is unfortunate that the present operating assignment is unsatisfactory with respect to the irregular schedule of operating hours and restricted nighttime coverage which is involved, but it appears that the granting of this application would merely substitute other objectionable features in the place of these."

TEN KILOCYCLE SEPARATION

John B. Reynolds, acting secretary of the Federal Communications Commission is sending out the following statement in connection with the ratio of desired to undesired signals for 10 kilocycle separation between broadcast stations:

At the October 5th informal engineering hearing on broadcasting, recommendations were made by various participants as to the permissible ratio of desired to undesired signal between broadcast stations operating 10 kilocycles removed in frequency. These recommendations varied rather widely and in general would allow a much higher undesired signal than is now permissible under the present empirical standard of the Engineering Department. These empirical standards were adopted in 1932 and were based on the characteristics of receiving sets manufactured from 1929 to 1932. Since that time there has been a marked change in receiver characteristics and practically all receivers now manufactured for broadcast reception have superheterodyne circuits, whereas at that time the majority of receivers employed were of the tuned radio frequency type.

The present empirical standard requires that the desired signal be twice the undesired signal. This does not let the primary service areas of stations on adjacent channels overlap and requires a mileage separation between stations, depending on the power.

After carefully studying the recommendations made by the various engineers, the Engineering Department is not satisfied that this subject has been sufficiently investigated to accept any of the various recommendations made. The recommendations by certain engineers were based on receiver characteristics with regards to selectivity and apparently little consideration was given to the fidelity characteristics of the receivers.

There is no question but that a receiver can be designed and manufactured at a nominal cost that will separate a desired signal from an undesired signal 10 kilocycles removed in frequency when the intensity of the undesired signal is 50 to 100 times the desired signal. (In fact many receivers now on the market will do this.) But, in obtaining this selectivity the high frequency audio response of the receiver is materially reduced. The amount of the reduction varies widely with individual receivers. Therefore, before a new ratio of desired to undesired signal can be adopted as a standard for broadcast allocation, it will be necessary for the industry to assist the Commission in determining the maximum audio frequencies that are to be transmitted and received.

Under the present plan of allocation, stations separated by 10 kilocycles are also required to maintain a mileage separation; thus, two 1-kilowatt stations, 10 kilocycles removed in frequency, must be separated by 200 miles at night and two 50-kilowatt stations by 800 miles at night. This allocation provides for the transmission of all audio frequencies to 7.5 kilocycles and for the reception in the primary service area of frequencies to this value and in the secondary service area of frequencies to 5 kilocycles. If the ratio of desired to undesired signals of 1 to 10 or 50 be adopted, it is evident that this plan could no longer be retained and it would be necessary to require all broadcast stations to cut off all audio frequencies above, say, 5 kilocycles. Also, with the above stated ratio, broadcast stations of the same power, 10 kilocycles removed in frequency, could be placed in the same service area, and, thereafter it would not be possible ever to accomplish high fidelity transmission and reception on such stations.

W. B. Snow, in the July 1931 issue of the *Journal of the Acoustical Society of America,* gives a complete report on the frequency band that must be reproduced before sounds can be practically indistinguishable in quality from the original sound. It is shown that 90 percent of the observers considered the reproduced sound indistinguishable from the original sound when the frequencies between 90 cycles and 7500 cycles are faithfully reproduced. Stations transmitting this band without more than 2 to 4 percent harmonic distortion may be considered as accomplishing high fidelity transmission. When the higher frequencies were cut off at 5 kilocycles, 72 percent of the observers considered the reproduction satisfactory. The four network program systems employ telephone lines for distribution. These lines cut off at approximately 5000 cycles.

The following table shows the extent of the variation in the response at 3000 cycles and at 5000 cycles as compared to the

response at 400 cycles for the receivers used as a basis for the recommendations made in behalf of the National Association of Regional Broadcast Stations:

	3000 cycles	5000 cycles
G. E. E-71	—4	—11
Detrola 101A	—9	—20
Philco 37-89	—12	—24
RCA 6T2	—7	—20

A similar table based on the receiver data submitted at the hearing by Van Dyck on behalf of the National Broadcasting Company is as follows:

	3000 cycles	5000 cycles
Average of 36— 1935 receivers All price classes	—7	—15
Average of 47— 1936 receivers All price classes	—7	—17

The fidelity curves for the receivers used as a basis for the recommendations of the clear channel group were not submitted in evidence.

It is seen that these receivers were substantially down in response both at 3000 cycles and at 5000 cycles. The Engineering Department hesitates to recommend an allocation based on receiving sets of the selectivity and high frequency response as given without the assurance from the industry that it is unnecessary to reproduce faithfully frequencies above 3000 or 4000 cycles and that at 5000 cycles it is satisfactory to have the response down some 11 to 24 decibels below that at 400 cycles.

Unfortunately the characteristics of a receiver having an acceptance band of 10 kilocycles (audio frequency response to 5 kilocycles) are not available nor are characteristics of receiving sets having an acceptance band of 15 kilocycles (audio frequency response to 7.5 kilocycles) available. If the selectivity characteristics were known of receivers which had acceptance bands of these widths and if the audio response characteristics faithfully covered the same frequencies, then an allocation could be made based on the ratio of desired to undesired signal for such receivers. In other words, should we not base the allocation on receivers with the desired output characteristics, rather than on receivers of very poor output characteristics which do not approach the ideal and thus seriously limit development in the future?

Although broadcast stations are separated by only 10 kilocycles, by requiring an adequate geographical separation between stations on adjacent channels, it has been possible to permit transmission and reception of emissions with a frequency range greater than 5 kilocycles. Or, in other words, by maintaining certain geographical separation, it has been possible to accomplish an equivalent of a substantially greater frequency separation than 10 kilocycles in the primary service areas.

Figure 1, Curve 1, of a chart with this statement shows the distribution of audio energy per cycle for the average of 4 selections played by a 75-piece orchestra.[1] Curves 2, 3, 4, 5 and 6 are plotted for a 10-kilocycle separation between carriers with the undesired signal 0.5, 1, 2, 10 and 50 times the desired signal, and for similar modulation on the undesired station. From these curves, it is obvious that with the undesired signal 10 times the desired signal it would be necessary to prevent the transmission of audio signals above approximately 5 kilocycles because at 7800 cycles from the undesired carrier, the energy is the same as that at 2200 cycles from the desired carrier. This manifestly would produce hopeless monkey chatter.

The Engineering Department of the Commission wishes to ask the radio industry the following questions with respect to changing the policy of allocating broadcast stations 10 kilocycles removed in frequency:

1. The allocation of broadcast stations should provide for what maximum audio frequencies to be transmitted?

2. The allocation should provide for what maximum audio frequency reception in the primary service area? In the secondary service area? (Consider usual and variable selectivity receivers.)

3. What selectivity characteristics can be obtained from a receiver that will reproduce audio frequencies flat within 4 decibels, to 7.5 kilocycles? To 5 kilocycles?

4. Should the characteristics of the average receiver sold today, which is substantially limited in response above 3 to 4 kilocycles, be taken as a basis for a change in the present standard of desired to undesired signal?

5. Is not an allocation which provides for transmission of frequencies to 7.5 kilocycles, for reception of frequencies to 7.5 kilocycles in the primary service area, and for reception in the secondary service area to 4 or 5 kilocycles (or less as controlled by the selectivity control or the tone control of the receiver) a fair allocation?

6. Would not a substantial increase in the permissible undesired signal materially impair this allocation?

7. Is there any need to reduce materially the mileage separation between stations on adjacent channels so that the above conditions of transmission and reception can no longer be maintained?

8. If the industry decides that the characteristics of the various selective receivers now being manufactured should be taken as a basis of allocation for 10-kilocycles frequency separation, then does the industry accept the responsibility for all broadcast stations so allocated to be limited in transmission and reception to an audio response not exceeding 5 kilocycles?

Before changing the present engineering policy in these regards, the Engineering Department of the Communications Commission wishes to be assured that all interested parties are fully aware of the practical results which would be obtained and of the limitations which would then be imposed on broadcasting if the recommendations made on this subject at the October 5th hearing were followed. The Commission therefore requests all interested parties to participate in an informal conference (round table discussion with the Engineering Department) to be held at the office of the Commission in Washington, D. C., on January 18, 1937.

[1] See "Absolute Amplitudes and Spectra of Certain Musical Instruments and Orchestras" by L. J. Sivian, H. K. Dunn, and S. D. White, in the January 1931 issue of the *Journal of the Acoustical Society of America*.

NORTH CAROLINA STATION RECOMMENDED

The *Asheville Daily News* filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new broadcasting station to be located at Asheville, N. C.

Examiner George H. Hill in Report No. I-318 recommended that the application be granted "on condition that an approved transmitter site is selected and also subject to compliance with Rule 132." The Examiner found that there appears "to be a definite need for the services of the proposed station and the tentative programs submitted appear to be well balanced and will serve the public interest." Any interference caused, the Examiner states, "would not be serious."

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

Halle Brothers Company, Cleveland, Ohio. (2-2651, Form A-2)
Chicago Venetian Blind Co., Chicago, Ill. (2-2652, Form A-1)
Trustees General Utilities Co., Jersey City, N. J. (2-2653, Form F-1)
Wentworth Mfg. Co., Chicago, Ill. (2-2654, Form A-2)
Committee Philip Schuyler Corp, bonds, Albany, N. Y. (2-2655, Form D-1)
Zoller Brewing Company, Davenport, Iowa. (2-2656, Form A-1)
Minneapolis Gas Light Co., Minneapolis, Minn. (2-2657, Form A-2)
Transcontinental & Western Air Inc., Kansas City, Mo. (2-2658, Form A-1)
Committee Skinner Mfg. Co., New York City. (2-2659, Form D-1)
Investors Fund, Inc., New York City. (2-2660, Form A-2)
Automobile Finance Co., Pittsburgh, Pa. (2-2661, Form A-1)
The Clark Controller Company, Cleveland, Ohio. (2-2663, Form A-2)
Lockheed Aircraft Corporation, Burbank, Calif. (2-2664, Form A-2)
Filtrol Company of California, Los Angeles, Calif. (2-2665, Form A-2)
R. G. Letourneau, Inc., Stockton, Calif. (2-2666, Form A-2)
Globe Steel Tubes Co., Milwaukee, Wis. (2-2667, Form A-2)
Purex Corporation, Ltd., Los Angeles, Calif. (2-2668, Form A-1)
Pollock's Incorporated, Asheville, N. C. (2-2669, Form A-1)
World Electric Appliance Corp., New York City. (2-2670, Form A-1)

Davidson-Boutell Company, Kansas City, Mo. (2-2671, Form E-1)
American Hide and Leather Company, Boston, Mass. (2-2675, Form A-2)
Seattle Times Company, Seattle, Wash. (2-2676, Form A-2)
Newton P. Frye, et al., voting trustees of Community Public Service Company, Chicago, Ill. (2-2678, Form F-1)
United Specialties Co., Detroit, Mich. (2-2681, Form A-1)
Interstate Home Equipment Company, Inc., Providence, R. I. (2-2683, Form A-2)
Mutual American Securities Trust, Boston, Mass. (2-2684, Form A-1)
Carnegie Metals Company, Pittsburgh, Pa. (2-2685, Form A-1)
The Weisbaum Bros.-Brower Company, Cincinnati, Ohio. (2-2687, Form A-2)
Automatic Quotation Co., New York, N. Y. (2-2688, Form A-1)
North American Investment Corporation, San Francisco, Calif. (2-2689, Form A-2)
Bagdad Copper Corporation, Hillside Post Office, Arizona. (2-2690, Form A-1)
Public Service Company of New Hampshire, Manchester, N. H. (2-2691, Form A-2)
Michigan Silica Company, Rockwood, Mich. (2-2692, Form A-2)
Romec Pump Company, Elyria, Ohio. (2-2693, Form A-1)
American Fidelity and Casualty Co., Inc., Richmond, Va. (2-2694, Form A-2)
Pacific Distillers, Inc., Culver City, Calif. (2-2695, Form A-1)
Kentucky Valley Distilling Co., Louisville, Ky. (2-2696, Form A-1)
Central Violeta Sugar Company, Havana, Cuba. (2-2697, Form E-1)
Consumers Credit Corporation, New York City. (2-2699, Form A-1)
Goldblatt Bros., Inc., Chicago, Ill. (2-2700, Form A-2)
Sherrard Power System, Orion, Ill. (2-2703, Form A-2)
National Tax Investment Corporation, Washington, D. C. (2-2704, Form A-1)

A. T. & T. AND RADIO

During the course of hearings this week by the Federal Communications Commission in connection with the American Tel. & Tel. investigation the Commission introduced a detailed report on the "Bell System Policies and Practices in Radio Broadcasting." The Commission's conclusions in this report include the following:

(1) The Bell System's original aim in the broadcasting industry, as defined in 1923, was to control, subject to limited concessions to Radio Corporation of America, General Electric Company, and Westinghouse Electric & Manufacturing Company, the manufacture and sale of radio transmitting equipment, operation of radio stations. and the wire facilities associated therewith.

(2) When it became apparent to the American Company that its rights under the License Agreement of July 1, 1920, were not, according to the views of the Referee in Arbitration (1924), as broad as at first anticipated, the Telephone Group (a) gave up its broadcasting business (1926); (b) granted General Electric Company, and others, equal rights with itself in the sale of transmitting equipment (1926); and (c) through the acquisition of exclusive patent rights (1926) and the continuance of certain practices (1923 to 1936) sought to make the furnishing of wire facilities an exclusive Bell System function.

(3) The Bell System used its position as a utility in control of extensive networks of local and long distance telephone circuits to protect the patents of American Telephone and Telegraph Company which were useful in the manufacture and sale of broadcasting apparatus. The American Company directed the Associated Telephone Companies to defend its patents by denying wire services to broadcasting stations not licensed under American Telephone and Telegraph Company's patents (1923 to 1928) without any contractual obligation on the part of the Associated Companies (according to the opinion of the Legial Department of American Telephone and Telegraph Company).

(4) Prior to July, 1926, New York Telephone Company denied network service to two or more stations, because it was the policy of American Telephone and Telegraph Company not to give such service. The American Company and Associated Companies were at the same time giving such service to the Bell-owned station WEAF. The New York Company protested such unequal treatment, but the American Company wished to retain this business for Bell-owned radio stations. Network service was given to non-Bell stations after American Telephone and Telegraph Company agreed to sell Station WEAF to Radio Corporation of America (July 1, 1926).

(5) The Bell System, under the aegis of the American Company, has refused to interconnect with the wire facilities owned by others, in order to eliminate competition in the furnishing of wire facilities for radio program transmission. Thus, the Bell System has used its strategic position in control of telephone circuits to extend and protect its control over the wire facilities necessary in transmission of radio programs.

(6) The Bell System, by virtue of its policy with respect to interconnections, limits the distribution of programs unless they are routed over Bell circuits exclusively.

(7) The Bell System has practiced discrimination in the exercise of its monopoly position and in the application of its policies in giving wire services to broadcasting stations, and with respect to interconnections with other wire-using companies. Although American Telephone and Telegraph Company licenses were required from broadcasting stations before they could obtain wires from the Associated Companies, in many cases exceptions were made, often with a view to public relations. Similarly, although refusal to interconnect Bell wires with those of others is a long-standing policy of the Bell System and is now incorporated in tariffs filed with the Federal Communications Commission, there have been many exceptions which permitted some radio stations to avail themselves of the less expensive telegraph company circuits, whereas others have been denied the same privilege.

(8) The Bell System incorporated the policies with respect to wire telephony used in conjunction with broadcasting in tariffs filed with the Federal Communications Commission, using these tariffs as arguments against modification of long-established policies.

(9) Various Bell Telephone Companies have allowed violations of their filed tariffs in specific cases with respect to interconnections. Thus, there has been discrimination by the Bell System in the application of their tariffs to different broadcasting stations.

(10) Certain Associated Bell Telephone Companies have amended their filed tariffs with the Federal Communications Commission to allow exceptions to their policies, thus giving rise again to discriminations between favored interests and others.

(11) The desire to prevent unfavorable publicity, and on occasion, uncertainty with regard to the legal foundations of the policies, have been principal reasons in the discriminatory application of policies and tariffs.

EDUCATIONAL RADIO CONFERENCE

It is estimated that about 1,000 persons attended the First National Conference on Educational Broadcasting, held at the Mayflower Hotel, the latter part of last week. The conference held many sessions, divided into various groups, and was addressed by well known persons in the radio and educational field.

Among those talking were Secretary of the Interior Harold Ickes; Anning S. Prall, chairman of the Federal Communications Commission, and John W. Studebaker, United States Commissioner of Education.

Among others who talked were: David Sarnoff, president of the Radio Corporation of America; George F. Zook, chairman of the executive committee of the conference; William Mather Lewis, president of Lafayette College; Prof. Arthur N. Holcombe, Harvard University; T. A. M. Craven, chief engineer of the Federal Communications Commission; C. B. Jolliffe, chief of the Frequency Bureau of the Radio Corporation of America; C. M. Jansky, Jr., consulting radio engineer; and many others.

Chairman Prall had the following to say:

There once wandered through the length and breadth of the land called Greece, a singer of songs and a teller of tales named Homer. Long years he, himself, traveled and sang. Many a time and oft were his tales repeated by himself and others, until at length—long after his death—all Greece could repeat the opening lines of his Iliad.

Today by virtue of the remarkable development of broadcasting his theme could be "featured" internationally and sent forth on the "winged words," of which he prophetically sung, to the ends of the earth and back again. Why make the suggestion? Because it points out the difference between the slow imperfect spread of knowledge through the ancient telling of tales and the instantaneous and ubiquitous reception of the modern broadcast, which is, in its essential details, still a telling of tales, a recital of facts, a stirring of emotions.

There remains the old magic of the human voice, its strong personal appeal, but to these have been added the new magics, the sorcery of music, the vividness of drama, the stark realism of the "March of Time." But what have such programs to do with education per se? Many of you have taken serious issue with so-called educational broadcasts of today. Many of you have implied that such programs have dealt too much with formal curriculum

topics only, prepared by teachers inexperienced in radio technique, without adequate funds and without adequate administrative and technical staffs, and with little or no time for preparation or rehearsal. That may be so. You educators should be the best judges.

Radio education has travelled a long road since its early pioneering. It has broadened its field and has slowly grown to a full recognition of its possibilities. My mission here is not to attempt to portray to you any solution. You are the experts and this meeting, I understand, has been called for the purpose of appraising the present status of educational radio, and of devising suggested means of improving it in the public interest. I do, however, desire to make a few random observations for what they may be worth.

An adequate conception of what radio can do for education in America demands a fair consideration and study of the three types of radio systems. There is the system common to many European countries, but best exemplified in Great Britain where sponsored programs are not a source of income, revenue being derived solely from a percentage of the annual license fee of ten shillings which all owners of receiving sets have to pay, and from proceeds from the sale of and advertising in British Broadcasting Corporation publications. There is no broadcast advertising.

It is my personal opinion that American listeners would not stand for the payment of a receiving set tax. It is my judgment that it would be most unpopular in this country. It is not the American way of accomplishing things.

I have said much in the past with respect to the so-called American system of broadcasting as compared with Government owned or operated systems. I shall not devote any considerable time to this subject today.

There is one fact, however, that I trust there may be no uncertainty about and that is the attitude of the Federal Communications Commission concerning the subject of educational broadcasting.

The Commission is sincerely interested in and is wholeheartedly supporting the movement looking toward the development of a comprehensible plan for education by radio. We believe it can be done. And, if in the final analysis, it fails to crystallize, it will not be because of any lack of cooperation on the part of the Commission.

The so-called American system of supporting a radio station or network by means of payments made to the broadcaster by sponsors of advertising programs is by no means confined to the United States. It is found in France, Italy, Norway, Poland, Spain, Turkey, Australia, Canada and all the South American states.

The two systems are found existing together in France, Irish Free State, Norway, Poland, Australia and Canada. In Germany and Russia, radio is an instrument of the state and under absolute control.

What is the outlook so far as it concerns the possibility of meeting the demands for educational broadcasting? There have been many theories on this as attested by the volume of testimony presented to the Federal Communications Commission in May, 1935, during tbe educational radio hearings. Following tbese hearings, a special committee of educators and broadcasting officials was appointed. This committee is the Federal Radio Education Committee. I believe you are all familiar with its scope and objectives.

Dr. John W. Studebaker, U. S. Commissioner of Education, was appointed chairman of this committee and is directing an experimental study of the entire broad subject, with the end in view of submitting to the proper parties at a later date a definite and all-embracing plan to cope with it.

This committee is functioning as an arm of the Federal Government. I am of the opinion that whatever conclusions you may reach at these sessions; whatever recommendations you may decide upon, should be conveyed to Dr. Studebaker's Committee, for it is functioning as the coordinating agency.

And at this time I would like to bring to your attention another matter of great import. From time to time various educational groups have proposed that additional facilities be allocated for educational broadcasting. I think it is only fair that I impress upon you ladies and gentlemen the fact that the broadcast band is rigidly limited. We must bear in mind that the practical application of the use of the radio spectrum does not permit unlimited facilities. At the present state of the art there are serious technical limitations which make available only a relatively few number of radio channels to supply a world-wide demand for communications. Not only must the United States share the radio spectrum with other nations, but we must also provide communication facilities for services which are dependent solely upon radio and cannot use land line, such as, for example, ships and aircraft, where radio is an absolute necessity in connection with safety of life and property, as well as for communications.

Likewise it is essential that we provide radio spectrum facilities for direct communication between the United States and other nations of the world, a long established and wise policy of this Government. And, again not only are facilities in the radio spectrum used by the national defense and civilian departments of our Government, but they are also used most effectively in the combat of crime.

Therefore, in the consideration of the technical phases of the problem of education by radio, technicians should remember the needs of otber worthy services, and endeavor to provide a practicable procedure which will permit the fullest use of radio by all. In the educational institutions of the country there are many fountains of science which contribute much toward the progress in the technical phases of the art of communications, and I have confidence that if these scholars, physicists and scientists in your educational institutions have a full understanding of the limitations with which we are now confronted, they will assuredly endeavor to find tecbnical ways and means to overcome the obstacles. Because of these physical limitations, it is impossible to gratify the demands of all groups for facilities. The Commission, pursuant to the law, has adopted the definite policy of licensing stations for general service in the public interest. It does not license farm stations as such, or religious stations as such, or educational stations because they are in that category. If it did, then it probably would have to consider the licensing of stations to every conceivable type of educational, religious, fraternal or social organization.

The Communications Commission has but one real function to perform. That is to see that broadcasting facilities are used for the maximum benefit of all the people. We believe tbat we are meeting that mandate successfully at this time.

There is no doubt in my mind but that radio, properly used, can become an even greater instrument of instruction than the printing press since it provides a dramatic medium, not only because of its immediacy and directness but because it represents communication by the human voice.

You delegates assembled at this meeting are looking forward to a radio educational Utopia, I assume—one in which states, and cities in them, will sponsor educational broadcasts. I have observed that educators in this country usually look to Europe as an example of what might be accomplished in this country. Therefore, an overview of the present educational use of radio in Europe may prove interesting.

The following summary is made by Arthur R. Burrows, Director of the International Broadcasting Union at Geneva:

"A special feature of an ever growing number of European countries is school broadcasting—that is, the systematic broadcasts to the schools, during school hours, of talks by recognized experts, and of musical and dramatic performances directly associated with the educational courses. These talks are arranged several months in advance of their broadcasts, after the closest possible collaboration with all the interested educated groups. The teachers in charge of classes taking these broadcasts are provided with specially prepared and profusely illustrated pamphlets to enable them to supplement tbe broadcast material. No attempt is made to displace the existing educational machinery, but only to give to the children the stimulating experiences of experts, whicb naturally gain by first-hand presentation. It would appear from recent reports that certain technical difficulties in the reception of school broadcasts have not yet been entirely surmounted. Nevertheless, there are tens of thousands of schools in Europe today where the broadcast programs are eagerly anticipated." (A. R. Burrows. Broadcasting Outside the United States, Radio the Fifth Estate.)

Other speakers at this session unquestionably are prepared to discuss European educational methods. They warrant consideration. But you must keep in mind that Europe's problems are not America's; that Europe's radio is not America's; that Europe's tastes differ widely from our own, and that in attempting to devise improvements in educational broadcasting in this country you must take into account those practical considerations, and forget illusory plans that cannot succeed in the United States where they might in other nations.

And in considering potential expansion of education's use of radio, I assume you educators have in mind the possibilities of linking present broadcast facilities with television. This is staggering to the imagination. Think for an instant of the tremendous emotional reaction that would result from a televised broadcast of actual conditions in Spain today!

The consideration—in a *free* America—of the potentialities of

radio in the development of public opinion, offers opportunity for intriguing speculation. That is, of course, nothing more nor less than "propaganda" and today propaganda has a sinister connotation. Yet propaganda, radio's greatest function in Germany and Russia, can spread the ideas and ideals of America, can "sell" America to Americans and thus forge a weapon of national unity that no other agency can create. Why cannot propaganda be used for good as well as directed to evil ends? Who are so well equipped as those engaged in the education of our youth to guarantee an unselfish, idealistic and patriotic extension through radio of the ideals of citizenship, which they are now engaged in presenting in the narrower field of their individual classrooms?

Radio offers an outlet to the more gifted of these educators and to them affords a national audience. Is there a danger here, perhaps, or cannot a nation of one hundred and thirty millions achieve a common ground of national ideals, devoid of partisanship and divorced from foreign propaganda, and having achieved such common ground, cannot that nation build upon it a stronger patriotism, a finer citizenship? Here—to me—is radio's real and greatest educational opportunity.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity to show cause why cease and desist orders should not be issued against them:

No. 3008. False representations concerning the therapeutic effects of electric belts and electric insoles manufactured and sold by **The Electric Appliance Co., Burlington, Kans.,** are alleged in a complaint against that company. The respondent company's practices are said to constitute unfair methods of competition in violation of Section 5 of the Federal Trade Commission Act.

Advertisements appearing in newspapers, magazines and circulars allegedly represent that the company's electric belt is effective in the treatment of nervous disorders, rheumatism, diseases of the heart, liver and kidneys, and other ailments, and that the electric insoles are effective in treating rheumatism, cramps, cold and sweaty feet, and gout.

No. 3009. Wain's Laboratory, Inc., 1500 N. Vermont Ave., **Los Angeles,** is charged in a complaint with use of unfair methods of competition in connection with the sale of a medicinal preparation offered as a treatment for asthma, hay fever and bronchial ailments and designated "Wain's Compound."

The respondent company is said to advertise that "Wain's Compound" is a new and startling remedy, competent in the treatment of hay fever, asthma and bronchial ailments; that it has overcome asthma and hay fever for thousands of sufferers, and is free from all dangerous drugs, opiates and heart depressants.

According to the complaint, the preparation is not an accepted or effective remedy for hay fever, although it is to some degree a competent treatment for minor bronchial irritations; it is an old, commonly-known compound, and the assertion that it is a new and startling remedy is erroneous.

No. 3010. Charging unauthorized appropriation of a well-known trade name, a complaint has been issued against **Philadelphia Rubber Waste Co.,** a Delaware corporation, of **Philadelphia,** and a partnership including **Albert Schwartz,** in charge of the corporation's business in **Philadelphia; Isadore M. Engel,** in charge of the partnership's **Washington, D. C.,** store, and **Simon Sperberg,** in charge of the partnership's **Richmond, Va.,** store. The partnership distributes the corporation's products and trades under the names **Philco Rubber Co., Philco Rubber Sales Co., Philco Auto Supply, Philco Auto & Rubber Supply,** and **Philco Spark Plug Co.**

Manufacturing and selling tire patches, tire reliners, spark plugs, inner tubes, and other accessories, the respondents are alleged to have used the word "Philco" as a trade name or brand for their products, having adopted this name at a date long subsequent to its adoption and use by the Philadelphia Storage Battery Co., manufacturer and distributor of radio and television receiving and broadcasting equipment and other apparatus under the name "Philco."

No. 3013. Charging unfair competition through use of misleading trade representations, a complaint has been issued against **Jean G. Subin, Israel Subin** and **John N. Kinderman,** of 131 Market St. and 301 Green St., **Philadelphia,** trading as **American Remedy Co.**

In the sale of aspirin, the respondents are alleged to have represented it as "American Purest Aspirin", tending to lead the public into believing that the product was the purest aspirin obtainable in America, when according to the complaint, this was not true.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 2426. James Van Dissen Distilling Co., 1401 Boyd St., **Los Angeles,** has been ordered to discontinue representing, through use of the word "Distilling" in its corporate name, on labels, or in any other manner, that it is a distiller of whiskies, gins or other spirituous beverages; that it manufactures such products through the process of distillation, or that it owns or operates a place where it distills spirituous beverages, unless and until it shall actually own or operate such a place.

No. 2677. Fall River Wholesale Grocers' Association and nine member firms, of **Fall River, Mass.,** have been served with a cease and desist order prohibiting any understanding, agreement or combination in restraint of trade. The respondents are wholesalers of groceries in the Fall River region which includes part of Rhode Island.

Under the order, the respondent association and its members are directed to stop adopting, enforcing or attempting to put into effect any understanding, agreement, combination or conspiracy among and between themselves to restrict and eliminate competition in the sale of grocery products by interfering with the source of supply of retailers.

The respondents, in answering the Commission's complaint, had refused to admit that they interfered with the sources of supply of wholesale grocers, as alleged in the complaint, and the Commission's order contains no reference to unfair competition on the part of the respondents with non-member wholesalers, as alleged in the complaint.

The order also prohibits the respondents from persuading, threatening or coercing manufacturers to distribute their products only through wholesalers and to refrain from dealing with retailers.

Wholesale grocers named as respondents are: **Allen Slade & Co., American Wholesale Grocery Co., Chabot Bros., Fall River Economy Wholesale Grocery Co., Fall River Paper & Supply Co., Joseph Horvitz & Co., New England Wholesale Grocery Co., Portuguez Wholesale Grocery Co.,** and **Roy Paper Co.,** all of **Fall River, Mass.**

No. 2701. George Landon and **M. M. Warner,** trading as **Landon & Warner,** 360 N. Michigan Ave., **Chicago,** have been ordered to discontinue advertising that an elastic, fabricated abdominal belt designated "Director", which they sell in interstate commerce, will permanently reduce the waistline, eliminate excess fat around the abdomen, or that it provides a remedy or constitutes a safe, efficacious method of treatment for abdominal obesity.

Representations that the wearing of the belt will produce results formerly obtained by massage and exercise, or cure constipation without use of irritating cathartics, are prohibited.

No. 2721. R. M. Barnett, of **Philadelphia,** trading as **Home and School Education Society,** has been ordered to cease and desist from making unfair representations in the sale of an encyclopedia set, a loose-leaf extension service and memberships in a "Perpetual Bureau of Research". Barnett has headquarters in the Real Estate Trust Building, Philadelphia.

Among representations prohibited are that the encyclopedia known as "Source Book" is given free to subscribers to the loose-leaf service, and that the total cost of both is less than the amount actually charged therefor.

Advertisement that a staff of educators, writers, photographers and illustrators is maintained in every part of the world to prepare a review of current events, is prohibited in the order, as is the assertion that the respondent Garnett maintains a research bureau to give subscribers information on any question.

The order also bars the representation that the respondent Barnett maintains a competent staff to whom are available the expert services of teachers who are authorities in every branch of education, and that the services of such staff and the entire list of editors and contributors to the work are available to purchasers.

No. 2793. Premier Peat Moss Corporation, 150 Nassau St., **New York City,** has been ordered to cease and desist from certain unfair competitive methods in the sale of imported peat moss to wholesalers and retailers. Peat moss is used as a soil conditioner.

Among the practices prohibited is the misrepresentation of statistics of the United States Government with respect to the supply of, demand for, and quality or merits of the respondent company's products as compared with competing peat moss.

Also barred by the order is the use in advertisements of analyses or tests of the merits of the respondent company's own and com-

peting peat moss, with the representation, express or implied, that such analyses or tests were made by or under the supervision of, or had the United States Government's approval, when this was not a fact.

No. 2796. Lumber Mills Co., 11 S. LaSalle St., **Chicago,** selling sash, windows, doors, molding and mill work made from wood, has been ordered to cease and desist from using the words "White Pine" or the letters "W. P." to designate lumber products manufactured from trees of any species other than Pinus Strobus; and from representing through use of such words or letters, that products manufactured from wood of the tree species Pinus Ponderosa, or from any species other than Pinus Strobus, are made from white pine.

The respondent company is directed to discontinue representing in its business or advertising literature through use of the word "Mills", alone or with words of similar meaning, that it is the manufacturer of the products which it sells or that it owns or controls any mills in which such products are made.

No. 2817. Discontinuance of certain unfair methods of competition in connection with the sale of St. Joseph Aspirin has been directed in an order to cease and desist entered against **Plough, Inc., Memphis, Tenn.**

Prohibited by the order are representations in advertising matter and in radio broadcasts that the respondent company's product gives quicker relief than other aspirin and is the "best thing in the world" to stop pain; that it is fully effective for pains and colds and always brings prompt relief to sufferers from such conditions, and that it exceeds in purity and accuracy of ingredients the rigid standards set by the United States Government.

No. 2820. An order has been entered directing **Jean Vivadou** and **Henry G. Lubin,** trading as **Jean Vivadou Co.** and dealing in toilet sundries, to cease representing, through use of the word "Paris" on letter heads and in advertising matter, that they own or maintain offices, branches or factories at Paris, France, or in any other city where they do not actually own or maintain such establishments. Findings are that the respondents' principal and only place of business is at 135 W. 20th St., **New York City.**

In connection with the sale of a toilet article advertised as a "Swansdown Puff", the order prohibits the respondents from representing an article made of maribou feathers as being swansdown, and from using the term "Swansdown" with the word "Puff" to designate an article which is not manufactured from the down of a swan or from the specially prepared skin of a goose with its original down attached.

FTC DISMISSES CASE

No. 2661. The Federal Trade Commission has ordered dismissal and closing of its case in the matter of **Chattanooga Automotive Jobbers' Association, of Chattanooga, Tenn.,** and others, and **Tennessee Automotive Jobbers' Association, of Knoxville, Tenn.,** and others, charged with entering into understandings and conspiracies to fix and maintain uniform prices for automobile parts and accessories and with boycotting customers and manufacturers, and other practices.

The Commission's action was ordered following dissolution of the two associations. The order noted that it also appeared the officers, directors and members of the Tennessee Automotive Jobbers' Association had not engaged in the practices charged in the complaint.

The complaint was dismissed as to both associations and as to members of the Tennessee association, but, as to individual and company members of the Chattanooga association, the case was closed without prejudice to the right of the Commission, should the facts so warrant, to reopen and resume prosecution of the complaint.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

Monday, December 21

HEARING BEFORE AN EXAMINER

(Broadcast)

WBAX—John H. Stenger, Jr., Wilkes-Barre, Pa.—Modification of license, **1210 kc.,** 100 watts, unlimited time. Present assignment: **1210 kc.,** 100 watts, specified hours.

Because of the holidays there will be no further meeting of the Broadcast Division of the Commission until January 5.

APPLICATIONS GRANTED

WJBL—Commodore Broadcasting, Inc., Decatur, Ill.—Granted C. P. to install new transmitter.

WIP—Pennsylvania Broadcasting Co., Philadelphia, Pa.—Granted C. P. to move transmitter site locally, install vertical radiator and new equipment.

KOY—Salt River Valley Broadcasting Co., Phoenix, Ariz.—Granted C. P. to change transmitter site locally and install vertical radiator.

KRRV—Red River Valley Broadcasting Corp., Sherman, Tex.—Granted C. P. to make changes in equipment and increase day power from 100 watts to 250 watts.

KLRA—Arkansas Broadcasting Co., Little Rock, Ark.—Granted C. P. to make change in composite equipment, and increase day power from 2½ to 5 KW.

WBRB—Monmouth Broadcasting Co., Red Bank, N. J.—Granted C. P. to make changes in equipment.

WFBM—Indianapolis Power & Light Co., Indianapolis, Ind.—Granted license to cover C. P. authorizing changes in equipment.

KFAC—Los Angeles Broadcasting Co., Inc., Los Angeles, Calif.—Granted license to cover C. P. for installation of new equipment.

KVCV—Golden Empire Broadcasting Co., Redding, Calif.—Granted license to cover C. P. authorizing new station; **1200 kc.,** 100 watts, unlimited.

KVI—Puget Sound Broadcasting Co., Inc., Tacoma, Wash.—Granted license to cover C. P. as modified for changes in transmitter location; installation of directional antenna and new equipment; increase day power from 1 to 5 KW; **570 kc.,** 1 KW night, unlimited. Also granted authority to determine operating power by direct measurement of antenna input.

KRKO—Lee E. Mudgett, Everett, Wash.—Granted license to cover C. P. for installation of new transmitter.

WHEC—WHEC, Inc., Rochester, N. Y.—Granted license to cover C. P. as modified for local move of transmitter and installation of new equipment and vertical radiator.

WHFC—WHFC, Inc., Cicero, Ill.—Granted license to cover C. P. for changes in equipment, installation of vertical radiator, increase in day power to 250 watts, change time of operation from specified hours to unlimited; **1420 kc.,** 100 watts night, 250 watts day.

WAWZ—Pillar of Fire, Zarephath, N. J.—Granted license to cover C. P. for installation of new transmitter and antenna.

KFVD—Standard Broadcasting Co., Los Angeles, Calif.—Granted license to cover C. P. for installation of new equipment.

KGHI—Arkansas Broadcasting Co., Little Rock, Ark.—Granted C. P. to move transmitter locally and install vertical radiator.

KVOR—Out West Broadcasting Co., Colorado Springs, Colo.—Granted C. P. to install new transmitter.

KCKN—WLBF Broadcasting Co., Kansas City, Kans.—Granted license to cover C. P. for changes in equipment.

KSTP—National Battery Broadcasting Co., St. Paul, Minn.—Granted license to cover C. P. for changes in transmitter location to 4½ miles northwest of city and erection of vertical radiator.

KTEM—Bell Broadcasting Co., Temple, Tex.—Granted license to cover C. P. for new station; **1370 kc.,** 100 watts, daytime only.

WNBF—Howitt-Wood Radio Co., Inc., Binghamton, N. Y.—Granted license to cover C. P. for move of transmitter site locally and installation of vertical radiator.

WHDL—Olean Broadcasting Co., Inc., Olean, N. Y.—Granted license to cover C. P. for changes in equipment; change in transmitter location to town of Allegany, N. Y.; change frequency from **1420 kc.** to **1400 kc.;** and increase day power from 100 watts to 250 watts.

WSYR-WSYU—Central New York Broadcasting Corp., Syracuse, N. Y.—Granted license to cover C. P. for change in transmitter site to Darwin Ave. and Valley Drive; installation of new equipment and directional antenna system; and increase in power from 250 watts to 1 KW, unlimited.

WSAU—Northern Broadcasting Co., Inc., Wausau, Wis.—Granted modification of C. P. approving antenna and transmitter site at 113-115 Third St.

WSYR-WSYU—Central New York Broadcasting Co., Syracuse, N. Y.—Granted modification of C. P. as modified for extension of completion date to 1-1-37.

KRLC—H. E. Studebaker, Lewiston, Idaho.—Granted authority to make changes in automatic frequency control equipment.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Granted authority to install automatic frequency control.

KFQD—Anchorage Radio Club, Inc., Anchorage, Alaska.—Granted extension of present license for a period of 2 months.

KRGV—KRGV, Inc., Weslaco, Tex.—Granted special temporary authority to use equipment authorized to operate with 500 watts pending installation of new antenna system.

KUOA—KUOA, Inc., Siloam Springs, Ark.—Granted license to cover C. P. for change in transmitter and studio location to John Brown University, Siloam Springs; install new equipment, and increase day power from 1 to 2½ KW; **1260 kc.**

WEAU—Central Broadcasting Co., Eau Claire, Wis.—Granted modification of C. P. approving transmitter site at 26th St. and Crescent Road, and set for hearing application to increase time of operation from daytime to limited, sunset at Abilene, Kans.

WBIG—North Carolina Broadcasting Co., Inc., Greensboro, N. C. —Granted modification of license to make changes in antenna and increase night power from 500 watts to 1 KW.

KCMO—Lester E. Cox, Thomas L. Evans, and C. C. Payne, Kansas City, Mo.—Granted voluntary assignment of license to KCMO Broadcasting Co.; **1370 kc.,** 100 watts, S.H. (SA for unlimited time).

WSVA—Shenandoah Valley Broadcasting Corp., Harrisonburg, Va.—Granted authority to transfer control of corporation from Marion K. Gilliam to Floyd Williams; **550 kc.,** 500 watts daytime.

NEW—National Broadcasting Co., Inc., New York City.—Granted modification of extension of authority to transmit recorded programs to all broadcast stations under control of Canadian authorities that may be heard consistently in the U. S.

W9XPY—American Broadcasting Corp. of Kentucky, Mobile, Lexington, Ky.—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 10.5 watts.

NEW—American Broadcasting Corp. of Kentucky, Mobile, Lexington, Ky.—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 2 watts.

KOOS—Tribune Printing Co., Jefferson City, Mo.—Granted modification of C. P. approving transmitter site at St. Mary's Blvd., and studio location at 400 E. Capital St., and approving new equipment and vertical radiator.

NEW—Keystone Broadcasting Corp., Mobile, Harrisburg, Pa.—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 50 watts, unlimited.

NEW—Keystone Broadcasting Corp., Mobile, Harrisburg, Pa.—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 5 watts, unlimited.

NEW—Roy L. Albertson, Mobile, Buffalo, N. Y.—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600 kc.** and **40600,** 2.5 watts, unlimited.

NEW—Symons Broadcasting Co., Mobile (Spokane, Wash.).—Granted C. P. for experimental relay broadcast station; frequencies **31100, 34600, 37600, 40600 kc.,** 15 watts, unlimited.

NEW—WSMB, Inc., Mobile (New Orleans, La.).—Granted C. P. for relay broadcast station; frequencies **1606, 2022, 2102, 2758 kc.,** 40 watts.

NEW—WSMB, Inc., Mobile (New Orleans, La.).—Granted C. P. for relay broadcast station; frequencies **1606, 2022, 2102, 2758 kc.,** 40 watts.

WBAM—Bamberger Broadcasting Service, Inc., Mobile, Newark, N. J.—Granted modification of C. P. to make changes in equipment and increase power to 30 watts. Also granted license to cover same.

WBAN—Bamberger Broadcasting Service, Inc., Mobile, Newark, N. J.—Granted modification of C. P. for changes in equipment and reduction in power from 50 to 30 watts. Also granted license covering same.

WJLF—WBNS, Inc., Mobile (Columbus, Ohio).—Granted license to cover C. P. for new station; frequencies **1646, 2090, 2190** and **2830 kc.,** 20 watts.

W3XAD—RCA Mfg. Co., Inc., Portable, New York, N. Y.—Granted license for portable television broadcast station for relaying television programs from one plant to another (W3XAD and W3XAL formerly used for aural broadcast deleted under new rules); frequencies **124000-13000 kc.,** 500 watts.

WENA—Westinghouse Electric and Manufacturing Co., Mobile (Chicopee Falls, Mass.).—Granted C. P. for new relay broadcast station; frequencies **1606, 2022, 2102** and **2758 kc.,** 15 watts. Also granted license covering same.

WGBD—WBNS, Inc., Mobile (Columbus, Ohio).—Granted license to cover C. P. for new relay broadcast station; **1646, 2090, 2190** and **2830 kc.,** 3 watts.

W8XAB—Olean Broadcasting Co., Inc., Mobile (Olean, N. Y.).—Granted license to cover C. P. for new relay broadcast experimental station; frequencies **31100, 34600, 37600** and **40600 kc.,** 25 watts.

W8XKC—Miami Valley Broadcast Corp., Mobile (Dayton, Ohio.) —Granted license to cover C. P. for new relay broadcast station; frequencies same as above, 40 watts.

RENEWAL OF LICENSES

The following stations were granted renewal of licenses for the regular period:

KORE, Eugene, Ore.; WMFO, Decatur, Ala.; WNBF, Binghamton, N. Y.; WOC, Davenport, Iowa; WPAD, Paducah, Ky.; WPAR, Parkersburg, W. Va.; WPAY, Portsmouth, Ohio; WRAK, Williamsport, Pa.; WRGA, Rome, Ga.; WRJN, Racine, Wis.; KBIX, Muskogee, Okla.; KFGQ, Boone, Iowa; KFJM, Grand Forks, N. Dak.; KIUP, Durango, Colo.; KPLC, Lake Charles, La.; KPQ, Wenatchee, Wash.; WABY, Albany, N. Y.; WAGF, Dothan, Ala.; WAZL, Hazleton, Pa.; WBTM, Danville, Va.; WCBM, Baltimore, Md.; WCHV, Charlottesville, Va.; WEED, Rocky Mount, N. C.; WJBK, Detroit, Mich.; WJBO, Baton Rouge, La.; WKBV, Richmond, Ind.; WLEU, Erie, Pa.; WLLH, Lowell, Mass.; WMAS, Springfield, Mass.; WMBC, Detroit, Mich.; WMBH, Joplin, Mo.; WMBR, Jacksonville, Fla.; WMFD, Wilmington, N. C.; WMFJ, Daytona Beach, Fla.; WNLC, New London, Conn.; KABC, San Antonio, Tex.; KABR, Aberdeen, S. Dak.; KALB, Alexandria, La.; KCKN, Kansas City, Kans.; KFIZ, Fond du Lac, Wis.; KFJZ, Fort Worth, Tex.; KFRO, Longview, Tex.; KGAR, Tucson, Ariz.; KGFF, Shawnee, Okla.; KGFL, Roswell, N. Mex.; KGGC, San Francisco; KGIW, Alamosa, Colo.; KGKB, Tyler, Tex.; KGKY, Scottsbluff, Nebr.; KGKL, San Angelo, Tex.; KICA, Clovis, N. Mex.; KIDW, Lamar, Colo.; KLUF, Galveston, Tex.; KMAC, San Antonio, Tex.; KNEL, Brady, Tex.; KNET, Palestine, Tex.; KRE, Berkeley, Calif.; KRLC, Lewiston, Idaho; KRNR, Roseburg, Ore.; KVL, Seattle; KWYO, Sheridan, Wyo.; WDAS and auxiliary, Philadelphia, Pa.; WFOR, Hattiesburg, Miss.; WIBM, Jackson, Mich.; WJMS, Ironwood, Mich.; WKEU, Griffin, Ga.; WLAP, Lexington, Ky.; WSYB, Rutland, Vt.; WTMV, E. St. Louis, Ill.; WWRL, Woodside, L. I.; WWSW, Pittsburgh, Pa.

The following stations were granted renewal of licenses on a temporary basis subject to whatever action may be taken by the Commission upon pending applications for renewals:

KVOE, Santa Ana, Calif.; KXL, Portland, Ore.; WMBQ, Brooklyn, N. Y.

WGPC—Americus Broadcast Corp., Albany, Ga.—Granted renewal of license on a temporary basis subject to whatever action may be taken by the Commission upon the renewal application of this station and upon the application of H. Wimpy.

WJTN—James Broadcasting Co., Inc., Jamestown, N. Y.—Granted renewal of license for the period ending June 1, 1937.

APPLICATIONS DISMISSED

The following applications, heretofore set for hearing, were dismissed at request of applicants:

NEW—Berks Broadcasting Co., Pottsville, Pa.—C. P., **580 kc.,** 250 watts, daytime.

NEW—R. E. Chinn, Moorhead, Minn.—C. P., **1500 kc.,** 100 watts, unlimited.

NEW—Julius Brunton & Sons Co., San Jose, Calif.—C. P., **970 kc.,** 250 watts, daytime.

KQW—Pacific Agr. Foundation, Ltd., Sacramento, Calif.—C. P., **1010 kc.,** 1 KW, 5 KW LS, unlimited.

KVOD—Colorado Radio Corp., Denver, Colo.—Modification of license, **630 kc.,** 500 watts, unlimited.

APPLICATIONS DENIED

WCAX—Burlington Daily News, Inc., Burlington, Vt.—Denied special temporary authority to operate with power of 100 watts, daily except Friday, Saturday and Sunday, 7:30 to 9 a. m., 11:30 a. m. to 2 p. m., 4:30 to 7 p. m.; Friday and Saturday, 7:30 to 9 a. m., 11:30 to 2 p. m., 4:30 to 8 p. m., EST, for period not to exceed 30 days.

KUOA—KUOA, Inc., Siloam Springs, Ark.—Denied special authority to operate with power of 5 KW from midnight to 6 a. m., CST, for a period not to exceed 10 days, to broadcast special test program.

SET FOR HEARING

WFBM—Indianapolis Power & Light Co., Indianapolis, Ind.—Hearing before Broadcast Division on application for modification of license to increase nighttime power to 5 KW, with directional antenna.

WCAE—WCAE, Inc., Pittsburgh, Pa.—Hearing before Broadcast Division on application for modification of license to increase nighttime power from 1 KW to 5 KW.

NEW—Wm. W. Ottaway, Port Huron, Mich.—Application for C. P. for new broadcast station at Port Huron, Mich., to operate on **1370 kc.,** 250 watts, daytime only. Transmitter and studio sites to be determined with Commission's approval.

KFUO—Evangelical Lutheran Synod of Missouri, Ohio and other states, Rev. R. Kretzschmar, Chairman of Board of Control of Concordia Seminary, Clayton, Mo.—Application for C. P. to install new equipment and directional antenna system for nighttime operation; increase night power from 500 watts to 1 KW, day power from 1 KW to 5 KW; and increase time of operation from sharing with KSD to one-half time.

WIBG—Seaboard Radio Broadcasting Corp., Glenside, Pa.—Hearing before Broadcast Division on application as amended 11-17-36 for C. P. to install new equipment and vertical radiator and increase power from 100 watts daytime only to 5 KW night, 5 KW day, limited to sunset at Chicago. Site to be determined.

WSOC—WSOC, Inc., Charlotte, N. C.—Application for C. P. to move transmitter site locally; install new equipment, with directional antenna system for nighttime use; change frequency from **1210 kc.** to **600 kc.**; increase power from 100 watts night, 250 watts day, to 250 watts night, 1 KW day, unlimited.

KFPL—WFTX, Inc., Dublin, Tex.—Application for C. P. to move KFPL from Dublin, Tex., to Wichita Falls, Tex., as well as to install new equipment and vertical radiator, and change frequency from **1310 kc.** to **1500 kc.**

KFPL—C. C. Baxter, Dublin, Tex.—Application for voluntary assignment of license of KFPL to WFTX, Inc., a Texas corporation.

NEW—Chase S. Osborn, Jr., Fresno, Calif.—Application for C. P. for new broadcast station at Fresno, Calif., to operate on **1440 kc.,** 500 watts, unlimited, exact transmitter site to be determined with Commission's approval.

NEW—George W. Taylor Co., Inc., Williamson, W. Va.—Application for C. P. for new broadcast station at Williamson, W. Va., to operate on **1210 kc.,** 100 watts, daytime only.

KSL—Radio Service Corp. of Utah, Salt Lake City, Utah.—Hearing before Broadcast Division on application for C. P. to make changes in equipment and increase power from 50 KW to 500 KW.

NEW—Faith Broadcasting Co., Inc., Wichita Falls, Tex.—Application for C. P. for new broadcast station at Wichita Falls, Tex., to operate on **1380 kc.,** 1 KW, unlimited time. Transmitter and studio sites and antenna are to be approved.

WABY—Adirondack Broadcasting Co., Inc., Albany, N. Y.—Application for modification of C. P. to increase maximum rated carrier power of equipment and increase daytime power from 100 watts to 250 watts.

WPEN—Wm. Penn Broadcasting Co., Philadelphia, Pa.—Application for authority to transfer control of corporation from Clarence H. Taubel to John Iraci. Also application requesting facilities of WRAX to which licensee of WRAX has consented.

WRAX—WRAX Broadcasting Co., Philadelphia, Pa.—Application for authority to transfer control of corporation to John Iraci.

WPEN—Wm. Penn Broadcasting Co., Philadelphia, Pa.—Application for modification of license to change hours of operation from sharing time with WRAX to unlimited.

WIRE—Indianapolis Broadcasting Co., Indianapolis, Ind.—Application for transfer of control of corporation from William E. Vogelback and Douglas E. Kendrick to Central Newspapers, Inc. WIRE operates on **1400 kc.,** 500 watts night, 1 KW day, and has a C. P. for 1000 watts night, 5000 watts day.

SPECIAL TEMPORARY AUTHORIZATIONS

WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Granted special temporary authority to operate from 11 p. m. until 1 a. m., EST, on Tuesday, Thursday, Saturday and Sunday nights, using 50 watts power, for remainder of December in order to use station's facilities to raise food and supplies for unfortunates of Hagerstown; also to operate unlimited time nights of December 24 and 31, 1936, in order to broadcast special features, with 50 watts.

KGFX—Mrs. Dana McNeil, Pierre, S. Dak.—Granted special temporary authority to Mrs. Dana McNeil to operate station for period beginning December 16, 1936, and ending in no event later than January 14, 1937, pending action on application for consent to involuntary assignment of license.

WFIL—WFIL Broadcasting Co., Philadelphia, Pa.—Granted extension of special temporary authority to operate on **560 kc.,** with power of 1 KW at night, during month of January, 1937, pending filing of and action on license application to cover construction permit for this authority.

KGNC—Plains Radio Broadcasting Co., Amarillo, Tex.—Granted special temporary authority to operate with reduced power of 250 watts for period of 4 days beginning December 18, 1936, while certain changes in the transmitting equipment are being made pursuant to C. P.

WMBG—Havens and Martin, Inc., Richmond, Va.—Granted extension of special temporary authority to operate from 6:30 p. m. to 7 p. m., EST, on Sundays during month of January, 1937 (provided WBBL remains silent), in order to broadcast special programs.

KWSC—State College of Washington, Pullman, Wash.—Granted special temporary authority to remain silent from 9:30 p. m. on Friday, December 18, 1936, until 6:45 a. m., PST, Monday, January 4, 1937, in order to make changes and improvements in equipment preparatory to operating on 5 KW as authorized by C. P.

KUMA—Albert H. Schermann, Yuma, Ariz.—Granted special temporary authority to operate from 10 p. m. to 11:30 p. m., MST, Tuesday, December 15, 22, 29, 1936, in order to broadcast wrestling and boxing bouts.

WNAD—University of Oklahoma, Norman, Okla.—Granted special temporary authority to operate from 2 p. m. to 4 p. m., CST, January 5, 6, 7, 11, 12, 13, 14, 18 and 19, 1937, in order to broadcast special educational programs (provided KGGF remains silent).

KGGF—Hugh J. Powell and Stanley Platz, d/b as Power & Platz, Coffeyville, Kans.—Granted special temporary authority to operate from 7:15 p. m. to 9:15 p. m., CST, January 21, 26 and 28, 1937, and from 8:15 p. m. to 9:15 p. m., CST, January 20 and 27, 1937 (provided WNAD remains silent), so that WNAD may remain silent during University examinations and the vacation between semesters.

WHAT—Independence Broadcasting Co., Inc., Philadelphia, Pa.—Granted special temporary authority to remain silent all day Christmas Day, Friday, December 25, 1936.

KWLC—Luther College, Decorah, Iowa.—Granted special temporary authority to reduce hours of operation to 1½ hours per week during the period of Christmas holidays at Luther College, beginning December 19, 1936, and ending in no event later than January 5, 1937.

WOW—Woodman of the World Life Insurance Company, Omaha, Nebr.—Granted extension of special temporary authority to operate with power of 5 KW at night for period beginning December 28, 1936, and ending in no event later than January 26, 1937.

WCBS—WCBS, Inc., Springfield, Ill.—Granted special temporary authority to operate from 10 p. m. to 12 midnight, CST, for period ending in no event later than December 25, 1936, in order to broadcast talent programs, asking listeners for donations of food to fill baskets for American Legion.

WTRC—The Truth Publishing Co., Inc., Elkhart, Ind.—Granted special temporary authority to operate simultaneously with station WLBC from 7:30 p. m. to 8:30 p. m., CST, Tuesday, December 22, 1936, for purpose of presenting a Christmas program, and from 7:30 p. m. to 10 p. m., CST, Wednesday, December 30, 1936, in order to broadcast La Porte-Elkhart High School basketball game.

WAPO—W. A. Patterson, Chattanooga, Tenn.—Granted special temporary authority to operate unlimited time nights of December 21, 22, 23 and 24, 1936, in order to broadcast programs for charity in behalf of the United Civic Societies and business men of Chattanooga.

WCBS—WCBS, Inc., Springfield, Ill.—Granted special temporary authority to operate from 10 p. m., CST, Thursday, December 31, 1936, until 1 a. m., CST, Friday, January 1, 1937, in order to broadcast special New Year's Eve program.

WDBO—Orlando Broadcasting Co., Inc., Orlando, Fla.—Granted extension of special temporary authority to operate with additional power of 750 watts at night for period beginning December 27, 1936, and ending in no event later than January 25, 1937.

WELI—City Broadcasting Corp., New Haven, Conn.—Granted special temporary authority to operate unlimited time Wednesday, December 16, 1936, in order to broadcast a testimonial banquet in honor of the entire state ticket, to be held in the Pavilion Royale, and to operate unlimited time Tuesday, December 29, 1936, in order to broadcast a testimonial banquet in honor of Gov. Wilbur L. Cross, to be held at Hotel Taft.

WPAX—H. Wimpy, Thomasville, Ga.—Granted special temporary authority to operate from 5:30 p. m. to 10 p. m., EST, the night of Sunday, December 27, 1936, in order to broadcast a special farewell address and church service of Rev. Ansley G. Moore of Presbyterian Church of Thomasville.

KGDM—E. F. Peffer, Stockton, Calif.—Granted special temporary authority to operate from local sunset (4:45 p. m.), PST, December 29, 1936, until 1 a. m. PST, December 30, 1936, and from local sunset, December 30, 1936, until 1 a. m., PST, December 31, 1936, in order to bring to listeners in the Central Valley (known as Sacramento-San Joaquin Valleys) the inaugural program of KGDM when it becomes an affiliate of Don-Lee Mutual Broadcasting System.

KGKB—East Texas Broadcasting Co., Tyler, Tex.—Granted special temporary authority to operate nights from 8 to 10 p. m., CST, December 8 to January 1, pending compliance with C. P. granted for 250 watts day, unlimited time.

RATIFICATIONS

The Commission ratified the following acts authorized on the dates shown:

WEAN—Shepard Broadcasting Service, Inc., Providence, R. I.—Granted equipment test period extension for 10 days from December 6; no tests to be made from 4 to 4:20 a. m., EST, December 12, due to monitoring schedule.

WABY—The Adirondack Broadcasting Co., Inc., Albany, N. Y.—Granted extension of program test period for 30 days from December 6.

WKY—WKY Radiophone Co., Oklahoma City, Okla.—Granted extension of program test period for 30 days from December 12.

KWTO—Ozarks Broadcasting Co., Springfield, Mo.—Granted extension of program test period for 30 days from December 12.

KFRU—KFRU, Inc., Columbia, Mo.—Granted extension of program test period for 30 days from December 18.

WHFC—WHFC, Inc., Cicero, Ill.—Granted extension of program test period for 30 days from December 11.

WAWZ—Pillar of Fire, Zarephath, N. J.—Granted extension of program test period for 30 days from December 7.

WTAW—Agr. and Mech. College of Texas, College Station, Tex.—Granted extension of special temporary authority to suspend operation beginning December 12 and ending December 21, 1936, pending rebuilding of transmitter and installation of automatic frequency control apparatus.

The Division granted the petition of Fred A. Baxter in so far as it requests cancellation of oral argument scheduled to be held on his application for C. P. to erect a new station at Superior, Wis. (Docket No. 3358); and denied the petition in so far as it requests a grant of said application.

The Broadcast Division denied the motion of Ted R. Woodward requesting that the Commission strike the appearance filed by Lincoln Memorial University in connection with that University's application (Docket No. 4064) and granted the petition of Ted R. Woodward for an extension of time of 10 days from December 5 within which to file his answer to the appearance of said applicant.

The Broadcast Division granted the motion of the Brooklyn Daily Eagle Broadcasting Co., Inc., for leave to file late answer as respondent in the proceedings pending upon the application of State Broadcasting Corp. (WNBC), New Britain, Conn. (Docket No. 2917).

The Broadcast Division granted the petition of May Seed and Nursery Co. (KMA), Shenandoah, Iowa, requesting authority to intervene in the proceedings on the application of City Broadcasting Corp. (WELI), New Haven, Conn., for modification of license (Docket No. 3761).

The Broadcast Division denied the petition of the Educational Broadcasting Corp. (KROW), Oakland, Calif., requesting authority to intervene in the hearing upon the application of City Broadcasting Corp. (WELI), New Haven, Conn.

The Broadcast Division granted the petition of Harold Thomas requesting authority to intervene in the proceedings upon the application of Lawrence K. Miller, Pittsfield, Mass., for a C. P. (Docket No. 4187).

ACTION ON EXAMINER'S REPORTS

NEW—Ex. Rep. 1-259: Kidd Brothers (K. K. Kidd and A. C. Kidd), Taft, Calif.—Denied C. P. for new broadcast station to operate on **1420 kc.**, 100 watts, daytime. Order effective February 2, 1937. Examiner R. H. Hyde reversed.

NEW—Ex. Rep. 1-320: WRBC, Inc., Youngstown, Ohio.—Denied, as in cases of default, application for C. P. for new station to operate on **890 kc.**, 1 KW, unlimited time. Examiner R. H. Hyde sustained.

MISCELLANEOUS

WABY—Adirondack Broadcasting Co., Inc., Albany, N. Y.—Denied petition to grant, without a hearing, application for modification of C. P. to make changes in equipment and increase daytime power to 250 watts.

NEW—Peninsula Newspapers, Inc., Palo Alto, Calif.—Granted petition for continuance of hearing on its application for C. P. to erect a new station at Palo Alto, to operate on **1160 kc.**, 250 watts, daytime only, from January 11, 1937, to first week in March, 1937, date to be fixed by Docket Section.

KSLM—Oregon Radio, Inc., Salem, Ore.—Granted petition for continuance of hearing from January 5, 1937, for a period of approximately 30 days, the new date to be fixed by the Docket Section, on application for C. P. to change frequency from **1370 kc.** to **1240 kc.**, and increase power from 100 watts, unlimited, to 250 watts, unlimited time.

NEW—Harold Thomas, Pittsfield, Mass.—Denied petition to reconsider and grant without hearing application for C. P. for new station to operate on **1310 kc.**, 100 watts night, 250 watts day, unlimited time, site to be approved, which was designated for hearing September 22, 1936.

NEW—United States Broadcasting Co., Toledo, Ohio.—Granted petition requesting Acceptance of Appearance and Statement of Desire to be Heard in connection with application for C. P. for new station at Toledo, to operate on **1200 kc.**, 100 watts, daytime only, hearing on which is scheduled for January 4, 1937; additional 10 days also given other interested parties who have not done so to file answers.

NEW—Birmingham News, Birmingham, Ala.—Granted petition requesting Commission to waive requirements of Rule 106.28 and accept exceptions and request for oral argument in connection with Examiner's Report recommending grant, subject to Rule 131, of application of WKZO, Inc., of Kalamazoo, Mich., for change in hours of operation from daytime to unlimited and to change power from 1 KW to 250 watts night, 1 KW LS.

NEW—Golden Empire Broadcasting Co., Marysville, Calif.—Denied motion to consolidate and remand for further hearing applications of Golden Empire Broadcasting Co. and Marysville-Yuba City Publishers, Inc., for new stations at Marysville, Calif., to operate on **1140 kc.**, 250 watts day. However, it was ordered that further action by the Commission be deferred on application of Marysville-Yuba City Publishers, Inc. (Ex. Rep. 1-264), until such time as the appli-

cation of the Golden Empire Broadcasting Co. becomes available for Commission action. Examiner has not as yet made his report on the Golden Empire Broadcasting Co., while oral argument was held on December 3, 1936, in connection with Ex. Rep. No. 1-264, recommending grant of application of the Marysville-Yuba City Publishers, Inc.

The Broadcast Division, upon consideration of petition filed by the Florida Broadcasting Co. (WMBR), Jacksonville, Fla., and the consents received thereto, directed that the hearing on that company's application (Docket No. 4135), scheduled for December 16, 1936, be cancelled.

WHBL—Press Publishing Co., Sheboygan, Wis.—Granted petition to postpone hearing on application of Press Publishing Co. for C. P. to increase daytime power of station WHBL to 1 KW, until after the Commission reaches a decision on application of Milwaukee Broadcasting Co. (WEMP) to change frequency from **1310 kc.** to **1010 kc.**, and increase power from 100 watts daytime to 250 watts night, 500 watts day, unlimited time, hearing on which was held September 12, 1936. Docket Section will fix new hearing date.

APPLICATIONS RECEIVED

First Zone

WLBZ—Maine Broadcasting Co., Inc., Bangor, Maine.—License
620 to cover construction permit (B1-P-1390) for new transmitter.

WABI—Community Broadcasting Service, Bangor, Maine.—
1200 License to cover construction permit (B1-P-1128) for a new transmitter and antenna, increase in power, change hours of operation, and move transmitter.

WSAY—Brown Radio Service & Laboratory (Gordon P. Brown,
1210 owner), Rochester, N. Y.—Construction permit to make changes in equipment, increase power from 100 watts to 100 watts night, 250 watts day, and change hours of operation from daytime to unlimited time.

WNBZ—Earl J. Smith and Wm. Mace, d/b as Smith & Mace,
1290 Saranac Lake, N. Y.—Construction permit to make changes in transmitting equipment.

WABY—The Adirondack Broadcasting Co., Inc., Albany, N. Y.—
1370 License to cover construction permit (B1-P-1191) for new transmitter, antenna, and move studio and transmitter. Amended re-equipment.

WSYB—Philip Weiss, tr/as Philip Weiss Music Co., Rutland, Vt.—
1500 Modification of license to change specified hours from 10 a. m. to 1 p. m., 5 p. m. to 9 p. m. daily, Sunday 10 a. m. to 11 a. m., to 9 a. m. to 1 p. m., 5 p. m. to 9 p. m. daily. Amended to add the hours now licensed for Sunday 10 a. m. to 11 a. m.

Second Zone

WCHS—Charleston Broadcasting Co., Charleston, W. Va.—Con-
580 struction permit to install a vertical antenna, increase night power from 500 watts to 1 KW.

WLW—The Crosley Radio Corp., Cincinnati, Ohio.—Construction
700 permit to make changes in equipment.

WBLY—Herbert Lee Blye, Lima, Ohio.—License to cover con-
1210 struction permit (B2-P-643) as modified for a new station.

KQV—KQV Broadcasting Co., Pittsburgh, Pa.—Construction per-
1380 mit to make changes in equipment; change power from 500 watts to 1 KW, hours of operation from simultaneous day WSMK, specified hours night, to unlimited time, using directional antenna at night.

NEW—Staunton Broadcasting Co., Inc., Staunton, Va.—Construc-
1500 tion permit for a new station to be operated on **1500 kc.**, 100 watts night, 250 watts day, unlimited time. Amended to change hours of operation from unlimited to daytime, using 250 watts power.

W8XIK—The Crosley Radio Corp., Mobile.—Construction permit to increase power from 30 watts to 50 watts and make changes in equipment.

W8XIL—The Crosley Radio Corp., Mobile.—Construction permit to make changes in equipment and increase power from 30 to 50 watts.

NEW—The Crosley Radio Corp., Mobile.—Construction permit for a new low frequency relay broadcast station to be operated on **1622, 2058, 2150, 2790 kc.,** 50 watts.

NEW—The WGAR Broadcasting Co., Mobile.—Construction permit for a new low frequency relay broadcast station to be operated on **1622, 2058, 2150, 2790 kc.,** 100 watts.

NEW—The WGAR Broadcasting Co., Mobile.—License to cover above.

Third Zone

NEW—R. W. Page Corp., Columbus, Ga.—Construction permit
610 for a new station to be operated on **950 kc.,** 250 watts, unlimited time. Amended to change frequency from **950 kc.** to **610 kc.**

NEW—El Paso Broadcasting Co., El Paso, Tex.—Construction
940 permit for a new station to be operated on **940 kc.,** 1 KW, unlimited time.

WNOX—Continental Radio Co., Knoxville, Tenn.—Modification
1010 of construction permit (B3-P-1295) for new transmitter and antenna, increase in power, and move of transmitter, requesting new transmitter and extend commencement and completion dates.

WRBL—WRBL Radio Station, Inc., Columbus, Ga.—Modifica-
1200 tion of construction permit (B3-P-1396) for new transmitter and antenna, increase power, move studio and transmitter locally, requesting further changes in equipment, change frequency from **1200 kc.** to **950 kc.,** and power from 100 watts, 250 watts day, to 250, 500 watts day.

KADA—C. C. Morris, Ada, Okla.—Modification of license to
1200 change hours of operation from daytime to unlimited time, using 100 watts power.

KGHI—Arkansas Broadcasting Co., Little Rock, Ark.—Con-
1200 struction permit to move transmitter from 319 West Second St., Little Rock, Ark., to 3rd and Louisiana Street, Little Rock, Ark., and install a vertical antenna.

WIOD—Isle of Dreams Broadcasting Corp., Miami, Fla.—Con-
1300 struction permit to install a 250-watt auxiliary transmitter to be located at 600 Biscayne Blvd., Miami, Fla.

KFPL—WFTX, Inc., Wichita Falls, Tex.—Construction permit
1310 to change frequency from **1310 kc.** to **1500 kc.;** install a new transmitter; make changes in antenna system; move transmitter from at north city limits, Dublin, Tex., to site to be determined, Wichita Falls, Tex., and studio from 205 Grafton, Dublin, Tex., to site to be determined, Wichita Falls, Tex.

KFPL—C. C. Baxter, Dublin, Tex.—Voluntary assignment of
1310 license from C. C. Baxter to WFTX, Inc.

KFRO—Voice of Longview, Longview, Tex.—Modification of con-
1370 struction permit (B3-P-1308) to make changes in authorized equipment and extend commencement date from 12-7-36 to 30 days after grant.

NEW—Faith Broadcasting Co., Inc., Wichita Falls, Tex.—Con-
1380 struction permit for a new station to be operated on **1380 kc.,** 1 KW, unlimited time.

KRBC—Reporter Broadcasting Co., Abilene, Tex.—License to cover
1420 construction permit (B3-P-1502) for new equipment and increase in power.

KAAD—Fort Worth Broadcasters, Inc., Mobile.—License to cover construction permit for a new relay broadcast station.

W4XCH—Wilton E. Hall, Mobile.—License to cover construction permit for a relay broadcast experimental station.

W4XCI—The Atlanta Journal Co., Mobile.—License to cover construction permit for a new relay broadcast station.

WAAK—WSOC, Inc., Mobile.—License to cover construction permit as modified for a new low frequency relay broadcast station.

W4XH—Virgil V. Evans, d/b as The Voice of South Carolina, Spartanburg, S. C.—Modification of license to add frequency **25950 kc.** in addition to present frequencies. Amended to delete the present assigned frequencies and request **25950 kc.** only.

NEW—Isle of Dreams Broadcasting Corp., Mobile.—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 10 watts.

Fourth Zone

WREN—The WREN Broadcasting Co., Inc., Lawrence, Kans.—
1220 Authority to transfer control of corporation from R. R. Jackman, Jean Jackman Carter, R. C. Jackman, F. C. Jackman, O. E. Jackman, Katherine Jackman Smith, Vernon H. Smith to The Kansas City Star Co., 6,000 shares of stock.

WTCN—Minnesota Broadcasting Corp., Minneapolis, Minn.—
1250 Authority to determine operating power by direct measurement of antenna.

KOIL—Central States Broadcasting Co., Omaha, Nebr.—Construc-
1260 tion permit to make changes in equipment; install a vertical antenna; increase power from 1 KW, 2½ KW day, to 1 KW, 5 KW day; and move transmitter from 600 Huntington Ave., Fairmont Park, Council Bluffs, Iowa, to Twp. 74 N., Range 44 W., Pottawattamie County, Iowa. Amended to change transmitter site to NW¼ of NW¼ of NW¼ Section 2, Twp. 15 N., Range 12 East, near Omaha, Nebr.

KWOS—Tribune Printing Co., Jefferson City, Mo.—Modification
1310 of construction permit (B4-P-1023) for a new station, requesting change in type of equipment, approval of antenna and approval of transmitter site at St. Mary's Blvd., Jefferson City, Mo., and studio site at 400 E. Capital St., Jefferson City, Mo. Amended to make changes in equipment.

WSAU—Northern Broadcasting Co., Inc., Wausau, Wis.—Modifi-
1370 cation of construction permit (B4-P-725) as modified for a new station, requesting change of hours of operation from daytime to unlimited time, using 100 watts power.

KPLT—North Texas Broadcasting Co., Paris, Tex.—License to
1500 cover construction permit (B3-P-442) as modified for a new station.

NEW—Frank N. Adcock, Plainview, Tex.—Construction permit
1500 for a new station to be operated on **1500 kc.,** 100 watts, unlimited time.

NEW—Howard A. Miller, Galesburg, Ill.—Construction permit
1500 for a new station to be operated on **1500 kc.,** 100 watts, specified hours (6 a. m. to 10 p. m.). Amended to give transmitter site as Galesburg, Ill., and studio site at Weinberg Arcade, corner Simmons and Prairie Streets, Galesburg, Ill., and make changes in antenna.

W9XPT—Woodmen of the World Life Insurance Assn., Mobile.—
License to cover construction permit for a new high frequency relay broadcast station.

W9XPX—Woodmen of the World Life Insurance Assn., Mobile.—
License to cover construction permit for a new high frequency relay broadcast station.

Fifth Zone

KGHL—Northwestern Auto Supply Co., Inc., Billings, Mont.—
780 Modification of license to increase power from 1 KW, 5 KW, to 5 KW day and night.

KVOD—Colorado Radio Corp., Denver, Colo.—Construction per-
920 mit to change frequency from **920 kc.** to **630 kc.;** change hours of operation from share KFEL to unlimited; increase power from 500 watts to 1 KW; install directional antenna for night use; and move transmitter from outside of Denver, Colo., to north of Denver, Colo.

NEW—Radiotel Corporation, San Diego, Calif.—Construction per-
920 mit for a new station to be operated on **920 kc.,** 500 watts, unlimited time.

KROW—Educational Broadcasting Corp., Oakland, Calif.—Con-
930 struction permit to install a new transmitter; erect a vertical antenna; increase power from 1 KW to 5 KW; and move transmitter from 1520 8th Avenue, Oakland, Calif., to site to be determined, Alameda, Calif.

KFWB—Warner Bros. Broadcasting Corp., Hollywood, Calif.—
950 Authority to determine operating power by direct measurement of antenna.

KFWB—Warner Bros. Broadcasting Corp., Hollywood, Calif.—
950 License to cover construction permit (B5-P-202) as modified for new equipment, increase in power, and move of transmitter.

KWJJ—KWJJ Broadcast Co., Inc., Portland, Ore.—Authority to
1060 determine operating power by direct measurement of antenna.

KWJJ—KWJJ Broadcast Co., Inc., Portland, Ore.—License to
1060 cover construction permit (B5-P-837) as modified for changes in equipment, move of transmitter and studio.

KFXJ—R. G. Howell and Chas. Howell, d/b as Western Slope
1200 Broadcasting Co., Grand Junction, Colo.—Authority to install automatic frequency control equipment.

KFXD—Frank E. Hurt, Nampa, Idaho.—License to cover con-
1200 struction permit (B5-P-1358) for new equipment.

KVOA—Arizona Broadcasting Co., Inc., Tucson, Ariz.—License to
1260 cover construction permit (B5-P-1096) as modified for changes in equipment, install new antenna, increase in power and move of transmitter locally.

KID—KID Broadcasting Co., Inc., Idaho Falls, Idaho.—License
1320 to cover construction permit (B5-P-559) as modified for new equipment, increase in power and move of transmitter.

KIDO—Frank L. Hill and C. G. Phillips, d/b as Boise Broadcast
1350 Station, Boise, Idaho.—Construction permit to make changes in equipment and increase power from 1 KW, 2½ KW day, to 5 KW.

NEW—Salinas Newspapers, Inc., Salinas, Calif.—Construction
1390 permit for a new station to be operated on **1390 kc.,** 250 watts, daytime.

NEW—Roberts-MacNab Hotel Co., Arthur L. Roberts, R. B.
1420 MacNab, A. J. Breitbach, General Manager, Bozeman, Mont.—Construction permit for a new broadcast station to be operated on **1420 kc.,** 100 watts night, 250 watts daytime, unlimited time.

NEW—Harry R. Spence, Centralia, Wash.—Construction permit
1500 for a new station to be operated on **1500 kc.,** 100 watts, unlimited time. Amended to give transmitter site as County Road, midway between Chehalis and Centralia, Wash.

KDB—Santa Barbara Broadcasters, Ltd., Santa Barbara, Calif.—
1500 License to cover construction permit (B5-P-1331) for changes in equipment and increase in power.

W6XKG—Ben S. McGlashan, Los Angeles, Calif.—Modification of license to delete frequencies **31600, 35600, 38600, 41000 kc.** and add the frequency **25950 kc.**

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

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IN THIS ISSUE

COMMITTEE OF FIFTEEN MEETS

A meeting of the Joint Committee on Radio Research was held in New York City, December 16. This Committee, often referred to as the "Committee of Fifteen", represents the National Association of Broadcasters, the American Association of Advertising Agencies and the Association of National Advertisers. The meeting was called to deal with a number of important issues which are arising in the work of the Committee.

The Committee had before it for consideration the report of Paul Peter, Committee investigator, who had completed his report on coverage of radio stations and on methods used to determine such coverage. This report had been the subject of study and examination by the Technical Committee headed by L. D. H. Weld and the full Committee had before it also the latter's recommendations. There was also before the Committee the question of retaining the services of Mr. Peter who was engaged during the summer to prepare a report on the subject of coverage and listener habits. The Committee agreed to retain the services of Mr. Peter and approved the recommendations of the Technical Committee which are directed toward field tests designed to evaluate methods used to determine station coverage. The representatives of the NAB (Arthur B. Church, KMBC; J. O. Maland, WHO; Roy Witmer, NBC; H. K. Boice, CBS, and James W. Baldwin) agreed that the project should be proportionately financed consistently with the resolution adopted by the NAB at the Fourteenth Annual Convention.

It is expected that the field tests will have been conducted and that analyses of the results of such tests will be made in sufficient time for the whole problem of research to receive serious attention and consideration at the next Annual Convention.

DENIAL OF NEW STATION RECOMMENDED

Smith, Keller & Cole, filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new broadcasting station at San Diego, Cal., to use 1200 kilocycles, 100 watts power and daytime operation.

Examiner P. W. Seward in Report No. I-327 recommended that the application be denied. The Examiner states that the applicants are not financially qualified to construct and operate the proposed station. He also calls attention to the fact that there is already an application pending for the same frequency which would cause objectionable interference if both applications were granted.

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

J. C. Penney Company, New York City. (2-2706, Form A-2)
Mohawk Liquer Corporation, Detroit, Mich. (2-2707, Form A-1)
Sunset Mines, Inc., Forbestown, Cal. (2-2708, Form A-1)
Westgate-Greenland Oil Company, San Antonio, Texas. (2-2709, Form A-2)
Edison Salt Electric Company, Salt Ste. Marie, Mich. (2-2710, Form A-2)
National Unit Corporation, Boston, Mass. (2-2711, Form C-1)
Small Industry Management Corp., Buffalo, N. Y. (2-2712, Form A-1)
Thermoid Company, Trenton, N. Y. (2-2713, Form A-2)
Brooklyn Daily Eagle Corp., Brooklyn, N. Y. (2-2714, Form A-1)
Brooklyn Daily Eagle, Brooklyn, N. Y. (2-2715, Form A-2)
Potash Company of America, Denver, Colo. (2-2716, Form A-1)
United Securities Co., Missouri, Kansas City, Mo. (2-2717, Form A-2)
Puritan Mills, Inc., Chicago, Ill. (2-2718, Form A-1)
Mount Baker Chromium Corp., Seattle, Wash. (2-2719, Form A-1)
Rath Packing Company, Waterloo, Ia. (2-2720, Form A-2)
Anglo American Mining Corp., Ltd., San Francisco, Cal. (2-2722, Form A-1)
Buffalo Stratford Corp., Buffalo, N. Y. (2-2723, Form E-1)
Financial Independence Founders Inc., New York City. (2-2724, Form C-1)
Eastern Consolidated Gas Co., Baltimore, Md. (2-2725, Form A-1)
Tri Metal Mining Corp. of New Mexico, Albuquerque, N. M. (2-2726, Form A-1)
American Rock Wool Corp., Wabash, Ind. (2-2727, Form A-1)

SOCIAL SECURITY TAXES

The NAB has received numerous inquiries regarding certain provisions of the Social Security Act, particularly as to whether artistic talent including musicians used by radio stations are *employees* subject to the tax provisions.

Taxes levied under the Act are to be collected by the Bureau of Internal Revenue. Your attention is directed to Treasury Department Regulations 90 and 91 which deal with the collection of these taxes and define in general what constitutes employment. Regular employees of a station, including staff personnel and house orchestras on the regular payroll, are without doubt employees within the meaning of the Act. Talent, including musicians, however, hired for one or more broadcasts by the station or through someone else presents a problem. As yet, no definite ruling of general application has been issued on this point.

In the calculation of your Federal tax, the taxability of talent will have to be determined in the light of the facts in each particular case depending on the contractual relationship between the station and the artist. For the distinction between employees and independent contractors we suggest that you consult your local counsel in order to comply with the Federal statute and your own state law.

The following quotations from *Prentice Hall*—Labor and Unemployment Insurance Service—may be of some value in approaching your own problems:

Entertainers As Independent Contractors, (New York)—"Please be advised that orchestras, bands, artistic talent, etc., engaged by advertising agencies, or by the proprietor of a ballroom, are considered independent persons with respect to the principal engaging their services. The orchestra or band leaders in the cases referred to above should be considered the employers of the members of their bands." (U. I. D. letter to Prentice Hall, Inc., dated July 24, 1936, Prentice Hall, New York, 29,539).

Entertainers—(New York)—"Question: Hotels, restaurants, advertising agencies and the like frequently engage the services of orchestras, bands, entertainers and artistic talent. How should such performers and their personnel be classified?

"Answer: Musicians, entertainers, and the like who are hired directly by hotels and restaurants will be considered employees of such hotels and restaurants unless a contract has been entered into

between the principal engaging such services and the leader or manager of such personnel whereby the leader or manager hires and dismisses the members of his orchestra, band, etc., directs and controls the performance of their work and actually pays their wages; in which case the leaders or managers will be deemed to be the employers of the members of the orchestras, bands, artistic talent, etc." Prentice Hall, New York, 29,544.22.

"Status of Radio Artists on Sponsored Programs (Wisconsin)—The following letter is from the Wisconsin Commission regarding liability for contributions on salaries paid to radio artists appearing on sponsored radio broadcasting programs:

"Your letter of July 24 inquires concerning the status of artists other than staff artists appearing on a radio broadcasting sponsored program, under the Wisconsin Unemployment Compensation Act.

"The Unemployment Compensation Act, as amended on June 26, provides that each individual engaged by any employer performing services for pay shall be treated as in an employment (and consequently, as an employee) unless and until the employer has satisfied the Commission that such individual has been and will continue to be free from the employer's control and direction over the performance of his work both under his contract of service and in fact, and that such work is either outside the usual course of the employer's enterprise or performed outside of all the employer's places of business, and that such individual is customarily engaged in an independently established trade, business, profession or occupation.

"It would, therefore, appear that such artists, being engaged in the usual line of business of the broadcasting company, and being employed in the broadcasting company's place of business and, in all probability, being subject to more or less detailed direction and control, should be considered as employees under the Unemployment Compensation Act.

"You also inquire whether, if an advertising agency handles all of the details incidental to the organization and preparation of the radio broadcasting program (including hiring of artists), and if the agency receives therefor a stipulated fee from the sponsor of the program, the artists are the employees of the advertising agency, the sponsor, or the broadcasting company.

"It would seem that the artists are the employees of the organization which actually enters into the contract of hire. Since you indicate in your question that the agency is assumed to hire the artists, the artists should be considered the employees of the agency." (Letter from Unemployment Compensation Department of Industrial Commission of Wisconsin, to Prentice Hall, Inc., dated August 16, 1935. Prentice Hall—Wis. 26,131).

MARKET AND NEWSPAPER STATISTICS

Section B of the fifth volume of "Market and Newspaper Statistics" has just been released by the American Association of Advertising Agencies.

This section deals with the 62 cities in the United States and Canada over 100,000 population for which A.B.C. Audit Reports were issued for periods ended March 31 and June 30, 1936.

It contains figures on population, number of families, English reading persons (for Canadian cities, English speaking persons), income tax returns, audited newspaper circulations, local rates, national rates, the differential between local and national rates, linage, and an analysis of sections of A.B.C. Audit Reports dealing with inducements.

"Market and Newspaper Statistics" is a part of a program for the advancement of newspaper advertising being conducted by the A.A.A.A. Committee on Newspapers, of which J. J. Hartigan of Campbell-Ewald Company, Detroit, is Chairman, and Lester M. Malitz of Cecil, Warwick & Cecil, New York, Vice-Chairman.

These studies aim to help space buyers determine:

(1) The size and character of markets as indicated by population, families, percentage of English reading persons and income tax returns,
(2) The cost of reaching these markets with newspapers, including comparison between markets,
(3) The differential between local and national rates,
(4) The amount of circulation obtained through inducements.

A supplement entitled "Changes in General and Retail Milline Rates Together with Circulation and Rates Changes Which Have Caused Them," comparing Section B, Volume V with Volume IV, will be issued shortly.

Copies of Section B are available to other than A.A.A.A. members at $6.00 each (including the supplement, when issued. The same price applies to Section A.

IS RADIO LIVING UP TO ITS PROMISE?

Commissioner George Henry Payne, member of the Federal Communications Commission, speaking at the University of the Air, College of the City of New York Auditorium December 18, said:

"In the first place let me say that the question I was asked to discuss—'Is Radio Living up to its Promise?'—poses a pretty problem.

"If you take 'radio' as the scientific world regards it as the transmission through the ether of messages—it has more than met its promises. If you mean by 'radio', *broadcasting*, you are on debatable ground.

"It is important to remember that 'broadcasting' is but one of the twenty-seven services. A few of the more important radio services other than broadcast service may be mentioned here.

"Radio is used extensively in telegraph and telephone services to foreign countries and in maritime service, which includes radiotelegraph and radiotelephone communication between ships at sea and between ships and the shore. It has become indispensable to aviation and to the police of the country. It is used in the transmission of news to the newspapers by means of what is known as the multiple address radiotelegraph service, the messages being automatically recorded by means of printers. There are also maintained a number of experimental services which permit further research and development in the radio science.

"Not far off is a new service which is associated with broadcasting and is very much in the public eye at the present time. I refer to television, which is still in the experimental stage but is bound some day to play an important part in our social and business life. In these services radio has certainly lived up to its promise.

"Assuming then that the problem that I am to discuss is 'broadcasting' I can say that I have received many protesting letters and messages from people who felt that through inferior broadcasting programs their homes were being invaded by doctrines and ideas calculated to create unhappiness in their homes and to invade their rights.

"The situation recalls the keen analysis of Sainte-Beuve in his delightful essay on Cardinal De Bernie. That interesting character had astonished the world by suddenly changing from a flippant man of the world and maker of whimiscal, gay, and not always decorous verse, to a serious-minded statesman and prime minister. Sainte-Beuve's explanation was that he had suddenly come to the conclusion that inasmuch as it took just as much trouble to accomplish little things as it did to accomplish large things, he would devote himself, hereafter, to accomplishing the great things of life.

"So with broadcasting—the same amount of effort would give us nobler programs instead of the jazz and trash of today.

"Every movement that tends to make broadcasting more cultural and more intelligent is deserving of the greatest respect and the most earnest support. I am glad, therefore, to be included in the program of the Fifth Anniversary of the University of the Air, especially under its present distinguished sponsors.

"It is not an easy problem, however, that you have posed for me—'Is Radio Broadcasting Living up to its Promise?' Frankly, my own opinion is that it is not, but I feel I would be unfair if I did not qualify that statement by saying that elements, mainly political and some economic, have been as much to blame as the broadcasting industry itself. Nor would it be fair to say that broadcasting has not come up to expectations when some fine programs have been the delight of American audiences.

"But—and this is the question—when we have allowed private corporations to develop a national resource that elsewhere in the world is government owned and controlled, should not those who are making large fortunes from this resource give us better programs?

"To anyone who studies the situation from the inside there is quite evident a contempt for educational and cultural influences that is most unusual in any field of scientific development.

"What would have happened in the field of medicine, philosophy, law, science, literature, politics or journalism if the first impulse had been money-making? When we look back over the long struggle of humanity to achieve civilization and some surcease from the sorrow and the ills that flesh is heir to, how little would have been accomplished if there had not been, in all those fields, men and women ready to suffer and even to die that humanity might benefit. What untold tragedies might have resulted if the men and women who made all those sacrifices were actuated by a desire to make a million dollars rather than by a love of humanity.

"Fortunately in the radio field, while the great actuating impulse of those who are in control of the industry is money, the engineers and scientists on whom they depend for the development of their fortunes are, in the main, men who are unselfish.

Some of them, and I am speaking of those who are associated with the Federal Communications Commission, have a devotion to high ideals that will challenge comparison with any other time.

"A more disagreeable aspect, and a more sinister one, deterring radio from living up to its promise, is the fact that the radio lobby in Washington has filled the radio 'industry' with the novel idea that they control the government.

"For two and a half years I have watched the operations of this lobby which has endeavored to dictate the actions of the Federal Communications Commission.

"When I speak of its contemptuous attitude toward educational and cultural matters I am not hazarding any guess. I am speaking from facts. An important broadcaster, a man who has acted as an official of an organization, sat in my office one day arguing about the perfectability of the radio program. We were naturally at different ends of the question—he declaring that the programs as given today were perfect. Finally I drew out some letters and extracts from letters of many college presidents throughout the country and showed him that they were far from satisfied with the present set-up.

"His answer was, 'What the hell do them college presidents know!'

"One argument, effective though unreal, that has kept public opinion from forcing the production of better programs has been that the pioneers of the radio art are entitled to a just share of credit and profits for their pioneering. But have the real pioneers had any sizeable share in the profits?

"Of the forty-three scientists who, since 1912, have contributed most to radio's scientific development and progress, only two have received compensation in any way commensurate with their achievements.

"We have here a complex and serious economic phenomenon. Great discoveries are made and the discoverers profit little. The public which owns the ether is amused, delighted and astonished, but spiritually profits little. A third party steps in and, discovering nothing, inventing nothing and owning nothing, nevertheless makes great fortunes.

"Mr. Gifford, President of the American Telephone and Telegraph Company, went so far as to say in a paper, brought out by the Federal Communications Commission telephone investigation, as follows:

" 'If anyone tries to tell me that he is acting in a business capacity in the public interest, I am inclined to say, "Oh, bunk!" in my own mind, unless the public interest and his interest coincide.'

"Here we have the philosophy of decline and decay, denying the very principle of altruism.

"For two years I have argued and pleaded and reasoned with this most difficult division of our activities to take a fairer attitude toward the public. I finally came to the conclusion that I could get better results if I appealed to them from a public forum, and so I accepted invitations from Harvard, Columbia and other universities to enunciate under dignified auspices what I thought were proper reforms.

"You can imagine my surprise when instead of getting the cooperation of those whom this Commission is supposed to regulate, I was told publicly in their trade journal that I 'should mind my own business.'

"Attacking every endeavor of the cultural and educational interests to improve the quality of radio programs is a most vicious lobby. It is not a particularly intelligent lobby for, if it knew its business, it would see that the education and cultural interests ask so little that they could be easily conciliated by small concessions. But, arrogant in its belief that it controls the Commission, it is not inclined to concede anything.

"Developments and inventions that are now going on and being made in the radio field will affect the mental life and education and possibly the material interests of every person in the country. Behind this development, fraught with so much importance to our people, a fierce struggle is going on for the control of the great resource of the air.

"Private interests favoring private monopoly are naturally anxious that there be just as little governmental 'interference' (regulation) as possible in what they call their 'business'. Those who believe that we must not repeat the mistakes of the past and allow the wasteful private exploitation of our resources are just as keenly aroused in behalf of the government taking a strong stand to protect the public interest.

"The indifference of the public to the importance of this struggle is lamentable. Fascinated by the wonders of radio and the astonishing developments in the entire field of communications, the people have given little attention to the economic control of these new developments. Unless the public is aroused, its interests are apt to be neglected and lax administration is apt to creep in. In this way private monopoly, without warrant of law, establishes itself, and, too late, the public bestirs itself to recover ground that never should have been lost.

"I lunched a few days ago with Dr. Alexis Carrel and Dr. Ward Crampton, and the subject of discussion was the upbringing of the human race, the awakening of man to something like an appreciation of his powers—spiritual and mental—and the possibilities of his future for happiness and usefulness.

"The fruitfulness of that conversation I could not relate if I took the two hours of its actual duration. But this thought I can give as a summation. What a blessing radio would be, if under the direction of Dr. Carrel and Dr. Crampton, it stimulated the American public to find some answers to the questions that Dr. Carrel propounded in his great book 'Man, The Unknown!' What a blessing radio would be, instead of urging children to harass their tired mothers to buy various nostrums, time and attraction were given to the endeavors of Dr. Crampton to bring our boys to a better understanding of their future needs and to a greater knowledge of their possibilities for usefulness and happiness.

"To sum up, I do not hesitate to say that radio has not lived up to its promise because its promise is limitless and its development has hardly begun. It has failed, however, in that it has catered to the lesser intelligent rather than to the greater.

"To those who are battling for a more intelligent discussion of the problems of broadcasting, in fact, all the problems of communications, I would say, be of good cheer and of great hope. If the solution—an intelligent and honest solution—is not just around the corner, like Mr. Hoover's prosperity, it is not as far away as it was a year ago, and certainly not as far away as it was when the Federal Communications Commission came into existence. If we, the Commissioners, have not seemed to live up to our opportunities the trouble lies, as it lies with the question of radio, in the fact that the opposition—those who are organized for selfish and greedy purposes, have been stronger than we thought and more arrogant than it is possible to believe. But in their very arrogance there lies their self-destruction. The increasing interest in radio is stimulating hundreds of thousands of people to think more clearly as to their rights. It is stimulating the great mass of people to see that radio does live up to its promise. More and more we hear of men and women in far off places rebelling against the conditions as they are and demanding better and more intelligent programs. More and more as we fight for better radio and more enlightened governmental supervision, I see the truth of what John Stuart Mill so beautifully said:

" 'All the grand sources of human suffering are in a great degree, many of them almost entirely, conquerable by human care and effort, and though their removal is grievously slow, though a long succession of generations will perish in the breach before the conquest is completed, yet every mind sufficiently intelligent and generous to bear a part, however small and unconspicuous—will draw a noble enjoyment from the contest itself which he would not for any bribe in the form of selfish indulgence consent to be without.' "

BROADCAST ADVERTISING IN OCTOBER

Highlights of the Month

Broadcast advertising experienced the greatest month in the history of the medium during October. Gross time sales amounted to $11,514,505, an increase of 34.8% over September and a gain of 37.2% over October 1935. All portions of the medium registered the greatest volume of sales in history. Total gross time sales for the first ten months of the current year were 20.5% ahead of the 1935 level for the corresponding period. Radio broadcasting showed the greatest gain over September of any major medium.

Total non-network advertising increased 31.4% over the preceding month. The greatest gain was shown by the clear channel group which rose 38.8%, although all classes of stations registered substantial increases. All sections of the country shared in the increased business, the South Atlantic-South Central Area and the North Central Area leading with increases over the preceding month of 36.9% and 36.3%, respectively. All classes of stations and sections of the country were well ahead of October 1935 non-network sales.

Transcriptions showed the greatest increase of any type of rendition over last month, rising 41.6%. All types of rendition, however, enjoyed marked increases. Announcements and transcriptions showed the principal

gains in the national non-network field, while transcriptions and live talent led in the local field.

All sponsor groups with a few minor exceptions gained as compared to September. Mainly because of sponsored political broadcasts, the miscellaneous group enjoyed the greatest increase over September, rising 94.2%. Principal gains were registered in the automotive, clothing, drugs and pharmaceuticals, foodstuffs, soap and kitchen supply and department store sponsor groups. The miscellaneous group showed nearly a threefold increase over last October. Soap and kitchen supply volume rose 90.4% and department store advertising 63.1% as compared to the corresponding month of last year.

Total Broadcast Advertising

Total broadcast advertising for the month of October is set forth in Table I.

TABLE I

TOTAL BROADCAST ADVERTISING

	1936 Gross Time Sales		
Class of Business	*September*	*October*	*Cumulative Jan.-Oct.*
National networks	$4,894,494	$6,722,926	$47,408,601
Regional networks	117,524	154,979	1,145,671
National non-network	1,697,900	2,401,800	18,806,960
Local	1,831,300	2,234,800	17,723,570
Total	$8,541,218	$11,514,505	$85,084,802

Total broadcast advertising volume increased 34.8% over the preceding month. All portions of the medium registered substantial gains. National network volume rose 37.3%, regional network volume 31.9%, national non-network business 41.5%, and local advertising 22.0%. As in past years, local advertising experienced the smaller gain, this portion of the medium being less subject to seasonal fluctuation than other types of broadcast advertising.

Compared to the corresponding month of last year, total broadcast advertising rose 37.2%. National non-network business showed the greatest increase, rising 59.6%. National network volume rose 33.9%, regional network volume 16.7%, and local business 28.5%.

Cumulative figures for the first ten months of the current year compared to those of the corresponding period of last year, showed the following increases: National network volume 16.8%, regional network volume 34.0%, national non-network business 37.2%, and local advertising 14.6%. Total broadcast advertising was 20.5% ahead of the 1935 level.

Comparison with Other Media

Advertising volume by major media during the month of October is found in Table II.

TABLE II

ADVERTISING BY MAJOR MEDIA

	1936 Gross Time and Space Sales		
Advertising Medium	*September*	*October*	*Cumulative Jan.-Oct.*
Radio broadcasting	$8,541,218	$11,514,505	$85,084,802
National magazines [1]	11,118,077	14,324,291	117,611,600
National farm papers [1]	597,036	624,835	5,774,152
Newspapers [2]	46,247,000	55,242,000	462,364,000
Total	$66,503,331	$81,705,631	$670,834,554

[1] Publishers' Information Bureau.
[2] Estimated.

Radio broadcast advertising showed the greatest increase over the preceding month of any medium. Whereas broadcasting volume increased 34.8% over September, national magazine volume increased 28.8%, national farm paper advertising 4.7%, and newspaper lineage 19.4%.

Compared to the corresponding month of last year, national magazine volume increased 35.1%, national farm paper advertising 18.9%, and newspaper lineage 13.6%.

National magazine volume for the first ten months of the current year exceeded the previous year's level by 13.9%, national farm papers 24.7%, and newspaper lineage 10.2%.

Non-network Advertising

Total non-network advertising increased 31.4% over last month, all classes of stations showing substantial gains. Non-network advertising over clear channel and high powered regional stations rose 38.8% and regional station and local station volume increased 28.4% and 22.4%, respectively. Compared to October of last year, total non-network advertising rose 42.9%. Gains over the different classes of stations were as follows: clear channel and high powered regional stations 42.9%, regional stations 49.2%, and local stations 27.1%.

Non-network advertising by power of station is shown in Table III.

TABLE III

NON-NETWORK ADVERTISING BY POWER OF STATION

	1936 Gross Time Sales		
Power of Station	*September*	*October*	*Cumulative Jan.-Oct.*
Over 1,000 watts	$1,329,200	$1,845,600	$15,442,340
250-1,000 watts	1,616,700	2,076,900	15,325,050
100 watts	583,300	714,100	5,763,140
Total	$3,529,200	$4,636,600	$36,530,530

Compared to the preceding month, all sections of the country experienced an increase in non-network advertising. The South Atlantic-South Central Area and the North Central Area showed the greatest gains, rising 36.9% and 36.3%, respectively. Non-network advertising in the New England-Middle Atlantic Area rose 21.5% and in the Pacific and Mountain Area 29.0%.

Likewise, non-network advertising experienced increases in all sections of the country when compared to the corresponding month of last year. Gains were as follows: New England-Middle Atlantic Area 49.5%, South Atlantic-South Central Area 53.3%, North Central Area 42.5%, and Pacific and Mountain Area 24.7%.

Non-network advertising by major geographical districts is found in Table IV.

TABLE IV

NON-NETWORK BROADCAST ADVERTISING BY GEOGRAPHICAL DISTRICTS

	1936 Gross Time Sales		
Geographical District	*September*	*October*	*Cumulative Jan.-Oct.*
New England-Middle Atlantic Area	$922,900	$1,121,400	$8,143,550
South Atlantic-South Central Area	683,900	936,900	7,324,670
North Central Area	1,354,400	1,845,600	14,339,330
Pacific and Mountain Area	568,000	732,700	6,722,980
Total	$3,529,200	$4,636,600	$36,530,530

Non-network Advertising by Type of Rendition

All types of rendition showed marked increases during October both when compared to the preceding month and the corresponding month of last year. Total transcription volume rose 41.6% over the September level, live talent business 27.8%, records 12.6%, and announcements 31.5%. Compared to October of last year, total transcriptions increased 56.5%, live talent 42.7%, records 28.6%, and announcements 33.4%.

In the national non-network field, transcription volume rose 39.4%, live talent business 32.8%, and announcements 71.4%. Record volume, which is relatively unimportant in the national non-network field, declined 15.4%. When compared to last October, both transcriptions and live talent business increased more than 50.0%, while records rose 66.4% and announcements 83.9%.

Transcription volume showed an increase of 50.0% in the local field over the previous month. Live talent business rose 23.7%, records 18.5%, and announcements 12.9%. Compared to the

corresponding month of the previous year, local transcriptions increased 50.3%, live talent business and records more than one-third, and announcements 11.7%.

For the first ten months of 1936, transcription volume was 47.4% above the 1935 level for the corresponding period. Live talent business showed a gain of 25.9% and records and announcements increases of 7.5% and 9.3%, respectively.

Broadcast advertising by type of rendition is found in Table V.

TABLE V

RADIO BROADCAST ADVERTISING BY TYPE OF RENDITION

	1936 Gross Time Sales						
	National Non-network		Local		Total		Cumulative
Type of Rendition	*September*	*October*	*September*	*October*	*September*	*October*	*Jan.-Oct.*
Electrical transcriptions	$595,790	$830,800	$157,290	$235,920	$753,080	$1,066,720	$9,024,850
Live talent programs	791,180	1,051,000	966,930	1,196,470	1,758,110	2,247,470	17,547,350
Records	14,780	12,500	69,580	82,480	84,360	94,980	741,700
Announcements	296,150	507,500	637,500	719,930	933,650	1,227,430	9,216,630
Total	$1,697,900	$2,401,800	$1,831,300	$2,234,800	$3,529,200	$4,636,600	$36,530,530

Sponsor Trends in October

Marked increases were experienced in practically all sponsor groups as compared with the preceding month. The greatest gain was registered in the miscellaneous group which contains sponsored political broadcasts. This group increased 94.2% over September, with the national network volume increasing 165.2%. Automotive advertising increased 72.9% over September, all portions of the medium showing increases. Clothing, drugs and pharmaceuticals, foodstuffs, soap and kitchen supply and department store advertising also experienced substantial gains. Amusement, confectionery, financial, and tobacco groups declined to a small extent.

The miscellaneous group showed nearly a threefold increase over the October 1935 level. Soap and kitchen supply advertising rose 90.4% and department store advertising 63.1% as compared to the previous October. Substantial gains were also registered in the gasoline and accessories, foodstuffs, beverage and financial sponsor groups. Only the amusement and confectionery groups experienced declines.

Broadcast advertising during October on the part of various sponsoring groups is found in Table VI.

TABLE VI

RADIO BROADCAST ADVERTISING BY TYPE OF SPONSORING BUSINESS

(October, 1936)

	Gross Time Sales				
Type of Sponsoring Business	*National Networks*	*Regional Networks*	*National Non-network*	*Local*	*Total*
1a. Amusements	—	—	$10,960	$37,710	$48,670
1–2. Automobiles and accessories:					
(1) Automobiles	$694,062	$560	225,060	103,780	1,023,462
(2) Accessories, gas and oil	469,456	41,129	178,430	70,130	759,145
3. Clothing and apparel	50,986	658	46,560	306,230	404,434
4–5. Drugs and toilet goods:					
(4) Drugs and pharmaceuticals	472,504	4,783	431,310	59,140	967,737
(5) Toilet goods	1,002,738	5,535	119,040	22,950	1,150,263
6–8. Food products:					
(6) Foodstuffs	1,131,056	34,054	464,970	261,280	1,891,360
(7) Beverages	394,251	7,470	67,640	110,750	580,111
(8) Confections	33,984	2,680	48,350	7,300	92,314
9–10. Household goods:					
(9) Household equipment and furnishings	8,091	3,340	78,100	219,110	308,641
(10) Soap and kitchen supplies	457,224	4,088	152,920	4,330	618,562
11. Insurance and financial	53,320	1,984	17,770	68,910	141,984
12. Radios	121,527	—	29,260	34,610	185,397
13. Retail establishments	64,964	616	18,500	200,850	284,930
14. Tobacco products	359,076	9,350	89,930	7,120	465,476
15. Miscellaneous	1,409,687	38,732	423,000	720,600	2,592,019
Total	$6,722,926	$154,979	$2,401,800	$2,234,800	$11,514,505

Detailed information regarding various sponsor groups during the month of October is as follows:

1a. ***Amusements.*** National non-network volume increased 34.3% over September, while local business declined 25.9%. Total down 19.2%. National non-network three times over the October 1935 level. Local decreased 21.9%. Total volume 5.9% below October of last year.

1. ***Automotive.*** Total volume 72.9% over preceding month. National network advertising rose 101.7%, national non-network 36.4%, and local 26.8%. Regional network business amounted to $560. Compared to last October, national network rose 4.0%, national non-network 10.0%, and the total volume 4.9%. No change occurred in volume of local advertising.

2. ***Gasoline and accessories.*** National network volume up 10.2% over September, regional network business 94.9%, national non-network advertising 61.6%, and total volume 17.1%. Local advertising declined 22.5%. Compared to the corresponding month of last year, national network increased 21.3%, regional network 71.2%, national non-network 139.3%, and total volume 31.9%. Local advertising 21.9% below last October.

3. ***Clothing.*** Gains compared with September as follows: national networks 115.2%, national non-network 28.1%, local 33.3%, and total volume 39.4%. Regional network business amounted to $658. National networks increased as against October 1935 by 33.9%, national non-network 17.5%, local 2.5%, and total volume 5.9%. Regional network advertising declined materially.

4. ***Drugs and pharmaceuticals.*** National network advertising 39.6% above preceding month, national non-network 80.8%, local 52.9%, and total volume 55.7%. Regional network volume down 21.1%. Compared to October 1935, national networks down 7.7%, regional networks 65.7%, and local 11.4%. National non-network advertising up 25.2% and total volume increased 3.2%.

5. ***Toilet goods.*** National network volume 7.3% greater than during previous month. Regional networks up 4.8%, national non-network 33.7%, local 1.8%, and total volume 9.4%. Compared to the corresponding month of last year, national networks

increased 9.9%, national non-network 54.3%, local 23.6%, and total volume 14.2%.

6. ***Foodstuffs.*** Increases as against previous month as follows: national networks 22.8%, regional networks 13.0%, national non-network 17.7%, local 13.8%, and total volume 20.0%. Compared to last October, increases as follows: national networks 13.3%, regional networks 17.8%, national non-network 46.8%, local 37.1%, and total volume 23.3%.

7. ***Beverages.*** National network advertising 19.8% over September, national non-network 8.9%, local 6.9%, and total 15.4%. Regional network business down 5.7%. National networks 51.1% over October 1935, national non-network 5.8%, local 28.6%, and total volume 38.4%. Regional network advertising declined 8.3%.

8. ***Confectionery.*** Total volume 13.5% below September and 41.9% below October 1935. Regional network volume increased 263.5% as compared to September, national non-network 145.7%, and local 130.3%, while national network volume declined 59.1%. Compared to last October, national networks declined 74.5% and regional networks 52.5%. National non-network volume increased threefold and local business 62.2%.

9. ***Household equipment.*** National network and regional network business down 69.8% and 6.2%, respectively, as compared to September. National non-network advertising up 22.6%, local 28.8%, and total volume 16.8%. Compared to the corresponding month of last year, national network and regional network volume down 73.5% and 63.3%, respectively. National non-network up 44.0%, local 22.8%, and total volume 13.4%.

10. ***Soaps and kitchen supplies.*** National network volume 33.6% above September. National non-network up 38.1% and total volume 32.5%. Regional networks down 50.5% and local 21.1%. Total volume 90.4% above October 1935 level. National networks up 76.6% and national non-networks 242.6%. Regional network and local business down 62.3% and 58.2%, respectively.

11. **Financial and insurance.** Total volume 2.2% below September, national non-network declining 30.1% and local 7.3%. National network business increased 21.8% and regional network volume 22.7%. Total increased 32.6% as compared to October of last year. Gains as follows: national networks 58.9%, regional networks four times as great, national non-network 5.6%, and local 22.6%.

12. ***Radios.*** National network advertising 9.1% greater than September. National non-network increased 5.8%, local business 75.9%, and total volume 16.8%. Compared to last October, national network volume declined less than 2.0% and national non-network volume 5.2%. Local business up 29.5% and total increased 2.3%.

13. ***Department and general stores.*** Mail order house advertising over national networks amounted to $64,964 during October. Regional network advertising amounted to $616. National non-network advertising 43.6% greater than during September, local 5.7%, and total volume 40.0%. Compared to the corresponding month of last year, national non-network volume rose 55.5%, local 36.8%, and total volume 63.1%.

14. ***Tobacco products.*** Total declined 10.6% compared to September, national networks declining 18.2% and local business 16.6%. Regional networks up 4.2% and national non-network volume 40.6%. Total increased 17.4% as compared to previous October, national non-network increasing threefold and local business 17.1%. National network declined 4.1% and regional networks 41.4%.

15. ***Miscellaneous.*** Increases as against previous month as follows: national networks 165.2%, regional networks 84.4%, national non-network 57.0%, local 40.6%, and total volume 94.2%. Compared to last October, increases as follows: national networks 416.0%, regional networks 267.2%, national non-network 132.5%, local 76.5%, and total volume 196.5%.

Retail Broadcast Advertising

Total retail broadcast advertising for October showed an increase of 20.3% over the previous month and a gain of 20.1% over the corresponding month of last year. Automotive advertising rose 31.9% over September, clothing 32.1%, grocery stores 53.4%, furniture stores 49.2%, and radio retailers 65.7%. Beverage and confectionery volume increased materially. Compared to October 1935, restaurant advertising rose 25.2%, household equipment dealers 46.9%, furniture stores 43.6%, radio retailers 65.7%, and department stores 38.2%. Confectionery advertising increased materially.

Broadcast advertising by retail establishments of various types is set forth in Table VII.

TABLE VII

RETAIL BROADCAST ADVERTISING OVER INDIVIDUAL STATIONS

Type of Sponsoring Business	*1936 Gross Time Sales* *September*	*October*
Automobiles and accessories:		
Automobile agencies and used car dealers	$82,670	$109,100
Gasoline stations, garages, etc.	43,250	33,660
Clothing and apparel shops	247,750	327,050
Drugs and toilet goods:		
Drug stores	15,340	16,180
Beauty parlors	6,670	9,550
Food products:		
Grocery stores, meat markets, etc.	36,000	55,230
Restaurants, eating places	20,090	21,750
Beverage retailers	370	990
Confectionery stores	1,530	6,390
Household goods:		
Household equipment dealers	65,850	76,120
Furniture stores	86,640	129,260
Hardware stores	18,760	18,330
Radio retailers	18,990	31,460
Department and general stores	202,950	219,360
Tobacco shops	—	—
Miscellaneous	144,730	138,300
Total	$991,590	$1,192,730

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity to show cause why cease and desist orders should not be issued against them.

No. 3015. A complaint charging unfair competition in the sale of hosiery has been issued against **Louis A.** and **Abram Burd,** 112-120 North 12th Street, **Philadelphia,** trading as **Burd Knitting Mills Company.**

Use by the respondents of the words "knitting mills" in their firm name and of the word "manufacturers" in the phrase "hosiery manufacturers" in connection with or separate from their trade name, to describe their business, is alleged to be a violation of Section 5 of the Federal Trade Commission Act.

These representations, according to the complaint, tend to deceive purchasers by causing them to believe the respondents actually own and operate or control a factory in which their products are made, when this is not a fact. The complaint notes that many purchasers prefer to buy directly from a manufacturer or mill, believing that a saving of a middleman's profit may be obtained.

No. 3017. Charles of the **Ritz, Incorporated,** and **Charles** of the **Ritz Distributors Corporation,** both of 9-11 University Place, **New York City,** engaged in the sale of cosmetics and toilet goods, are named respondents in a complaint alleging violation of three sections of the Robinson-Patman Anti-Price Discrimination Act and Section 5 of the Federal Trade Commission Act.

Under Section 2(a) of the Robinson-Patman Act, the respondent corporations are charged with discriminating in price between different purchasers of their products of like grade and quality, by allowing certain of such purchasers prices different from those granted to others who are competitively engaged in the sale of such products in interstate commerce.

According to the complaint, customers whose purchases are less than $4,000 a year are allowed a discount of 33⅓ per cent, plus 5 per cent of the retail or list price of the respondent corporations' commodities of like grade and quality; and those whose total annual purchases amount to $4,000 or more are given a discount of 33⅓ per cent, plus 10 per cent of the retail or list price. It is alleged that these same discounts are made to a group of purchasers, depending upon whether their purchases are less than $18,000 annually, or more than that amount.

The effect of these price discriminations, the complaint alleges, may be to lessen competition substantially in the sale of toilet articles and cosmetics between the respondent corporations and competitors, and between favored purchasers and those who do not receive discriminatory allowances.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 01510. Harold C. Breckenridge, 20030 Russell St., Detroit, trading as Quality Chemical Co., agreed that in the sale of medicinal preparations, a hair shampoo, and a cleanser designated "Magic Concentrates", he will cease advertising that any article is free when the price therefor is included in the price charged for a combination of articles or that any article is worth more than the price charged. Among other representations he will discontinue are that "Dolora Alice Healthy Hair Shampoo" will make hair grow, that "Nature's Blood Purifier and Laxative Tonic" will benefit the liver, stomach, kidneys or nerves; that "Magic Cough Syrup" is a germ killer and meets all the requirements of the Pure Food and Drug Act, that "Magic Hits The Spot Liniment" will relieve sprains, lumbago and rheumatism, and that "Scientific" restores original luster to the surface of new objects or leaves the surface so that it will not collect dust or so that the weather will not affect it.

No. 01511. William E. Huber, 2905 W. North Ave., Milwaukee, trading as Wonderene Company and selling a washing fluid designated "Huber's Wonderene Solution", agreed to discontinue advertising that the product thoroughly disinfects wherever it is used, unless specific directions are set forth in equally conspicuous type, providing that the object to be disinfected must be cleansed thoroughly before application of the solution. The respondent also will stop representing that "Wonderene" is not a poison, will kill all germs, and is a disinfectant for poultry and dogs.

No. 01512. Chamberlain Laboratories, Des Moines, Iowa, will cease and desist from representing in advertising that "Chamberlain's Lotion" will revitalize and enable the skin to retain the radiance of youth, that it is a complete beauty treatment containing a blend of 13 imported oils, each of which is noted for a specific skin need; that it will prevent sunburn, windburn and cracked or irritated skin in all cases, and that it is a competent treatment for athlete's foot.

No. 01513. Eugene Munk, 1851 Washington Ave., New York, trading as Duad Company, Duad Laboratories and Duo-Beaute Laboratories, in selling a sensitizing solution designated "Duo-Print", will cease representing that his 50-cent "treatment" is sufficient to print 200 pictures, three by five inches in size; that results are guaranteed, no dark room or special equipment is required, and that it takes but four minutes to complete a picture. The stipulation sets out that the respondent admits that, according to the weight of scientific opinion, the "treatment" is sufficient to sensitize not more than 35 prints of the size referred to in the advertising.

No. 01514. Associated Pharmacists of Massachusetts, Inc., Salem, Mass., selling a preparation designated "Chaulmex," will discontinue assertions in advertising that its product will heal any condition of the skin or that it is an effective remedy for various skin disorders, unless the representations are limited to the relief of such skin conditions as the product reasonably may be expected to benefit. The respondent corporation admitted that its president is the only pharmacist connected with the firm and agreed to cease using as a part of its trade name the term "Associated Pharmacists of Massachusetts", or otherwise implying that it is an association of individuals engaged in the practice of pharmacy.

No. 01515. Kenneth M. Wickware, trading as K-W Company, 7392 Churchill St., Detroit, will stop representing that "Wick's Hair-Root Stimulant" will correct sluggish scalp circulation, inactive hair roots, dandruff or premature loss of hair; that it contains no irritants or harmful ingredients and that any offer is a special offer or is limited to a definite period of time, unless there is a definite time limit, after which offers to purchase are refused. Wickware stipulated that he will desist from using the words "Hair Root Stimulant" as part of the trade name for his product.

No. 01516. J. E. Ledger, operating as Standard Chemical Company, 113 E. 2nd St., Dayton, Ohio, is engaged in selling several preparations for use in making a cleaning compound, food flavorings and home remedies. Under his stipulation he will cease advertising that one can make from his products suitable flavorings of the "highest" quality, "wonderful" lemon and tar shampoo, effective cough remedy, and a herb laxative compound which he describes as a valuable aid in liver or kidney disorders. Ledger agrees to stop representing certain merits of, and results to be obtained from the use of his products which include a cleaning preparation designated "Quickleen". He further stipulates that he will not represent as maximum earnings any amount in excess of what actually has been earned by his salesmen or dealers under normal business conditions.

No. 01517. Dr. J. Douglas Thompson, 330 Fifteenth St., Oakland, Calif., in selling a medicinal preparation designated "Dubla" and health and diet publications, entered into a stipulation to discontinue representations that infectious and contagious diseases are caused by acidosis; that through use of "Dubla" and a chart called a "Colorimeter" the percentage of acid in one's system may be determined; that by use of the preparation and the chart, with the aid of Dr. Thompson's "specially planned diet control", any specified percentage of acid in the system may be overcome, and that such diet plan enables one to overcome rheumatism, arthritis and diseases of the skin, stomach, heart and liver. Among other claims to be discontinued are that Dr. Thompson taught in a leading college, that his text books are used by universities or colleges, that he is recognized as international authority on the subject of nutrition, or is the leader in the science of diet.

No. 2317. Galion Metallic Vault Company, Galion, Ohio, has been ordered to discontinue unfair methods of competition, in violation of Section 5 of the Federal Trade Commission Act, in connection with the sale of metal burial vaults.

The order prohibits the respondent company from representing in purported certificates of warranty, in guarantees, or in advertising matter that its Air Seal vaults are water-proof, or that they are air-tight either at the time of interment or after burial.

No. 2329. An order to cease and desist has been issued against seven companies manufacturing pin tickets for use in marking prices and stock numbers on garments offered for sale. The orders direct cessation of certain unfair competitive trade practices.

A. Kimball Co., 307 West Broadway, **New York City; The Reyburn Manufacturing Co.,** Allegheny Ave. and 32nd St., **Philadelphia; Waterbury Buckle Co., Waterbury, Conn.; American Tag Co.,** 6151 South State Street, **Chicago; Dancyger Safety Pin Ticket Co.,** 4704 Detroit Ave., **Cleveland; Adam Sutcliffe Co., Central Falls, R. I.,** and **Noesting Pin Ticket Co., Mt. Vernon, N. Y.,** are the respondents.

The order prohibits the respondent companies from entering into any agreement or understanding among themselves to fix figures for the sale of pin tickets, and from restricting or suppressing competition among themselves or with others by any other similar concert of action.

No. 2373. Under an order issued, **Robert R. Dunn, Jr.,** and **Tom Keck,** 1260 Fourth Ave., **San Diego, Calif.,** trading as **Iokelp Co.,** are prohibited from using certain unfair trade representations in the sale of a medicinal preparation called "Iokelp", produced by dehydrating and grinding kelp or seaweed.

The respondents are directed to stop representing that "Iokelp" is a remedy for, or will cure, constipation, nervous anemic conditions, prostrate, pituitary, or thyroid gland troubles, including simple goiter.

No. 2416. Under an order to cease and desist, **Nat D. Goldberg,** trading as **Sunset Distilling Co.,** 125 N. Racine Ave., **Chicago,** is directed to discontinue representing that he is the distiller of the spirituous beverages he sells in interstate commerce, when such is not a fact.

Goldberg is ordered to cease representing, through use of the word "distilling" in his trade name, on labels, or otherwise, that he is a distiller of whiskies, gins or other spirituous beverages; that such products are manufactured by him through the process of distillation, or that he owns or controls a distillery, unless and until he actually does own or control such a place.

No. 2641. Albert F. Cooley, of Palms Station, **Los Angeles,** has been ordered to cease and desist from unfair trade representations in the sale of certain medicinal products. Cooley does business under the names of **Rango Tablet Company, A. F. Rango, Daddy Rango, Daddy Rango Tablet Company, Rango Company,** and **Daddy Rango Company.**

Among representations prohibited in the order are: That Daddy Rango's Laxative Herb Tablets are an adequate treatment for headaches, dizzy spells, neuritis, and liver and kidney troubles; that Daddy Rango's Sunshine Kelp Tablets are a cure or competent treatment for goiter and for a run-down condition, and promote growth, and build sturdy bones and teeth in children; that Daddy Rango's Asthma and Hay Fever Remedy is a cure or competent treatment for asthma and hay fever, and other similar representations.

No. 2776. Bonomo Candy & Nut Corporation, 649 Morgan Ave., **Brooklyn,** has been ordered to cease and desist from selling candy so packed and assembled that sales to ultimate purchasers are to be made, or may be made, by means of a lottery, gaming device or gift enterprise.

The order prohibits the respondent company from packing in assortments, for sale to the public at retail, pieces of candy of uniform shape and size and having centers of different color, together with small boxes of candy which are to be given as prizes to purchasers procuring a piece of candy with a center of a particular color.

Nos. 2789 and 2970. Leader Novelty Candy Co., Inc., 23 Marcy Ave., **Brooklyn,** and **Maywood Candy Co., Maywood, Ill.,** have been ordered to cease and desist from selling candy so packed and assembled that sales to ultimate purchasers are to be made, or may be made, by means of a lottery, gaming device or gift enterprise.

The order against the Brooklyn firm also prohibits placing in the hands of wholesalers and jobbers packages of candy which may be used without alteration to conduct a lottery or gift enterprise, and bars the packing or assembling in the same or separate packages of uniform sized candies having different colored centers, and other articles of merchandise, which other articles are to be given as prizes to the purchaser procuring a piece of candy of a particular color.

FTC ORDER SET ASIDE AND CLOSED

No. 2721. Findings of fact and an order to cease and desist entered against **R. M. Barnett,** trading as **Home and School Education Society,** 1621 Real Estate Trust Building, **Philadelphia,** have been set aside by the Federal Trade Commission.

The respondent's application for oral argument in the case was not brought to the attention of the Commission until after it had issued the order to cease and desist.

The Commission, therefore, set aside the order and fixed January 6, next, as the date for final argument in the Commission's hearing room, 815 Connecticut Ave., N. W., Washington.

The Commission's complaint charges the respondent with making certain unfair representations in connection with the sale of an encyclopedia set, a loose-leaf extension service and memberships in a "Perpetual Bureau of Research."

No. 2487. The Commission has ordered its case closed in the matter of **United Importers & Distillers, Inc.,** of 167 Columbus Ave., **New Haven, Conn.,** charged with misleading use of the word "distillers" in its trade name and in advertising.

The case was ordered closed because the respondent, prior to November 23, 1935, had abandoned the practices alleged and ever since has engaged in business under the corporate name of "United Importers and Distributors, Inc."

FEDERAL COMMUNICATIONS COMMISSION ACTION

Owing to the holidays there was no meeting of the Broadcast Division of the Commission this week.

No hearings are scheduled for the week beginning **Monday,** December 28, for the same reason.

The Broadcast Division, on December 19, granted the petition of Central Newspapers, Inc., to reconsider its action of December 15, in designating for hearing the application of the Indianapolis Broadcasting, Inc., Station WIRE, Indianapolis, Ind., to transfer control of WIRE to Central Newspapers, Inc., and directed that said application be dismissed from the hearing docket and granted (Commissioner Case dissenting). It was further directed that an order be entered accordingly and forwarded to all interested parties.

APPLICATIONS RECEIVED

First Zone

WEEI—Columbia Broadcasting System, Inc., Boston, Mass.—
590 Modification of construction permit (B1-P-1196) to install a new transmitter and directional antenna, increase power, and move transmitter, requesting increase in power from 1 KW, 5 KW day, to 5 KW day and night. Amended to change name from WEEI Broadcasting Corp. to Columbia Broadcasting System, Inc.

NEW—Geraldine Alberghane, Pawtucket, R. I.—Construction per-
720 mit to erect a new station to be operated on **720 kc.,** 1 KW power, daytime operation.

WEAN—Shepard Broadcasting Service, Inc., Providence, R. I.—
780 License to cover construction permit (B1-P-734) as modified for new equipment, directional antenna, move of transmitter, and increase in power.

NEW—McNary & Chambers, near College Park, Md.—Construc-
1060 tion permit for a new experimental broadcast station to be operated on **1060 kc.,** 100 watts power, time from 12 midnight to 6 a. m.

NEW—General Electric Co., near Belmont, Calif.—Construction permit for a new international broadcast station to be operated on **9530, 15330, 21480 kc.,** 20 KW. Amended to delete the frequency **21480 kc.**

W1XLV—The WATR Company, Inc., Mobile.—License to cover construction permit for a new high frequency relay broadcast station.

W1XAL—World Wide Broadcasting Corp., Boston, Mass.—Modification of license to increase power from 10 KW to 20 KW.

Second Zone

NEW—Pottsville News & Radio Corp., Pottsville, Pa.—Construc-
580 tion permit for a new station to be operated on **580 kc.,** 250 watts, daytime only.

WTAR—WTAR Radio Corporation, Norfolk, Va.—Modification
780 of construction permit (B2-P-1073) for changes in equipment, requesting increase in power from 500 watts, 1 KW day, to 1 KW, using directional antenna night, and move auxiliary transmitter from Virginia Beach Blvd., 1.7 miles from Norfolk, Va., to on Glen Rock-Elizabeth Park Road, 1.6 miles east of Norfolk, Va., and extend commencement and completion dates.

WRVA—Larus & Bros Co., Inc., Richmond, Va.—Construction
1110 permit to install a new transmitter and directional antenna for day and night use; increase power from 5 KW to 50 KW; move transmitter from Mechanicsville (4½ miles from city limits), Virginia, to 15 miles southeast of Richmond, Va.

NEW—Great Lakes Broadcasting Corp., Cleveland, Ohio.—Con-
1270 struction permit for a new station to be operated on **1270 kc.,** 1 KW night, 5 KW day, unlimited time.

NEW—Lou Poller, Scranton, Pa.—Construction permit to erect a
1370 new station to be operated on **930 kc.,** 250 watts, daytime operation. Amended to change requested frequency from **930 kc.** to **1370 kc.**

WBLK—The Exponent Co., Clarksburg, W. Va.—Modification of
1370 construction permit (B2-P-1127) as modified for a new station, requesting authority to change type of transmitter to be installed.

WBNS—WBNS, Inc., Columbus, Ohio.—Construction permit to
1430 install a new transmitter and increase power from 500 watts, 1 KW day, to 1 KW night, 5 KW day. Amended to install directional antenna for night use.

WCBA—B. Bryan Musselman, Allentown, Pa.—Modification of
1440 construction permit (B2-P-1381) for new transmitter and vertical antenna, requesting authority to move transmitter from Mizpah Grove, 14th Ward, Allentown, Pa., to near junction of Route 309 and W. Catasauqua Road, Allentown, Pa.

WSAN—WSAN, Inc., Allentown, Pa.—Modification of construc-
1440 tion permit (B2-P-1380) for new transmitter and vertical antenna, requesting authority to move transmitter from Mizpah Grove, 14th Ward, Allentown, Pa., to near junction of Route 309 and W. Catasauqua Road, Allentown, Pa.

WJBK—James F. Hopkins, Inc., Detroit, Mich.—License to cover
1500 construction permit (B2-P-637) as modified for new equipment.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio.—Construction permit for a new high frequency broadcast (relay) station to be operated on **31100, 34600, 37600, 40600 kc.,** 10 watts power.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio (Mobile).—License to cover above.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio (Mobile).—Construction permit to erect a new high frequency relay broadcast station to be operated on **38900, 39100, 39300,** and **39500 kc.,** 100 watts power.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio (Mobile).—License to cover above.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio (Mobile).—Construction permit to erect a new high frequency relay broadcast station to be operated on **39700, 39900, 40800, 41400 kc.,** 10 watts power.

NEW—Cleveland Radio Broadcasting Corp., Cleveland, Ohio (Mobile).—License to cover above.

Third Zone

WDBO—Orlando Broadcasting Co., Inc., Orlando, Fla.—License
580 to cover construction permit (B3-P-1048) for change in transmitter and antenna, move of transmitter, and increase in power.

WMC—Memphis Commercial Appeal, Inc., Memphis, Tenn.—Con-
780 struction permit for move of auxiliary transmitter from intersection U. S. Highways 64 and 70, 2 miles east of Bartlett, Tenn., to ¾ mile northwest of five points intersection U. S. Highway No. 70 and Macon Road, near Memphis, Tenn.

WLAK—Lake Region Broadcasting Co., Lakeland, Fla.—Authority
1310 to transfer 25 shares of common stock from E. L. Mack to J. P. Marchant.

KGFG—Oklahoma Broadcasting Co., Inc., Oklahoma City, Okla.—
1370 Modification of construction permit (B3-P-1463) for new equipment, move of transmitter and studio, requesting approval of transmitter site at 1800 W. Main St., Oklahoma City, Okla., studio at 200 Perrine Bldg., Oklahoma City, Okla., and approval of antenna.

NEW—Beaumont Broadcasting Assn., B. A. Steinhagen, Pres.,
1420 Beaumont, Tex.—Construction permit for a new station to be operated on **1420 kc.,** 100 watts, daytime. Amended to change hours of operation from daytime to unlimited, using 100 watts power.

NEW—Archie E. Everage, Andalusia, Ala.—Construction permit
1420 for a new station to be operated on **1420 kc.,** 100 watts, 250 watts day, unlimited.

Fourth Zone

KFUO—Evangelical Lutheran Synod of Missouri, Ohio, and other
550 states, Rev. R. Kretzschmar, Chairman, Board of Control of Concordia Seminary, Clayton, Mo.—Authority to determine operating power by direct measurement of antenna.

WISN—Hearst Radio, Inc., Milwaukee, Wis.—Construction per-
1120 mit to move transmitter from 533 East Wells St., Milwaukee, Wis., to 231 West Michigan, Milwaukee, Wis., and install a vertical antenna.

KOIL—Central States Broadcasting Co., Omaha, Nebr.—Con-
1260 struction permit to make changes in equipment; install a vertical antenna; increase power from 1 KW night, 2½ KW day, to 1 KW night, 5 KW day; and move transmitter from Pottawattamie County, Iowa, to near Omaha, Nebr. Amended to withdraw amendment for change of transmitter site.

WIBA—Badger Broadcasting Co., Inc., Madison, Wis.—Modifica-
1280 tion of license to change power from 1 KW, 5 KW day, to 5 KW day and night, and to eliminate directional antenna.

KSCJ—Perkins Bros. Co. (The Sioux City Journal), Sioux City,
1330 Iowa.—License to cover construction permit (B4-P-1391) for new transmitter and increase in power.

NEW—Abraham Plotkin, Chicago, Ill.—Construction permit for
1370 a new special broadcast station to be operated on **1370 kc.,** 5 KW, hours of operation not given. Amended to change power from 5 KW to 1 KW and give hours of operation as unlimited time.

KOBH—Black Hills Broadcast Co. (Robert Lee Dean), Rapid
1370 City, S. Dak.—License to cover construction permit (B4-P-231) as modified for a new station.

KSO—Iowa Broadcasting Co., Des Moines, Iowa.—Modification
1430 of construction permit (B4-P-996) for changes in equipment and increase in power, requesting further changes in equipment.

WTMV—Mississippi Valley Broadcasting Co., Inc., East St. Louis,
1500 Mo.—Modification of construction permit (B4-P-1256) for new transmitter and increase in power, further requesting changes in type of equipment and extend commencement and completion dates.

NEW—Galesburg Printing & Publishing Co., Galesburg, Ill.—Con-
1500 struction permit to erect a new station to be operated on **1500 kc.,** 250 watts, daytime operation.

NEW—Howard A. Miller, Galesburg, Ill.—Construction permit for
1500 a new station to be operated on **1500 kc.,** 100 watts, specified hours (6 a. m. to 10 p. m.). Amended to give transmitter site as site to be determined, Galesburg, Ill.

NEW—Rockford Broadcasters, Inc., Rockford, Ill. (Mobile).—
Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 2 watts power.

NEW—Rockford Broadcasters, Inc., Rockford, Ill. (Mobile).—
Construction permit for a new low frequency relay broadcast station to be operated on **1646, 2090, 2190, 2830 kc.,** 50 watts power.

Fifth Zone

KEHE—Evening Herald Publishing Co., Los Angeles, Calif.—
780 License to cover construction permit (B5-P-599) as modified for changes in equipment, increase in power, change hours of operation, and move transmitter.

KEHE—Evening Herald Publishing Co., Los Angeles, Calif.—Au-
780 thority to determine operating power by direct measurement of antenna power.

NEW—Anne Jay Levine, Palm Springs, Calif.—Construction per-
1200 mit for a new station to be operated on **1200 kc.,** 100 watts night, 250 watts day, unlimited time.

KOOS—Pacific Radio Corp., Marshfield, Ore.—Voluntary assign-
1200 ment of license from Pacific Radio Corp. to KOOS, Inc.

NEW—Cheyenne Radio Corp., Cheyenne, Wyo.—Construction
1210 permit for a new station to be operated on **1210 kc.,** 100 watts, 250 watts day, unlimited time, with studio at 16th and Central Avenue, Cheyenne, Wyo., and transmitter as slightly over two miles southeast, near Cheyenne, Wyo.

KFBB—Buttrey Broadcast, Inc., Great Falls, Mont.—Construc-
1280 tion permit to make changes in equipment; increase power from 1 KW, 2½ KW day, to 1 KW, 5 KW day; change frequency from **1280 kc.** to **950 kc.;** and move transmitter from 5 miles south of town on 13th St., Great Falls, Mont., to site to be determined, south of Great Falls, Mont. Amended to change night power from 1 KW to 5 KW.

NEW—Ellwood Warwick Lippincott, Inc., Bend, Ore.—Construc-
1310 tion permit for a new station to be operated on **1310 kc.,** 100 watts, unlimited time. Amended to change name from an individual, Ellwood Warwick Lippincott, to a corporation, Ellwood Warwick Lippincott, Inc.

KRE—Central California Broadcasters, Inc., Berkeley, Calif.—
1370 Construction permit to install a new transmitter and antenna; move studio from 2345 Channing Way, Berkeley, to 2337 Shattuck Avenue, Berkeley, Calif., and transmitter from same site to East Shore Highway, Berkeley, Calif.

NEW—Central Broadcasting Corp., Centralia, Wash.—Construc-
1440 tion permit for a new station to be operated on **1440 kc.,** 1 KW, unlimited time. Amended to change requested power from 1 KW to 500 watts, and make changes in equipment.

KLS—S. W. Warner and E. N. Warner, d/b as Warner Bros.,
1440 Oakland, Calif.—License to cover construction permit (B5-P-1378) for a new transmitter.

KRNR—Southern Oregon Pub. Co., Roseburg, Ore.—License to
1500 cover construction permit (B5-P-1379) for equipment changes, increase in power, and change hours of operation.

KDB—Santa Barbara Broadcasters, Ltd., Santa Barbara, Calif.—
1500 Construction permit to make changes in equipment; erect a vertical antenna; change frequency from **1500 kc.** to **1220 kc.;** increase power from 100 watts to 500 watts; and move transmitter from 17 E. Haley Street, Santa Barbara, Calif., to site to be determined, near Santa Barbara, Calif. Amended to change type of equipment.

NEW—W. E. Whitmore, Hobbs, N. Mex.—Construction permit
1500 for a new station to be operated on **1500 kc.,** 100 watts, daytime. Amended to change type of transmitter to be installed.

The National Association of Broadcasters

NATIONAL PRESS BUILDING ★ ★ ★ ★ ★ WASHINGTON, D. C.

JAMES W. BALDWIN, Managing Director

NAB REPORTS

★ ★ ★ ★ ★

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IN THIS ISSUE

FCC ENGINEERING RECOMMENDATIONS SOON

The Engineering Division of the FCC is expected to submit a *preliminary* report to the Commission on the October Hearings sometime during the first week of January.

It can be said on reliable authority that the idea, published yesterday, of a single chain of super-power stations is an error. From an equally reliable source it was learned that the Engineering Report will find the weight of the technical evidence favors the removal of the limitation of 50 KW on clear channels. Further, the Preliminary Report will state that insofar as power in excess of 50 KW is concerned the social and economic factors outweigh technical considerations and the appraisal of these are left to the Commission. It is understood that a reduction in the number of clear channels will be recommended. The best guess is that the Engineers will recommend 28 or 29 clear channels instead of 25 as has been reported.

Classification of Stations

The Engineering Division will recommend that broadcasting stations be divided into six classes. This classification will, for all practical purposes, conform to the conditions which actually exist today. Subject to the preliminary character of the Report and to the possible substitution of legal definitions the various classes of stations may be described as follows:

Class A stations will provide for clear channel stations, with a *minimum* of 50 KW power and protection to their .5 mv/m night and .1 mv/m day signals.

Class B stations will provide for two or more stations of 50 KW each operating on one frequency and with protection to their 1 mv/m night and .5 mv/m day signals.

Class C stations will provide for those stations now known as High Power Regionals with a minimum of 10 KW and a maximum of 50 KW and protection to their 2 mv/m night and 1 mv/m day signals.

Class D stations will provide for stations with power of 1 to 5 KW and protection to their 3 mv/m night and 2 mv/m day signals.

Class E stations will provide for stations of 250 to 1000 watts and probably give protection to their 4 mv/m night and 2 mv/m day signals.

Class F stations will provide for what are now regarded as Local stations, permit of 100 to 250 watts and give protection to their 4 mv/m night and 2 mv/m day signals.

10 Kc Separation

The Engineers will definitely and without reservation recommend the retention of the existing 10 kc. separation of broadcast channels.

Power Increases Would Not Be Mandatory

The Report will stress the importance of allowing changes to be brought about in an evolutionary manner and recommend against compulsory regulations concerning power. Moreover, provision would be made for protecting as far as possible existing coverages.

Economic and Social Aspects

The Report will point out the importance of the social and economic effects of changing existing rules and regulations and express the view that these, in some instances, outweigh the technical considerations.

As far as can be learned the Report, which will treat the voluminous testimony adduced at the October hearings, will be based strictly upon technical considerations and, to the credit of the Chief Engineer, will not embrace recommendations in respect of the highly controversial social and economic issues involved.

IN RE SESAC

The recent correspondence between the NAB and the Society of European Stage Authors and Composers, copies of which have been sent to members, is being carefully studied. Upon completion of the investigation now in progress a full and complete report will be submitted to stations.

CONGRESS AND RADIO

Before the next issue of the NAB Bulletin reaches the desk of its readers the first session of the Seventy-Fifth Congress will have convened. To be exact, on Tuesday, January 5.

The bill calendar slate regarding radio activities, and everything else for that matter, will be entirely clean. This being a new Congress and not merely a new session, no bills are pending. As bills relating to radio broadcasting are introduced they will be carried in NAB Reports.

KFJI WINS SLANDER SUIT

The Circuit Court for Klamath County, Oregon, on December 21, found for the defendants, Radio Station KFJI, George Kincaid its manager, and David R. Vandenberg, local attorney, in the $75,000.00 slander suit brought against them by Mrs. Josephine Irwin.

In her complaint Mrs. Irwin charged that slanderous and libelous statements were made against her by D. R. Vandenberg, attorney, in his closing arguments to the jury in a murder trial of over a year ago.

Closing arguments of both state and defense attorneys, as well as the court's instructions to the jury and the reading of the verdict, were broadcast by Radio Station KFJI direct from the court room after consent had been obtained from the presiding judge.

Mrs. Irwin was a witness for the State in the murder trial and her testimony at the trial was commented on by Attorney Vandenberg. She charged in her slander suit that Vandenberg had called her a "Dope Fiend" and a "Crazy Lunatic."

KFJI based their defense on a qualified priviledge to broadcast the court proceedings, due to the fact that they had broadcast a complete and true account of the entire procedure, and also that they did not personally know Mrs. Irwin and could therefore have had no malicious intent to injure her.

RECOMMENDS AGAINST WOAI TRANSFER

Broadcasting station WOAI, San Antonio, Texas, using 50,000 watts, and operating unlimited time on 1190 kilocycles, applied to the Federal Communications Commission for permission to sell all of the stock of the corporation to the Columbia Broadcasting System, Inc.

Examnier P. W. Seward, in Report No. I-337, recommended that the application be denied. In his conclusions in the report the Examiner says:

The right of any person operating a business predicated on a license issued by the government, to attach any value for the

purpose of sale, to good will or going concern value by reason of holding such license, is challenged as amounting to a domination over such license equal to an assertion of ownership, and to the sale of a government gratuity, which is not in the public interest, and, in this case, is in violation of the Communications Act of 1934.

All of the Acts of Congress and the decisions of the Court negative the idea that a licensee of a radio broadcast station should ever be permitted to place a value on the license, frequency or channel or be permitted to traffic in radio facilities or to assert or exercise "ownership" thereof.

The fact that the modus procedendi for the transfer of radio license or the transfer of the stock of a licensee corporation is not set forth in the Communications Act indicates only that Congress left the details of such matters to the Commission.

It appears most certain that if the Congress had intended to permit the barter, sale, and trafficking in radio broadcast license, frequencies, or channels, it would have fixed a standard for the guidance of this Commission in arriving at a proper value.

The language in Section 301 of the Act is not general or ambiguous; it is clear and emphatic; and denies the right of anyone to acquire a right of property in radio license, frequencies or channels.

To permit a corporation engaged in broadcasting to purchase the control of a licensee corporation, which has been authorized to use a given frequency, at a price which is based upon the use of said frequencies for a period of time in excess of the then extent of said license, would carry with it the implied promise of the Commission that the license for the use of said frequency is to be continued. This is the same as giving a license for an unlimited time and amounts to the creation of ownership of the frequency by the holders of a license and transferee and is unlawful.

The contention of the transferor that this Commission is without authority to deny this application and that a grant thereof would be in the public interest is predicated on a fallacy and his position is untenable. Private profit is not the measure of public interest nor is it the criteria for the interpretation of statutes. To follow the plain provisions of the Act which presents the expressed legislative intent of Congress as set out in Section 301, shown above, is the only way to safeguard the public interest.

After a careful consideration of the facts, the pertinent sections of the Act, it is concluded that a grant of this application would be in violation of Section 301, as it would amount to the recognition of an assertion of ownership and sale of radio facilities; that it would be in violation of Section 310(b) as it is considered that such grant would not be in the public interest and that the grant would not serve public interest, convenience or necessity.

CRUMIT DENIED TEMPORARY INJUNCTION IN WHN CASE

The first of the test cases brought in July of 1936 by the National Association of Performing Artists in New York State was ruled upon by Mr. Justice Valente of the New York Supreme Court of New York County in a decision appearing in the New York Law Journal of December 24th, denying the plaintiff's motion for a temporary injunction restraining Station WHN from broadcasting phonographic records of the plaintiff's performances. This decision, favorable to broadcasters, indicates that the recording artists cannot rely alone upon any notice on the labels of phonograph records, but must prove that similar restrictions existed in the contract between the artist and the recording company and that the radio station knew the terms of such agreement and of any other restrictions in the contract. In denying the injunction the Court did not attempt to pass upon the points of law urged by the defendant to the effect that the plaintiff never had any property rights in the recordings and that, even if he once had, he has lost them since any attempted restrictions on the use of the recordings do not follow the records into the hands of radio stations or other persons who buy them. The opinion of the Court is as follows:

> "Plaintiff seeks to restrain defendants from using a phonograph record of plaintiff's performance in a radio broadcast. The record was made pursuant to contract with Decca Records, Inc. The contract or a copy is not annexed to the papers but plaintiff claims that under it all Decca Records obtained plaintiff's services as a performer so that commercial sound records could be manufactured in a form suitable for use upon home talking machines. The records bear upon the face a legend 'Not to be used for Radio Broadcasting'. There is no proof that the contract with Decca contained any such restriction as alleged by plaintiff nor that defendants knew the terms of the alleged licensing agreement with Decca, if any such existed, or even any of the other terms. The statement stamped on the record is not sufficiently explicit or connected with any license restriction to warrant the granting of a temporary injunction, whatever evidentiary bearing it may have upon the full presentation of the facts. The denial of a temporary injunction makes it unnecessary to pass upon the fundamental and novel question of law involved as to the general rights of a purchaser of a phonographic record of a performer to use this record for broadcasting purposes without special permission. It also leaves open the question as to the rights in that respect of Decca Records, Inc., or the seller of records generally. The motion for injunction is denied. Order signed. N. Y. Law Journal, Thursday, December 24, 1936."

SUPPLEMENTAL REPORT RECOMMENDS NO CHANGE IN ORIGINAL REPORTS

Two supplemental reports have been rendered by Examiners Robert L. Irwin and P. W. Seward in applications of the Continental Radio Company for permits for the erection of new broadcast stations at Columbus and Toledo, Ohio.

The original applications to the Federal Communications Commission asked that 1310, 100 watts and unlimited time be allocated for the proposed Columbus station and that 1200 kilocycles, 100 watts and daytime operation be allocated for the proposed Toledo station.

In the original reports in both of these cases, Report No. I-240 and 241, the Examiners found that no need was shown for the proposed new service and in both of the supplemental reports the Examiners recommend that the original recommendations be "not changed or altered in any respect."

SECURITIES ACT REGISTRATIONS

The following companies have filed registration statements with the Securities & Exchange Commission under the Securities Act:

G. Krueger Brewing Company, Newark, N. J. (2-2728, Form A-2)
San Jose Water Works, San Jose, Cal. (2-2729, Form A-2)
Interstate Bond Company, Atlanta, Ga. (2-2731, Form A-2)
Mines Operating Corporation, West Hanover, Mass. (2-2733, Form A-1)
North Shore Gas Co., Waukegan, Ill. (2-2734, Form A-2)
The Serrick Corporation, Defiance, Ohio. (2-2735, Form A-2)
Jefferson Brewing Company, Detroit, Mich. (2-2736, Form A-1)
Emporium Capwell Company, San Francisco, Cal. (2-2738, Form A-2)
Emporium Capwell Corporation, San Francisco, Cal. (2-2739, Form A-2)
Brooklyn-Manhattan Transit Corporation, Brooklyn, N. Y. (2-2740, Form A-2)
Rochester Gas & Electric Corporation, Rochester, N. Y. (2-2741, Form A-2)
Cunningham Drug Stores, Inc., Detroit, Mich. (2-2742, Form A-2)
Fiscal Fund, Inc., Philadelphia, Pa. (2-2743, Form A-1)
Gold Seekers Mines, Ltd., Toronto, Canada. (2-2744, Form A-1)

RECOMMENDS GRANTING NEW STATION

The Bayou Broadcasting applied to the Federal Communications Commission for a construction permit for the erection of a new station at Houston, Texas, to use 1210 kilocycles, 100 watts power and daytime operation.

Examiner Ralph L. Walker in Report No. I-329 recommends that the application be granted. In his decision the Examiner found that "the applicant is qualified in all respects to construct and operate the proposed station; there is a need for the service to be rendered; and operation as proposed will not result in objectionable interference to the service of any existing station."

MORE TIME RECOMMENDED FOR KICA

Broadcasting station KICA, Clovis, N. M., operating on 1370 kilocycles, 100 watts and specified hours, applied to the Federal Communications Commission to be allowed unlimited hours of operation.

Examiner P. W. Seward in Report No. I-328 recommended that the application be granted in part to wit: "that they be permitted to broadcast each day from 4:30 p. m. to local sunset, Clovis, N. M., subject to the condition that the applicant meet the requirements of Rule 131, in re antenna."

The Examiner states that the evidence indicated that there is a need for additional radio service in the area proposed to be served.

The Examiner states further that "the simultaneous nighttime operation of the applicant station and station KGFL would result in objectionable interference to each station. However, the applicant station might operate from 4:30 p. m. to local sunset at Clovis without causing objectionable interference to the fair and efficient radio service of any existing licensed radio station." The Examiner found also that the antenna now in use by the applicant does not meet the requirements of Rule 131 of the Commission.

NEW TEXAS STATION RECOMMENDED

The Brownwood Broadcasting Company filed an application with the Federal Communications Commission asking for a construction permit for the erection of a new broadcast station to be erected at Brownwood, Texas, to use 1370 kilocycles, 100 watts power and daytime operation.

Examiner R. H. Hyde in Report No. I-330 recommended that the application be granted "under conditions requiring applicant to obtain the Commission's approval of a transmitter site before beginning construction and requiring construction of an antenna conforming to conditions prescribed by Rule 131."

The Examiner found that there is a need in the area proposed to be served for additional service and he further found that no serious interference would be caused with any existing radio service by the granting of the application.

FEDERAL TRADE COMMISSION ACTION

Complaints

The Federal Trade Commission has alleged unfair competition in complaints against the following firms. The respondents will be given an opportunity to show cause why cease and desist orders should not be issued against them:

No. 3016. Alleging unfair representations in the interstate sale of certain medicinal treatments, a complaint has been issued against **Gabriel S. Eusch, Sr.,** and **Gabriel S. Eusch, Jr.,** 402 Main Street, **Tell City, Ind.,** trading as **Gabriel's Laboratories.**

According to the complaint, the respondents misleadingly represented their mange and distemper treatments for dogs. The complaint alleges that, contrary to the respondents' representations it "kills mange overnight," Gabriel Mange Cure, when used in a case of follicular mange, has no effect and no curative value, and upon sarcoptic mange it must be applied actively for several weeks. The respondens' "On-The-Nose" treatment for distemper has no curative value and has no effect against the spread of distemper, nor does it relieve this ailment, according to the complaint.

No. 3018. Alleging unfair competition through use of a game of chance in the sale of women's and men's hosiery, a complaint has been issued against **Henry R. Shapiro,** trading as Monarch Fashion Co., 1414 South Wabash Ave., Chicago.

The complaint alleges that sales are made by means of push cards, and that premiums of hosiery are allotted in accordance with instructions printed on the cards.

The respondent allegedly gives a pair of hosiery free to a woman employee of some organization if she furnishes him with the names and addresses of ten other women in diffent offices, to whom he sends sales literature, including a push card with instructions for its operation, and hosiery which is to be awarded to customers by lot or chance.

No. 3020. Charging violation of both the Robinson-Patman and Federal Trade Commission Acts, a complaint has been issued against **Hollywood Hat Co., Inc.,** 42 West 39th Street, **New York City,** manufacturer and distributor of women's hats.

Price discrimination between different purchasers of the respondent company's hats of like grade and quality is alleged in the complaint. Contrary to provisions of the Clayton Act as amended by the Robinson-Patman Act, the respondent company is alleged to have allowed certain purchasers, particularly Si Fish, Inc., a retailer with stores in San Francisco, Sacramento and Oakland, Calif., different prices from those given to other of its purchasers competitively engaged in selling women's hats in the three California cities and other localities in the United States. According to the complaint, the prices allowed Si Fish, Inc., and certain others, were lower than those it allowed to other customers competing with them. The effect, it is charged, was to lessen or to injure and destroy competition.

No. 3023. Illinois Baking Corporation, 2230 S. Union Ave., **Chicago,** is charged with unfair competition, through use of lottery methods, in a complaint.

Manufacturing and selling ice cream cones for distribution to ice cream manufacturers and dealers, the respondent company is alleged to have packed and assembled its cones, containing small printed slips, so as to involve use of a lottery scheme when the cones are sold to consumers.

These slips are said to have borne the following language: "You're lucky. You win a free ice cream cone." Such printed slips, according to the complaint, were so placed in the cones that the ultimate consumer could not ascertain whether or not he was entitled to a free ice cream cone until after his purchase had been made and the cone partially consumed. The complaint points out that the fact as to whether the purchaser received an additional ice cream cone free of charge was thus determined by lot or chance.

Stipulations and Orders

The Commission has issued the following cease and desist orders and stipulations:

No. 01489. Laboratories, Inc., 3117 Gillham Road, Kansas City, Mo., agrees in its stipulation to stop representing its "Precision Vapor Balm" as being competent for treating sciatica, lumbago and headaches; that "Precision Stimulating Tonic Compound" will supply the things most needed to replenish vital elements used by the body, and other similar assertions.

No. 01503. Dr. O. A. Johnson, 1324 Main St., Kansas City, Mo., will discontinue asserting that various preparations comprising a treatment for rectal ailments constitute an effective remedy, unless this representation is specifically and accurately qualified; and that these preparations will relieve cases in which in fact operations would otherwise be necessary.

No. 01504. Enoz Chemical Co., 2367 Logan Blvd., Chicago, will stop advertising "Enoz Moth Spray" as the undisputed leader in its field, as the most economical and effective method of moth control ever known, and that this article re-lusters upholstered furniture, carpets or rugs, or brings out the original color.

No. 01505. Forrest Kinder, 3548 Sidney St., St. Louis, trading as Darcin Pharmacal Co. and selling "Darcin Tablets," agrees no longer to advertise them as a new or improved cold remedy or that the taking of such tablets "before going outside will eliminate the danger of taking additional cold." Kinder, in his stipulation, admitted that the tablets were not a new improved cold remedy.

No. 01506. Oliver Conklin, 420 South Olive Ave., West Palm Beach, Fla., trading as Auritone Co., agrees to bar the representation that his products constitute an adequate treatment or remedy for impaired hearing, unless these assertions are limited to temporary relief of such an ailment not due to defective ear drums or other causes that cannot reasonably be expected to be benefited substantially by use of these products.

No. 01507. H. R. Hostettler, operating under the name Swan-Reed Co., at 12435 Euclid Ave., Cleveland, will ban representations that his weight reducing preparation called "Slim" provides a safe way to reduce, or will restore one's figure and improve health.

No. 01508. Health Research, Inc., 537 Second National Bank Bldg., Akron, selling the "Air-Draulic Pad" for rupture treatment, agrees to cease representing, inferentially or by direct assertion, that the appliance is satisfactory in treatment of all types of rupture. In its stipulation, the respondent company admitted that the appliance does not constitute a rupture cure, and that wearing it for some time will not result in a rupture staying reduced without its use.

No. 01509. The Heneph Corporation, Kingston, N. Y., agrees to stop advertising "D. W. Kold Kaps" as giving almost immediate relief from all cold symptoms; "Heneph's Pills" as a competent remedy for serious kidney lesions; "Bitter Tone Tonic Tablets" as a natural and safe means of increasing weight; and to cease representing certain other products by means of other similar assertions.

No. 1853. Shaw's Jewelry Co., 1618 Main Street, Dallas, Texas, with branches in Fort Worth and San Antonio, in its stipulation with the Commission, agrees to stop use in advertising of the words "Yellow Gold" to describe watch cases not made of gold. In the event the watch cases are gold filled or gold plated the company agrees to employ in connection with its use of the words "Yellow Gold," other words in conspicuous type clearly revealing that the cases are not made wholly of gold. The word "certified" will not be used by this firm to describe diamonds not certified by a governmental agency, scientific bureau or other responsible agency charged with such function.

No. 1854. American Woolen Co., Inc., 225 Fourth Ave., New York City, in its stipulation, agrees to cease using as a brand or label the words "All Wool" when the products so described are not composed wholly of wool. The stipulation provides that if the products consist substantially of wool, the word "wool," when used to describe them, shall be accompanied by other words in

prominent type showing that the articles are composed in part of materials other than wool. This company manufactures blankets.

No. 1855. A. Sartorius & Co., Inc., 80 Fifth Ave., New York City, in the sale of "Piat-Num Manicure Beautifying Cream," will discontinue representations in advertising which directly assert or clearly imply that the product, when applied as directed, will nourish or feed the nails, will keep them healthy, or prevent splitting or breaking of the nails, when such are not the facts. The corporation trades as Plat-Num Laboratories.

No. 1856. Bakert Co., Inc., 54 Austin St., Newark, N. J., engaged in selling "Durenamel," a dental silicate for use in making fillings, agrees to cease the use, or recommending the use, of a so-called "mercurochrome test" of its product or of the products of competitors, and to stop making any claim that such test in any way demonstrates the comparative liability to leakage of its own and its competitors' silicate fillings. The respondent corporation will stop advertising that in the test referred to "Durenamel" shows no leakage; that it is not affected by atmospheric changes, and contains no acid in its liquid form.

No. 1857. Gralnick Brothers, Inc., 1011 Diamond St., Philadelphia, selling luggage, signed a stipulation to cease use of the words "Genuine Pigskin" to describe products not composed of leather made from the top layer of pigskin; and to stop using as a brand for its luggage the word "Pigskin" alone or with the word "Genuine," or with other words, so as to imply that the luggage is made from the top layer of the hide, when such is not a fact. The stipulation provides that if the article is made from the inner cut of the pigskin and is branded "Pigskin," then that word shall be immediately accompanied by other words in type equally as conspicuous so as to indicate clearly that the product is not composed of leather made from the top cut of pigskin. The respondent corporation also will stop branding certain of its products as "Walrus," when they are not composed of leather made from the top or grain cut of such hide, and in fact, are not composed of walrus at all.

No. 1858. Gibsonville Hosiery Mills Co., Gibsonville, N. C., will stop labeling its products as "Pure Silk Thread Reinforced With Rayon" or "Pure Silk and Rayon" when they are not composed chiefly of silk.

No. 1859. Salvatore A. Laraia, 23 Wallabout Market, 35 Washington St., Brooklyn, agrees to stop representing on packages in which his "Squisita" brand of olive oil is packed, that the product was awarded first prize, gold medal, grand cross, or diploma of honor at the Firenze Exposition of 1934. He also stipulates that he will cease making these representations either alone or accompanied by a picture of such medal, cross or diploma.

No. 1860. Peter J. Fisher, trading as The Superna Co., 200 North Chicago Ave., South Milwaukee, Wis., agrees to discontinue representing that "Nose-O-La," advertised as a remedy for treating dogs and other animals, is a competent treatment for catarrh, colds, or distemper; that it is a tonic of permanent benefit, or a preventive of worms or skin disease, or that it is a protection against contagious diseases.

No. 1861. Hargood Ribbon Co., Inc., 79 Madison Ave., New York City, agrees to bar use in its advertising of the words "Mills," "Manufacturers," and "Manufacturing," alone or in connection with the phrase, "Selling Direct to the Trade," implying that it manufactures the products it sells, or controls a mill in which they are made, when this is not a fact.

No. 1862. Bloom Brothers Co., 25 North Second St., **Minneapolis,** selling souvenirs through traveling salesmen, agrees to cease using in catalog descriptions of its bracelets, or in pictures embossed on the bracelets, portrayals of American Indians or scenes in the lives of Indians, unless such portrayals include appropriate language clearly indicating that the articles so described are not made by American Indians. Bloom also agreed not to use the words "Indian" or "Indian bracelet" in advertisements, to designate his products, and not to employ the word "Indian" in any way to imply that the bracelets were made by Indians, when such was not a fact.

No. 1865. Abe Puzes, 711 South Dearborn St., Chicago, trading as American Distributors, stipulates that he will discontinue the use in interstate commerce of any plan or scheme promoting the sale of his products which involves the use of a gift enterprise, lottery or scheme of chance whereby an article is given as a prize or premium for or in consideration of the purchase of any other article. The respondent will cease asserting that articles distributed to dealers in consideration of their services in selling his products are given free, when such is not a fact. Puzes sells wrist watches, silverware, lamps and other articles by a sales card method.

Two **New York** shoe companies have entered into stipulations to discontinue unfair trade representations in the sale of their products. These firms are: **Champion Shoe Manufacturing Corporation,** 104 Bleecker St., and **Melville Shoe Corporation,** 555 Fifth Ave., which owns and controls **Thom McAn Shoe Co., Inc.,** operator of a chain of retail stores, through which the parent company sells its shoe at retail.

No. 1866. The **Champion** firm, in its stipulation, agrees to stop use in the sale of its shoes of labels containing the phrases, "Made by Dr. Zacharoff" or "Approved by Dr. Zacharoff," or containing the word "health," either alone or in connection with the words "foot form" or "foot," implying that such shoes are made in accordance with the design or under supervision of a doctor and have special, scientific, orthopedic features, when this is not a fact.

No. 1867. Melville Shoe Corporation agrees to cease using the phrases "Approved by Doctors" or "Scientifically Designed" and the word "health" to imply that its shoes have special scientific, orthopedic features, when such is not a fact.

No. 1870. Grain Products Corporation, 11 West 42nd St., New York, engaged in the sale of malt, will desist from use of the words "Pilsen Malt" to designate a malt product not made from barley grown in Czechoslovakia, and from use of the word "Pilsen" so as to imply that its malt product so described is manufactured from barley grown in Czechoslovakia, when such is not a fact.

No. 2071. Prohibiting lottery methods in the sale of candy, an order has been issued to cease and desist against **Sol Block** and **Sidney Blumenthal,** manufacturers, Worth and Herbert Streets, **Philadelphia,** trading as **Rittenhouse Candy Co.**

Sales to jobbers and wholesalers of candy in packages which may be used without alteration of contents to conduct a lottery or gift enterprise, are barred under the order, as is the supplying of dealers with packaged candy together with punchboards for use by retailers.

No. 2734. H. E. Martindale, 647 State Street, **Marinette, Wis.,** formerly of **Menominee, Mich.,** has been ordered to discontinue certain unfair trade representations in the sale of a correspondence course in butchery and meat packing. Martindale traded under the name of Federal Institute of Meats and Marketing.

Representations implying that the respondent or the business conducted by him is a branch or bureau of the United States Government, or is connected with, or licensed or approved by the Government when this is not a fact, are prohibited under the order. He is directed to stop making these representations through use of the terms "chief of examiners," "board of examiners," "assistant examiners," "divisional director," and "Federal Institute."

Other representations barred under the order are that the respondent's business is operated on a nation-wide basis; that there are many openings for positions in the meat slaughtering and packing industry; that the respondent maintains an office in Washington, D. C., and that his course of instruction is a competent course, upon completion of which the pupil will be adequately qualified to fill positions in the industry.

No. 2808. An order has been entered directing **Frank Rabinowitz,** trading as **Novelty Sweets Co., Philadelphia,** to discontinue selling to retailers, jobbers and wholesalers candy so packed that sales to ultimate purchasers are to be made, or may be made, by means of a lottery, gaming device or gift enterprise.

The complaint in this case was dismissed as to D. Goldenberg, Inc., originally named as one of the respondents. According to the findings, the business conducted under the trade name, Novelty Sweets Co., was not a joint enterprise of Rabinowitz and D. Goldenberg, Inc., which corporation for several years has not engaged in the manufacture and distribution of candy assortments involving use of a lottery scheme when sold to the public.

No. 2949. Fort Clark Distilleries, Inc., 915 Forsythe St., **Peoria, Ill.,** has been ordered to discontinue certain unfair trade representations in the sale of liquors. This company is a rectifier and wholesaler

The order prohibits use of the word "distilleries" in the respondent company's corporate name, or in advertising, so as to imply that the company is a distiller, manufacturing its products through the process of distillation in a plant which it owns and controls, when such is not a fact. This part of the order does not apply to gins produced by the respondent company through a process of rectification whereby alcohols purchased but not produced by the respondent company, are redistilled over juniper berries and other aromatics.

No. 2977. C. G. Hyre, of **Morgantown, W. Va.,** trading as **The Pepsotalis Co.,** has been ordered to cease and desist from unfair trade representations in the sale of "Pepsotalis," a medicinal preparation advertised by means of radio broadcasts.

Hyre is directed to stop making certain representations, either in

the form of assertions by himself or by repeating the testimonials, or what purport to be the testimonials, of others.

He is directed to cease alleging that Pepsotalis is an intestinal antiseptic and a relief for indigestion, and that its use will be beneficial in cases of stomach disorders generally.

FTC COMPLAINT DISMISSED

No. 2557. The Federal Trade Commission has ordered dismissal of a complaint charging the **Thayer Pharmacal Co.** and **Thayer Sales Corporation,** 2944 W. Lake St., **Chicago,** with unfair representations in the sale of cosmetics.

FEDERAL COMMUNICATIONS COMMISSION ACTION

HEARING CALENDAR

The following hearings are scheduled for the week beginning Monday, January 4.

Monday, January 4

HEARING BEFORE AN EXAMINER
(Broadcast)

NEW—United States Broadcasting Co., Toledo, Ohio—C. P., **1200 kc.,** 100 watts, daytime.

NEW—United States Broadcasting Co., Columbus, Ohio—C. P., **1310 kc.,** 100 watts, unlimited time.

Wednesday, January 6

HEARING BEFORE AN EXAMINER
(Broadcast)

NEW—A. L. Chilton, Dallas, Texas—C. P., **990 kc.,** 1 KW, daytime.

Thursday, January 7

ORAL ARGUMENT BEFORE THE BROADCAST DIVISION

Examiner's Report No. I-251:

NEW—Voice of Marshall, Marshall, Texas—C. P., **1500 kc.,** 100 watts, specified hours.

Examiner's Report No. I-286:

NEW—Leon S. Packard, Lewis H. Stebbins, Alden C. Packard, d/b as Valley Broadcasting Co., Pomona, Calif.—C. P., **1160 kc.,** 250 watts, daytime.

Examiner's Report No. I-291:

NEW—Power City Broadcasting Corp., Niagara Falls, N. Y.—C. P., **630 kc.,** 250 watts, daytime.

NEW—The Niagara Falls Gazette Publishing Co., Niagara Falls, N. Y.—C. P., **630 kc.,** 250 watts, daytime.

Examiner's Report No. I-294:

WMFF—Plattsburg Broadcasting Corp., Plattsburg, N. Y.—Modification of license, **1310 kc.,** 100 watts, 250 watts LS, daytime until 7:30 p. m. Present assignment: **1310 kc.,** 250 watts, daytime.

Friday, January 8

HEARING BEFORE AN EXAMINER
(Broadcast)

NEW—The Schuylkill Broadcasting Co., Pottsville, Pa.—C. P., **580 kc.,** 250 watts, daytime.

NEW—Pee Dee Broadcasting Co., James A. Bradley, Pres., Florence, S. C.—C. P., **950 kc.,** 1 KW, daytime.

APPLICATIONS RECEIVED

First Zone

1210 WJEJ—Hagerstown Broadcasting Co., Hagerstown, Md.—Construction permit to move transmitter from Lovely Dame Bldg., 16 West Washington St., Hagerstown, Maryland, to near Hagerstown, Maryland, and install a vertical antenna.

1280 WORC—Alfred F. Kleindienst, Worcester, Mass.—Authority to install automatic frequency control.

1350 WBNX—Standard Cahill Co., Inc., New York, N. Y.—Modification of license to change name from Standard Cahill Co., Inc., to WBNX Broadcasting Company, Inc.

Second Zone

1050 NEW—Times-Star Co., Cincinnati, Ohio—Construction permit for a new station to be operated on **1050 kc.,** 5 KW, unlimited time.

1190 WSAZ—WSAZ, Incorporated, Huntington, W. Va.—Authority to determine operating power by direct measurement of antenna.

Third Zone

920 WSPA—Virgil V. Evans, d/b as The Voice of South Carolina, Spartanburg, S. C.—Construction permit to install a new transmitter, erect a vertical antenna and increase power from 1 KW to 5 KW. Also change frequency from **920 kc.** to **970 kc.** Amended: To change frequency from **970 kc.** to **880 kc.**

1200 WFTC—Jonas Weiland, Kinston, N. C.—Modification of construction permit (B3-P-944) as modified for a new station, requesting changes in equipment.

1450 WTFI—Liberty Broadcasting Co., Atlanta, Ga.—Modification of construction permit (B3-P-745) for move of transmitter and studio, requesting authority to install new equipment, for approval of transmitter site at Parkway Drive and East Avenue, Atlanta, Georgia, and approval of antenna.

1500 NEW—C. S. Gooch, d/b as Amarillo Broadcasting Co., Amarillo, Texas—Construction permit for a new station to be operated on **1500 kc.,** 100 watts, daytime. Amended: To change hours of operation from daytime to unlimited time using 100 watts power.

NEW—Tulsa Broadcasting Co., Inc., Mobile—Construction permit for a new high frequency relay broadcast station to be operated on **31100, 34600, 37600, 40600 kc.,** 2 watts.

Fourth Zone

620 WTMJ—The Journal Co. (The Milwaukee Journal), Milwaukee, Wis.—Authority to transfer control of corporation of station WTMJ and experimental stations from the estate of Lucius W. Nieman, deceased, to Faye McBeath and The Journal Co., 1100 shares stock.

630 KFRU—KFRU, Incorporated, Columbia, Mo.—Modification of license to increase power from 500 watts, 1 KW day to 1 KW day and night.

1210 KGLO—Mason City Globe Gazette Co., Mason City, Iowa—Construction permit for equipment changes and increase in power from 100 watts to 100 watts night, 250 watts day.

1330 KSCJ—Perkins Brothers Co. (The Sioux City Journal), Sioux City, Iowa—License to cover construction permit (B4-P-1490) to move auxiliary transmitter to present site of main transmitter.

1370 KVGB—Ernest Edward Ruehlen, Great Bend, Kansas—Modification of construction permit (B4-P-1211) for a new station, requesting approval of studio site at 2103 Forest Avenue, Great Bend, Kansas, and transmitter site at Great Bend, Kansas, and make changes in equipment.

1370 WEOA—Evansville On The Air, Inc., Evansville, Ind.—License to cover construction permit (B4-P-1276) for equipment changes and increase in power.

Fifth Zone

570 KGKO—Wichita Falls Broadcasting Co., Fort Worth, Tex.—Modification of construction permit (B3-P-709) for new equipment and move of transmitter and studio, requesting installation of new transmitter and directional antenna for night use, increase power from 250 watts, 1 KW day, to 1 KW, 5 KW daytime, and for approval of transmitter site at near Fort Worth, Tex.

1200 NEW—Thomas R. Waters, Jr., Sydney R. Lines, Jr., and Gomer Thomas, d/b as Skagit Broadcasting Assn., Bellingham, Wash.—Construction permit for a new station to be operated on **1420 kc.,** 100 watts, unlimited time. Amended to change frequency from **1420 kc.** to **1200 kc.,** make changes in proposed equipment, increase power from 100 watts to 100 watts night, 250 watts day, change name of partners in partnership, change transmitter and studio sites to site to be determined, Bellingham, Wash. Requests facilities of Station KVOS.

1210 KLAH—Barney Hubbs, A. J. Crawford, Jack Hawkins and Harold Miller, d/b as Carlsbad Broadcasting Co., Carlsbad, N. Mex.—License to cover construction permit (B5-P-1075) for a new station on **1210 kc.,** 100 watts, unlimited time.

Puerto Rican Zone

1290 WNEL—Juan Piza, San Juan, Puerto Rico.—License to cover construction permit (B-P-661) as modified for equipment changes and increase in power.