

THE SEPTEMBER 1930

RADIO INDEX

A MAGAZINE FOR THE RADIO HOME



Broadcasting Stations of the World
What's New in 1931 Sets?
The Lure of Short Waves
Those Bothersome Noises

HOW TO TUNE A SET CORRECTLY

Read This Page Carefully and You Can Set Your Dials Accurately for Any Station in America

ALL stations in America are listed in RADEX in three tables:

- 1st by Frequencies.
- 2nd by Call Letters.
- 3rd by States and Cities.

The Index by Frequencies is the one to be used, the other two are merely supplementary.

Let us assume you have just bought your first RADEX. Proceed as follows:

Tune in some station—any station that comes in. Tune it sharply, turning down your rheostats (Volume control) until we find the marks on your dials at which it comes in most clearly and with greatest volume.

Let us assume that the station we are hearing is WEAF in New York. First we must ascertain the frequency for this station. Look it up under WEAF in the Index by Call Letters or under New York in the Index by States and Cities. In either of these indexes we find that the frequency of WEAF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAF is one of the two stations which have been assigned the 660 keys. frequency by the Federal Radio Commission. We also find that it has a power of 50,000 watts, that it is located in New York City and is owned by the National Broadcasting Co., Inc.

In the blanks for dial numbers one 660 kilocycles (which is the wave length of 454.3 meters) enter the dial readings of your set. It is immaterial whether your set has one, two or three dials. Use as many of three spaces provided as you need. The set used in the illustration had two dials. In this case we entered the dial readings for 660 kilocycles as 69-67.

Let us now tune in some other station. We repeat the same procedure in tuning and find that we are hearing, let us say, WOS at Jefferson City. Proceed as before in ascertaining the frequency of WOS. This we find to be 630 keys. We turn to 630 in the Index by Frequencies and enter our dial readings for this band which on the set we are using was 72-70.

We now have found that the dial numbers for 630 keys, are 72-70 and the dial numbers for 660 keys, are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 keys. We listen carefully and if they are on the air and within range of our set we will tune in WSM of Nashville at this point. We then enter the dial readings for WSM opposite 650 keys. Now it is

clear that if we reset our dials at 71-69 our set will be tuned to 640 keys, and at that point KFI of Los Angeles will be heard, always assuming, of course, that it is on the air and within range of our particular set.

Now we tune in some other station, proceeding as before until after an evening or two, we have blanks filled on every page. We are now able to set our dials for any frequency we desire and consequently any station we may want whether we have never received it before or not.

Our index now becomes of great value to us in identifying programs. Let us say that we hear music at 67-65 on our dials. We refer to our Index by Frequencies and Dial Numbers and we find that we are in tune to 680 kilocycles. On this wave there are two stations: KPO at San Francisco and WPTF at Raleigh, N. C. Both of these stations have 5000 watts in power. But knowing which is the closer to our set, we can tell almost invariably which station we are hearing. The Radio Commission has had to give the same frequency in most cases to several stations but they have distributed them geographically so they should not interfere.

When two stations in the same locality have the same frequency, they are required to divide the time. In this case, of course, it is not possible to tell which one of the two stations is broadcasting at the particular moment we hear it, but we do know it is one or the other of them.

The second column in the Index by Frequencies, as we have seen, gives the power of the station as measured in watts. This power also aids us in identifying stations as we will not ordinarily hear those stations with 500 watts or less unless they are close to our home city.

The Index by Call Letters also has spaces providing for logging dial numbers but these are provided merely for the convenience of those who want to be able to turn instantly to some favorite station. They may or may not be used as you desire. Remember that it is the Index by Frequencies that we must use to get the most value and pleasure out of our radios.

The Index by Frequencies is now printed with marginal tabs. If you will fill in under the word "dial" your reading for this particular frequency, you can then turn instantly to any frequency desired. Take a pair of shears and cut along the dotted line, as shown.

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters	76 74
KIJO 1000 Spokane, Wash.	Louis Weaver, Inc.
WEJL 500 Lincoln, Neb.	Detroit Western University
WEI 500 Detroit, Mich.	Boston Elec. Illuminating Co.
WVIC 1000 Berkeley Springs, Mich.	Woodward and Lothrop
	Episcopal Missionary College
600 kilocycles 499.7 meters	75 73
CFCH 350 frequency Falls, Ont.	Abilene Power & Paper Co.
KFRU 300 Lafayette, Mo.	Hobart N. S. Thomas
KJSD 500 San Diego, Calif.	Aurora Radio Corp.
NCB 210 Baltimore, Md.	Ballou Electric Radio Co., Inc.
WEHW 200 Detroit, Mich.	Young Men's Christian Assn.
WOLM 500 Evansville, Ind.	WRXK, Inc.
WVFC 500 Memphis, Tenn.	Travelers Insurance Co.
WVIC 1000 Hartford, Conn.	
610 kilocycles 491.5 meters	74 72
EFRC 1000 San Francisco, Calif.	Easton Typ. Sear Co.
WJAF 1000 Kansas City, Mo.	Keynote Broadcasting Co., Inc.
WJP 500 Philadelphia, Pa.	Clifton Bros., Inc.
WJU 1000 Kansas City, Mo.	Unity School of Christianity
620 kilocycles 483.6 meters	73 71
EFAD 500 Phoenix, Ariz.	Recreational Publishing Co.
KFRU 300 Lafayette, Mo.	Organon Publishing Co.
WJAF 1000 Kansas City, Mo.	Chicago Publishing Co.
WJSD 1000 Philadelphia, Pa.	Thompson & Co., Inc.
WJW 500 Worcester, Mass.	McIntire Journal
WVIC 1000 Milwaukee, Wis.	
630 kilocycles 475.9 meters	72 70
CFCH 350 frequency Falls, Ont.	Victoria Broadcasting Assn.
KJSD 500 San Diego, Calif.	Virginia State Reserve
NCB 210 Baltimore, Md.	Central National Hallways
WEHW 200 Detroit, Mich.	Lawrence Education
WOLM 500 Evansville, Ind.	Knoxville College
WVFC 500 Memphis, Tenn.	Kennedy Radio Air, Inc.
WVIC 1000 Hartford, Conn.	State Marketing Bureau
640 kilocycles 468.5 meters	
KJL 1000 Los Angeles, Calif.	Park C. Anthony, Inc.
WJLU 1000 Columbus, Ohio	American Insurance Union
650 kilocycles 461.3 meters	70 68
VSM 1000 Nashville, Tenn.	National Life & Accident Ins. Co.
660 kilocycles 454.3 meters	69 67
WJAF 1000 Kansas City, Mo.	Omaha Grain Exchange
WJSD 1000 Philadelphia, Pa.	National Broadcasting Co., Inc.
670 kilocycles 447.5 meters	68 66
WMAQ 1000 Chicago, Ill.	Chicago Daily News, Inc.
680 kilocycles 440.9 meters	67 65
EPD 500 San Francisco, Calif.	Hart Iron & The Chronicle
WTFP 1000 Raleigh, N. C.	Durham Life Insurance Co.

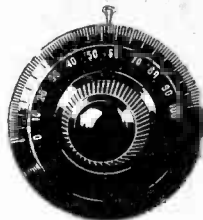
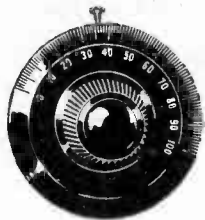
THE SEPTEMBER 1930

RADIO INDEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER

Editor and Publisher



SEVENTH YEAR

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Published Monthly Excepting July and August
See Subscription Blank on page 65

THE RADEX PRESS

1367 East 6th Street Cleveland, Ohio

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WHAT'S NEW in 1931 SETS?

By J. B. SMITH
Technical Editor

ELECTRICAL and mechanical refinements of radio receivers, power packs, loudspeakers, especially those of the dynamic type; the application of receivers to automobiles; the general movement toward simplicity of operation and the persistent efforts toward more perfect reproduction, are the outstanding points of progress during the last year. This, of course, includes the perfection of numerous accessories and the provision of new apparatus for the same purpose. There has been and still is, a transition from the old-style, battery-operated receiver to the new all electric type of receiver, which, as a rule, consists of one integral unit comprising the parts that formerly had to be purchased and maintained separately, and hooked up to the receiver by the radio fan or service man. With the unlimited possibilities involved with the use of house-lighting current for the operation of receivers, new tubes have been developed, superior transformers, chokes and other instruments have been perfected to eliminate the first serious objections to the use of house-lighting current for radio reception, namely, hum and the fluctuation of line voltage. Consistent efforts toward the solution of these problems have met with a high degree of success so that receivers that are now obtainable for a moderate sum, are practically humless and are not affected by variations of line voltage. More sturdy and durable apparatus was also found necessary owing to the high plate voltages required by new tubes, and as a result we now have heavy-duty condensers, chokes and transformers that will stand the strain. Thus, although the year of 1930 has not been marked by any revolutionary changes in receivers, unless one would so class screen-grid circuits, the outstanding feature is that there has been a stride toward the building of a better product.

Noticeable improvement in reception has been accomplished by the use of screen-grid tubes, and most manufacturers have incorporated two or three stages, which resulted in a higher amplification value. As this amplification is so great that different means of detection have been found necessary to handle the immense output and for this reason most manufacturers have forsaken the old method of grid detection and have gone over to what is termed "power" detection, which is capable of handling the large output of the radio-frequency stages without distortion or the risk of overloading. Distortion caused by poor methods of detection, has often been attributed to inefficient audio systems.

Better Tone Quality

In consequence of this large amplification obtained from the radio-frequency stages, it has been found possible to use low-gain, audio-frequency amplifiers, which together with rapid strides in transformer design and the use of resistors, is responsible for excellent tone quality. Manufacturers have also applied themselves to the improvement of electro-dynamic loudspeakers, which contribute greatly to the good tone quality obtained and also to the audio-frequency range now possible. If proper output transformers are used on a well-designed receiver, the efficiency of these speakers is so high that the frequency range is practically limited only by the types and different characteristics of the cones used. The majority of speakers have a paper or composition cone about 12 inches in diameter. The type of speaker generally used has a direct-current field winding energized by the current obtained from the power unit. A type of audio-frequency amplifier that is finding favor with the manufacturers consists of a straight audio stage, usually employing a 227 tube, which is in turn fed into a push-pull stage consisting of two 245 tubes.

Radio programs are also available to the motorist, thanks to receivers that
(Continued on page 22)

What OUR READERS are THINKING

Letters to the Editor About Divers Things

THE letter of Miss Carrie Alice Brinkerhoff in a recent issue stirred up a lot of comment. Several readers who have been annoyed at failure to receive verification from stations to which they had written, commended the idea of publishing a list of broadcasters who failed to reply. Thus H. Walter Fricke, 560 30th Street, North Bergen, N. J., writes: "I consider as basically sound your idea of publishing a list of those stations which do not reply to requests for verification, but I believe that very often innocent stations will be put on the black list. Thus Miss Brinkerhoff lists KSL as one of the discourteous stations whereas I received my verification from KSL within two weeks after I had written them and considering the distance, this is a very fair return."

Joseph J. Becker, 415 S. 11th Street, Hamilton, Ohio, also objects to including KSL as a delinquent. "They wrote me a wonderful letter offering to dedicate a number for me on the air." George Lilley, 227 W. Bernard Street, West Chester, Pa., also reports hearing from KSL promptly as have several others. M. B. Murphy, Glenn Ranch, Calif., points out that "some of the broadcasting stations, both large and small, are still in red ink on their ledgers and do not have the office force to answer all mail promptly."

KSL's Position

And from KSL comes the following: "We do not understand why complaints of this nature have been received by you as this is one of the things that we have been very careful about. In fact, we have one girl that does practically nothing but reply to letters and forward "Ekko" stamps. With the vast amount of mail received daily, it is, of course, possible that a few letters have gone astray. In this connection, may we suggest that you publish an editorial telling people when they write to radio stations re-

questing verification of reception, that they be sure to show name and address and that they clearly define the programs by time and numbers heard by them, so that stations will not have difficulty in checking the program which they claim to have received."

Judging from our own experience, stations must receive many letters with signatures and addresses which are practically illegible and in some cases which



Adelaide Candee, one of Ida Bailey Allen's Radio Home-Makers, illustrating the title of a talk entitled "Mirrors of Beauty." Miss Allen's talks are a Columbia feature

are unsigned altogether. So the fault is not always with the station and we are convinced that it would not be fair for us to try to indicate those stations which are careless in replying to inquirers. We have therefore sent a letter to every broadcasting station in North America asking them, first, if they are willing to verify reception upon receipt of stamp and, second, if they send "Ekko" stamps upon receipt of a dime. Almost without exception stations report their willingness to verify reception and, in the Index by Frequencies, you will find the symbol (*) in front of those stations which have signified their willingness either to verify or send stamp. Some of

the stations have adopted a stamp of their own in place of "Ekko" and some of them have no stamps at all. The latter are marked with the symbol (†) while (‡) indicates those stations that do not care to verify.

We hope this new feature will prove helpful to our readers and help us to earn such commendation as that of R. Reid Pelton, 63 Benlamond Avenue, Toronto, Ont., who says "RADEX is a fine example of exactness and application. There is not another publication printed that spends so much pains on details that are so helpful to the ardent radio fans."

Radio Map Ready

Other evidence of our desire to serve our readers will be found in the new RADEX Radio Map of North America which will be ready for mailing early in September. We had planned to include this in the magazine, devoting a four-page spread to it, but we found that even four pages would be too small a space in which to show all the stations of America, including those in Canada, Cuba and Mexico. We are, therefore, bringing out a map of the size of twelve pages of RADEX and are incorporating in it all the features which in our opinion will make it ideal for radio use. On the map will be shown the regular Index by States and Cities, with a key number for the quick location of any station on the map. We have received many complaints regarding a table of distances because more cities were not included. With such a table it is impossible to show more than one city from each state. We are therefore arranging a method of quick measurement of distances between any two cities of the United States, Canada and Mexico which we believe will be far more convenient than any table of distances could be.

The new map will be for sale on the newsstands at 25 cents each, or a copy will be included free with each new subscription or renewal for one year or more.

The Perfect Announcer

"In line with your suggestion to announcers," writes H. Gorman, of Naval House, Pa., "I would suggest if they

would only give the name of their city after each selection, that would be a big help to their listeners. If the announcer would just say 'Baltimore,' my dial and my RADEX would tell me it was WBAL I was receiving and not WTIC."

"I have made a very important discovery," writes Edward C. Houlgate, 388 Waterloo Street, London, Ont. "On May 3rd I picked up WCSC, Charleston, S. C., broadcasting a test program and I found the 'Perfect Announcer.' They were broadcasting records and after each selection, the announcer gave the call letters, the location of the station and the owners. Please give this announcer a big hand; his name should go down in history." Mr. Houlgate adds, "Your publication is getting better with each issue. I think each copy is perfect and then the succeeding one has some improvement. I like especially the features by J. B. Smith. They are really beneficial and anyone can understand them."

CPRY or CHRY

This new station which R. Reid Pelton reports as a phantom call of CKGW on 690 kcys., has been reported to us both as CHRY (Hotel Royal York) and CCRY (Canadian Pacific Railways). Official information regarding the station has not yet been received. Can our readers give us the correct call?

"Have you had any information regarding VCX?" writes Cyril P. Engelmeier, P. O. Box 132, Pittsburgh, Pa. "I understand it operates on 685 kcys. in Toronto and has been picked up quite frequently in the East."

"Somebody asked about WWU at Hadley Field," writes Thomas J. Fee, 33 Second Street, Elizabeth, N. J. "WWU's frequency is about 340 kcys., therefore it would have harmonics at about 680 and 1020 kcys. It is received here in New Jersey and New York on either or both of these channels and many listeners get the impression that these are its regular frequencies. Likewise, listeners have been hearing the second harmonics of WJZ and WGY on 1520 and 1580 kcys. respectively and have gotten the idea that they were getting

(Continued on page 19)

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Name.....
Address.....
State.....
Occupation.....

Please mention RADEX

1	2	3	4		5	6	7		8	9	10	11
			C		W	E	W		K			
12	13	14			15		16			17	18	19
					F		C					K
20	21	22	23		24	25	26		27	28	29	30
					K	O			W	A	D	C
31		32	33	34	35		36	37	38	39		40
			K	E	D							R
			41	42	43	44	45	46	47			
				F								
48	49	50	51	52	53	54	55	56	57	58	59	60
			K	X					K	L	R	
61		62		63	64	65	66	67		68		69
		G		C						E		E
70	71	72	73	74	75	76	77	78	79	80	81	82
			A	F				A	G	X	E	X
			83	84	85	86	87	88	89			
				J								
90		91	92	93	94		95	96	97	98		99
			K	C	J		W					X
100	101	102	103		104	105	106		107	108	109	110
			C		S	S	K		C			
111	112	113			114		115			116	117	118
							A					
119	120	121	122		123	124	125		126	127	128	129
					K	P	Q		W			

RGFY
WHFC

STATION CALLS in PUZZLE FORM

OUR readers will recall that in our May issue, Viggo K. Jensen, of Geneva, N. Y., gave us a neat little problem when he submitted a list of seven world stations whose calls contained all the letters of the alphabet with no duplications. Only one puzzler has succeeded in equalling this record, Clair Calavan, of Jefferson, Ore., who makes up the following list:

- CNRV Vancouver, B. C.
- KTUE Houston, Texas
- XGY Hankow, China
- PHOBI Huizen, Holland
- SMZD Jonkopings, Sweden
- AFL Hamburg, Germany
- WQJ Chicago, Ill.

As the last named station no longer exists, the honors still rest with Mr. Jensen.

The Puzzle Editor thought he was doing pretty well in compiling a list of North American broadcasting stations of seven calls with only six duplications to include the alphabet, but a score or more of our readers have submitted lists

with only five and four duplicates. The following submit lists which use only 29 letters or three duplicates: Clair Calavan, Jefferson, Ore., Russell Overman, San Fernando, Calif., W. H. Howe, Leominster, Mass., and then to show what a simple thing a puzzle is to a girl, Emma E. Laughlin, Barnesville, Ohio, submits *six* different lists each with but three duplicates. No use trying to fool a woman!

The June cross-call contained a number of alternatives and, in sending out the rewards, any of these were considered as correct. If you do not receive a copy of the September number as a reward for your solution, check the following for your error:

- CKCR WKBW
- WASH G WHAZ
- BSO KWK WCY
- BATK OC LC MCBW
- KOA KP KZ LGW
- KFRC KR AX CHWK
- OHW CMC KFH
- WCOC S WJAK
- TSGW KCRG

The puzzle which appears on this page was submitted by Earl Roberts, of Indianapolis, Ind. This is an unusually clever problem, most symmetrical in design, with every letter keyed each way. Only those who have tried to design these cross-calls will be able fully to appreciate Mr. Roberts' achievement.

For correct solutions of this puzzle we are offering a new reward—a copy of our radio map of North America, which is described elsewhere in this issue. So get busy and try your hand at this latest course in broadcasting station lore.

Horizontal

- 1- 4. In the Carolinas
- 5- 7. A midwestern university
- 8- 11. On 1370 keys.
- 12- 14. Comes over the water
- 15- 16. These letters use twice give a Canadian station
- 17- 19. On the Hotel Plaza
- 20- 23. An inland city with a harbor
- 24- 26. Recently taken over by the NBC
- 27- 30. Where the American Zeppelin docks are located
- 31. This letter in three stations in one city
- 32- 35. On 1420 keys.
- 36- 39. A railroad station
- 40. Also in three stations in one city
- 41- 44. (Reverse) 211.1 meters
- 44- 47. Fifty kilowatts
- 48- 51. On the Hudson
- 51- 53. (Reverse) In "The Centre" of California
- 53- 56. A Sunday station
- 57- 60. In Red Oak
- 61- 62. Second and fourth letters of Virginia station
- 63- 66. In "The Pearl of the Antilles"
- 64- 67. (Reverse) In Maryland
- 68- 69. Middle letters of Boston station
- 70- 73. A state police station
- 73- 76. On Mountain Time
- 77- 80. In Sand Point
- 80- 82. In Old Mexico
- 83- 86. A Southern insurance company
- 86- 89. (Reverse) East of the Smokies
- 90. No Ohio station uses this letter
- 91- 94. In city named for Indian tribe
- 95- 98. In the "City of Brotherly Love"
- 99. Signifies a station east of the Mississippi
- 100-103. Last three letters are owners' initials
- 104-106. (Reverse) Also taken over by NBC
- 107-110. An hour faster than EST
- 111-113. A state college
- 114-115. Middle letters of live stock station
- 116-118. Fifteen kilowatts
- 119-122. (Reverse) Shares time with WEDC
- 123-125. A "Wescoast" station
- 126-129. A Hoosier university

Vertical

- 1- 31. In the Blue Grass state
- 2- 21. A new Columbia outlet
- 3- 32. (Reverse) Daylight only
- 4. First letter of first station alphabetical
- 5- 35. On thirteen-ten
- 6- 25. Last two letters of long-deleted Lansing station
- 7- 36. Last three letters stand for college owner
- 8- 27. Abbreviation for power
- 9- 39. A labor station
- 10- 29. Jas. McClatchy Co.
- 11- 40. In city named for great battle

- 23- 51. A better radio club
- 27- 57. Recently changed cities
- 34- 52. Last Mexican station
- 36- 66. In western Canada
- 37- 56. A U. S. station on Canadian wave
- 44- 76. A Columbia station
- 48- 70. Another fifty k.w.
- 49- 71. Last two letters of 20 k.w. agricultural
- 50- 72. Shares wave with two Tenn. stations
- 43- 53. Last two letters Lake Erie station
- 53- 85. At the foot of the Cascades
- 58- 80. (Reverse) 101 watts
- 59- 81. Last two letters of station on 1285 keys.
- 60- 82. Shares time with N. M. station
- 63- 93. In Kamloops
- 66- 95. A cow station
- 67- 88. A big newspaper
- 73-103. A western state college
- 79-107. A Luther college station
- 86-105. First and last letters of Mexican station
- 90-119. (Reverse) in B. C.
- 91-121. A daylight station in California
- 94-123. A big Japanese station
- 95-125. "Where the World's Best Coffee Grows"
- 99-129. A Warner Bros. production
- 99-129. Sister of 116-118
- 101-120. In New Mexico
- 103-122. First and last letters of Toronto station
- 105-124. Second and last letters of station now named WXYZ
- 107-126. First and third letters of smallest station in Canada
- 109-128. Farthest south station of continental U. S.



One of the few outstanding humorous features of radio is "Chic" Sale, otherwise known as "The Specialist." As "Wheel" Wilkins, proprietor of the "Liberty Bell Gas Station," his whimsicalities are broadcast over the CBS

WHEN THINGS GO WRONG

Answers to Readers' Troubles

by J. B. SMITH
Technical Editor

We have a nine-tube Case all-electric neodyne receiver equipped with five UX 226, one UX 227, two UX 171A and one UX 280 tubes. The speaker is a Farrand electro-dynamic with three leads and specified by the manufacturer to have the proper impedance for the receiver. The speaker is suspended by means of rubber strips to reduce vibration. A pulsating hum, which I believe to be of microphonic origin, interferes with the reception and so far we have been unable to eliminate it. Kindly suggest what you think will be helpful in this case.

First remove the set chassis from the cabinet and place it in such a position that the receiver will not be directly in front of the loudspeaker. If the speaker connections are not long enough, use temporary extensions, wrapping the joints with tape. Turn the set on to determine whether the hum still persists. If you find that the set works well with this temporary arrangement, your trouble has been caused by microphonic action, and the methods of curing this trouble are as follows: (1) Get a howl arrestor in the form of a metal cup or weight, and apply it to the detector tube, and possibly another one to the first audio amplifier. Ground the device to the frame of the chassis with a length of flexible wire. (2) Reduce this plate current to the detector and possibly also to the first audio tube. This can be done by introducing a resistor such as a Clarostat in the lead supplying plate current from the power pack. If the trouble still persists with chassis out of case it is not caused by a microphonic action of the tubes, but is an a. c. hum induced through the field windings of the speaker or through the plate or filament circuits of the receiver, or power pack, or both. As you mentioned in your letter that the speaker has three leads it seems that you

have a d. c. speaker and that the output transformer used for operating the speaker is an integral part of it. Trace the three leads back to the receiver in order to determine which one connects to the plate of the power tube. Remove this lead from the post to which it connects to see if the noise still persists. If so the hum is induced through the plate or filament circuit of the receiver and should be gone over by a person who is well versed in this particular type of receiver.

Can you tell me how I can make my Zenith receiver tune more sharply, aside from the installation of a wave trap? Local stations can not always be separated.

First, I should like to call your attention to the fact that on nearly all receivers, the stations operating on frequencies from 1000 to 1500 kilocycles are much broader than those below this band. Of course, this is not the fault of the stations but of the receivers. Also it is difficult to tune in one or two stations that are separated by only 10 kilocycles. I presume that the big reason for your trouble of broad tuning is the close proximity of the stations with which you are having trouble. However, lack of selectivity is often caused by improper adjustment of the trimmer condensers. If you will get a copy of the May issue of RADEX, turn to the article entitled "Balancing Condensers on T. R. F. Receivers," which gives instruction for adjusting them.

Last November we purchased an Admiralty 10 from a mail order concern. The selectivity is good and we get quite a bit of distance, but the volume is weak. We do not get the local stations much louder than distant ones, which is not right. Can you suggest where the trouble lies?

In shipping a receiver for any distance it is probable that one or more of the tubes was jarred and became defective. Hence, one or more stages are not operating properly and therefore the amplification value is very low. Another pos-

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THE LURE of the SHORT WAVES

COMMENT in a recent issue of this magazine to the effect that some manufacturer should bring out a combination short-wave and broadcast-band receiver, brought us so many letters from our readers that we are giving this subject an article of its own.

Richard Zorn, North Baltimore, Ohio, sends us a circular of the Super DX-5 which he says is a wonderful outfit but high in price, listing at \$150. The manufacturers claim that this set has a wave range of from 20 to 205 meters regularly and adaptable with extra coils down to 10 meters and up to 2000. It uses the new pentode tube, push-pull audio amplification and double shielding. Their claims, for which, of course, we cannot vouch, are that with this set "reliable international reception is to be had daily, with good quality and comparatively free from static. Selectivity is of the highest order, 3XAL Bound Brook 6100 keys, being separated from 2XE New York 6120 keys., with a distinct dead spot in between. The set is completely all-electric although d. c. battery-operated models can be supplied."

Regarding operation the manufacturers say: "Generally from 14 to 18 meters is best East and West from daybreak until 2 p.m., when they fade out and nothing can be heard until after dark. From 18 to 33 meters you may listen to European stations from 1 p.m. to 10 p.m. and stations to the west of the United States from 1 a.m. until 9 a.m. Between 33 and 75 meters reception is not generally good in daylight and best for East and West reception from 7 p.m. until 7 a.m. In daylight you can hear Chelmsford, England; Huisen and Eindhoven, Holland; Spanish stations and Zeelson, Germany. Lynby, Denmark, is heard occasionally and, of course, there are a number of regular American broadcasters on short waves. At night the list of stations is very diversified."

Dr. C. F. Rodgers, Conneaut, Ohio, has a new National SW-4 that covers from 18 to 570 meters. Regarding it, he
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Reports on Round-the-World Reception



What Makes the Wild Waves Wild?

Pulchritudinous Lee Bartlett, "Miss Atlantic City" in the last beauty pageant, brought the welcome sound of breaking waves to Columbia's millions in the "Dancing by the Sea" program last month

When Things Go Wrong

(Continued from page 8)

sible source of your trouble is low-line voltage. Get a local electrician to test the voltage of your house-lighting circuit under a full load at night. In case that you find this is lower than 110 volts, get a voltage regulator, which is installed at a point between the plug and the receiver. This will automatically increase the voltage to the proper value. In respect to the tubes it would be a good idea to get a few extra tubes as substitutes for those in use. By changing the tubes, being sure to use the correct ones in the proper places, you may be able to remedy the trouble yourself. In many cases where radio owners connect up their own sets, which they have purchased from mail order houses, some seemingly insignificant connection is inadvertently forgotten, which causes lots of trouble. For this reason I would suggest that you go over the instruction manual again and check over every connection, making sure that it goes to the right point. In respect to the aerial and ground the importance of a good installation cannot be over-estimated. Lack of volume can often be traced to inefficient ground connection or a short-circuited or partly grounded aerial. A long aerial will also pick up more signals than a short one. I hope that these suggestions will help you, but if not, do not hesitate to write again.

I have a Buckingham Model 80 A. C. receiver. On a few stations I get good volume but on most stations we do not get enough volume. What causes this and can it be remedied? There is also a rattle in the loudspeaker, which is of a dynamic type. The rattle is especially noticeable on low notes. Outside of this the tone quality is satisfactory. Sometimes there is a loud ringing noise or howl, and by changing the amplifier tubes this trouble seems to be lessened. I think that there are five 227 tubes in the set, whereas the instruction manual calls for four. Would this make any difference?

Go over your instruction manual and check up whether the tubes in your set are in accordance with those prescribed in the manual. The trouble with the loud-

speaker, namely, rattling, can be remedied by following the suggestions published in the June issue of RADEX. The trouble most likely to occur is improper adjustment of the cone apex over the pole piece, and the rattling would naturally be more pronounced on the low notes. The occasional howl that you experience is undoubtedly caused by a microphonic tube. Change the tubes around as much as possible, using only the proper type of tubes in each stage as the set demands.

I would like to determine exactly how much current my set is consuming and then figure out how much the cost of operation is per hour. Can you tell me how to proceed?

The simplest method of doing this is by means of comparison. Go down to your meter and when all the lights and electrical appliances in the house are turned off, the little disk behind the glass should be at rest. As soon as current is consumed this disk will rotate. Turn on a 50-watt lamp, which consumes exactly 50 watts of electrical energy per hour. Now note how many times the small disk rotates per minute. Suppose that this is 10 times. Turn the lamp off so that the disk will again be at rest, after which the radio set is turned on, and the rotation of the disk is again noted. Supposing that it turns 20 times per minute, or exactly twice as fast as it does when burning a 50-watt lamp, it is obvious that it consumes just twice as much electricity as the latter. Now suppose that the flat rate for electricity is 10 cents per kilowatt hour, which is equivalent to burning a 1000-watt lamp for one hour. Naturally a 500-watt lamp would consume only half of this amount per hour and would cost five cents during that time. Similarly, a 100-watt lamp costs one cent and a 50-watt lamp only one-half cent per hour. The radio set consumes say twice as much electricity as a 50-watt lamp. In other words its consumption is 100 watts, which costs one cent per hour at the above-mentioned flat rate. In many cities, however, there is a sliding scale of rates, which depends on the amount of electricity consumed per month. For instance, in

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THOSE BOTHERSOME NOISES

By G. R. Walters of the Radio Trades Association
of Southern California as Broadcast over KFI-KECA

PROGRAMS leave a radio transmitter in the form of waves, which we call carriers. Once they leave, these carriers wander about through space looking for antennas. There seems to have grown up, in the minds of the public, a belief that the modern receiver does not need an antenna.

fixture hung from the ceiling by chains is an antenna. If you have stand lamps, then their cords are antennas. The screens on the windows and doors are antennas and so are the strings on your pianos. All wire inside your house is an antenna. The gas pipe and the kitchen stove are antennas and so is the sink,

"The Poet of the Organ," Jesse Crawford with his two inspirations. With two such at home waiting for and listening to him, the poetry is accounted for.



If your radio reception is good, if you have no interference, and you receive all the stations you wish, then leave well enough alone and be happy. But if you have a fifteen or twenty-foot wire trying to serve as an antenna and you get interference, don't report that you have a "leaky transformer." You haven't any idea how absurd that really sounds.

In all probability, you have at least a dozen antennas in your house. There are at least a dozen agencies in the average home which collect both programs and noise.

Every wire outside your house is an antenna. Each one of them collects radio signals and neighborhood noise. They are brought into your home by means of your telephone or light wires. Every

the bath tub, the water boiler.

A modern radio set will take every vagrant electrical wave, multiply it 1,750,000 times, and deliver it to your loud speaker. Perhaps you wonder what the solution is.

Broadcast stations always put their antennas as high in the air as they can because the higher you go from street levels, the more unpolluted the air.

We find that interference begins to disappear and signal strength of stations begins to increase at thirty feet from the ground in the average location.

You must put your antennas up away from the influence of all noises and carriers of noises. When it becomes necessary to turn up the volume control of your set, you increase noise more rapidly

than you increase the program. Interference is only a question of which is greatest in your locality, noise or signal strength. Suppose you lived a block from KFI or KECA. It would be almost impossible to create enough interference to hurt reception.

When you shorten an antenna you lose the ability to collect the signals from stations, consequently you must turn on more volume. When you do that you get more noise.

Prove it to yourself in this way: Disconnect your antenna and ground from your set. If you live reasonably close to a broadcast station you will still be able to hear a program by turning on more volume. What acts as an antenna in this case? Your light lines of course.

When you connect an antenna post to a water pipe, your light lines become an antenna immediately.

Every once in a while we get a letter from someone who boasts that he has played some distant stations on eight feet of wire. As a matter of fact he has used eight feet, plus all his house wiring, plus all the utility lines on poles outside his house, plus a few more antennas he has around.

We find hundreds of cases where a blown fuse has been replaced with tinfoil or pennies or washers. Fuses work loose. Tighten them and you have done yourself and all your neighbors a favor.

We find a lot of interference caused by entrance switches which disconnect your house from utility lines. Try working the blades back and forth without quite opening your switch entirely when your radio is turned on.

In my first talks at KFI and KECA, I spoke about the use of wire or metal lath as a foundation for plaster in a house.

The trouble isn't with the metal lath, it is with the person who installs a radio with an antenna where the wire from the antenna to the set runs down the wall close to the outside of the house.

Just out of curiosity I measured to see how much chicken wire was used in the house I live in. I found it to total 3000 square feet. All right! Let's make an antenna out of that. Let's say we make one ten feet wide. It would be three

hundred feet long. Right beside that, let's string our antenna one inch away from it. What do you suppose the result would be?

It would simply mean that this long stretch of chicken wire ten feet wide and three hundred feet long would provide a tremendous pick up. That would be fine as long as it only picked up programs but it would pick up plenty of interference too.

Let's take that same piece of wire netting and ground it. Remember your antenna is still an inch away from it and parallel to it. The grounded netting would serve as a grounded shield if you put enough grounds on it.

We find a great many houses that were wired for radio when they were built. A pair of wires run from the attic to the service outlet near the floor to supply the set. On the other side of the same studding that carries the 110-volt wires and running parallel for many feet runs the antenna lead-in.

You can't run an antenna for any distance, side by side with a 110-volt line without getting a hum in the set. And in these cases they are separated by only four inches and run parallel for many feet.

There are in American homes and factories today thousands of appliances which create radio interference. The real job is to find it. There isn't a single appliance known which cannot be thoroughly silenced with a proper filter.

A vacuum cleaner may or may not create interference, depending upon the design and condition. Turn on your radio and then operate your vacuum cleaner. If it disturbs your reception it is almost a certainty that it will disturb your neighbors.

Electrically-operated sewing machines are much on the same order. Both of these can be thoroughly silenced with a filter or by new brushes, truing up the commutator or new bearings.

Any induction type motor will not create interference in its normal operation. The kind of motors that create interference are the brush type.

Lamps with broken filaments and lamps loose in sockets cause no end of trouble. I know one community within

the service range of KFI-KECA which was seriously disturbed by a sign hung across a highway. It was illuminated by lamps. The jarring of trucks loosened the lamps and interference ruined radio reception for several blocks.

Battery chargers, of the vibrating type or tungsar tube, will create interference unless filtered.

Any house where the wiring is placed in iron pipe or conduit, is less susceptible to interference when the wire is open on porcelain knobs or tubes. The conduit serves as a very effective choke.

Nearly all electric fans are induction

interference in Santa Barbara. Radio dealers, technicians from KFI-KECA, and utilities spent a long time investigating before they found that it was caused by a small appliance used to heat a baby's milk. The noise it made, common to many similar appliances, was a periodic buzz.

There is a certain peanut vending machine where the peanuts are heated by a lamp which flashes on and off. These operate by the hundreds in cigar stands and drug stores. You can hear them a hundred feet or more in all directions.



A group photograph of Columbia's dance orchestra leaders. From left to right we have Will Osborne, famous for his crooning; Paul Tremaine, who specializes in spirituals and novelities; Fredie Rich, one of Radio's most prolific conductors; Jules Asseerty, popular society entertainer; Huston Ray, who can play two pianos simultaneously; and Ben Pollack, of Broadway fame

type. If it says "induction" on the nameplate, it is harmless. There is a certain line of fans, soft drink mixers and hair dryers which create interference of such density that it can be heard for several hundred feet if you are on the same line with the house.

We hope the day will come when the manufacturers of all appliances will be compelled by public opinion to so design or filter his products that no interference will result. And when that time comes, merchandise should bear a label reading "Non radio interfering." There are products of that kind on the market today.

Sometime ago there was widespread

When appliances start creating interference all the wire in the house becomes a radiating antenna. In addition to that this interference is fed back on the line through your meter and may travel for a block or more.

Twenty-three cities in Southern California have passed ordinances to regulate the use of devices and appliances which cause preventable interference. The cost of repairs or filters is not great and almost every radio dealer carries or can get the proper filter for any appliance.

The new Radio Map of North America is ready to mail. 25c.

GETTING RID of INTERFERENCE

Many Noises are City-Wide—Get Your City Officials and Chamber of Commerce Interested.

THE saying has become most hackneyed but it still expresses an idea better than any other that has been devised. We refer to Mark Twain's remark about the weather. "People are always kicking about it," he said, "but nobody does anything about it." So it has been for years with the subject of interference by man-made static in radio. Until the advent of broadcasting no one realized that electric motors were sending out into space electrical disturbances and when highly sensitive receivers came into our homes, we took these entirely unnecessary noises as an evil that which could not be cured but must be endured. Happily the worm is now turning.

Throughout the country systematic efforts are being made to eliminate this bugbear of radio. Just today we received from the Tobe Deutschmann Corporation information regarding the country-wide campaign they are initiating to eliminate interference. This company manufactures "Filterettes," a condenser-like device to attach at the source of the noise and by-pass the high-frequency current. They are now cooperating with any city which asks their help to run down the noise makers and diagnose the trouble and prescribe the proper filterette to meet the situation.

They ask that we bring to the attention of our readers the fact that cities may obtain the services of an interference engineer, and we are most happy to pass the word along. With the service which the Tobe Deutschmann Corporation is willing to render, our readers need no longer suffer in silence. All they have to do is to take the initiative through cooperation with their neighbors in bringing the undesirable situation to the attention of their local authorities. For their information we reproduce below the offer of the company whose address is Canton, Mass.

Do You Want Immediate Action On Radio Interference In Your Own Community?

"With the advent of the present-day radio set, in itself a clear-toned, sensitive musical instrument, the question of eliminating radio interference from residential districts becomes increasingly critical.

"Whether or not the annoyance of outside radio noises has been called repeatedly to your attention, you will readily appreciate that any community in which these raucous disturbances are at a minimum is indeed fortunate.

"This company is a leader in the field of radio interference elimination. If your town seems to be getting more than its share of radio noises, possibly we can help you as we have many other towns and cities.

"The expense entailed, considering the immediate benefit conferred on practically every citizen of the community, is negligible, twenty dollars a day and the expenses of the engineer making the survey. For this sum you receive a complete and accurately determined survey telling you just where your trouble lies, and how to correct it.

"We manufacture filterettes for almost every type of extraneous radio noise. There is almost no type of man-made electrical disturbance which we cannot eliminate or reduce to a negligible minimum. Within the space of a few days hundreds, thousands even, of your citizens would be enabled to enjoy clearer radio reception than they had ever before known.

"There are generally a few major causes of trouble which, if remedied, make the difference between radio reception which is impossible, and a condition which is so much better that listeners are encouraged to go ahead on their own and filter their own premises and apparatus.

"We should be glad to furnish you with further details of how you can make your town a better place to live in."

THE HOBBY of DX RECORDING

IN presenting reports on DX records, obviously it is impossible for us to make any verification of them. We feel sure these are sent to us in good faith and we offer them to our readers in the same spirit. Some correspondents keep their records in the most complete detail and these bear every evidence of accuracy. Thus David C. Crossman, 1133 Spruce Street, Chester, Penna.,



She sings high and he sings low — Adele Vasa, lyric soprano, and John Barclay, baritone, who require two different microphones for their duets over the CBS. Mr. Barclay is six feet, seven inches tall

It's More Fun than
any Other Sort of
Collecting

sends us a carefully typewritten list of 200 stations, giving his complete verification record with those stations. He indicates those which send "Ekko" stamp, those which send their own station stamp, those which verify and the promptness with which they do it.

From C. M. Falconer, 209 Highfield Road, Guilford, Baltimore, Md., comes the following interesting comments: "I have quit asking for 'Ekko' stamps. As verifications they are not trustworthy and their only value is in their physical appearance. What I want is the signed verification, and I can easily get 'Ekko' stamps from the Ekko Company whenever I have the necessary verifications. By enclosing a duplicate of my letter and not using the 'Ekko' cards at all, I find that I am now getting replies within a few days. All the station has to do is to O.K. one copy of my letter and mail it back to me in the self-addressed envelope that I always enclose.

"I received a few days ago a verification from KGU, Honolulu, covering their broadcast when they were using 500 watts power. I have made diligent inquiry through the Newark News Club and in other quarters, but have not yet been able to locate any other listener on the Eastern Seaboard who has a verification from that station. It is difficult to receive not only on account of its distance, but because WFIW, Hopkinsville, uses the same frequency. There is a period from 12 to 1 a.m. EST when WFIW is off the air and it was during this period that I heard KGU.

The DX Clubs

"If you will lend your editorial support to the radio clubs of the country, you will do a great deal of good. Anyone who really enjoys DXing should be a member of at least one club and if that club has a column or a page in a daily newspaper, a subscription to that paper

is well worth its cost in the information it gives one even though the paper may not be received until one or more days after publication. I am a member of the Newark, Buffalo and Chicago clubs, but the only meetings I have attended have been in Newark. At the Newark meeting you will see fifty or more copies of RADEX, which seems to be regarded as the DX Bible. The club members are boosting your sales and they would appreciate whatever cooperation you can give them. These club memberships cost usually only \$1.00 a year with an initiation fee of \$1.00 the first year, so that the cost should not be any real obstacle."

Mrs. Edwin T. Morris, 524 East Saville Street, Roxboro-Philadelphia, Pa., writes in this connection: "RADEX was unknown to me until I joined the Newark News Radio Club. Read so much about it in the Club Notes, published in the Newark News, I bought my first RADEX in March, and it surely has been a wonderful help in my DXing. I have logged and verified 75 100-watters in the United States and Canada this season and 16 from ten to fifty watts, including a 25-watt station in Prince Edward Island. Several years ago I verified 206 stations when there were about half as many on the air as now. Those verifications were turned in on a contest and never returned to me. I didn't think anything of it at the time for I did not appreciate the value of them then. I have since started all over again and now have 509 verifications, with about 75 of the first logging. I am one of the DX Aces of our club and DXing is my greatest hobby. All of my records have been made on a *Fada* purchased in September, 1925. Pretty fair for an old-timer like mine."

Conditions in Canada

From Kenova, Ontario (P. O. Box 998), Edward B. Makin writes: "Let me congratulate you on a fine radio publication. I have found the only real attraction in radio since reading the DX letters but, say Mr. Editor, if any of your DX fans want some peculiar experiences, let them try a few nights in Kenova. For instance, on 560 kcys., I

get KLZ, Denver, just as loud and clear as WIBO, Chicago, *but* one fades out while the other comes in and vice versa. This happens regularly. Station KFXF, Denver, 500 watts, comes in just as loud and clear as KOA, 12500 watts, and I can very often get the smaller station when the larger-powered station is fading badly. It is almost impossible to get stations in the 580, 630, 880, 890, 930, 1200, 1210, 1250, and some other wave lengths where there are several stations broadcasting at the same time, as they all come in with equal volume."

"I have been DXing about 5½ months and during that time I have logged 367 stations, including 26 in Canada, five in Mexico and five in Cuba. I have every state in the Union with the exception of Maine, New Hampshire and Vermont. These were all logged on a Standard 8-tube Silver Radio." This is the record of a fifteen-year-old DXer, Gerald McGrath, 2211 South Clinton, Sioux City, Iowa.

"Before me as I write I have a wonderful letter from JOAK, the Takyo Chuwo Hosokyoku or Tokyo Central Broadcasting Station," says Leon V. Garland, P. O. Box 93, El Segundo, Calif., who adds that there is a new 3000-watt station on the air in Japan at Kanazawa—the call letters are JOJK and the frequency 708 kcys."

Joseph J. Becker, 415 South 11th Street, Hamilton, Ohio: "Since November 6th, 1929, I have logged 500 stations. I own a Majestic radio and think its equal cannot be found."

Wilfred T. Siddle, 3917 7th Court, South Birmingham, Ala.: "I have received a station which was signing off on 950 kcys. which announced their location as Miami, Fla. I could not catch their call letters and RADEX lists no Miami station on or near 950. Have any other readers heard this station?"

John Malone, Box 195, Lacon, Ills.: "In the January issue some lady said she had logged 126 stations in 26 days. When I read this I started logging stations and keeping records. I find now, that in 25 days I logged 175 stations, an average of seven per night. All in all, since January, with RADEX at my

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The SONG LADY

A Short Story by E. VIVIAN SCOTT

DOUGLAS stood with his nose pressed against the window glass. His eyes were glued to the spot in the road where one could first see the top of a person's head as they came up the hill from the village. At any moment now his father would come in sight, and he would be bringing—a radio! Douglas

stood. The little boy could but dimly remember his mother—that graceful, laughing creature who sang to him and covered him with kisses. At least he supposed she was his mother. Everyone had a mother, didn't they? And then sometimes they suddenly went away somewhere and you never saw them any-

Here is the announcing staff of the Columbia System, all dressed up in their new summer uniforms. Left to right, sitting: Harry Vonzell, David Ross and Don Ball; standing, George Beuchler, Frank Knight, Hugh Walton and Ted Husing



had wanted a radio so badly, ever since the night he stayed with the Turners, the time when his father was in the city on business. Somehow the music he had heard that night had gripped him strangely and for the first time he realized that he loved it. Something within him had seemed to leap and respond to the enchantment of it. His soul was starved for it but he had not known it.

For a boy of nine years, Douglas was quaintly pathetic. Always that wistfulness so appealing to those who under-

more, and you missed them a lot. His mother had been that kind. The house had all at once turned horribly silent and there was only Daddy to see and to talk to—Daddy with the sunshine gone from his face and as silent as the house.

Life had become a drab existence for the man and the boy. It became eat, sleep and school for Douglas. Some days he found his father sitting in the silent house when he came home from school and sometimes he found him gone. Then he must wait, just like tonight, face against the glass and watching the road.

But now, all would be changed. And the boy's eager little face glowed as he thought of the radio. Music! Silvery voices! Noise! That was what he wanted. It had been hard, dreadfully hard to coax his father to say he would buy a radio. But that thing of magic would soon be here, and then—

John Rollins slowly drove his team up the hill. Unconscious of the eager little face at the window, he spoke to the horses absently while his thoughts were far away. Funny—the way life treats a fellow sometimes. Hope and a wonderful happiness for a time, and then, grim misunderstanding and finally indifference and loneliness. Of course he was the only one who had suffered. She had not cared anyway. Too dreamy and flighty; too irresponsible to realize that she was the wife of a poor man and that the days of light foolishness were over. That was it! Foolishness!

Singing! That eternal warbling all over the house! No wonder he couldn't stand it! Any sane man couldn't. Perhaps she was where she could sing now! Europe, probably. She had always wanted to go there. Foolishness! And the boy was like her—too much like her. Music! Singing! And yet he had been fool enough to give in and buy this radio. He glanced at it now scornfully. At least it could be shut off when it became unbearable.

A joyful child to greet him, but that didn't matter. Perhaps now the kid would be satisfied and get all the infernal music he wanted.

Breathlessly Douglas watched him install it, but not once did he speak. If he did, it might make his father angry enough to take the set back. Eagerly he waited. Oh, would it never be ready?

At last the final connections were made, and John Rollins, unaware of his own anticipation, slowly turned the dials.

Music! Sound! Scarcely breathing, Douglas held himself straight and gripped the arms of his chair. At last—music!

The moments flew on while John Rollins sat before the set and the boy drank in the wonder of his wish come true.

In the weeks that followed the house was not quite so silent. True, there

were times when his father would not let the set bring Douglas his music and he had to go to bed bitterly disappointed. But John Rollins himself could not explain why he turned the set on in the evenings when his better nature prevailed, why he sat there slouched in his chair—thinking.

Once, there came a voice, silvery and clear, and the man jerked himself up quickly and changed the dials. It was such a beautiful voice and Douglas would like to have listened.

And then, one day, coming home to find his father gone, Douglas turned the dials himself. That voice again! Eagerly the boy listened. Such a nice voice, and tinkly like! She must be a very beautiful lady. "Somewhere a voice is calling, calling for me," sang the voice and Douglas crouched closer.

A step outside, and John Rollins strode into the room. Douglas turned to smile at his father.

"What station is that?" John Rollins asked.

For several moments the man and the boy listened. Then, abruptly, the man pushed the switch and the boy watched him leave the house.

Coming home the next day, Douglas again heard the silvery voice, just as he started to open the door. His father—listening to that voice!

Softly he pushed the door open a crack. John Rollins sat there, oblivious of all else but the voice. And there were tears in his eyes!

Awed, Douglas stepped back quietly and closed the door. His father liked the lady too!

John Rollins often listened to the silvery voice after that, sometimes when Douglas was there too.

"And a little child shall lead them," came floating in to them one day. Astonished, Douglas saw his father drop his face in his hands and give a great sob. Without knowing why, the boy felt resentful. Why did she make his father cry? Perhaps she wasn't so nice after all. It was queer that his father liked to listen to her. But this time her song had almost made him want to cry too! The song lady must be sad.

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What Our Readers are Thinking

(Continued from page 4)

short-wave stations. The short-wave stations on both WGY and WJZ have frequencies much higher than the broadcast receivers can get even though they may tune down to about 180 meters."

WGM and WOOP

Mention of the above stations in a recent issue brings us a request from the Federal Radio Commission as to what we know about them, the implication being that they are outlaw stations on the air without authority. One reader sends us a newspaper clipping which reads in part as follows: "In the rolling hills back of Jeannette, Pa., in the four or five-house town of Adamsburg, there exists an Old King Koal of a modern day in WGM, the 7½-watt broadcasting station whose studio is at the mouth of a coal tipple. Since July, 1925, WGM has been operating on a regular schedule, presenting high-school orchestras, fiddlers, banjo strummers, instrumentalists—all home-town talent. Edward Tomajko, Jr., owner of the station, is the announcer, operator and station manager. His audience is clamoring for an increase in power and more time on the air."

Howard B. Hubbard, 358 Windsor Avenue, Stratford, Conn., sends a letter

from the Commission which states that they have no official knowledge of WOOP which seems to be a sister station of WGM at Jeannette.

Defends WWJ's Rights

In a recent issue William E. Kessell, of Temple, Texas, complained vigorously about the maelstrom on 920 kcys. and of the insufferable interference between WWJ and KPRC, both assigned to that wave. Philip M. C. Armstrong, of 446 Clinton Street, Detroit, takes up the cudgels for WWJ. Says he: "Your correspondent cannot be well informed as WWJ is entitled to this wave clear of interference. WWJ was the first station to broadcast regular programs over the air, although KDKA did some spasmodic broadcasting a little earlier. From the very first, WWJ has consistently been a high-grade station, featuring many locally originating programs of superior quality. Both historically and on account of its uniformly perfect record, it is beyond doubt entitled to a clear wave with plenty of power. It now has neither. While many newcomers of inferior quality have been granted clear waves and maximum power, WWJ is held down so that it is not received with decent volume even in parts of Michigan and is spoiled even in Detroit itself by heterodynes at times, both from Houston and Denver. WWJ has pending an appli-



Introducing "Tony Cabooch," the one-man radio show, alias Chester J. Gruber, of the Anheuser-Busch Antics which reach you every Tuesday at 11 p.m. E.D. S.T. over the Columbia Broadcasting System. He has portrayed as many as twelve characters in a single production, speaking half a dozen dialects

cation for another frequency with maximum power which is now 'loaned' to a Chicago station. If this zone had a square deal this frequency would be given to WWJ." In all of which the Editor fully concurs except to say that Mr. Kessel did not argue WWJ's right to its wave but merely pointed out that WWJ and KPRC were destroying each other's programs.

And WGY Too

The Editor recently criticized WGY for taking the lead in appealing to the courts to break down the authority of the Radio Commission and setting up the claim that a channel belonged to the station that first pre-empted it—a theory that would mean the destruction of radio control. Now comes David Mason, Jr., Oregonia, Ohio, as the lawyers would say, to criticize the Editor for criticizing WGY. "I say WGY should be given any wave they ask for, for WGY and KDKA spent thousands of dollars testing and sending programs out and making radio what it is today. WGY has been kicked around as badly as any station and then when radio begins to pay, other stations get the choice channels. Where would radio be if it had not been for WGY and KDKA? WGY is now spending thousands of dollars a month on television. Did you ever hear of ——— spending anything on it? After television is practical then ——— and hundreds of other stations will be in it for the money it pays, but until that time they are not in it." All of which to the contrary notwithstanding, we still insist that appealing to the courts to overrule the national federal radio authority will ultimately break down control and return radio to a terrible chaos. We think it just as senseless to ask the courts to decide a ruling of the Radio Commission as it would be for a ball-player to go to court when the umpire called him out.

A Static Eliminator

"I recently heard," writes S. J. Hauser, 854 East 143rd Street, Cleveland, Ohio, "that attaching an outside ground to the aerial lead-in would reduce static and improve reception. Is there anything to this report?" We suspect that

this rumor was started by the Society for the Suppression of Radio Loud Speakers. There is no doubt that the static would go direct from the aerial into the ground and not go through the set at all but unfortunately the programs would follow it and the loud-speaker wouldn't be even a soft speaker. No, there is as yet no panacea for static for both music and static are electrical vibrations and it seems as impossible to separate them as to tune that nasal tenor out of an otherwise good quartet.

Some Bouquets.

A large bindery manufacturer writes us that he has been requested by the Chicago and Northwestern Railway Co. to prepare four binders for RADEX so that that railroad may carry copies of the magazine on its crack train, the "Columbine Limited." Thus "the radio fan's own magazine" will be tuning in programs for its friends as they whiz along on the transcontinental.

"Several friends of mine were complaining about not being able to get any DX so when I was in Los Angeles a few days ago, I bought several copies of RADEX and gave my friends a thrill. They are not sore at their receivers any more." This comes from Leon V. Garland, P. O. Box 93, El Segundo, Calif.

Friends in both Great Britain and France send us lists of foreign stations from which we are consolidating what we believe to be the first real list of world broadcasting stations by frequencies ever published in this country. Except that we are eliminating stations of less than 1000 watts, we believe this to be the most complete list ever published. It would be wise to cut this list out as it will not appear regularly.

Through the cooperation of the government officials of both Cuba and Mexico, we are enabled to give our readers the official data on stations in those countries in this issue. This data is correct at time of publication, but changes are frequent in these two countries, and we cannot guarantee the information for long.

Letters from our readers regarding DX and short waves will be found this month in departments of their own.

When Things Go Wrong

(Continued from page 10)

Chicago, the charge for the general residential service is eight cents per kilowatt hour for the first three kilowatt hours per room, or 15 kilowatt hours in case of an average five-room home, six cents per kilowatt-hour for the following equal amount, and three cents per kilowatt-hour for all additional consumption.

Does it make any difference how much silver coating a tube has? A friend of mine says it indicates the condition of the tube, a well-silvered one being superior to one only partly silvered. Also does the silver wear off with age?

This is a question frequently asked of radio dealers and service men and I have known some customers who will not purchase a tube on which the silver is not evenly distributed. However, the amount of silvered surface does not show the condition of the tube in any way. Testing a tube with a regular tube tester is the best method of determining its quality. What looks like silver inside of the tube is really magnesium, and the purpose of its presence in the tube is to obtain a high vacuum, but the manner in which it is spread makes no difference. In the making of a tube the glass is entirely transparent before the tube is evacuated, or the air pumped out. After pumping out as much air as possible mechanically, the tube is sealed and then a small quantity of magnesium, placed in the tube before it is evacuated, is exploded by placing the tube in a radio-frequency furnace. This absorbs the remaining air which could not be removed by means of a vacuum pump and incidentally silvers the glass.

In order to make my receiver tune more sharply I installed brass shields between the r. f. stages, grounding the shields to the negative line. But the set is still just as broad as it was before. Previous to this experiment I tried all other methods of increasing the selectivity but to no appreciable effect.

To obtain the desired selectivity much can be gained by properly shielding all plate leads from the grid leads, and enclosing each stage in a separate can, instead of merely installing a shield

between stages as you have done. For shielding the plate leads separately, you can obtain a specially-made, armored cable, the outside of which must be grounded to the negative line in the same way as the cans. In using this cable, care must be taken to prevent the metal covering from coming in contact with any terminals to which the lead itself is attached.

Although my set has functioned perfectly well for three years, it is now developing a peculiarity, which I hope you can explain and tell me how to cure. For a minute or so after the set has been turned on, it gradually weakens until no signal comes through. I have tried new tubes and a new aerial but with no satisfactory results. Even when the set operates at first the volume is much less than it was formerly.

Many old receivers develop trouble similar to yours, which is due to various causes. Most generally one of the chief causes is a light film of corrosion on the parts of the receiver, caused by gas and moisture in the atmosphere, fine particles of carbon and other dust being caught and retained in this film, which although invisible to the naked eye, nevertheless provides a path for electrical leakage. This leakage occurs between such parts as the plate and grid tips of the tubes and corresponding socket prongs, and between the two clips of resistor mountings and condensers. One method of cleaning is to use an old toothbrush with some alcohol. Another frequent cause of the same trouble is one or more leaky by-pass condensers, which should be tested. Often the grid leak is of too high a value and the detector gradually chokes up, with the same effects that you have experienced.

I have an inductor dynamic loud-speaker which often rattles when extremely low notes are reproduced. The receiver is said to amplify notes as low as 30 cycles per second. Is there anything wrong with the speaker or how can this trouble be remedied?

It is of quite general occurrence that dynamic speakers rattle on low notes. This is generally caused by too much current or by the lack of a good baffle.

If you will first provide a large baffle and then not put quite as much current through the speaker, the trouble will most likely be overcome.

How great should the frequency range of a radio receiver be to reproduce all tones faithfully? What instruments produce tones of extreme low and high frequencies?

The human ear of the average adult individual detects sound waves having a frequency as low as 30 cycles per second and as high as 16,000 cycles per second. This range of hearing, of course, varies with age and condition of health, children usually have more acute hearing than adults. A good radio receiver should reproduce all tones that are audible. The instruments having the lowest and highest frequencies are the bass viol, which reaches down as far as 40 and the piccolo, which tops the frequency scale at 4600. Below is a list of frequencies covered by various wind instruments, string instruments and the human voice: piccolo, 510-4600; flute, 256-2304; oboe, 256-1536; clarinet, 160-1536; trumpet, 160-960; French horn, 100-780; trombone and bass clarinet, 80-480; bassoon, 60-480; bass horn and tuba, 48-330; kettle drums, 85-160, violin, 192-3072; viola, 128-1152; cello, 64-768; bass viol, 40-240; human voice, 84-1152.

I would like to know to what extent my electric refrigerator is causing radio interference?

If your refrigerator runs on alternating current and it is in good mechanical and electrical condition, it does not cause any interference except for a short time when the motor is starting and until it reaches its regular running speed as a centrifugal switch cuts out the starting mechanism as soon as the motor has reached its normal speed. However, an old motor with dirty, sparking brushes may cause trouble and it should be taken out by a competent motor repair man and given a thorough overhauling and cleaning. It is also a good idea to apply an external interference-elimination device. On the other hand, direct-current refrigerators are apt to cause continuous interference.

In using the oscillator described in your May issue for balancing the condensers

on my receiver, I would like to know how to tell when the oscillator is tuned to about 1500 kilocycles.

To tune your oscillator to about 1500 kilocycles, turn the condenser until the plates are nearly out of mesh. It is not necessary to perform the operation at exactly 1500 kilocycles as the object in view is to get near the end of the dials as far as possible.

I have a Bremer-Tully No. 81A.C. receiver. Several times my ballast tube has burned out and had to be replaced. What is the cause of this and what can I do to prevent such frequent replacements?

Fluctuating line voltages of abnormal extent cause the ballast tube to burn out, although small fluctuations of from 5 to 10 volts are absorbed and therefore are not injurious to the tube, which is designed to serve as a voltage regulator, within limits, in order to protect the other tubes of the receiver. As a further precaution against this frequent trouble, get an automatic voltage regulator of the better kind, connecting it according to the accompanying instructions, between the wall plug and the receiver. This, in conjunction with the ballast tube will prevent unusually high voltages from burning out the latter.

What's New in 1931 Sets?

(Continued from page 2)

have been especially designed for this purpose. With the limitation of a comparatively small antenna and no ground connection, an automobile receiver must be one of unusual sensitivity. For satisfactory operation a receiver having a sensitivity range of from $2\frac{1}{2}$ to $14\frac{1}{2}$ microvolts per meter, with an average of about 7 microvolts per meter, is necessary. The reason for this is that the motorist often finds himself quite a distance from a broadcast station. Besides, as there is really no actual ground connection, the effective "electrical length" of the antenna is greatly reduced compared to other types of receivers using a regular aerial-and-ground system.

An interesting development in receiver accessories is brought to light in the remote-control devices now on the

market. This method of tuning and adjusting a receiver from a distance, is quite a contrast to the need of tuning a number of dials and adjusting several controls which characterized models of a few years ago. On many 1930 receivers, a single dial is used for tuning and another control for volume, besides the switch. The remote-control devices are designed so that they can be attached to any receiver, and the control box placed within easy reach of your favorite easy chair. Any one of a certain number of stations can be tuned in and the volume adjusted as desired without even getting up or going to the receiver.

Lure of Short Waves

(Continued from page 9)

writes: "There are two extra coils for the broadcast band and when these high-wave coils are used, there is a little switch that couples in an extra variable condenser, permitting splendid reception on powerful stations. This set uses a 222 screen grid tube for r. f., a 200-A for detector, High Mu 240 for first audio and 171 for second audio. On short waves it operates more like a broadcast receiver than any set I have ever had. The dials are set and power control advanced until the beat-note squeal of station is heard and then the volume is reduced until squeal stops and program is heard. When beat note is on, the set does not re-radiate except on a set in the same room. Of course, on short waves it requires work and patience to locate a station as a hair-line movement will eliminate a station completely."

Joseph Stokes, 2255½ Hawthorne Street, Swissvale, Pa., has an S. M. Round-the-World Four although he does not believe it compares with the a. c. Super-Wasp. "I have recently received verifications from VK2ME, Sydney, Australia, and HRB, Tegucigalpa, Honduras. The following stations are heard regularly in the warm evenings: VRY, Georgetown, British Guiana; HKT, Bogota, Colombia; NRH, Heredia, Costa Rica; XDA, Mexico City, etc. On cool evenings I hear G5SW and GBS in England; PCJ, Eindhoven; PHI, Huizen, both in Holland; CJRX, VE9AP,

VE9CL in Canada, and W6XN, Oakland, Calif. I have heard CM2MK, Cuba; EAM, Spain; FW4, Manilla; HKC, Bogota, and several unknown foreigners in the vicinity of 45-55 meters."

Dr. Rodgers points out the difficulty of getting a single receiver that will give equally good results on both broadcast and short waves. "No one should expect a set designed primarily for short waves to give equal service in reception on high waves," he says. "The most one should expect is a short-wave receiver that is reasonably well adapted for the regular broadcast band."

In the Tropics

From Melvin B. Ricks, Box 615, Compton, Calif., comes a copy of an interesting letter to him written by Edward C. Blessing, Balboa Heights, Canal Zone, relative to short-wave reception in the tropics, which we are passing on to our readers.

"I wish that I could be where I could get a station free from dots and dashes. I have been tinkering with short waves for several years but, with the harbor always full of naval and merchant vessels sending forth their messages and marring my reception, we are in a very disadvantageous location for radio. We can get only two stations with loud-speaker volume, or rather only one now—WGY. We were formerly able to get KDKA—in fact that station was our old standby—but for some reason known only to themselves, they changed their wave-length from 26 meters to 48 and that is no good here.

"Once in a great while I get PCJ, Holland, with loud-speaker volume. With head phones I can get England, Germany, Colombian Republic, KGO, Oakland, and several stations around New York City. There is no static on the short waves, but we are greatly troubled with fading. The long waves are absolutely no good here. I have some long-wave coils and, oh boy! you don't know what static is.

"With the head-phones and in the winter when it is very cold in the States, I can get a number of stations in New York, one in Miami and one that I like in Nashville, Tenn. Most sets here are

locally made and battery operated. The Balboa station you mention has been discontinued for lack of interest and suitable programs. I feel sure there are no more than 100 sets in the Canal Zone; how many there are in Colon and Panama City, I cannot say. The only set I know to give fairly good results is the Pilot Super-Wasp. As our electrical division here operates on 25 cycles and 60 is used in the States, it is impossible to use any of the A and B eliminators advertised."

The Hobby of DX Recording

(Continued from page 16)

right hand, I have logged about 130 stations I never had before."

Who Has Heard It?

Frank Switalski, Jr., 2819 Victoria Avenue, Cincinnati, Ohio: "With each issue of RADEX I have looked for the listing of a station in Santo Domingo, Republica Dominica. I know that they have a station there broadcasting around 450 meters." We do not seem to have any record of this station; who can identify it?

Ray E. Everly, 102 W. Washington Street, Newton, Ills.: "I spent a lot of stamps trying to get verifications from WKBW, WGR, WMAK, WKCW, using the addresses given in RADEX. These stations are all operated by the Buffalo Broadcasting Co., Rand Building, Lafayette Square, Buffalo, N. Y. If you will make this change you will save postage for your readers. (I now have 450 on my log—48 in Canada, eight in Cuba and two in Mexico)."

Karl Halpern, 1435 Coney Island Avenue, Brooklyn, N. Y.: "JOBK, in Japan, comes over great at 5:30 a.m. EDST, with a program of classic music. I'm the first one to receive them in Brooklyn. Reception was verified. EAJ19, in Spain, verifies my reception and asks me to tell my friends to try to tune them in. They come over fine at 5 a.m. EDST, with a program of music. They use 200 watts. LKO, in Norway, can usually be heard in the morning about 5:30 EDST. They verified my reception, as has also 2XA, in New Zealand."

M. B. Murphy, Glenn Ranch, Calif.: "Have logged 344 stations on a five-tube Fada kit hook-up since December 12, 1929. Have one station each in Russia, Czechoslovakia, England and Argentina. Have logged CHWK, 5 watts, in British Columbia; WHDL, 10 watts, in Tupper Lake, N. Y.; KFPL, 15 watts, in Dublin, Texas; WLAP, Louisville, with only 30 watts and on the 1200 kc. channel with KGFJ broadcasting 24 hours a day on the same channel; CKIC, 50 watts, at Wolfville, N. S., and XEI, 101 watts, at Morelia, Mexico. Have logged 18 stations on the 1370 channel, all 100 watts or less. Have had daylight reception from WWNC at 2 p.m. PST."

Claiming 935 verifications since starting in radio three years ago, of which 197 are foreign stations, Jos. Baskys, 1610 S. Union Avenue, Chicago, lists Bombay and Calcutta, India; Helsinki, Finland; Amsterdam, Dublin; Torino and Riga as among his catch. He brought in the five-watt WQDM at St. Albans, Vermont, at 11:14 a.m. on March 17th, 1930, which is certainly some reception. He is now using a 14-tube set with loop aerial.

The Song Lady

(Continued from page 18)

It was in school a few days later that Douglas got his inspiration. The teacher was having them write letters in their English lesson. He would write to the song lady and tell her to please stop singing those sad songs. He would tell her about his father and how he cried when he listened to her.

Thoughtfully the teacher helped him make corrections and told the boy he might mail it. For who wouldn't sense tragedy and remorse in the letter Douglas had so painfully penned?

A week passed by. And then one evening, while Douglas was waiting for his father, a car drove in the yard. Timidly, the boy went to the door. A lovely lady was getting out! Now she was coming toward him, smiling and with tears in her eyes.

Suddenly he found himself crushed against her, and in wonder he heard her whisper, "Dougie, my baby!"

Quickly, Douglas straightened himself. "Are you my mother?" he asked.

"Yes, dear child. I am your mother and—I've come home again! Aren't you glad?"

Douglas smiled happily as he gazed at this beautiful creature—his mother!

The car went away, and his mother followed him into the house. She wept as she went from room to room, looking about her.

Hark! a sound outside!

Quickly, and to the wonderment of the boy, the song lady stepped close to the radio. "And a little child shall lead them," came the song from her lips in silvery tones.

His mother and the song lady were the same!

Excitedly, Douglas turned to see his father enter the room. His mother's voice was trembling now. John Rollins stood very still.

"It's me, John! I've come back to stay—if you'll have me!"

"Thank God!" breathed the man as he took the song lady into his arms.

A GOOD GROUND

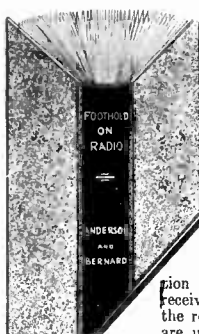
What the U.S. Bureau of Standards calls a good ground. Dig a hole in the ground one foot deep and one foot square, away from all buried pipes. Place in that hole five pounds of rock salt. Turn a hose on it until it dissolves. Drive an eight-foot rod or a half-inch pipe through the center of the hole. In sections where there is little natural moisture in the earth, use four of these six feet apart and all connected together.

When you have done that you have a real ground of low resistance which will help your reception.

Radiophone signals made a complete circuit around the world today in one-eighth of a second.

For approximately 30 minutes, starting at 7:05 a.m., a talk by C. D. Wagoner, of the General Electric Co., here, was sent around the earth by a series of radio relays. The received signals, after traveling approximately 25,000 miles through the ether, were rebroadcast by station WGY.

A BOOK FOR THE BEGINNER



THE science of radio presents a fascinating study, and many would like to understand the theory and practice of transmission and reception. Why do the sounds made in a broadcasting studio become reproduced in your home, when no sound travels between the station's transmitter and your receiver? What does the station do, what does your receiver do, to accomplish the result? What circuits are used? What are the different types of receivers

and their respective advantages?

Find out all the desired particulars in the first book on radio to be written for the sheer novice—"Foothold on Radio," by J. E. Anderson, M.A., and Herman Bernhard, LL.B. The book is written in plain, simple English, and the treatment is non-technical and non-mathematical. Anyone who can read English can understand what's printed in this illustrated book, published May, 1930.

ANOTHER new book by the same authors, entitled, "The Superheterodyne," is intended for those technically versed who desire complete understanding of the theory, construction and operation of the Superheterodyne. Constructional chapters deal with a practical receiver based on the theory. Published June, 1930.

A THIRD volume by Anderson and Bernhard is entitled "Audio Power Amplifiers," also technical.

The book begins with an elementary exposition of the historical development and circuit constitution of audio amplifiers and powering sources.

Radio World, the first and only national radio weekly, ninth year, publishes all the latest news and circuits of radio. Its technical presentations are highly authoritative. Construction of ultra-sensitive and selective circuits and of superb power amplifiers is featured regularly. Subscribe for *Radio World* and follow the developments on pentodes, Loftin-White amplifiers, band pass filters, pre-tuners, Superheterodynes, screen grid tubes, push-pull, etc.

Radio World, 145 West 45th St., New York City

Enclosed find:

- \$2.00 for 16 weeks' subscription for *Radio World* (16 issues); send "Foothold on Radio" free as premium.
- \$3.00 for 6 months' subscription for *Radio World* (26 weeks); send "The Superheterodyne" free as a premium.
- \$6.00 for one year's subscription for *Radio World*, (52 issues, one each week). Send "Audio Power Amplifiers" free as a premium.
- I am a *Radio World* subscriber. Extend my subscription. (Check if true.)

Name

Address

City State

USING the CLIPPERS

on World News
of Radio

By "Pretzelite"

One of our good correspondents who uses the above nom de plume, sends us so many clippings of miscellaneous bits about radio, that we are setting aside a page for his use. We are sure our readers will find this page most interesting.

The government of India has assumed full control over all broadcasting in the country.

* * *

A new high school in Grand Gorge, N. Y., has radio reception in all of its rooms.

* * *

The Australian Government is planning to assume control of radio broadcasting and has licensed nearly 300,000 listeners.

* * *

The ordinary radio tube has an amplification of about eight times while the screen grid may be made to amplify as high as 290.

* * *

An English-speaking radio club has been formed at Buenos Aires to encourage the broadcasting of programs in the English language.

* * *

British radio experts have succeeded in using a captive balloon as a transmitting tower with the advantage that its height can be easily changed.

* * *

They've given an "M" to the fellow who has popularized the filling of steins for dear old Maine. Rudy Vallee was awarded a varsity letter at a dinner of the University of Maine Alumni Association. He went to Maine before attending Yale.

* * *

A vocational scholarship has been founded by Graham McNamee, New York radio announcer, which provides for study in a New York vocal studio and is open to American baritones under 22 years of age and coloratura sopranos under 18 years.

* * *

Boston may have a radio curfew. Councilman Robert Gardiner Wilson to-

day proposed an ordinance forbidding the operation of a radio after 11 p.m. and before 7 a.m., if its tones are audible 50 feet from the machine. A fine of \$20 is provided.

* * *

Above the hum of motors, jazz, symphonies and lectures on gardening now come to the passenger flying to Cleveland and Chicago via the Stout Air Lines.

All the planes have been equipped with radio sets which serve both to entertain the more blase air travelers and also insure safety. Weather reports and directional beams aid the pilot in picking his course.

* * *

Chicago bus riders in the future may be able to take their setting-up exercise as they ride to work or hear their favorite bedtime story at night, if experiments being conducted by the Chicago Motor Coach company are successful.

Six double-deck busses have been equipped for three weeks with radio sets of different makes to test whether a plan for each bus to carry its own radio entertainment is feasible.

Officials announced radio reception had been clear.

* * *

Radio loudspeakers in Washington, D. C., must hereafter be tuned down so that they will not disturb neighbors else the owners are liable to go to jail.

The District of Columbia Commissioners have adopted an ordinance which carries a fine of not more than \$40, in default of which a jail sentence of not more than 364 days may be imposed.

The ordinance was adopted at the request of numerous citizens who complained that neighboring radios kept them awake at night and disturbed them at all hours.

KEY TO CHAIN STATIONS

CFRB 960 C CKAC 730 C CKGW 690 N KDKA 980 N KDYL 1290 C KECA 1430 N KFAB 770 N KFH 1300 C KFI 640 N KFJF 1480 C KFKX 1020 N KFPY 1340 C KFRC 610 C KFSD 600 N KGO 790 N KGW 620 N KHJ 900 C KHQ 590 N KLRA 1390 C KLZ 560 C KMBC 950 C KMOX 1090 C KOA 830 N KOIL 1260 C KOIN 940 C	KOL 1270 C KOMO 920 N KPO 680 N KPRC 920 N KRDL 1040 C KSCJ 1330 C KSD 550 N KSL 1130 N KSTP 1460 N KTAR 620 N KTHS 1040 N KTRH 1120 C KTSA 1290 C KVI 760 C KVOO 1140 N KWK 1350 N KYW 1020 N WABC 860 C WADC 1320 C WAIU 640 C WAPI 1140 N WPAL 1060 N WPAP 800 N WBBM 770 C WBCM 1410 C	WBRC 930 C WBT 1080 N WBZ 990 N WBAZ 990 N WCAE 1220 N WCAH 1430 C WCAO 600 C WCAU 1170 C WCCO 810 C WCFL 970 N WCKY 1490 N WCSH 940 N WDAE 1220 C WDAF 610 N WDAY 940 C WDBJ 930 C WDBO 1120 C WDOD 1280 C WDSU 1250 C WEAF 660 N WEAN 780 C WEBR 1290 N WEIT 590 N WENR 870 N WFAA 800 N	WFAN 610 C WFBL 1360 C WFBM 1230 C WFI 560 N WFIW 940 C WFJC 1450 N WFLA 620 N WGN 720 N WGR 550 N WGST 890 C WGY 790 N WHAM 1150 N WHAS 820 N WHEC 1440 C WHK 1390 C WHO 1000 N WHP 1430 C WIBO 560 N WIBW 580 C WIOD 1300 N WISN 1120 C WJAR 890 N WJAS 1290 C WJAX 900 N WJDX 1270 N	WJJD 1090 C WJR 750 N WJZ 760 N WKBN 570 C WKBW 1480 C WKRC 550 C WKY 900 N WLAC 1470 C WLBW 1260 C WLBZ 620 C WLIB 720 N WLIT 560 N WLS 870 N WLW 700 N WMAK 900 C WMAQ 630 C WMC 780 N WMT 600 C WNAC 1230 C WNAX 570 C WOAI 1190 N WOC 1000 N WOW 590 N	WOWO 1180 C WPG 1100 C WPTF 680 N WQAM 560 C WRC 950 N WREC 600 C WREN 1220 N WRR 1280 C WRVA 1110 N WSAI 1330 N WSB 740 N WSM 650 N WSMB 1320 N WSPD 1340 C WSUN 620 N WTAG 580 N WTAM 1070 N WTAR 780 C WTIC 1060 N WTMJ 620 N WTOC 1260 C WWJ 920 N WWNC 570 C WXYZ 1240 C
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ENTER YOUR DIAL NUMBERS IN THESE SPACES

510	610	710	810	910	1010	1110	1210	1310	1410
	75	534	82	29					
520	820	720	820	920	1020	1120	1220	1320	1420
	72		37	28					
530	630	730	830	930	1030	1130	1230	1330	1430
	70		36	27					
540	640	740	840	940	1040	1140	1240	1340	1440
	68		35	26					
550	650	750	850	950	1050	1150	1250	1350	1450
	76		34	25					
560	660	760	860	960	1060	1160	1260	1360	1460
	72		33	24					
570	670	770	870	970	1070	1170	1270	1370	1470
	81		32	23					
580	680	780	880	980	1080	1180	1280	1380	1480
	74		31	22					
590	690	790	890	990	1090	1190	1290	1390	1490
	81		30	21					
600	700	800	900	1000	1100	1200	1300	1400	1500
	78		29	20					

WHAT'S ON THE AIR TONIGHT?

A WEEKLY CALENDAR

Leading Features of the Network Programs

Time is given by Eastern Daylight Saving. For Eastern Standard Time, subtract one hour; for Central Time, two hours; for Mountain Time three hours; and for Pacific Time, four hours.

Programs of the National Broadcasting Company begin with WEAJ and WJZ; those of the Columbia Broadcasting System with WABC.

These programs are correct to date but are subject to change daily thereafter

Daily (Except Saturday and Sunday)

6:45-8:00 Tower Health Exercises
WGR CKGW
WEAF WEEL WCAE WFI WRC WGY

8:15-8:30 Morning Devotions
WEAF WRC WCAE WGY WHAS WOW
WGR WFI WOSH WLS WJAR WWJ
WCKY WPTF WIOD WAPI WFLA WSUN

8:30-9:00 Cheerio
WEAF WEEL WCKY WRC WGR WJAR
WGY WTAG WOSH WCAE WWJ WOW
WDAF KSTP WAPI KPRC WFI WSB
WJAX WPTF WOAI CKGW WIOD WHAS
WFLA WSUN WTAM WSM WMC

9:00-9:15 Quaker Crackles Man
WLW WLS WRC WJR KWK WREN
KFAB WTMJ KSTP WIBC

9:00-9:30 Something for Everyone
WABC WMAL WHP WJAS WHEC WKBW
WHK WKRC WAIU WKBN WMAQ KMOX
KOIL KMBC WIBW KFH WBCM WSPD
WMT WWNC WDBJ WBRC WDOD WREC
WLAC KLRA KFJF WPG WBT

9:00-10:00 Morning Melodies
WEAF WRC WWJ WOW WHAS WGY
WTAM WAPI WGR WSM WIBO

11:15-11:45 Radio Household Institute
WEAF WJAR WTAG WOSH WLIT WRC
WHAS WSM WMC WSB WGR WCAE
WWJ WSAI KFKX WTAM KSD WOW
WTMJ KSTP WIBC WAPI WSMB KTHS
KVOO KPRC WOAI WKY WEEL WGY

12:00-12:30 Columbia Revue
WABC WEAN WNAC WLBZ WFAN WCAO
WMAL WHP WJAS WLBW WPBL WHEC
WKBW WAIU WKBN WOWO KMBC WISN
WIBW WBCM WWNC WDBJ WGST WDOD
WREC KRLD KLRA KFJF KLZ KFRC
KVI KFPY WPG KOL WDAY WORC

1:30-2:00 Harold Stern and Ambassador Orchestra
WABC WEAN WLBZ WFAN WCAO WMAL
WHP WJAS WLBW WHEC WMAK WADC
WAIU WOWO WBBM KMBC WCCO WIBW
KFH WBCM WMT WTAR WBRK WDOD
WREC KLRA KFJF KHJ KFPY WDAY

1:45-2:30 National Farm and Home Hour
WJZ WHAM KDKA WJR WLW KSTP
WIBC WRVA WPTF WJAX WHAS WSM
WMC WSB KVOO WKY WOAI WRC
WHO WOW WDAF KPRC WJDX WBAL
WSMB WIOD KWK WREN KOA WBZ
WFAA KFAB WAPI KTHS WFLA WSUN

3:00-3:30 Columbia Ensemble
WABC WEAN WNAC WCAU WCAO WMAL
WHP WMAK WADC WKRC WAIU WKBN
WFBM KOIL WISN WIBW WGLR KFH
WBCM WSPD WMT WWNC WTAR WDBJ
WBRK WDOD WREC WLAC KLRA KFJF
KLZ KFRC KVI KFPY WPG WDAY
WORC WBT

3:30-4:00 Columbia Educational Features
WABC WEAN WNAC WCAU WCAO WMAL
WHP WMAK WKRC WKBN WFBM WMAQ
KMBC WISN WCCO WIBW KFH WBCM

WSPD WMT WWNC WTAR WDBJ WDOD
WREC WLAC KLRA KFJF KLZ KDYL
KVI KFPY WPG WDAY WBT

5:00-5:45 Dancing by the Sea
WABC WFAN WCAO WMAL WHP WJAS
WKBW WADC WKRC WAIU KOIL KMBC
WISN WBCM WSPD WMT WWNC WTAR
WDBJ WGST WDOD WREC WLAC KRLD
KLRA KFJF KLZ KDYL KHJ KVI
KFPY KOL WDAY WBT

6:05-6:45 Black and Gold Room Orchestra
WEAF WCAE WOSH WWJ WTAG WRC
WGY WGR WOC WHO

6:45-7:00 Uncle Abe and David
WEAF WEEL WJAR WOSH WFI WRC
WCAE WTAG

7:00-7:15 Amos 'n' Andy
WJZ WBZ WBZA WHAM KDKA WRC
CKGW WRVA WPTF WJAX WIOD WCKY
WFLA WSUN WBAL

7:00-7:15 The Crockett Mountaineers
WABC WLBZ WCAU WMAL WHP WJAS
WLBW WHEC WKRW WADC WKRC WFBM
WMAQ KMBC WISN WCCO WIBW KFH
WBCM WMT WWNC WDBJ WBRK WDOD
WREC KLRA KFJF KLZ KDYL KHJ
KFPY KOL WDAY WORC WBT WKBN

7:30-7:45 Phil Cook — Quaker Man
WJZ WBZ WBZA WFLA WSUN WIOD
WKY WRVA WPTF WJAX WBAL WHAM
KDKA WHAS WENR KWK WREN KFAB
WTMJ KSTP WSB WSM WIBC WSMB
WJDX WOAI KTHS KVOO KOA KSL
KGO KECA KGW KOMO KHQ KFSN
KTAR KPRC WRC WFAA

11:15-11:30 Uncle Abe and David
WWJ WSAI WTAM WENR KSD WDAF
WBCO WHAS WSM WSB WSMB WJDX
WEO WOC WFJC WOW WMC WTMJ

11:30-11:45 Amos 'n' Andy
KYW KWK WREN WTMJ KSTP WIBC
KFSN WKY KPRC WOAI WJR KOA
KSL WDAF WJAP WMAQ KECA KTHS
KGO KOMO KHQ KGW WHAS WSM
WMC WLW WSB WSMB KFAP WJDX

11:45-12:00 Literary Digest Topics — Floyd Gibbons
WJR KWK WLW WENR WREN KFAB

Sunday

1:00-1:30 Southland Sketches— Spirituals
WJZ WBAL KFAB KDKA WLW KWK
KOA KSL CKGW WHAM

1:30-2:00 Neopolitan Nights
WJZ WHAL WLW WRC KSL WHAS
WLS CKGW WHAM KFAB KOA

2:00-3:00 Ross' Symphony Concert
WJZ WBZ WBZA WBAL KDKA KYW
WRC WFAA WIBC KFAB CKGW WHAS
WREN KSTP KWK WTMJ WSB WRVA
WJAX WHAM WFLA WSUN WLW WPTF

2:30-3:00 NBC Artists' Service Program
WEAF WTAG WOV KSD WWJ WGY
WDAF WOC WHO WGR WIBO

2:30-3:00 **Ballad Hour**

WABC WEAN WLBZ WCAU WCAO WMAL
 WHP WHEC WKBW WHK WKRC WAU
 WKBN WMAQ KMOX KOIL KMBC WISN
 WCCO WIBW WBCM WSPD WMT WWNC
 WDBJ WBRC WODD WREC KLRK KLZ
 KDYL KVI KFPY WPG WDAY WORC

3:00-3:30 **Paul Tremaine and His Orchestra**

WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WKBW WADC WKBN
 WFBM WMAQ KMOX KOIL KMBC WISN
 WCCO WBCM WMT WWNC WDBJ WBRC
 WODD WLAC KLRK KFJF KLZ KDYL
 KFRC KVI KFPY WPG WDAY WORC

3:00-4:00 **The Friendly Hour**

WJZ WBAL KDKA WJR WLW KWK
 WREN KFAB WRVA WJAX WIOD WJDX
 KVOO WFAA WOAI KSL WFLA WSUN
 KTHS WSB WLS WBZ WBZA KGW
 KFSD KGO

3:30-4:00 **Conclave of Nations**

WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WKBW WADC WKRC
 WKBN KMBC WISN WCCO WIBW WBCM
 WMT WWNC WDBJ WBRC WODD WLAC
 KLRK KLZ KDYL KFRC KVI KFPY
 WPG WDAY WORC WBT

4:00-5:00 **National Sunday Forum**

WEAF WEEL WJAR WTAG WCSH WGR
 KOA WIOD WOV WRVA WKY WOAI
 WRC WSAI WJAX WHAS WJDX WFAA
 FVOO KPRC WIBC WFJZ KHQ WDAF
 WWJ WSUN WFLA WHO WSB WIBO
 WOC KPO KGO KGW KOMO WMC
 WCAE CKGW

4:00-5:00 **Cathedral Hour**

WABC WEAN WNAC WLBZ WCAU WCAO
 WHP WJAS WLWB WKBW WADC WHK
 WKRC WAU WKBN WWOV WFBM KMOX
 KOIL KMBC WISN WCCO WIBW KPH
 WBCM WSPD WMT WWNC WDBJ WGST
 WBRC WODD WREC WLAC KRLD KLRK
 KFJF KLZ KDYL KHJ KVI KFPY
 WDAY WORC WBT

4:30-5:00 **Don Carlos and Marimba Band**

WJZ WBAL KFAB WJR WLW WBZ
 WBZA WHAM

5:00-6:00 **Sabbath Reveries**

WJZ WBZ WBZA WBAL WHAM WLW
 KWK WREN KFAB KSTP WIBC WJAX
 WIOD WMC KOMO WJDX WOAI KVOO
 KPBC WFLA WSUN WSB KOA KVAR
 KGO KGW KHQ KDKA WRC

5:30-6:00 **Tea Time Tunes**

WEAF WEEL WTAG WFI WGR WCAE
 CKGW WWJ WDAF WHO WOC WOV

6:00-6:30 **Songs at Eventide**

WJZ WBAL KFAB WJR KDKA WBZ
 WBZA WHAM KWK WREN CKGW

6:00-7:00 **Catholic Hour**

WEAF WEEL WJAR WTAG WCSH WRC
 WGY WWJ WIBC WIOD WSM WKY
 WJDX KGO KPO KSTP KHQ KOMO
 KGW WOV WSAI WGR KECA KVAR
 WCAE KYW WFJZ WOC WHO WDAF
 WTMJ WJAX WFLA WSUN WHAS WMC
 WSB WBAP KPRC WOAI KOA WFI
 WRVA

6:30-7:00 **The Globe Trotter**

WABC WEAN WNAC WLBZ WCAU WMAL
 WHP WJAS WLWB WHEC WKBW WADC
 WHK WKRC WAU WKBN WFBM WMAQ
 KMOX KOIL KMBC WISN WCCO WIAW
 KPH WSPD WMT WWNC WDBJ WGST
 WBRC WODD WREC KRLD KLRK KFJF
 KLZ KDYL KHJ KFRC KVI KFPY
 WPG WDAY WORC WBT

7:00-7:30 **Mystery House**

WEAF WEEL WJAR WTAG WFI WRC
 WGY WGR WCAE WFJZ WWJ WSAI
 KSD WOC WHO WOV WDAF

7:30-8:00 **Williams Obitomatics**

WJZ WBZ WBZA WJR KWK KOA
 KSL WHAM WLW WREN KDKA WGN

7:35-8:30 **Major Bowes Family**

WEAF WSMB KSTP WCSH WEBC WSM
 WDAF WIOD WMC WSB WJDX WKY
 WJAR WCAE WRC WGY WWJ WSAI
 KSD WFJZ WHAS WTAM WOAI KTHS
 WFLA WISN WHO WOC WTAG WCFL

7:45-8:00 **The World's Business**

WABC WEAN WNAC WLBZ WFAN WMAL
 WHP WJAS WLWB WHEC WKBW WADC
 WKRC WAU WKBN WFBM WMAQ KMOX
 KOIL KMBC WISN WCCO WIBW WSPD
 WMT WWNC WDBJ WODD KLRK KFJF
 KLZ KDYL KHJ KFRC KVI KFPY
 WPG WNAX WDAY WORC

8:00-8:30 **Jesse Crawford, Organ**

WABC WEAN WNAC WFAN WMAL WHP
 WJAS WLWB WHEC WKBW WADC WAU
 WKBN WFBM KMOX KOIL KMBC WISN
 WCCO WIBW WSPD WMT WWNC WTAR
 WDBJ WBRC WODD KLRK KFJF KLZ
 KDYL KHJ KFRC KVI KFPY WNAX
 WDAY WORC WBT

8:30-9:00 **Chase and Sanborn Orchestra**

WEAF WJAR WTAG WCSH WRC WGY
 WGR WCAE WFJZ WWJ WSAI KSD
 WOV WIOD WHAS WEBC WMC WSB
 WSMB WKY KTHS KPRC WOAI WTMJ
 WJDX WTAM KSTP WIBO WPTF KVOO
 WAPI WRVA WFAA WHO WOC WLIT

8:30-9:45 **Goldman Band Concert**

WJZ WBZ WBZA WHAM KDKA KOA
 KPO KGW KOMO KHQ WCKY WREN
 KWK KFAB KSL WJR WCFL

9:00-9:15 **"Our Government"**

WEAF WJAR WTAG WLIT WCSH WEBC
 WGY WCAE KSD WHAS WKY WSAI
 WFJZ WSB WMC WSM WFAA WTMJ
 WOV WOAI WWJ WSMB WTC WJDX
 WIOD WFLA WSUN WOC WHO WCFL
 WEEL WRC

9:00-10:00 **Majestic Theatre of the Air**

WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WJAS WLWB WFBM WMAK WKBW
 WDEL CFRB CKAC WADC WHK WKRC
 WHP WOV WFBM WBBM KMOX KOIL
 KMBC WISN WCCO WIBW KPH WSPD
 WWNC WSAZ WTAR WDBJ WBRC WODD
 WREC WLAC WDSU KRLD KLRK KFJF
 KTSA KLZ KDYL KHJ KFRC KOIN
 KVI KFPY KOL

9:15-9:45 **Atwater Kent Program**

WEAF WEEL WRC WFI WGY WGR
 WCAE WTAM WWJ WSAI KSD WOV
 KSTP KOA KSL KFI KGW KOMO
 KPO KHQ WSM WMC WFAA KPRC
 WOAI WKY WSMB WHAS WGN WSB
 WOC WHO

9:45-10:15 **In the Time of Roses**

WEAF WEEL KSL KPO KGW KSD
 WFI WGY WGR WWJ WSAI WOV
 WTMJ KSTP WIBC WTAG WRC KOA
 WTC KVAR WDAF

10:00-10:30 **Mayhew Lake and His Band**

WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WJAS WLWB WHEC WADC WHK
 WKRC WKBN WWOV WFBM KMOX KOIL
 KMBC WISN WCCO WIBW WSPD WMT
 WWNC WTAR WDBJ WBRC WODD WRC
 WLAC KRLD KLRK KFJF KLZ KDYL
 KHJ KFRC KVI KFPY KOL WNAX
 WORC WBT

10:15-10:45 **Studebaker Champions**

WEAF WYIC WTAG WFI WCSH WRC
 WGY WCAE WTAM WWJ WGN KSTP
 WJAR WTMJ KOA WEBC KGO KGW
 KOMO KFI KHQ WOV WEEL WDAF
 KSD WGR

10:30-11:00 **Around the Samovar**

WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WJAS WLWB WHEC WADC WHK
 WKRC WAU WKBN WWOV WFBM KMOX
 KOIL KMBC WCO WIBW WSPD WMT
 WWNC WTAR WDBJ WBRC WLAC KLRK

KFJF	KLZ	KDYL	KFRC	KFPY	WPG	WCAE	WGR	WFJC	WWJ	WSAI	KSD
WNAX	WORC	WBT				WOC	WOW	WHO	KYW	WDAF	KSTP
10:45-11:15	Sunday at Seth Parkers					WJDX	WSMB	KGO	KVOO	KPHC	WOAI
WEAF	WCAE	WHAS	WFJC	WJAX	WOW	KOA	KECA	KGW	WFLA	WSUN	WTIC
WKY	WWJ	WPTF	WGY	WRC	KOA	WKY					
KGO	WEEL	WIOD	WMC	WSB	WCBS	8:00-8:30	Burbig's Syncopated History				
WEBC	KGW	KYW	WSM	WHO	WJDX	WABC	WEAN	WNAC	WLBZ	WCAU	WCAO
WTAM	CKGW	KSTP	KSD	WDAF	WSMB	WMAL	WHP	WJAS	WLBW	WKBW	WADC
KPHC	KOMO	KHQ	WTMJ	WOC	KTAR	WHK	WKRC	WFMB	WMAQ	KMOX	KOIL
KFSD	KVOO	WGR				WISN	WCCO	WIBW	WGL	KFH	WBCM
11:00-12:00	Back Home Hour					WSPD	WMT	WVNC	WTAR	WDBJ	WBRC
WABC	WLBZ	WMAL	WHEC	WKBW	WKRC	WDOD	KLRA	KFJF	KLZ	KHJ	KFRC
WKBN	WFBM	KMOX	WISN	WCCO	WIBW	KVI	KFPY	WPG	KOL	WNAX	WDAY
WSPD	WMT	WTAR	WDBJ	WDOD	KLRA	WORC	WBT				
KFJF	KLZ	KVI	KFPY	WNA	WDAY	8:30-9:30	A. & P. Gypsies				
WBT						WEAF	WEEL	WTAG	WJAR	WTIC	WCBS
11:30-12:00	Russian Cathedral Choir					WLIT	WRC	WGY	WGR	WCAE	WWJ
WEAF	WRC	WFJC	WWJ	WBAP	WOC	WSAI	WGN	KSD	WOC	WDAF	WTAM
KOA	WHO	WOW	WSB	WGY	WTAM	WOW	WHO				
CKGW	KSTP	WEBC	KVOO			8:30-9:00	Crime Prevention Program				
						WJZ	WBZ	WBZA	KDKA	WREN	KFAB
						CKGW	WTMJ	WJDX	KGO	KOMO	KFSD

Monday

3:00-3:30	Phil Napoleon and His Band					WJZ	KDKA	WHAM	KPHC	WBZ	WBZA
						WBAL	KWK	WREN			
3:30-4:00	Salon Singers					WEAF	WRC	KSD	WTAG	WGY	WFJC
						KSTP	WGR	WOW	WCFL		
4:00-4:30	The Merry-makers					WABC	WEAN	WNAC	WCAU	WCAO	WMAL
						WHP	WMAK	WADC	WAIU	WKBN	KOIL
						KMBC	WISN	WCCO	WIBW	WGL	WBCM
						WSPD	WMT	WVNC	WTAR	WDBJ	WBRC
						WDOD	WREC	WLAC	KRLD	KLRA	KFJF
						KLZ	KDYL	KVI	KFPY	WPG	KOL
						WDAY	WBT				
4:00-5:00	Denver Municipal Band					WJZ	WBZ	WBZA	KGW	KFSD	WBAL
						WHAM	KYW	WLW	KDKA	WREN	WSB
						WAPI	WBAP	KOA	KGO	WJR	WCFL
4:30-5:00	Ebony Twins					WABC	WEAN	WNAC	WCAU	WCAO	WMAL
						WHP	WMAK	WADC	WVNC	WAIU	WKBN
						WFBM	KOIL	KMBC	WISN	WCCO	WIBW
						WGL	WBCM	WSPD	WMT	WVNC	WTAR
						WDBJ	WGST	WBRC	WDOD	WREC	WLAC
						KRLD	KLRA	KFJF	KLZ	KDYL	KFRC
						KVI	KFPY	WPG	KOL	WDAY	WBT
6:00-6:30	Mormon Tabernacle Choir and Organ					WJZ	WBAL	WSM	KWK	KOA	KSL
						KGO	KOMO	KFAH	KGW	KPO	WLW
						CKGW	WRC	WHAS	KDKA	KSTP	KFSD
6:00-6:45	Carl Rupp and His Captivators					WABC	WCAO	WMAL	WHP	WJAS	WLBW
						WHEC	WKBW	WAIU	WKBN	WBBM	KMBC
						WISN	WIBW	WGL	KFH	WBCM	WSPD
						WMT	WVNC	WTAR	WGST	WBRC	WDOD
						WREC	KRLD	KLRA	KFJF	KLZ	KDYL
						KHJ	WDAY	WBT			
7:00-7:30	Current Events					WABC	WLBZ	WHP	WJAS	WLBW	WHEC
						WKBW	WADC	KMOX	WISN	WCCO	WIBW
						KFH	WBCM	WMT	WVNC	WDBJ	WGST
						WBRC	WDOD	WREC	KLRA	KFJF	KLZ
						KDYL	KHJ	KFRC	KVI	KFPY	KOL
						WDAY	WORC				
7:30-8:00	Colonial Beaconlights					WEAF	WEEL	WJAR	WTAG	WCBS	WGY
7:45-8:00	Bernhard Levitt and Orchestra					WABC	WEAN	WNAC	WLBZ	WCAU	WCAO
						WHP	WJAS	WLBW	WFBM	WHEC	WKBW
						WAIU	WKBN	WVNC	KMBC	WISN	WGL
						WBCM	WSPD	WVNC	WDBJ	WBRC	WDOD
						KLRA	KFJF	KLZ	KHJ	KFRC	KVI
						KFPY	KOL	WORC	WBT		
7:50-8:30	Roxy and His Gang					WJZ	WBZ	WBZA	WHAM	KWK	WSB
						WSM	WRC	KGO	KFAB	KOA	WFLA
						WSUN	WCKY	KGW	WCFL	CKGW	WIBO
						KTHS					
8:00-8:30	Half Hour in Nations Capital					WEAF	WEEL	WIOD	WPTF	WJAX	WJAR
						WTAG	WCBS	WLIT	KFSD	KOMO	WRC

10:30-11:00 Sign of the Shell
 WFAF WEEI WTIC WJAR WTAG WCSH
 WLIT WRC WGY WGR WCAE WWJ
 WSAI WENR KSD WOC WOV WDAF
 WRVA KOA KSTP WPTF WJAX WIOD
 WHAS WSM WMC WSB WSMB WJDX
 WBCB WHO WTAM

10:30-11:00 In the Spotlight
 WJZ WHAM KDKA WJR KWK WREN
 WFAA KPRC WBZ WBZA

10:30-11:00 Jesse Crawford
 WABC WEAN WNAC WLBZ WCAU WCAO
 WADL WHP WJAS WLBW WHEC WKBW
 WMAL WKRC WFBM WMAQ KMOX
 KMBC WISN WCCO WIBW KFJF WBCM
 WMT WWNC WTAR WDBJ WBRG WDOD
 WREC WLAC KRLD KLRA KFJF KLZ
 KDYL KHJ KFRC KVI KFPY WPG
 KOL WNAX WDAY WORC WBT

11:00-11:15 Phil Spitalny's Music
 WFAF WRC WGY WWJ WSMB WCAE
 WTAM WSAI WJDX

11:30-12:00 Barney Rapp Orchestra
 WFAF WRC WJY WDAF WCFL KOA
 KSTP WOV

11:30-12:00 Ted Fiorito and Orchestra
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHEC WADC WKBW WFBM KMOX
 KOIL WISN WCCO WIBW KFJF WBCM
 WMT WWNC WTAR WDBJ WBRG WDOD
 WREC WLAC KLRA KFJF KLZ KDYL
 WBT KFPY KOL WNAX WDAY WORC

Tuesday

10:15-10:30 Through the Looking Glass
 WJZ WBZ WBZA WHAM WLW WREN
 KFKX WJR KDKA KWK CKGW

4:00-4:30 U.S. Army Band Concert
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WMAK WADC WAIU WKBW
 WOWO KOIL WISN WCCO WIBW WBCM
 WSPD WMT WWNC WTAR WDBJ WGST
 WDOD WREC WLAC KRLD KLRA KFJF
 KLZ KDYL KVI KFPY WPG KOL
 WDAY WORC WBT

4:00-5:00 U.S. Navy Band
 WFAF WRC WTAM KSD KYW WCAE
 WTAG WOC WHO WFJC

4:00-5:00 Pacific Yagabonds
 WJZ WREN KFAB WHAM WLW KOA
 KPO KGO KSTP WJAX WBAF WJR
 WAPI KFSD WSM WTMJ

5:00-5:30 Rhythm Kings Dance Orchestra
 WABC WFAN WCAO WMAL WHP WMAK
 WADC WKRC WAIU KOIL KMBC WISN
 WBCM WSPD WMT WWNC WTAR WDBJ
 WGST WDOD WREC WLAC KRLD KLRA
 KFJF KLZ KDYL KHJ KVI KFPY
 WDAY WBT

7:15-7:30 Columbia Educational Features
 WABC WLBZ WCAU WCAO WHP WJAS
 WLBW WKBW WADC WOWO WFBM WMAQ
 WISN WCCO WIBW WBCM WMT WWNC
 WDBJ WBRG WDOD WREC KLRA KFJF
 KLZ KDYL KHJ KVI KFPY KOL
 WDAY WORC

7:30-8:00 Soconyland Sketches
 WFAF WEEI WJAR WTAG WCSH WGY
 WGR WTIC

7:30-8:00 Guy Lombardo and His Royal Canadians
 WABC WLBZ WFAN WHP WJAS WLBW
 WHEC WKBW WAIU WKBW WOWO WFBM
 WBBM KMBC WISN KFJF WBCM WSPD
 WWNC WDBJ WBRG WDOD KLRA KFJF
 KLZ KHJ KFRC KVI KFPY KOL
 WORC WBT

8:00-8:30 Troika Bells
 WFAF WFI WWJ WSAI WDAF WRC
 WCSH CKGW WGR

8:00-8:30 Pure Oil Orchestra
 WJZ WBAL WHAM KDKA WJR WREN
 KYW KWK KSTP WTMJ WBCB WHAS

WMC WJAX WRVA WSM WSB KFAB
 WJDX WAPI WPTF WLW

8:00-8:30 Blackstone Program
 WABC WEAN WNAC WCAU WCAO WMAL
 WHP WJAS WLBW WFBL WHEC WKBW
 WADC WHK WGHP WAIU KOIL
 WCCO WSPD WMT

8:30-9:00 Frontier Days
 WFAF WRC KSD WTAG WFI WCAE
 WWJ WSAI WOW WCSH WDAF WGR
 CKGW WJAR WTAM WOC WHO

8:45-9:00 The Melody Musketiers
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WFBL WKBW
 WADC WKRC WAIU WOWO WISN WCCO
 KFJF WBCM WSPD WMT WWNC WTAR
 WDBJ WBRG WDOD KRLD KLRA KFJF
 KLZ KDYL KHJ KVI KFPY WBT
 WNAX WDAY WORC

9:00-9:30 Henry George
 WABC WEAN WNAC WCAU WCAO WMAL
 WHP WJAS WLBW WFBL WKBW WADC
 WHK WKRC WGHP WOWO WBBM KMOX
 KOIL KMBC WISN WCCO KFJF WSPD

9:00-9:30 Everready Program
 WFAF WEEI WFI WRC WGY WGR
 WCAE WTAM WWJ WGN KSD WHO
 WDAF WHAS WSM WMC WSB WJAR
 KOA KSL KGO KGW KOMO KHQ
 WSMB WJDX WCSH WFJC WSAI WOW

9:30-10:00 Happy Wonder Bakers
 WFAF WJAR WEEI WTAG WCSH WRC
 WGY WGR WCAE WTAM WFJC WWJ
 WSAI WIBO KSD WHO WOW WDAF
 WTMJ KSTP WBCB WRVA WHAS WMC
 WSB WSMB KVOO WKY KOA KSL
 WJDX KGO KOMO KECA KGW KHQ
 WBAF WFI KPRC WOC

9:30-10:00 The Columbians — Freddie Rich
 WABC WEAN WNAC WLBZ WFAN WCAO
 WMAL WHP WJAS WLBW WKBW WADC
 WHK WKRC WAIU WKBW WOWO WBBM
 KMOX KOIL KMBC WISN WCCO WIBW
 KFJF WBCM WMT WWNC WTAR WDBJ
 WBRG WDOD WREC WLAC KRLD KLRA
 KFJF KLZ KDYL KHJ KFRC KVI
 KFPY WNAX WDAY WORC

10:00-10:15 Enna Jettick Songbird
 WFAF WEEI WJAR WTAG WTAM WCSH
 WFI WRC WGY WCAE WFJC WSAI
 WIBO KSD WOW WHO WDAF WGR
 WOC WWJ

10:00-10:15 Graybar's, Mr. and Mrs.
 WABC WEAN WNAC WCAU WCAO WMAL
 WJAS WLBW WFBL WHEC WKBW WADC
 WHK WKRC WGHP WAIU WKBW WOWO
 WFBM WBBM KMOX KOIL KMBC WISN
 WCCO KFJF WSPD WWNC WTAR WDBJ
 WGST WBRG WREC WLAC WDSU KRLD
 KLRA KFJF KTA KLZ KDYL KHJ
 KFRC KOIN KVI KFPY KTRH KOL

10:00-10:30 Westinghouse Salute
 WJZ WBZ WBZA WBAL KDKA KYW
 KWK WBCB WJAX WHAS WSM WMC
 WAPI WSMB KGW KPRC KOA KSL
 KGO KHQ WPTF WTMJ KOMO WHAM
 WREN WRVA WKY WOI WSB WIOD
 KECA WCKY KVOO WFLA WSUN KSTP
 KTR KFSD

10:15-10:30 Cuddles and Monty
 WFAF WGY WTAG WCSH WFI WRC
 KSD WDAF WWJ

10:15-11:00 Grand Opera Miniature
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WHEC WKBW
 WADC WHK WKRC WKBW WOWO WFBM
 WBBM KMOX KMBC WISN WCCO WIBW
 KFJF WSPD WMT WWNC WTAR WDBJ
 WBRG WDOD WREC WLAC KRLD KLRA
 KFJF KLZ KDYL KHJ KFRC KVI
 KFPY WPG KOL WNAX WDAY WORC
 WBT

10:30-11:00 **Radio-Keith-Orpheum Program**
 WEA WEEI WJAR WTAG WCSH WFI
 WRC WGY WGR WCAE WFJC WSAI
 WHO KSD WOV WWSB WOAI KTHS
 KOA KSL KGO KGW KOMO KHQ
 WBWO WIDX WTMJ KSTP KVOO WRVA
 WJAX WIOD WHAS WSM WMC WSB
 WDAF WEBC KECA WPTF WFLA WSUN
 WOC WBAP KFSD KTAR WWJ WKY
 WTAM

10:30-11:00 **Cuckoo**
 WJZ WJR KWK WREN WBZ WBZA
 KDKA

11:00-11:15 **Anheuser-Busch Program**
 WHK WGHP WAU WFBM WBBM KMOX
 KOIL KMBC WCCO WSPD WMT WDOO
 WREC WDSU KLRA WRR KFJF K TSA
 KTRH

11:00-11:30 **Vincent Lopez and His Orchestra**
 WEA WFI WCAE WWJ KSD WOC
 WHO WWSB KOA WSAI WGY WTAM
 WMC WJDX WOV

11:15-11:30 **The Collegians**
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WLBW WADC WKRC WKBN
 WFBM KOIL KMBC WISN WCCO WIBW
 WBCM WSPD WMT WNNC WTAR WDBJ
 WBRC WDOO WREC WLAC KLRA KFJF
 KLZ KDYL KFPY WPG WNAX WDAY
 WORC WBT

11:30-12:00 **Jack Albin and His Orchestra**
 WEA WFI WRC WOC WHO KSTP
 KOA WJDX

Wednesday

10:30-11:00 **U.S. Navy Band Concert**
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WFLB WIEC
 WKBW WADC WOWO KOIL KMBC WISN
 WIBW WBCM WSPD WNNC WDBJ WGST
 WBRC WDOO WLAC KLRA KDYL WORC

11:00-11:30 **U.S. Army Band**
 WJZ WBAL WJR KDKA WREN WRVA
 WJAX WBZ WBZA KOA

3:00-3:30 **Matinee Gems**
 WJZ WBAL KDKA KWK WREN CKGW
 WRVA WJAX WJDX WHAM WBZ WBZA

4:00-5:00 **Radio Guild**
 WJZ WLW WBAL WHAM CKGW KFAB
 KSTP WJAX WSM KTHS WBAP KOA
 KGO WREN KFSD

5:00-5:15 **The Columbia Grenadiers**
 WABC WFAN WCAO WMAL WHP WMAK
 WADC WKRC WAU WBBM KOIL KMBC
 WISN WGL WBCM WSPD WMT WNNC
 WTAR WDBJ WGST WDOO WREC WLAC
 KRLL KLRA KFJF KLZ KDYL WCI
 KFPY WPG WDAY WBT

5:15-5:45 **Footnotes - Freddie Rich**
 WABC WFAN WCAO WMAL WHP WKBW
 WADC WKRC WAU WBBM KOIL KMBC
 WISN WIBW WGL WBCM WSPD WMT
 WNNC WTAR WDBJ WGST WDOO WREC
 WLAC KRLL KLRA KFJF KLZ KDYL
 KFRC KVI KFPY WPG KOL WDAY
 WBT

6:00-6:40 **Jack Albin and His Orchestra**
 WJZ WBAL WREN KFAB KSTP WHAS
 WSM WAPI KOA KGO KTAR

7:15-7:30 **Ted Fiorito and His Orchestra**
 WABC WLBZ WCAU WCAO WHP WJAS
 WLBW WFLB WHEC WKBW WADC KMBC
 WISN WCCO WIBW WGL WBCM WMT
 WNNC WDBJ WBRC WDOO WREC KLRA
 KFJF KLZ KDYL KVI KFPY WPG
 KOL WDAY WORC

7:45-8:00 **Dic-a-Doo Entertainers**
 WJZ WBZ WBZA WBAL WHAM KDKA
 KYW KWK WREN KFAB KSTP WEBC

7:45-8:00 **Ether Leaf at the Organ**
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WHEC WKBW

WKRC WKBN KMBC WISN WBCM WSPD
 WWNC WDBJ WBRC WDOO KLRA KFJF
 KLZ KFRC KVI KFPY KOL WORC
 WBT

7:45-8:00 **"Back of the News in Washington"**
 WEA WRC KOA WTAG KSL KECA
 KGO WCSH WGY WCAE WFJC WRVA
 KGW KOMO KFSD WJAX WSAI WIBO
 KSD WOC WHO WOV WDAF WSM
 WAPI KTHS KPRC WKY

8:00-8:30 **East of Cairo**
 WEA WCSH WGR WOC WDAF WWJ
 WJDX WWSB WJAR KGO WGL WHO
 WOV WEEI WTAM

8:00-8:30 **The Yeast Foamers**
 WJZ WBZ WBZA WHAM KDKA KYW
 KWK WREN KSTP WEBC WLW KFAB
 WTMJ

8:00-8:30 **Manhattan Moods**
 WABC WEAN WNAC WLBZ WCAO WHP
 WJAS WLBW WFLB WHEC WKBW WADC
 WAU WFBM WMAQ KMOX KOIL KMBC
 WISN WCCO WIBW WGL WBCM WSPD
 WMT WWNC WTAR WDBJ WBRC WDOO
 KLRA KFJF KLZ KFRC KVI KFPY
 WPG KOL WDAY WORC WBT

8:30-9:00 **Mobilioil Concert**
 WEA WEEI WJAR WTAG WCSH WLIT
 WRC WGR WWJ WSAI KSD WOV
 WFJC WTAM KOA KVOO WFAA KPRC
 WOAI WKY KSL W TIC WGY WGN
 WEBC WTMJ WDAF WCAE WHO WOC

8:30-9:00 **Sylvania Foresters**
 WJZ WBZ WBZA WHAM KDKA WREN
 KWK KYW KFAB WLW

8:30-9:00 **Forty Fathom Trawlers**
 WABC WEAN WNAC WCAU WCAO WMAL
 WHP WJAS WLBW WFLB WHEC WKBW
 WADC WHK WKRC WGHF WOWO WFBM
 WMAQ KMOX WSPD

9:00-9:30 **Halsey, Stuart Program**
 WEA WEEI WJAR WTAG WCSH WLIT
 WRC WGY WCAE WGR WWJ WSAI
 KSD WOC WOV KSTP WJAX WHAS
 WMC WSB WWSB KVOO KOA KPRC
 WOAI KGO KOMO KHQ KGW WSM
 KSL CKGW KECA WTMJ WHO

9:00-9:30 **U.S. Marine Band Concert**
 WABC WEAN WNAC WLBZ WCAO WMAL
 WHP WJAS WLBW WADC WKRC WAU
 WOWO WFBM WMAQ KOIL KMBC WISN
 WCCO WIBW KFH WBCM WSPD WMT
 WNNC WTAR WDBJ WGST WBRC WDOO
 WLAC KRLL KLRA KFJF KLZ KDYL
 KFRC KVI KFPY WPG WNAX WDAY
 WORC WBT

9:15-9:30 **O Cedar Time**
 WJZ WBZ WBZA WLS KWK WREN
 KDKA WHAM WJR

9:30-10:00 **La Palina Smoker**
 WABC WEAN WNAC WCAU WCAO WMAL
 WJAS WLBW WFLB WMAK WADC WHK
 WKRC WGHF WOWO WMAQ KMOX KOIL
 KMBC WISN WCCO WSPD WREC

9:30-10:30 **Camel Wishing Hour**
 WJZ WBZ WBZA WHAM KDKA WREN
 WLW KYW WJSJ WPTF WRVA WJR
 KWK

9:30-10:30 **Palmolive Hour**
 WEA WEEI W TIC WJAR WTAG WCSH
 WLIT WRC WGY WGR WCAE WWJ
 WSAI WGN KSD WOC WOV WWSB
 KSTP WTMJ WHAS WSM WMC WHO
 WSB WJAX KVOO WOAI KOA KSL
 KGO KGW KOMO KHQ WFAA KECA
 KPRC

10:00-11:00 **Philco Symphony Concert**
 WABC WEAN WNAC WCAU WCAO WMAL
 WJAS WLBW WFLB WMAK WADC WHK
 WKRC WGHF WOWO WMAQ KMOX KOIL
 KMBC WSPD

10:30-11:00 **Coca Cola Program**
 WEA WEEI W TIC WJAR WTAG WCSH
 WLIT WRC WGR WCAE WWJ WSAI

WOC KYW KSD WEBC KSTP WRVA
 WJAX WIOD WSM WWSB WKY KTHS
 KPRC WOAI KOA KSL KGO KECA
 KGW KHQ KOMO WJDX WGY CKGW
 WDAF WHAS WPTF WTMJ KVOO WTAM
 WHO WOW KFSD WMC WSB

11:00-11:15 Vincent Lopez Orchestra
 WEF WFLA WSUN WRC WCAE WWJ
 WSAI KSD WOC WHO WOW KSTP
 WJDX WKY

11:30-12:00 California Melodies
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WADC WFBM KOIL KMBC WISN
 WCCO WIBW WBCM WSPD WMT WWNC
 WTAG WDBJ WGST WBRC WDDO WREC
 WLAC KLRA KFJF KLZ KDYL KHJ
 KFRC KFPY KOL WNAX WDAY WORC
 WBT

12:00-12:30 Bert Lown and His Orchestra
 WABC WEAN WNAC WLBZ WCAO WMAL
 WADC WHK WKRC WKBN WFBM KOIL
 KMBC WISN WCCO WIBW KFH WBCM
 WSPD WMT WWNC WTAG WDBJ WBRD
 WDDO WREC KRLD KLRA KFJF KFPY
 KOL WNAX WDAY WBT

Thursday

10:15-10:30 O Cedar Time
 WJZ WBZ WBZA WHAM KDKA WJR
 WLW WREN WRVA WPTF WJAX WIOD
 WSM WMC WSB WJDX WSMB KVOO
 WKY WTMJ KFJK KWK KSTP WERC
 WFLA WSUN KPRC KFAB

11:00-11:15 Bon Ami Radio Matinee
 WEF WJAR WTAG WCHS WLIT WRC
 WGY WGR WCAE WTAM WWJ WSAI
 WOC KYW KSD WDAF WEBC WRVA
 WJAX WIOD WHAS WSM WMC WSB
 WAPI WSMB KVOO KTHS KPRC WOAI
 CKGW WJDX WTIC WKY WHO KSTP

11:30-11:45 Ipana Troubadours
 WJZ WJR WBZ WBZA WHAM KWK
 WREN KDKA KYW WCKY

4:00-4:30 The Collegians
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WMAK WADC AWIU WKBN
 WOWO KOIL KMBC WISN WCCO WIBW
 WBCM WSPD WMT WWNC WTAG WDBJ
 WGST WBRC WDDO WREC WLAC KRLD
 KLRA KFJF KLZ KDYL KHJ KVI
 KFPY WPG KOL WDAY WORC WBT

5:00-5:30 Radio-Keith-Orpheum Program
 WEF WEEI WTIC WJAR WCHS WLIT
 WRC WFJC WSAI KSD WOC WOW
 WTAG WGY WTAM WWJ WDAF WGR
 KYW WCAE WHO

5:30-5:45 The Toddy Party
 WEF WEEI WTIC WJAR WTAG WCHS
 WLIT WRC WGY WGR WCAE WSAI
 KYW CKGW WWJ

7:00-7:30 Mid-Week Federation Hymn Sing
 WEF WMC WIBO WWJ WGR WJAR
 WHAS KSD KOA

7:30-8:00 Ward's Top Club
 WABC WEAN WNAC WCAU WCAO WJAS
 WFBM WHK WGHM WKBN KMOX

8:00-8:15 Symphonic Interlude
 WABC WLBZ WFAN WHP WJAS WLBW
 WFBM WKBW WADC WKBN WOWO WFBM
 WBBM KOIL WISN WCCO WIBW KFH
 WSPD WMT WWNC WTAG WDBJ WBRD
 WDDO KLRA KLZ KFRC KVI KFPY
 WPG KOL WDAY WORC WBT

8:00-9:00 Fleischmann Hour - Rudy Vallee
 WEF WEEI WTAG WJAR WCHS WFI
 WRC WGY WGR WCAE WFJC WHO
 WOW WDAF WWJ WTMJ WJAX WIOD
 WJDX WHAS WMC WSB WWSB WKY
 WSAI KOA WEBC WRVA KSL KOMO
 WOAI WSM KGO KHQ WBAK KTHS
 WAPI KECA KSD CKGW WTAM KGW
 KSTP WGN WPTF KPRC WOC KTR

8:00-9:00 B. A. Rolfe and Lucky Strike Orchestra
 WJZ WBAL WHAM KDKA WJR KYW
 KWK WREN

8:15-8:30 The Melody Masketers
 WABC WEAN WNAC WLBZ WCAO WMAL
 WHP WJAS WLBW WKBW WADC WKRC
 WAU WOWO WFBM WBBM KOIL WISN
 WCCO WIBW KFH WSPD WMT WWNC
 WTAG WDBJ WDDO KLRA KFJF KLZ
 KHJ KPRC KVI KFPY WPG KOL
 WDAY WORC WBT

8:45-9:30 Mardi Gras
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WHEC WKBW
 WADC WHK WKRC WAU WKBW WOWO
 WFBM WBBM KMOX KOIL KMBC WISN
 WCCO WIBW KFH WSPD WMT WWNC
 WTAG WDBJ WGST WBRD WDDO WREC
 WLAC KLRA KFJF KLZ KVI KFPY
 WPG WNAX WDAY WORC WBT

9:00-9:30 Arco Birthday Party
 WEF WEEI WJAR WTAG WCHS CKGW
 WFI WRC WGY WGR WSB WSM
 WOD WJAX WOAI KOA KSL WKY
 WBAK WRVA WWJ WSAI KSD WDAF
 KYW WCAE WEBC WSMB WJDX WOC
 WPTF WFJC WTMJ WMC KGO KECA
 KOMO KHQ KGW WHO WOW WAPI
 KSTP

9:00-9:30 Knox-Dunlap Orchestra
 WJZ WBZ WBZA WBAL WHAM KDKA
 WIBO KWK WREN WCKY WJR

9:30-10:00 Jack Frost's Melody Moments
 WEF WJAR WWJ WTAG WCHS WFI
 WRC WGY WGR WCAE WSAI WTAM
 WIBO

9:30-10:00 Detective Story Magazine
 WABC WEAN WNAC WCAU WCAO WMAL
 WJAS WLBW WFBM WKBW WADC WHK
 WKRC WGHM WOWO WBBM KMOX KOIL
 KMBC WSPD

9:30-10:00 Maxwell House Ensemble
 WJZ WBZ WBZA WBAL WLV KSTP
 WKY WTMJ WEBC WHAS WSM KPRC
 KOA WJAX WRVA WSB WBAK KYW
 KWK WREN WIOD WJR WSMB WOAI
 KGO KECA KGW KOMO KHQ WAPI
 WPTF CKGW WMC WHAM KDKA KSL

10:00-11:00 Victor Herbert Opera Series
 WJZ WBAL WHAM WCKY WREN CKGW
 KDKA

10:00-10:30 Romany Patteran
 WABC WEAN WNAC WLBZ WCAU WCAO
 WMAL WHP WJAS WLBW WHEC WKBW
 WADC WHK WKRC WOWO WFBM WBBM
 KMOX KMBC WISN WCCO WIBW KFH
 WSPD WMT WTAG WDBJ WGST WBRD
 WDDO WLAC KLRA KFJF KLZ KFRC
 KVI KFPY KOL WNAX WDAY WORC
 WBT

10:00-11:00 RCA Hour
 WEF WEEI WJAR WTAG WCHS WFI
 WRC WGY WGR WCAE WFJC WWJ
 WSAI KSD WOW WKY WOAI KOA
 KSL WTMJ WIOD WHAS WSM WMC
 WSMB KYW WDAF WJAX KTHS WTAM
 KSTP KGO KGW KFI KOMO KHQ
 WJDX WEBC WRVA WAPI WFLA WSUN
 WBAK WSB

11:00-11:15 Hotel Paramount Orchestra
 WEF WFI WRC WGR WCAE WWJ
 WSAI KSD WOC WHO WMC WSMB
 WJDX

11:00-11:30 Rhythm Ramblers
 WABC WEAN WNAC WLBZ WCAU WMAL
 WHP WLBW WHEC WKRC WOWO KMBC
 WISN WCCO WIBW KFH WSPD WMT
 WWNC WTAG WDBJ WGST WBRD WDDO
 WREC WLAC KLRA KFJF KLZ KDYL
 KPRC KFPY WDAY WNAX WORC

11:30-12:00 Don Bigelow and His Orchestra
WEAF WRC WGR WWJ KSD WJDX
WOC WHO WOW CKGW WFI KSTP

11:30-12:00 Guy Lombardo and Royal Canadians
WABC WEAN WNAC WLBZ WCAU WMAL
WHP WLWB WHEC WADC WKBN KOIL
KMBC WISN WCCO WIBW KFJF WMT
WWNC WTAR WDBJ WGST WBRW WDOD
WREC WLAC KLRA KFJF KLZ KDYL
WBT KFPY KOL WNAX WDAY WORC

12:00-12:30 Paul Tremaine and His Orchestra
WABC WEAN WNAC WLBZ WCAU WMAL
WLWB WADC WKRC WFBM KOIL KMBC
WISN WCCO WIBW KFJF WSPD WMT
WWNC WTAR WDBJ WGST WBRW WDOD
WREC KLRA KFJF KLZ KDYL WBT
KVI KFPY WDAY WNAX

Friday

11:00-11:30 U.S. Army Band
WJZ WBAL WHAM KDKA WJR WIBO
WBZ WBZA

4:00-4:30 U.S. Army Band
WEAF KSD WRC WTAM WOC WHO
WDAF WEEI WCAE

4:30-5:00 Dancing Melodies
WEAF WFJC KSD WDAF WRC WCAE
WOC WHO

7:45-8:00 Bernhard Leitow and Orchestra
WEAN WLBZ WHP WJAS WLWB WFBL
WHEC WKBW WAIU KMBC WISN WBCM
WWNC WDBJ WBRW WDOD KLRA KFJF
KLZ KFRC KVI KFPY KOL WORC

8:00-8:30 Nit Wit Hour
WABC WLBZ WHP WJAS WLWB WHEC
WKBW WADC WHK WKRC WAIU WOWO
WFBM KMOX WISN WCCO WIBW WBCM
WSPD WMT WWNC WTAR WDBJ WDOD
WREC KLRA KLZ KHJ KFRC KVI
KFPY WPG KOL WDAY WORC WBT

8:00-9:00 Cities Service Concert Orchestra
WEAF WEEI WTIC WLIT WRC WGR
WCAE WTAM WJAR WCSH KYW KSD
WOW WDAF KSTP WTMJ WKY WWJ
WOC KOA WFAA WSAI WIBC WOI
KOMO KGO KGW KHQ KPRC KSL
WTAG CKGW KECA WHO

8:05-8:30 Pickard Family
WJZ KWK WREN WSM WLS WHAM
WJDX WSMB KFAB

8:30-9:00 U.S. Army Band Concert
WABC WEAN WNAC WLBZ WCAU WMAL
WHP WJAS WLWB WAIU WOWO WFBM
WMAQ KMBC WISN WBCM WSPD WMT
WWNC WTAR WDBJ WBRW WDOD KRLD
KLRA KFJF KLZ KDYL KFRC KVI
KFPY KOL WNAX WDAY WORC WBT

8:45-9:00 Natural Bridge Program
WJZ WPTF WHAM KDKA KWK WRVA
WJAX WIOD KFAB WIBO WREN WLW
WBZ WBZA

9:00-9:30 Cliequot Club Eskimos
WEAF WEEI WTIC WJAR WTAG WCSH
WLIT WRC WGY WOW WCAE WSAI
WIBO KSD WWJ WGR WDAF WOC
WHO

9:00-9:30 Interwoven Program
WJZ WHAM KDKA WMC WKY WREN
KPRC KFSO WOI KOA WHAS WSM
WSB WJAX WRVA WAPI KSL KGO
KOMO KHQ KWK WBZ WBLZ KGW
WSMB WIOD WFAA WJR WTMJ KSTP
KYW WIBC KECA WCKY CKGW

9:00-10:00 True Story Hour
WABC WEAN WNAC WCAU WCAO WMAL
WJAS WLWB WFBM WMAK WADC WHK
WKRK WHP WOWO WMAQ KMOX KOIL
KMBC WSPD

9:30-10:00 Armour Program
WJZ WBZ WBA WJR KYW WREN
KSTP WIBC WRVA WMC WSB WOI
KOA KSL WKY WHAS KGO KGW
KOMO KHQ WJAX WJDX WIOD KDKA
WTMJ WAPI WHAM KWK WPTF WFAA
KECA WSM WLW WSMB

10:00-10:30 Armstrong Quakers
WJZ WBZ WBA WBA KDKA KYW KWK
WREN KPRC WHAM WJR KSTP WTMJ
WIBC WHAS WSM WSB WOI WKY
WSMB KOA KSL KGW KOMO KHQ
KGO WMC WLW KFI WFAA

10:00-10:30 Columbia Male Chorus
WABC WEAN WNAC WLHB WCAU WCAO
WJAS WLWB WADC WHK WKRC WMAQ
KMOX KOIL KMBC WBS WCCO WIBW
KFJF WSPD WMT WWNC WTAR WDBJ
WBRW WDOD WREC KRLD KLRA KFJF
KLZ KDYL WBT KFRC KVI KFPY
WPG KOL WNAX WDAY WORC

10:00-11:00 Raleigh Revue
WEAF WEEI WJAR WTAG WMC WSB
WHO WFJC WCSH WLIT WRC WOW
WGY WGR WCAE WWJ WSAI WIBO
KSD WOC WSM KOMO WDAF KOA
KECA KGW KHQ KGO KSL WPTF
WJDX WSMB WAPI WHAS

10:30-11:00 Under the Jolly Roger
WJZ WHAM KDKA KWK WJAX WIOD
WBZ WBA WLW WREN KSTP

10:30-11:00 Gold Medal Fast Freight
WABC WEAN WNAC WCAU WCAO WMAL
WJAS WLWB WFBM WMAK WADC WHK
WKRC WGHP WAIU WOWO WBCM KMOX
KOIL KSCJ KMBC WISN WCCO KFH
WSPD WTAR WDBJ WREC WLAC KLRA
KFJF KLZ KDYL KHJ KFRC KOIN
KFPY WLAP KOL

11:00-11:15 Elgin Program
WJZ WBZ WBA WHAM KDKA KWK
WREN KFAB WIBC WRVA WJAX WIOD
WSM WSB WJDX WSMB KVOO WKY
KTHS KPRC WOI KOA KSL KGO
KECA KGW KOMO KHQ WIBO WLW
WBAP WMC KFSO KSTP

11:00-11:15 Vincent Lopez Orchestra
WEAF CKGW WOW WJO WDAF WRC
KSD WTIC WOC WHO KSTP KOA

11:00-11:30 Bert Lown and His Orchestra
WABC WEAN WNAC WLBZ WCAO WMAL
WLWB WKRC KOIL KMBC WISN WCCO
WIBW WBCM WSPD WMT WWNC WTAR
WDBJ WGST WDOD WREC WLAC KLRA
KFJF KLZ KFRC KFPY WPG WBT
WNAX WDAY WORC

11:30-12:00 Will Osborne and His Orchestra
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHEC WADC KOIL KMBC WISN
WCCO WIBW WBCM WMT WWNC WTAR
WDBJ WGST WBRW WDOD WREC WLAC
KLRA KFJF KLZ KDYL KFPY WBT
KOL WNAX WDAY WORC

12:00-12:30 Cotton Club Band
WABC WEAN WNAC WLBZ WCAU WMAL
WADC WHK WKRC KOIL KMBC WISN
WCCO WIBW KFJF WBCM WSPD WMT
WWNC WTAR WDBJ WGST WBRW WDOD
WREC KLRA KFJF KLZ KDYL KFPY
WBT WNAX WDAY

10:30-11:30 U.S. Army Band Concert
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHP WJAS WHEC WKBW WADC
WHK WKRC WAIU KMOX KOIL KMBC
WISN WIBW KFJF WBCM WSPD WWNC
WDBJ WGST WBRW WDOD WREC WLAC
KRLD KLRA KFJF KDYL WPG WORC
WBT

Saturday

10:30-11:30 U.S. Army Band Concert
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHP WJAS WHEC WKBW WADC
WHK WKRC WAIU KMOX KOIL KMBC
WISN WIBW KFJF WBCM WSPD WWNC
WDBJ WGST WBRW WDOD WREC WLAC
KRLD KLRA KFJF KDYL WPG WORC
WBT

2:30-3:00 Dominion Male Quartet
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHP WJAS WHEC WMAK WADC
WIK WAIU WOWO WIBW WBCM WSPD
WUNC WTAR WDBJ WBRC WDDO WLAC
KLRA KFJF KFPY WPG WORC WBT

4:00-5:00 Merry Makers — Dance Band
WJZ WLW KDKA WBAP KFAB KOA
WBZ WBZA KYW WHAM WTMJ

4:30-5:00 The Gauchos
WABC WEAN WNAC WCAU WCAO WMAL
WHP WMAK WADC WHK WKRC WAIU
WKBN WFBM KMOX KOIL KMBC WISN
WCCO WIBW WBCM WSPD WMT WUNC
WTAR WDBJ WGST WBRC WDDO WREC
WLAC KRLD KLRA KFJF KLZ KDYL
KHJ KVI KFPY WPG KOL WDAY
WBT

4:30-5:00 Mellow Melodies
WEAF WVIC WCAE WTAM WDAF WRC
KSTP KTHS WFAA WTMJ WTAG WBAP
WSB

5:30-6:00 Blue Aces
WJZ WBZ WHAM WHAS KWK
WSB WFAA

6:00-6:15 The Jamesses
WEAF WEEI WJAR WFI WGY WRC
WWJ KSD CKGW KOA KGO WCAE
WMC KTAR WHAS WFAA WOV

6:00-6:15 Tom, Dick and Harry
WABC WFAN WMAL WHP WJAS WLBW
WHEC WKBW WAIU WKBN WBBM KMOX
KMBC WISN WIBW KFH WBCM WMT
WUNC WTAR WGST WBRC WDDO WREC
KRLD KLRA KFJF KLZ KDYL KHJ
KFRC KVI KFPY KOL WDAY WBT

6:00-6:40 Hotel Governor Clinton Orchestra
WJZ WBZ WBZA WHAM KWK KFAB

6:15-6:45 Ted Husing's Sportslants
WABC WMAL WHP WJAS WLBW WHEC
WKBW WAIU WOWO KMOX KMBC WISN
WIBW KFH WBCM WMT WUNC WGST
WBRC WDDO WREC KRLD KLRA KFJF
KLZ KHJ KVI KFPY KOL WDAY
WBT

7:15-8:00 Jack Denny and His Orchestra
WABC WEAN WNAC WLBZ WCAU WHP
WJAS WLBW WFBL WKBW WADC WAIU
WKBN WOWO WFBM KOIL WISN WCCO
WIBW KFH WBCM WMT WUNC WDBJ
WBRC WDDO WREC KRLD KLRA KFJF
KLZ KDYL KHJ KFRC KVI KFPY
KOL WDAY WORC WBT

7:30-8:00 The Fuller Man
WJZ WBZ WBZA WHAM WLW CKGW
WREN KFAB KWK KOA KSL KGO
KECA KGW KHQ WBCB KOMO KYW
KSTP KVOO KPRC WTMJ KDKA

7:30-8:00 Phil Spitalny's Music
WEAF WJAR WTAG WGY WTAM WWJ
WRVA WGR WRC WCSH WHO WOC
WOW

8:00-8:15 Dixies Circus
WJZ WLW KDKA KYW WBAL WHAM
WJR WBZ WBZA WBAP KSTP KVOO
WOA KPRC WKY

8:00-8:30 "Pop" Concert
WEAF WEEI WJAR WTAG WCSH WFI
WRC WGY WGR WCAE WSMB WSAI
WTMJ WJDX KOA KGO KGW KSD
WOC WHO WOW WDAF WWJ

8:15-8:30 Wonder Dog
WJZ WBAL WHAM KDKA WLW KYW
WREN KFAB WJR KWK

8:30-9:00 Dixie Echoes
WABC WNAC WLBZ WFAN WCAO WMAL
WHP WJAS WLBW WADC WAIU WOWO
WFBM KMBC WISN KFH WBCM WSPD
WMT WUNC WTAR WDBJ WBRC WDDO
KLRA KFJF KLZ KHJ WBT KFRC
KVI KFPY KOL WNAX WDAY WORC

8:30-9:30 The Mendelssohn Choir
WEAF WEEI WJAR WCSH WFI WRC
WGR WPTF CKGW

8:30-9:30 Goldman Band Concert
WJZ KGO KGW CKGW WFLA WSUN
KOMO KOA WBAL WJAX WBAP WHAM
KDKA KWK WREN KFAB WSMB KSTP
WPTF WSM WSB WJDX

9:00-10:00 Hank Simmons' Show Boat
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHP WJAS WLBW WADC WHK
WKRC WKBN WOWO WFBM WMAQ KMOX
KOIL KMBC WISN WCCO WIBW KFH
WBCM WSPD WMT WUNC WTAR WDBJ
WGST WBRC WDDO WREC WLAC KLRA
KFJF KLZ KDYL KHJ KFRC KVI
KFPY WPG WNAX WDAY WORC WBT

9:30-10:00 General Electric Band
WEAF WEEI WJAR WTAG WCSH WFI
WRC WGY WCAE WTAM WWJ KSD
WOW WDAF WTMJ WBCB WJAX WHAS
WSB KPRC WOAI WRVA WSAI KSTP
WAPI WKY KOA KGW KOMO KHQ
KSL KGO WSMB WBO WMC WBAP
KECA KFSD KTAR WGR WOC WHO

9:30-10:00 Dutch Masters Minstrels
WJZ WBAL WHAM KDKA WLW WJR
KWK KYW WREN WBZ WBZA

10:00-10:15 Cub Reporter
WJZ KDKA WCKY WREN CKGW WBZ

10:00-11:00 Paramount Publix Hour
WABC WEAN WNAC WLBZ WCAU WCAO
WMAL WHP WJAS WLBW KTRH WFBL
WHEC WKBW CFRB CKAK WADC WHK
WKRC WGHV WDAE WKBN WOWO WFBM
WBBM KMOX KOIL KSCJ KFH WBCM
WCCO WIBW WNAX KFH WBCM WSPD
WMT WUNC WTAR WDBJ WGST WBRC
WPIW WDAY WDDO WREC WLAC WDSU
KRLD KLRA WJR KVF KTSA KLZ
KDYL KHJ KFRC KOIN KFPY WPG
WCAH KNX WDBO WTOC WQAM KOL

10:00-11:00 B. A. Rolfe's Lucky Strike Orchestra
WEAF WEEI WJAR WTAG WFI WRC
WGY WGR WCAE WWJ WGN KSD
WHO WOW WDAF WIOD KSTP WTMJ
WSMB WJAX WHAS WSB KPRC WMC
WOAI WKY WAPI WSAI WFJC KOA
KGO KSL KGW KOMO KHQ WBCB
WJDX WPTF WRVA WFSH WFLA WSUN
WOC KFI KTAR KCSH KFSD WBAP

10:15-10:30 Broadway Lights
WJZ KDKA KWK WREN CKGW

11:00-11:15 Troubadour of the Moon
WEAF WFI WRC WCAE WOC WHO
WDAF WIOD KSTP WAPI WSMB

11:00-11:30 Will Osborne and His Orchestra
WABC WEAN WNAC WLBZ WFAN WCAU
WCAO WMAL WHP WLBW WHEC WADC
WKRC WKBN WFBM KMOX KOIL KMBC
WISN WCCO WIBW KFH WBCM WSPD
WMT WUNC WTAR WDBJ WGST WBRC
WDDO WRFK WLAC KLRA KFJF KWL
KDYL KHJ KFRC KFPY KOL WNAX
WDAY WORC WBT

11:30-12:00 Guy Lombardo and Royal Canadians
WABC WEAN WNAC WLBZ WCAU WCAO
WALX WFLA WLBW WHEC WADC WKBN
WMAL WHP WJAS WLBW WADC WAIU
WFBM KMOX KOIL KMBC WISN WCCO
WDBJ KFH WBCM WMT WUNC WTAR
WDBJ WGST WBRC WDDO WREC WLAC
KLRA KFJF KLZ KDYL KFRC KFPY
WNAX KOL WDAY WORC WBT

12:00-12:30 Bert Lown and His Orchestra
WABC WEAN WNAC WCAU WMAL WHP
WHK WKRC WFBM KMOX KOIL KMBC
WISN WCCO WIBW WBCM WSPD WMT
WUNC WTAR WDBJ WGST WBRC WDDO
WREC KRLD KLRA KFJF KLZ KDYL
WBT KVI KFPY WNAX KOL WDAY

12:00-12:30 Barney Rapp Orchestra
WEAF WRC WFJC WTAM WCFL WOW
KOA WWJ KSD WOC WHO WDAF
KSTP WFLA WSUN WSB WJDX

INDEX BY FREQUENCIES AND DIAL NUMBERS

NOTICE OF COPYRIGHT

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KEY

Frequency in kilocycles. Wave lengths in meters. Second column symbols: * Verifies receptions 2c; † sends station stamp 10c; ‡ Verifies 2c; no stamp; † Does not verify; § Did not reply. Third column shows night power in watts. Fourth column symbols: D, daytime only; S, Sunday only; Stations dividing time have same small figures; X means station has been granted permit to increase power; + means station has greater power during day; CP indicates station has construction permit only; Some Cuban and Mexican stations have odd frequencies; Correct kilocycles shown in small figures; N means NBC chain; C means Columbia chain; Z has been granted permit to change frequency; Y given permit to move to another city.

540 kilocycles 555.6 meters

CKX	†	500	---	Brandon, Manitoba
XFA	--	50	---	Mexico City

Manitoba Telephone System Sria. de Agricultura y Fomento			

550 kilocycles 545.1 meters

KFDY	†	500	1+	Brookings, S. D.
KFYR	*	500	2+	St. Louis, Mo.
KFYR	§	1000	1	Bismarck, N. D.
KOAC	--	1000	---	Corvallis, Ore.
KSD	--	500	2N	St. Louis, Mo.
WGR	*	1000	N	Buffalo, N. Y.
-WKRC	--	1000	C	Cincinnati, Ohio
XEY	--	105	547	Merida, Yucatan

96			
S. D. State College Concordia Theological Seminary Meyer Broadcasting Co. State Agricultural College Pulitzer Publishing Co. Buffalo Broadcasting Co., Lessees WKRC Incorporated Partido Socialista del Sureste			

560 kilocycles 535.4 meters

KFDM	--	500	X+	Beaumont, Texas
KLZ	*	1000	C	Denver, Colo.
KTAB	--	1000	---	San Francisco, Cal.
WFI	--	500	1N+	Philadelphia, Pa.
WIBO	--	1000	3+N	Chicago, Ill.
WISJ	--	500	3Y	Beloit, Wis.
WLIT	--	500	1N	Philadelphia, Pa.
-WNOX	--	1000	X+	Knoxville, Tenn.
WPCC	*	500	3S	Chicago, Ill.
-WQAM	*	1000	C	Miami, Fla.

92			
Magnolia Petroleum Co. Reynolds Radio Co., Inc. Associated Broadcasters Strawbridge & Clothier Nelson Bros. Bond & Mortgage Co. Wisconsin State Journal Co. Lit Brothers Sterchi Bros. North Shore Congregational Church Miami Broadcasting Co.			

570 kilocycles 526.0 meters

KGKO	*	250	++	Wichita Falls, Texas
KMTR	--	500	---	Los Angeles, Cal.
KXA	†	500	---	Seattle, Wash.
-WEAO	*	750	1	Columbus, Ohio
-WKBN	--	500	1C	Youngstown, Ohio
WMAC	--	250	2	Cazenovia, N. Y.
WMCA	--	500	3	New York City
-WNAX	--	1000	C	Yankton, S. D.
WNYC	--	500	3	New York City
WSYR	--	250	2	Syracuse, N. Y.
-WWNC	*	1000	C	Asheville, N. C.

88			
Wichita Falls Broadcasting Co. KMTR Radio Corp. American Radio Tel. Co. Ohio State University W. P. Williamson, Jr. Clive B. Meredith Knickerbocker Broadcasting Co., Inc. Gurney Seed & Nursery Co. Dept. of Plants and Structures Clive B. Meredith Citizens Broadcasting Co., Inc.			

580 kilocycles 516.9 meters

CFCL	--	500	3S	Toronto, Ont.
CHMA	--	250	4	Edmonton, Alta.
-CKCL	--	500	3	Toronto, Ont.
-CKNC	*	500	3	Toronto, Ont.
CKUA	--	500	4	Edmonton, Alta.
KGFS	--	200	D	Pierre, S. D.
KSAC	--	500	2+	Manhattan, Kans.
-WIBW	*	500	2+C	Topeka, Kansas
-WOBW	--	250	1	Charleston, W. Va.
-WSAZ	--	250	1	Huntington, W. Va.
WTAG	*	250	N	Worcester, Mass.

84			
Dominion Battery Co. Christian and Missionary Alliance The Dominion Battery Co. Canadian National Carbon Co., Ltd. University of Alberta Dana McNeil State Agricultural College Topeka Broadcasting Assn., Inc. WOBW, Inc. WSAZ, Inc. Telegram Publishing Co.			

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

KHQ	1000	+N
WCAJ	500	1
WEEI	1000	N
WEMC	1000	D
WOW	1000	1N
XFI	1000	591
	500	CP

Spokane, Wash.
Lincoln, Nebr.
Boston, Mass.
Berrien Springs, Mich.
Omaha, Nebr.
Mexico City
Lynchburg, Va.

813

Louis Wasmer, Inc.
Nebraska Wesleyan University
Edison Elec. Illuminating Co.
George W. Trendle
Woodmen of the World
Sria de Industria, Comercio y Trabajo
Abe Cohen

KCYS.
670
MTRS.
447.5
DIAL

600 kilocycles 499.7 meters

CFCH	250	3
CJRM	500	4
CJRW	500	4
CMW	1000	595
CNRO	500	3
KFSO	500	+N
WCAC	250	2+
WCAO	250	C
WGBS	250	2+
WMT	500	C
WOAN	500	1
WREC	500	1+C

Iroquois Falls, Ont.
Moose Jaw, Sask.
Fleming, Sask.
Havana, Cuba
Ottawa, Ont.
San Diego, Cal.
Storrs, Conn.
Baltimore, Md.
New York City
Waterloo, Iowa
Lawrenceburg, Tenn.
Memphis, Tenn.

785

Abitibi Power & Paper Co.
Jas. Richardson & Sons, Ltd.
Jas. Richardson & Sons, Ltd.
Columbus Commercial & Radio Co.
Canadian National Railways
Airfan Radio Corp.
Conn. Agricultural College
Monumental Radio, Inc.
General Broadcasting System, Inc.
Waterloo Broadcasting Co.
WREC, Inc.
WREC, Inc.

610 kilocycles 491.5 meters

KFRC	1000	C
WDAF	1000	N
WFAN	500	2C
WIP	500	2
WJAY	500	D

San Francisco, Cal.
Kansas City, Mo.
Philadelphia, Pa.
Philadelphia, Pa.
Cleveland, Ohio

75

Don Lee, Inc.
Kansas City Star Co.
Keystone Broadcasting Co., Inc.
Gimbel Bros. Co.
Cleveland Radio Broadcasting Corp.

620 kilocycles 483.6 meters

KGW	1000	+N
KTAR	500	+N
WFLA	1000	+N
WLBZ	500	C
WSUN	1000	1+N
WTMJ	1000	+N

Portland, Ore.
Phoenix, Arizona
Clearwater, Fla.
Bangor, Maine
St. Petersburg, Fla.
Milwaukee, Wis.

725

Oregonian Publishing Co.
KAR Broadcasting Co.
Chamber of Commerce
Maine Broadcasting Co., Inc.
Chamber of Commerce
Milwaukee Journal

630 kilocycles 475.9 meters

CFCT	500	---
CJGX	500	---
CNRA	500	---
KFRU	500	1
WGBF	500	1
WMAL	250	1+C
WOS	500	1+
XFC	350	631

Victoria, B. C.
Yorkton, Sask.
Moncton, N. B.
Columbia, Mo.
Evansville, Ind.
Washington, D. C.
Jefferson City, Mo.
Jalapa, Ver.

50

Victoria Broadcasting Association
Winnipeg Grain Exchange
Canadian National Railways
Stephens College
Evansville on the Air, Inc.
M. A. Leese
State Marketing Bureau
Gobierno del Estado de Veracruz

640 kilocycles 468.5 meters

KFI	5000	NX
WAIU	500	C
WOI	5000	D
XFG	2000	638

Los Angeles, Cal.
Columbus, Ohio
Ames, Iowa
Mexico City

67

Earle C. Anthony, Inc.
American Insurance Union
State College of Agriculture
Secretaria de Guerra y Marina

650 kilocycles 461.3 meters

KPCB	100	---
WSM	5000	N

Seattle, Wash.
Nashville, Tenn.

65

Wescoast Broadcasting Co.
National Life & Accident Ins. Co.

660 kilocycles 454.3 meters

WAAW	500	D
WEAF	50000	N

Omaha, Neb.
New York City

63

Omaha Grain Exchange
National Broadcasting Co., Inc.

670 kilocycles 447.5 meters

WMAQ	5000	C
XEB	1000	666

Chicago, Ill.
Mexico City

61

WMAQ, Inc.
E. Buen Tono, S. A.

36

INDEX BY FREQUENCIES AND DIAL NUMBERS

680 kilocycles 440.9 meters

KFEQ	*	2500	D	St. Joseph, Mo.
KPO	†	5000	N	San Francisco, Cal.
-WPTF	*	1000	N	Raleigh, N. C.
-----		250	CP	Gueda Springs, Kansas

59		
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Scroggin & Co., Bank
Hale Bros. & The Chronicle
Durham Life Insurance Co.
R. E. Campbell and F. L. Stallard

690 kilocycles 434.5 meters

CFAC	--	500	1	Calgary, Alta.
CFCN	--	500	1	Calgary, Alta.
CHCA	--	500	1	Calgary, Alta.
CJ CJ	--	500	1	Calgary, Alta.
-CJSC	--	5000	4	Toronto, Ont.
CKGW	--	5000	2N	Toronto, Ont.
CNRC	--	500	1	Calgary, Alta.
-CPRY	--	5000	2N	Toronto, Ont.
NAA	--	1000	---	Arlington, Va.
VAS	--	500	---	Louisburg, N. S.

57		
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The Calgary Herald
Western Broadcasting Co.
The Western Farmer
Albertan Publishing Co., Ltd.
The Evening Telegram
Gooderham & Worts, Ltd.
Canadian National Railways
Canadian Pacific Railways
U. S. Navy
Canadian Marconi Co.

700 kilocycles 428.3 meters

WLW	*	50000	N	Cincinnati, Ohio
XEZ	--	500	697	Mexico City, Mex.

55		
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Crosley Radio Corp.
Joaquin Zamacona

710 kilocycles 422.3 meters

KMPC	--	500	---	Los Angeles, Cal.
-WOR	--	5000	---	Newark, N. J.

535		
-----	--	--

R. S. MacMillan
Bamberger Broadcasting Service, Inc.

720 kilocycles 416.4 meters

WGN	--	25000	N	Chicago, Ill.
WLIB	--	25000	N	Chicago, Ill.
8WMC	--	500	722	St. Johns, N. F.

52		
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Chicago Tribune
Chicago Tribune
Wesley United Church

730 kilocycles 410.7 meters

CHLS	--	50	1	Vancouver, B. C.
CHYC	--	5000	2	Montreal, Que.
-CKAC	--	5000	2C	Montreal, Que.
CKCD	--	50	1	Vancouver, B. C.
CKFC	--	50	1	Vancouver, B. C.
CKMO	--	50	1	Vancouver, B. C.
CKWX	†	100	1	Vancouver, B. C.
CMK	--	3000	---	Havana, Cuba
CNRM	--	5000	2	Montreal, Que.
XEN	†	1000	731	Mexico City

50		
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W. G. Hassell
Northern Electric Co., Ltd.
La Presse Publishing Co., Ltd.
Vancouver Daily Province
United Church of Canada
Sprout-Shaw Radio Co.
A. Holstead & Wm. Hanlon
Cuban Broadcasting Co., Hotel Plaza
Canadian National Railways
Compania Civil de Inversiones Urbanas

740 kilocycles 405.2 meters

KMMJ	--	1000	---	Clay Center, Neb.
-WSB	--	5000	N	Atlanta, Ga.

483		
-----	--	--

The M. M. Johnson Co.
Atlanta Journal Co.

750 kilocycles 399.8 meters

TIX	--	50	---	San Jose, Costa Rica
-WJR	†	5000	N	Detroit, Mich.

47		
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WJR, The Goodwill Station, Inc.

760 kilocycles 394.5 meters

KVI	--	1000	C	Tacoma, Wash.
WEW	--	1000	D	St. Louis, Mo.
-WJZ	†	30000	N	New York City

46		
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Puget Sound Broadcasting Co., Inc.
St. Louis University
Radio Corp. of America, Inc.

770 kilocycles 389.4 meters

CMJ	--	500	775	Havana, Cuba
-KFAB	*	5000	1N	Lincoln, Nebr.
-WBBM	*	25000	1C	Chicago, Ill.
-WJBT	--	25000	1S	Chicago, Ill.
XED	--	2000	769	Reynosa, Tams.

44		
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Instituto Provincial
KFAB Broadcasting Co.
The Atlas Co., Inc.
The Atlas Co., Inc.
Alfonso Dominguez

780 kilocycles 384.4 meters

CKY	--	5000	3	Winnipeg, Manitoba
CNRW	--	5000	3	Winnipeg, Manitoba
KELW	--	500	2	Burbank, Cal.

42		
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Manitoba Telephone System
Canadian National Railways
Earl L. White

INDEX BY FREQUENCIES AND DIAL NUMBERS

KTM	--	500	2+	Los Angeles, Cal.
WEAN	--	250	+C	Providence, R. I.
WMC	--	500	+N	Memphis, Tenn.
WPOR	--	500	1	Norfolk, Va.
WTAR	*	500	1C	Norfolk, Va.

Pickwick Broadcasting Corp.
Shepard Broadcasting Service, Inc.
Memphis Commercial-Appeal
WTAR Radio Corp.
WTAR Radio Corp.

790 kilocycles 379.5 meters

CMHC	--	500	791	Tuinucu, Cuba
KGO	--	7500	N	San Francisco, Cal.
WGY	†	50000	N	Schenectady, N. Y.

41			
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Frank H. Jones
National Broadcasting Co., Inc.
General Electric Co.

800 kilocycles 374.8 meters

WBAP	*	10000	1XN	Fort Worth, Texas
WFAA	--	50000	1N	Dallas, Texas
XEU	--	101	---	Veracruz, Mex.

373			
-----	--	--	--

Carter Publications, Inc.
News & Journal
Natalio Ulibarri

KCY.S.
880
MTRS.
340.7
DIAL

810 kilocycles 370.2 meters

WCCO	--	7500	C	Minneapolis, Minn.
WPCH	--	500	D	New York City

372			
-----	--	--	--

Northwestern Broadcasting, Inc.
Eastern Broadcasters, Inc.

820 kilocycles 365.6 meters

WHAS	†	10000	N	Louisville, Ky.
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371			
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Courier-Journal & Times

830 kilocycles 361.2 meters

CMGA	--	300	834	Colon, Cuba
KOA	†	12500	N	Denver, Colo.
WHDH	--	1000	D	Auburn, Mass.
WRUF	*	5000	---	Gainesville, Fla.

363			
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Leopoldo V. Figueros
National Broadcasting Co., Inc.
Matheson Radio Co., Inc.
University of Florida

840 kilocycles 356.9 meters

CFCA	†	500	1	Toronto, Ont.
CHCT	--	1000	---	Red Deer, Alta.
CKLC	--	1000	2--	Red Deer, Alta.
CMC	--	500	---	Havana, Cuba
CNRD	--	1000	2--	Red Deer, Alta.
CNRT	--	500	1	Toronto, Ont.
WGM	--	100	3	Adamsburg, Pa.
WOOP	--	100	3	Jeannette, Pa.
XEM	†	501	---	Tampico, Tams.
AFX	--	500	---	Mexico City, Mex.

353			
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Star Publishing & Ptg. Co.
G. F. Tull & Ardern, Ltd.
Alberta Pacific Grain Co., Ltd.
Cuban Telephone Co.
Canadian National Railways
Canadian National Railways
Pioneer Broadcasting Co., Inc.
Oakford-Olympia Park Corp.
Gerbert A. Denny y Cia.
Secretaria de Educacion Publica

850 kilocycles 352.7 meters

KWKH	*	10000	1	Shreveport, La.
NBA	--	750	846	Balboa, Canal Zone
WWL	*	5000	1	New Orleans, La.

343			
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Hello World Broadcasting Corp.
United States Navy
Loyola University

860 kilocycles 348.6 meters

KMO	--	500	+	Tacoma, Wash.
WABC	--	5000	1XC	New York City
WBOQ	--	5000	1X	New York City
WHB	*	500	D	Kansas City, Mo.
XEJ	--	101	857	C. Juarez, Chih.

333			
-----	--	--	--

KMO, Inc.
Atlantic Broadcasting Corp.
Atlantic Broadcasting Corp.
WHB Broadcasting Co.
Juan G. Buttner

870 kilocycles 344.6 meters

WENR	--	50000	1N	Chicago, Ill.
WLS	--	5000	1XN	Chicago, Ill.

323			
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Great Lakes Broadcasting Co.
Agricultural Broadcasting Co.

880 kilocycles 340.7 meters

CHCS	--	10	4	Hamilton, Ont.
CHML	--	50	4	Hamilton, Ont.
CHRC	--	100	3	Quebec, Que.
CJCB	--	50	---	Sydney, N. S.
CKCI	†	22.5	3	Quebec, Que.
CKCV	†	50	3	Quebec, Que.
CKOC	†	50	4	Hamilton, Ont.
CNRQ	†	50	3	Quebec, Que.
KFKA	†	500	2+	Greeley, Colo.
KLX	--	500	---	Oakland, Cal.

313			
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The Hamilton Spectator
Maple Leaf Radio Co., Ltd.
E. Fontaine
N. Nathanson
Le "Soleil" Ltd.
G. A. Vandry
Wentworth Radio & Auto Sply. Co., Ltd
Canadian National Railways
Midwestern Radio Corp.
Tribune Publishing Co.

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INDEX BY FREQUENCIES AND DIAL NUMBERS

KPOF	--	500	2	Denver, Colo.
WCOC	--	500	+	Meridian, Miss.
WGBI	* *	250	1	Scranton, Pa.
WQAN	* *	250	1	Scranton, Pa.
WSUI	* *	500	---	Iowa City, Iowa

Pillar of Fire, Inc.
Mississippi Broadcasting Co., Inc.
Scranton Broadcasters, Inc.
Scranton Times
University of Iowa

890 kilocycles 336.9 meters

CFBO	*	50	---	St. John, N. B.
CKCO	--	100	---	Ottawa, Ont.
KFNH	--	500	2+	Shenandoah, Iowa
KGJF	* *	250	---	Little Rock, Ark.
KUSD	* *	500	2+	Vermillion, S. D.
WGST	--	250	1+C	Atlanta, Ga.
WILL	* *	250	2+	Urbana, Ill.
WJAR	* *	250	1+N	Providence, R. I.
WKAQ	--	500	---	San Juan, P. R.
WMAZ	--	250	1+	Macon, Ga.
WMMN	--	250	+	Fairmount, W. Va.
XES	†	500	---	Tampico, Tams.
XET	†	500	---	Monterrey, N. L.

C. A. Munro, Ltd.
Dr. G. M. Geldert
Henry Field Co.
Church of the Nazarene
University of South Dakota
Georgia School of Technology
University of Illinois
The Outlet Co.
Radio Corp. of Porto Rico
Junior Chamber of Commerce
Holt-Rowe Novelty Co.
Difusora Portena XES
Mexico Music Co.

900 kilocycles 333.1 meters

CMX	--	250	---	Havana, Cuba
KGBU	†	500	---	Ketchikan, Alaska
KHJ	* *	1000	C	Los Angeles, Cal.
KSEI	* *	250	---	Pocatello, Idaho
WBEN	--	1000	CP1	Buffalo, N. Y.
WJAX	* *	1000	N	Jacksonville, Fla.
WKY	* *	1000	N	Oklahoma City
WLBL	* *	2000	D	Stevens Point, Wis.
WMAK	* *	750	C1	Buffalo, N. Y.

Francisco Lavin
Alaska Radio & Service Co.
Don Lee, Inc.
KSEI Broadcasting Association, Inc.
Buffalo Evening News
City of Jacksonville
WKY Radiophone Co.
Wisconsin Dept. of Markets
Buffalo Broadcasting Co., Lessees

910 kilocycles 329.6 meters

CFQC	--	500	1	Saskatoon, Sask.
CJGC	* *	500	2	London, Ont.
ENRL	* *	500	2	London, Ont.
CNRS	--	500	1	Saskatoon, Sask.

The Electric Shop, Ltd.
Free Press Printing Co., Ltd.
Canadian National Railways
Canadian National Railways

920 kilocycles 325.9 meters

CMHD	--	250	---	Caibarien, Cuba
IHK	--	1000	---	Port au Prince, Haiti
KFEL	†	500	1	Denver, Colo.
KFXF	* *	500	1	Denver, Colo.
KOMO	†	1000	N	Seattle, Wash.
KPRC	--	1000	1+N	Houston, Texas
WAAF	--	500	D	Chicago, Ill.
WBSO	--	500	D	Wellesley Hills, Mass.
WWJ	†	1000	N	Detroit, Mich.
XEX	--	500	923	Mexico City, Mex.
XFE	--	250	923	Villa Hermosa, Tab.

Manuel A. Alvarez
Republic of Haiti
Eugene P. O'Fallon, Inc.
Colorado Radio Corp.
Fisher's Blend Station, Inc.
Houston Printing Co.
Drovers Journal Publishing Co.
Babson Statistical Organization, Inc.
The Detroit, News
Excelsior Cia Editorial S. A.
Gobierno Del Estado d Tobasco

930 kilocycles 322.4 meters

CJCA	* *	500	4	Edmonton, Alta.
CFRC	--	500	3	Kingston, Ont.
CHNS	--	500	---	Halifax, N. S.
CKIC	--	50	---	Wolfville, N. S.
CKPR	--	50	3	Midland, Ont.
CNRE	--	500	4	Edmonton, Alta.
CNRH	--	500	---	Halifax, N. S.
KFWI	--	500	1	San Francisco, Cal.
KGBZ	--	500	2+	York, Nebr.
KMA	* *	500	2+	Shenandoah, Iowa
KROW	--	500	1+	Oakland, Cal.
WBRC	--	500	1+C	Birmingham, Ala.
WDBJ	* *	250	1+C	Roanoke, Va.
WIBG	--	50	D	Elkins Park, Pa.

The Edmonton Journal, Ltd.
Queen's University
Halifax Herald, Ltd.
Acadia Academy
Midland Broadcasting Corp.
Canadian National Railways
Canadian National Railways
Radio Entertainments, Inc.
Dr. George R. Miller
May Seed & Nursery Co.
Educational Broadcasting Corp.
Birmingham Broadcasting Co., Inc.
Richardson-Wayland Elec. Corp.
St. Pauls P. E. Church

940 kilocycles 319.0 meters

KGU	--	1000	---	Honolulu, Hawaii
KOIN	* *	1000	C	Portland, Ore.
WAAT	--	300	D	Jersey City, N. J.
WCSH	* *	1000	N	Portland, Maine
WDAY	* *	1000	C	Fargo, N. D.
WFIW	* *	1000	C	Hopkinsville, Ky.
WHA	--	750	D	Madison, Wis.

Marion A. Mulrony
KOIN, Inc.
Bremer Broadcasting Corp.
Congress Square Hotel Co.
WDAY, Inc.
WFIW, Inc.
University of Wisconsin

INDEX BY FREQUENCIES AND DIAL NUMBERS

950 kilocycles 315.6 meters

26		
----	--	--

CMCQ	--	500	95S	Havana Cuba
KFWB	*	1000	---	Hollywood, Cal.
KGHL	--	500	X	Billings, Mont.
KMBC	*	1000	C	Kansas City, Mo.
WRC	†	500	N	Washington, D. C.

Andres Martinez
Warner Bros. Broadcasting Corp.
Northwestern Auto Supply Co., Inc.
Midland Broadcasting Co., Inc.
Radio Corp. of America

960 kilocycles 312.3 meters

25		
----	--	--

-CFCY	--	250	1	Charlottetown, P. E. I.
-CFRB	--	4000	2C	Toronto, Ont.
CHCK	--	30	1	Charlottetown, P. E. I.
CHWC	--	500	3	Pilot Butte, Sask.
CJBR	--	500	3	Regina, Sask.
CKCK	†	500	3	Regina, Sask.
CNRR	--	500	3	Regina, Sask.
-CNRX	--	4000	2	Toronto, Ont.

The Island Radio Co.
Rogers-Majestic Corp., Ltd.
W. E. Burke
R. H. Williams & Sons Ltd.
Cooperative Wheat Producers, Ltd.
Leader Publishing Co., Ltd.
Canadian National Railways
Canadian National Railways

970 kilocycles 309.1 meters

25		
----	--	--

KJR	*	5000	D	Seattle, Wash.
XEH	--	101	964	Monterrey, N. L.
-WCFL	--	1500	N	Chicago, Ill.

Northwest Broadcasting System, Inc.
Ing. Constantino de Tarnava
Chicago Federation of Labor

KCY.S.
1040
MTR.S.
288.3
DIAL

980 kilocycles 305.9 meters

24		
----	--	--

-KDKA	--	5000	N	Pittsburgh, Pa.
XEO	--	101	983	Mexico City

Westinghouse Elec. & Mfg. Co.
F. Armida y Cia.

990 kilocycles 302.8 meters

23		
----	--	--

-WBZ	*	15000	1NY	Springfield, Mass.
-WBZA	*	500	1NY	Boston, Mass.

Westinghouse Elec. & Mfg. Co.
Westinghouse Elec. & Mfg. Co.

1000 kilocycles 299.8 meters

23		
----	--	--

KFVD	--	250	---	Calver City, Cal.
-WHO	--	5000	1N	Des Moines, Iowa
-WOC	--	5000	1N	Davenport, Iowa
XEI	--	101	999	Morelia, Mexico

Los Angeles Broadcasting Co.
Central Broadcasting Co.
Central Broadcasting Co.
Carlos Gutierrez M.

1010 kilocycles 296.8 meters

--	--	--

CFLC	--	50	3	Prescott, Ont.
CKCR	--	50	3	Waterloo, Ont.
CMBZ	--	100	---	Havana, Cuba
CMCF	--	250	---	Havana, Cuba
KGGF	--	500	2Y	Picher, Okla.
KQW	*	500	---	San Jose, Cal.
WHN	--	250	1	New York City
WIS	--	500	C+	Columbia, S. C.
WNAD	--	500	2	Norman, Okla.
WPAP	--	250	1	New York City
WQAO	--	250	1	New York City
WRNY	--	250	1	New York City

Radio Association
John Patterson
Manuel y G. Salas
Raul Karmen
Powell & Platz
Pacific Agricultural Foundation, Ltd.
Marcus Loew Booking Agency
George T. Barnes, Inc.
University of Oklahoma
Calvary Baptist Church
Calvary Baptist Church
Aviation Radio Station, Inc.

1020 kilocycles 293.9 meters

22		
----	--	--

-KFKX	--	10000	1N	Chicago, Ill.
-KYW	--	10000	1N	Chicago, Ill.
WRAX	--	250	D	Philadelphia, Pa.

Westinghouse Elec. & Mfg. Co.
Westinghouse Elec. & Mfg. Co.
Berachah Church, Inc.

1030 kilocycles 291.1 meters

21		
----	--	--

-CFCF	--	500	---	Montreal, Que.
CNRY	--	500	---	Vancouver, B. C.

Canadian Marconi Co.
Canadian National Railways

1040 kilocycles 288.3 meters

21		
----	--	--

-KRLD	*	10000	1C	Dallas, Texas
-KTHS	§	10000	1N	Hot Springs, Ark.
WKAR	--	1000	D	East Lansing, Mich.
-WMAK	--	1000	---	Buffalo, N. Y.

KRLD Radio Corp.
Chamber of Commerce
Michigan Agricultural College
Buffalo Broadcasting Co., Lessees

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INDEX BY FREQUENCIES AND DIAL NUMBERS

1050 kilocycles 285.5 meters

-KFKB	--	5000	--	Milford, Kansas
-KNX	*	5000	X	Hollywood, Cal.

20				
KFKB Broadcasting Assn., Inc. Western Broadcast Co.				

1060 kilocycles 282.8 meters

KWJJ	--	500	--	Portland, Ore.
-WBAL	*	10000	IN	Baltimore, Md.
WJAG	*	1000	--	Norfolk, Nebr.
-WTIC	+	50000	IN	Hartford, Conn.

173				
KWJJ Broadcast Co., Inc. Consolidated Gas Elec. & Pwr. Co. Norfolk Daily News Travelers Broadcasting Service Corp.				

1070 kilocycles 280.2 meters

KJBS	*	100	D	San Francisco, Cal.
WCAZ	--	50	D	Carthage, Ill.
-WDZ	--	100	D	Tuscola, Ill.
-WTAM	*	50000	N	Cleveland, Ohio
XER	--	101	1071	Mexico City

17				
Julius Brunton & Sons Co. Superior Broadcasting Service James L. Bush WTAM & WEAR, INC. F. Armida y Cia				

1080 kilocycles 277.6 meters

-WBT	*	5000	C	Charlotte, N. C.
WCBF	*	5000	1	Zion, Ill.
WMBI	--	5000	1	Chicago, Ill.

183				
Station WBT, Inc. Wilbur Glenn Voliva Moody Bible Institute				

1090 kilocycles 275.1 meters

KFQA	--	5000	1SX	St. Louis, Mo.
-KMOX	*	5000	1CX	St. Louis, Mo.
XEL	--	10	--	Saltillo, Coah.

18				
Voice of St. Louis, Inc. Voice of St. Louis, Inc. Antonio Garza Castro				

1100 kilocycles 272.6 meters

KGDM	*	250	DX	Stockton, Cal.
LWLW	*	5000	1	New York City
WPG	--	5000	1C	Atlantic City, N. J.

173				
E. F. Peffer Missionary Society of St. Paul WPG Broadcasting Corp.				

1110 kilocycles 270.1 meters

KSOO	*	2000	--	Sioux Falls, S. D.
-WRVA	*	5000	N	Richmond, Va.

17				
Sioux Falls Broadcasting Assn., Inc. Larus & Bros. Co., Inc.				

1120 kilocycles 267.7 meters

CFJC	--	15	--	Kamloops, B. C.
CHGS	*	100	--	Summerside, P. E. I.
CJOC	--	50	--	Lethbridge, Alta.
KFIO	+	100	D	Spokane, Wash.
KFSG	*	500	3	Los Angeles, Cal.
KMIC	--	500	3	Inglewood, Cal.
KRSC	+	50	D	Seattle, Wash.
KTRH	*	500	2C	Houston, Texas
WDBO	*	500	+C	Orlando, Fla.
WDEL	*	250	+X	Wilmington, Del.
WHAD	*	250	1	Milwaukee, Wis.
WISN	--	250	1C	Milwaukee, Wis.
WTAW	--	500	2	College Station, Texas
-----	--	150	CP	Rayne, La.
-----	--	10	CPD	Haynesville, La.

10				
N. S. Dalgleish & Sons R. T. Holman, Ltd. Harold R. Carson Spokane Broadcasting Corp. Echo Park Evang. Assn. Dalton's, Inc. Radio Sales Corp. Rice Hotel Orlando Broadcasting Co., Inc. WDEL, Inc. Marquette University Evening Wisconsin Co. Agricultural & Mech. College Ber, Killmer & Bailey C. C. Crawford				

1130 kilocycles 265.3 meters

-KSL	--	5000	N	Salt Lake City
-WJJD	--	20000	C	Mooseheart, Ill.
WOV	--	1000	D	New York City
XEF	--	105	1131	Oaxaca, Oax.

10				
Radio Service Corp. of Utah Loyal Order of Moose International Broadcasting Corp. Frederico Zorrila				

1140 kilocycles 263.0 meters

-KVOO	*	5000	1N	Tulsa, Okla.
WAPI	--	5000	1N	Birmingham, Ala.

153				
Southwestern Sales Corp. Alabama Polytechnic Institute				

1150 kilocycles 260.7 meters

CMHA	--	200	1154	Cienfuegos, Cuba
-WHAM	*	5000	N	Rochester, N. Y.

13				
Jose Ganduxie Stromberg-Carlson Tel. Mfg. Co.				

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1160 kilocycles 258.5 meters

WOWO * 10000 1C Ft. Wayne, Ind.
 WWVA * 5000 1 Wheeling, W. Va.

143

Main Auto Supply Co.
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

KTNT -- 5000 C Muscatine, Iowa
 WCAU * 10000 C Philadelphia, Pa.

147

Norman Baker
 Universal Broadcasting Co.

1180 kilocycles 254.1 meters

KEX -- 5000 2 Portland, Ore.
 KOB -- 20000 2 State College, N. M.
 WDGY * 1000 1 Minneapolis, Minn.
 WHDI -- 500 1 Minneapolis, Minn.

149

Western Broadcasting Co.
 College of Agriculture & Mech. Arts
 Dr. George W. Young
 Wm. Hood Dunwoody Industrial Inst.

1190 kilocycles 252.0 meters

WICC * 500 D Bridgeport, Conn.
 WOAI * 5000 XN San Antonio, Texas

153

Bridgeport Broadcasting Station, Inc.
 Southern Equipment Co.

1200 kilocycles 249.9 meters

KBTM -- 100 D Paragould, Ark.
 KFHA -- 50 --- Gunnison, Colo.
 KFJB -- 100 + Marshalltown, Iowa
 KFWF -- 100 5 St. Louis, Mo.
 KGCU -- 100 --- Mandan, N. D.
 KGDE -- 100 + Fergus Falls, Minn.
 KGDY -- 15 XY Oldham, S. D.
 KGEK -- 50 9 Yuma, Colo.
 KGEV † 100 9 Fort Morgan, Colo.
 KGFI † 100 --- Los Angeles, Cal.
 KGHI -- 100 --- Little Rock, Ark.
 KGY -- 10 + Lacey, Wash.
 KMLB -- 50 DCP Monroe, La.
 KSMR -- 100 --- Santa Maria, Cal.
 KVOS -- 100 --- Bellingham, Wash.
 KWG * 100 --- Stockton, Cal.
 KXO -- 100 --- El Centro, Cal.
 WABI † 100 --- Bangor, Maine
 WABZ -- 100 1 New Orleans, La.
 WBBZ -- 100 --- Ponca City, Okla.
 WCAT -- 100 --- Rapid City, S. D.
 WCAX * 100 2 Burlington, Vt.
 WCLO † 100 --- Janesville, Wis.
 WCOD † 100 3 Harrisburg, Pa.
 WEHC * 100 +X Emory, Va.
 WEPS -- 100 --- Worcester, Mass.
 WFBC -- 50 --- Knoxville, Tenn.
 WFBE -- 100 + Cincinnati, Ohio
 WHBC -- 10 4S Canton, Ohio
 WHBY -- 100 --- Green Bay, Wis.
 WIBX -- 100 + Utica, N. Y.
 WIL -- 100 5+ St. Louis, Mo.
 WJBC * 100 6 La Salle, Ill.
 WJBL -- 100 6 Decatur, Ill.
 WJWB -- 30 1 New Orleans, La.
 WKJC -- 100 3 Lancaster, Pa.
 WLAP † 30 X+ Louisville, Ky.
 WLBG † 100 + Petersburg, Va.
 WMAY † 100 5+ St. Louis, Mo.
 WNBO * 100 4 Washington, Pa.
 WNBW † 10 --- Carbondale, Pa.
 WNBX -- 10 2 Springfield, Vt.
 WORC -- 100 X Worcester, Mass.
 WDPF * 100 8 Flint, Mich.
 WRAF * 100 8 La Porte, Ind.
 WRBL -- 50 --- Columbus, Ga.
 WVAE -- 100 8 Hammond, Ind.
 XEA -- 101 --- Guadalajara, Jal.
 XES -- 250 --- C. Lerdo Dgo.
 10-BP -- 25 --- Wingham, Ont.

123

W. J. Beard's Temple of Music
 Western College of Colorado
 Marshall Electric Co., Inc.
 St. Louis Truth Center, Inc.
 Mandan Radio Association
 Jaren Drug Co.
 J. Albert Loesch and George W. Wright
 Beehler Elec. Equipment Co.
 City of Fort Morgan
 Ben S. McGlashan
 Berean Bible Class
 St. Martin's College
 G. C. Liner
 Santa Maria Valley R. R. Co.
 KVOS, Inc.
 Portable Wireless Tel. Co., Inc.
 E. R. Irely and F. M. Bowles
 Pine Tree Broadcasting Corp.
 Coliseum Place Baptist Church
 C. L. Carrell
 State School of Mines
 University of Vermont
 WCLO Radio Corp.
 Norman R. Hoffman
 Emory & Henry College
 Alfred Frank Kleindienst
 First Baptist Church
 WFBE, Inc.
 St. John's Catholic Church
 St. Norbert's College
 WIBX, Inc.
 Missouri Broadcasting Corp.
 Kaskaskia Broadcasting Co.
 Commodore Broadcasting, Inc.
 Charles C. Carlson, Jr.
 Kirk, Johnson & Co.
 American Broadcasting Corp. of Ky.
 Robert Allen Gamble
 Kingshighway Presbyterian Church
 John Brownlee Spriggs
 Home Cut Glass & China Co.
 First Congregational Church
 Alfred Frank Kleindienst
 City of Flint
 Chas. Middleton
 David Parmer
 Hammond-Calumet Broad. Corp.
 Alberto Palos Sauza
 Cerveceria de Durango, S. A.
 Radio & Electric Shop

KCYS.
 1200
 MTRS.
 249.9
 DIAL

INDEX BY FREQUENCIES AND DIAL NUMBERS

1210 kilocycles 247.8 meters

129

CFCO	--	100	---	Chatham, Ont.
CFNB	--	50	---	Fredericton, N. B.
CHWK	†	5	---	Chilliwack, B. C.
CJOR	* *	50	---	Sea Island, B. C.
CKMC	--	15	---	Cobalt, Ont.
CKPC	†	25	---	Preston, Ont.
KDFN	†	100	---	Casper, Wyo.
KDLR	--	100	---	Devils Lake, N. D.
KFOR	--	100	+	Lincoln, Nebr.
KFVS	--	100	6	Cape Girardeau, Mo.
KFXM	--	100	9	San Bernardino, Cal.
KGCR	--	100	---	Watertown, S. D.
KGMP	--	100	---	Elk City, Okla.
KGNO	--	100	---	Dodge City, Kans.
KMJ	--	100	---	Fresno, Cal.
KPPC	--	50	9	Pasadena, Cal.
KWEA	--	100	---	Shreveport, La.
WALR	--	100	---	Zanesville, Ohio
WBAX	--	100	1	Wilkes-Barre, Pa.
WBBL	--	100	7S	Richmond, Va.
WBBS	--	100	2	Springfield, Ill.
WCOH	--	100	3	Yonkers, N. Y.
WCRW	--	100	4	Chicago, Ill.
WDWF	--	100	5	Providence, R. I.
WEBO	--	100	6	Harrisburg, Ill.
WEDC	--	100	4	Chicago, Ill.
WGBB	--	100	3	Freeport, N. Y.
WGCM	--	100	---	Gulfport, Miss.
WHBF	--	100	---	Rock Island, Ill.
WHBU	†	100	---	Anderson, Ind.
WIBA	--	500	XZ	Madison, Wis.
WJBI	--	100	3	Red Bank, N. J.
WJBU	--	100	1	Lewisburg, Pa.
WJBY	--	50	---	Gadsden, Ala.
WJW	--	100	---	Mansfield, Ohio
WLCI	--	50	---	Ithaca, N. Y.
WLSI	--	100	5	Providence, R. I.
WMAN	--	50	---	Columbus, Ohio
WMBG	--	100	7	Richmond, Va.
WMRJ	--	100	3	Jamaica, N. Y.
WOCL	--	25	---	Jamestown, N. Y.
WOMT	--	100	---	Manitowoc, Wis.
WPAW	--	100	5	Pawtucket, R. I.
WQDX	--	50	---	Thomasville, Ga.
WRBO	--	100	X+	Greenville, Miss.
WRBU	†	100	---	Gastonia, N. C.
WSBC	--	100	4	Chicago, Ill.
WSIX	--	100	---	Springfield, Tenn.
WTAX	--	50	2YX	Streator, Ill.

Western Ontario "Better Radio" Club
 James S. Neill & Sons, Ltd.
 Chilliwack Broadcasting Co., Ltd.
 G. C. Chandler
 R. L. MacAdam
 Metal Shingle & Siding Co.
 Donald Lewis Hathaway
 KDLR, Inc.
 Howard A. Shuman
 Hirsch Battery & Radio Co.
 J. C. & E. W. Lee
 Cutler's Radio Brdcastg. Service, Inc.
 Bryant Radio & Electric Co.
 Melvin A. McCollum
 James McClatchy Co.
 Pasadena Presbyterian Church
 Hello World Broadcasting Corp.
 Roy. W. Waller
 John H. Stenger, Jr.
 Grace Covenant Presbyterian Church
 H. L. Dewing & Chas. Messter
 Westchester Broadcasting Corp.
 Clinton R. White
 Dutee W. Flint
 First Trust & Savings Bank
 Emil Denmark, Inc.
 Harry H. Carman
 Great Southern Land Co., Inc.
 Bardsley Specialty Co.
 Citizens Bank
 Capital Times Co.
 Monmouth Broadcasting Co.
 Bucknell University
 Gadsden Broadcasting Co., Inc.
 Mansfield Broadcasting Assn.
 Lutheran Assn. of Ithaca
 The Lincoln Studios, Inc.
 Columbus Broadcasting Co.
 Havens & Martin, Inc.
 Peter J. Prinz
 A. E. Newton
 Francis M. Kadow
 Shartenburg & Robinson Co.
 Stevens Luke
 J. Pat. Scully
 A. J. Kirby Music Co.
 World Battery Co., Inc.
 638 Tire & Vulcanizing Co.
 Williams Hardware Co.

1220 kilocycles 245.8 meters

12

CMBC	*	100	1225	Havana, Cuba
KFKU	--	1000	1	Lawrence, Kans.
KWSC	--	500	X+	Pullman, Wash.
WCAD	--	500	D	Canton, N. Y.
WCAE	--	1000	N	Pittsburgh, Pa.
WDAE	--	1000	C	Tampa, Fla.
WREN	*	1000	1N	Lawrence, Kans.

Domingo Fernandez Cruz
 University of Kansas
 State College of Washington
 St. Lawrence University
 Gimbel Bros.
 Tampa Publishing Co.
 Jenny Wren Co.

1230 kilocycles 243.8 meters

123

KFQD	--	100	---	Anchorage, Alaska
KGGM	--	250	+	Albuquerque, N. Mex.
KYA	--	1000	---	San Francisco, Cal.
WBIS	--	1000	2	Boston, Mass.
WFBM	*	1000	1C	Indianapolis, Ind.
WNAC	*	1000	2C	Boston, Mass.
WPCB	--	500	D	State College, Pa.
WGBT	*	500	1	South Bend, Ind.

Anchorage Radio Club
 New Mexico Broadcasting Co.
 Pacific Broadcasting Corp.
 Shepard Broadcasting Service, Inc.
 Indianapolis Power & Light Co.
 Shepard Broadcasting Service, Inc.
 Pennsylvania State College
 South Bend Tribune

1240 kilocycles 241.8 meters

124

KTAT	--	1000	1	Ft. Worth, Texas
WACO	†	1000	1	Waco, Texas
WXYZ	†	1000	C	Detroit, Mich.

Texas Air Transport Brdcast.
 Central Texas Broadcasting Co., Inc.
 Kunsky-Trendle Broadcasting Corp.

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1250 kilocycles 239.9 meters

114

KFMX	--	1000	2
KFOX	*	1000	---
KIDO	--	1000	---
WAAM	*	1000	1+
WGAL	--	1000	2
WDSU	--	1000	C
WGCP	--	250	1
WGM5	--	1000	2
WLB	--	1000	2
WODA	*	1000	1
WRHM	*	1000	2
----	--	500	CP

Northfield, Minn.
Long Beach, Cal.
Boise, Idaho
Newark, N. J.
Northfield, Minn.
New Orleans, La.
Newark, N. J.
St. Paul, Minn.
St. Paul, Minn.
Paterson, N. J.
Minneapolis, Minn.
Little Rock, Ark.

Carleton College
Nichols & Warinner, Inc.
Boise Broadcasting Station
WAAM, Inc.
St. Olaf College
Jos. H. Uhalt
May Radio Broadcast Corp.
Northwestern Broadcasting Inc.
University of Minnesota
Richard E. O'Dea
Minnesota Broadcasting Corp.
Joseph E. Phelps

1260 kilocycles 238.0 meters

11

KOIL	*	1000	C
KRGV	*	500	1
KVOA	--	500	D
KWWG	--	500	1
WLBW	--	500	C+
WTOC	*	500	C

Council Bluffs, Iowa
Harlingen, Texas
Tucson, Ariz.
Brownsville, Texas
Oil City, Pa.
Savannah, Ga.

Mona Motor Oil Co.
KRGV, Inc.
Robert M. Riculfi
Chamber of Commerce
Radio-Wire Program Corp.
Savannah Broadcasting Co.

1270 kilocycles 236.1 meters

103A

KFUM	--	1000	---
KGCA	--	50	2D
KOL	+	1000	3C
KTW	--	1000	3
KWLC	*	100	2D
WASH	--	500	1
WEAI	--	1000	D
WFBR	--	250	---
WJDX	--	500	+N
WOOD	--	500	1

Colorado Springs, Colo.
Decorah, Iowa
Seattle, Wash.
Seattle, Wash.
Decorah, Iowa
Grand Rapids, Mich.
Ithaca, N. Y.
Baltimore, Md.
Jackson, Miss.
Grand Rapids, Mich.

W. D. Corley
Charles W. Greenley
Seattle Broadcasting Co., Inc.
First Presbyterian Church
Luther College
WASH Broadcasting Corp.
Cornell University
Baltimore Radio Show, Inc.
Lamar Life Insurance Co.
Walter B. Stiles, Inc.

1280 kilocycles 234.2 meters

103

CMCE	--	100	1285
KFBB	--	1000	+
WCAM	--	500	1
WCAP	*	500	1
WDOD	*	1000	1+C
WOAX	--	500	1
WRR	--	500	C

Havana, Cuba
Great Falls, Mont.
Camden, N. J.
Asbury Park, N. J.
Chattanooga, Tenn.
Trenton, N. J.
Dallas, Texas

Julio E. Power
Brettery Broadcast, Inc.
City of Camden
Radio Industries Broadcast Co.
Chattanooga Radio Co., Inc.
WOAX, Inc.
City of Dallas

1290 kilocycles 232.4 meters

104

KDYL	*	1000	C
KFUL	*	500	1
KLCN	*	50	D
KTSA	+	1000	1+N
WEBC	--	1000	+N
WJAS	*	1000	C
WNBZ	--	50	D

Salt Lake City
Galveston, Texas
Blytheville, Ark.
San Antonio, Texas
Superior, Wis.
Pittsburgh, Pa.
Saranac Lake, N. Y.

Intermountain Broadcasting Corp.
Will H. Ford
C. L. Lintzenich
Lone Star Broadcast Co.
Head of Lake Broadcasting Co.
Pittsburgh Radio Supply House
Smith & Mace

1300 kilocycles 230.6 meters

10

KFH	--	1000	2C
KFJR	--	500	3
KGEF	*	1000	4
KTBI	*	1000	4
KTBR	--	500	3
WBRR	--	1000	1
WEVD	*	500	1
WHAP	*	1000	1
WHAZ	*	500	1
WIOD	--	1000	N
WQQ	--	1000	2

Wichita, Kansas
Portland, Ore.
Los Angeles, Cal.
Los Angeles, Cal.
Portland, Ore.
Brooklyn, N. Y.
New York City
New York City
Troy, N. Y.
Miami Beach, Fla.
Kansas City, Mo.

Radio Station KFH Co.
Ashley C. Dixon & Son
Trinity Methodist Church
Bible Institute of Los Angeles
M. E. Brown
People's Pulpit Association
Debs Memorial Radio Fund, Inc.
Defenders of Truth Society, Inc.
Rensselaer Polytechnic Institute
Isle of Dreams Broadcasting Corp.
Unity School of Christianity

1310 kilocycles 228.9 meters

934

KCRJ	+	100	---
KFBK	--	100	---
KFGQ	--	100	7
KFIU	--	10	---
KFJY	\$	100	7

Jerome, Ariz.
Sacramento, Cal.
Boone, Iowa
Juneau, Alaska
Ft. Dodge, Iowa

Chas. C. Robinson
Jas. McClatchy Co.
Boone Biblical College
Alaska Electric Light & Power Co.
C. S. Tunwall

KCYS.

1310

MTRS.

228.9

DIAL

INDEX BY FREQUENCIES AND DIAL NUMBERS

KFPL	--	100	---	Dublin, Texas	C. C. Baxter
KFPM	*	15	---	Greenville, Texas	The New Furniture Co.
KFUP	--	100	8	Denver, Colo.	Fitzsimmons General Hospital
KFXJ	--	50	8	Edgewater, Colo.	R. G. Howell
KFXR	--	100	+	Oklahoma City	Exchange Ave. Baptist Church
KGBX	*	100	---	St. Joseph, Mo.	KGBX Inc.
KGCX	--	100	+	Wolf Point, Mont.	First State Bank of Vida
KGEZ	--	100	C	Kalispell, Mont.	Chamber of Commerce
KGFV	--	100	---	Ravenna, Neb.	O. F. Sothern and R. H. McConnell
KIT	--	50	---	Yakima, Wash.	Carl E. Haymond
KMED	--	50	---	Medford, Ore.	Mrs. W. J. Virgin
KRMD	--	50	9	Shreveport, La.	Robert M. Dean
KTLC	--	100	X	Houston, Tex.	Houston Broadcasting Co.
KTSL	--	100	9	Shreveport, La.	G. A. Houseman
KTSM	--	100	2	El Paso, Texas	W. S. Bledsoe & W. T. Blackwell
KWCR	--	100	7	Cedar Rapids, Iowa	Harry F. Paar
KXRO	--	75	---	Aberdeen, Wash.	KXRO, Inc.
WAGM	--	50	---	Royal Oak, Mich.	Royal Oak Broadcasting Co.
WBOW	*	100	---	Terre Haute, Ind.	Banks of Wabash, Inc.
WBRE	--	100	---	Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS	*	100	1	Joliet, Ill.	WCLS, Inc.
WDAH	--	100	2	El Paso, Texas	Eagle Broadcasting Co.
WEBR	*	100	+	Buffalo, N. Y.	Howell Broadcasting Co., Inc.
WFBG	--	100	3	Altoona, Pa.	Wm. F. Gable Co.
WFDF	--	100	---	Flint, Mich.	Frank D. Fallain
WFKD	--	50	4	Philadelphia, Pa.	Foulkrod Radio Engineering Co.
WGAL	--	100	5	Lancaster, Pa.	WGAL, Inc.
WGH	*	100	C	Newport News, Va.	Hampton Roads Broadcasting Corp.
WHAT	--	100	4X	Philadelphia, Pa.	Independence Broadcasting Co.
WIBU	--	100	---	Poynette, Wis.	William C. Forrest
WJAC	--	100	3	Johnstown, Pa.	Johnstown Automobile Co.
WJAK	*	50	6	Marion, Ind.	Marion Broadcasting Co.
WKAV	*	100	---	Laconia, N. H.	Laconia Radio Club
WKBB	--	100	1	Joliet, Ill.	Sanders Bros. Radio Station
WKBC	--	100	---	Birmingham, Ala.	R. B. Broyles Furniture Co.
WKBS	*	100	---	Galesburg, Ill.	Permil N. Nelson
WLBC	+	50	6	Muncie, Ind.	Donald A. Burton
WMBO	+	100	---	Auburn, N. Y.	Radio Service Laboratories
WNBH	*	100	---	New Bedford, Mass.	New Bedford Broadcasting Co.
WNBJ	--	50	---	Knoxville, Tenn.	Stewart Broadcasting Co.
WOBT	--	100	+	Union City, Tenn.	Tittsworth's Radio & Music Shop
WOL	*	100	---	Washington, D. C.	American Broadcasting Co.
WRAW	*	100	5XZ	Reading, Pa.	Reading Broadcasting Co.
WRK	--	100	---	Hamilton, Ohio	Hamilton Radio Service
WSAJ	*	100	---	Grove City, Pa.	Grove City College
WSJS	--	100	---	Winston-Salem, N. C.	Winston-Salem Journal Co.

1320 kilocycles 227.1 meters

KGHF	--	250	X+	Pueblo, Colo.
KGIQ	--	250	1	Twin Falls, Idaho
KGMB	--	500	---	Honolulu, Hawaii
KID	--	500	1+	Idaho Falls, Idaho
WADC	--	1000	C	Akron, Ohio
WSMB	*	500	N	New Orleans, La.

95		
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C. P. Ritchie & J. E. Finch
Radio Broadcasting Corp.
Honolulu Broadcasting Co., Ltd.
KID Broadcasting Co.
Allen T. Simmons
Saenger Theatre & Maison Blanche Co.

1330 kilocycles 225.4 meters

KGB	*	250	X	San Diego, Cal.
KSCJ	--	1000	1+C	Sioux City, Iowa
WDRG	--	500	---	New Haven, Conn.
WSAI	*	500	N	Cincinnati, Ohio
WTAQ	*	1000	1	Eau Claire, Wis.
XEC	--	50	1333	Toluca, Mex.

96		
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Pickwick Broadcasting Corp.
Perkins Bros. Co.
Doolittle Radio Corp.
Crosley Radio Corp., Lessee
Gillette Rubber Co.
Jesus R. Benavides

1340 kilocycles 223.7 meters

KFPW	--	50	D	Fort Smith, Ark.
KFBY	--	1000	C	Spokane, Wash.
WSPB	*	500	C	Toledo, Ohio

--	--	--

John Brown Schools
Symons Broadcasting Co.
Toledo Broadcasting Co.

1350 kilocycles 222.1 meters

KWK	*	1000	N	St. Louis, Mo.
WBNY	*	250	1	New York City
WCDA	--	250	1	New York City
WKBQ	--	250	1	New York City
WMSG	--	250	1	New York City

97		
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Greater St. Louis Broadcasting Corp.
Baruchrome Corp.
Italian Educ. Broadcasting Co., Inc.
Standard Cahill Co., Inc.
Madison Sq. Garden Brdcastg. Corp.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1360 kilocycles 220.4 meters

87			
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CMKC	--	150	1364
KGER	*	1000	4
KGIR	--	500	---
KPSN	--	1000	4
WCSC	--	500	CP
WFBL	*	1000	C
WGES	--	500	1+
WJKS	*	1000	1+
WQBC	--	300	---

Santiago de Cuba
Long Beach, Cal.
Butte, Mont.
Pasadena, Cal.
Charleston, S. C.
Syracuse, N. Y.
Chicago, Ill.
Gary, Ind.
Vicksburg, Miss.

M. P. Martinez
C. Merwin Dobyns
KGIR, Inc.
Pasadena Star-News
Jordan & Burk
Onondaga Radio Broadcasting Corp.
Oak Leaves Broadcasting Station, Inc.
Johnson-Kennedy Radio Corp.
Delta Broadcasting Co., Inc.

1370 kilocycles 218.7 meters

8			
---	--	--	--

KCRC	†	100	2+
KFBL	†	50	3
KFJI	--	100	---
KFJM	†	100	---
KFJZ	--	100	X
KFLX	--	100	---
KGAR	*	100	+
KGDA	†	100	---
KGFG	--	100	2
KGFL	--	50	---
KGKL	†	100	---
KMAC	--	100	5
KONO	†	100	5
KOOS	--	100	---
KRE	--	100	6
KVL	--	100	3
KWKC	--	100	---
KZM	--	100	6
WBGF	†	50	---
WBTM	†	100	7
WCBM	--	100	+Z
WELK	--	100	+
WFDV	--	100	---
WGL	--	100	---
WHBD	*	100	---
WHBQ	--	100	---
WHDF	--	100	+
WIBM	--	100	1
WJBK	--	50	1
WLEY	--	100	+
WLVA	†	100	7
WMBR	†	100	---
WPOE	--	100	---
WQDM	*	5	D
WRAK	--	50	---
WRBJ	--	10	---
WRBT	*	100	---
WRJN	--	100	---
WSVS	--	50	---
WRDO	§	100	CP

Enid, Okla.
Everett, Wash.
Astoria, Ore.
Grand Forks, N. D.
Ft. Worth, Texas
Galveston, Texas
Tucson, Ariz.
Mitchell, S. D.
Oklahoma City
Ratan, N. M.
San Angelo, Texas
San Antonio, Texas
San Antonio, Texas
Marshfield, Ore.
Berkeley, Cal.
Seattle, Wash.
Kansas City, Mo.
Hayward, Cal.
Glens Falls, N. Y.
Danville, Va.
Baltimore, Md.
Philadelphia, Pa.
Rome, Ga.
Fort Wayne, Ind.
Mount Orab, Ohio
Memphis, Tenn.
Calumet, Mich.
Jackson, Mich.
Detroit, Mich.
Lexington, Mass.
Lynchburg, Va.
Tampa, Fla.
Patchogue, N. Y.
St. Albans, Vt.
Williamsport, Pa.
Hattiesburg, Miss.
Wilmington, N. C.
Racine, Wis.
Buffalo, N. Y.
Augusta, Me.

Champlin Refining Co.
Leese Bros.
KFJI Broadcasters, Inc.
University of North Dakota
Estate of H. C. Meachem
George Roy Clough
Tucson Motor Service Co.
Mitchell Broadcasting Corp.
Faith Tabernacle Assn.
W. E. Whitmore
KGKL, Inc., Opr. by Ragsdale Auto
Radio Sam Broadcast Co., Inc.
Mission Broadcasting Co.
H. H. Hanseth
First Congregational Church
KVL, Inc.
Wilson Duncan Broadcasting Co.
Leon P. Tenney
W. N. Parker and H. H. Metcalfe
Clarke Electric Co.
Baltimore Broadcasting Corp.
Howard R. Miller
Dolies Goings
Fred C. Zieg
F. P. Moler
Broadcasting Station WHBQ, Inc.
Upper Michigan Broadcasting Co.
C. L. Carrell
James F. Hopkins, Inc.
Lexington Air Stations
Lynchburg Broadcasting Corp.
F. J. Reynolds
Nassau Broadcasting Corp.
A. J. St. Antoine
C. R. Cummins
Woodruff Furniture Co., Inc.
Wilmington Radio Association
Racine Broadcasting Corp.
Seneca Vocational School
Albert S. Woodson

1380 kilocycles 217.3 meters

734			
-----	--	--	--

KOV	†	500	2
KSO	*	500	1
WKBH	*	1000	1
WSMK	--	200	2

Pittsburgh, Pa.
Clarinda, Iowa
La Crosse, Wis.
Dayton, Ohio

Doubleday-Hill Electric Co.
Berry Seed Co.
WKBH, Inc.
Stanley M. Krohn, Jr.

KCYS.
1390
MTRS.
215.7
DIAL

1390 kilocycles 215.7 meters

75			
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KLRA	--	1000	1C
KOY	*	500	---
KUOA	--	1000	1
WHK	*	1000	CX

Little Rock, Ark.
Phoenix, Ariz.
Fayetteville, Ark.
Cleveland, Ohio

Arkansas Broadcasting Co.
Nilson Radio & Sporting Goods Co.
University of Arkansas
Radio Air Service Corp.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1400 kilocycles 214.2 meters

72

CMBY	--	200	1405	Havana, Cuba
KLO	*	500	X	Ogden, Utah
KOCW	*	250	+	Chickasha, Okla.
WBAA	--	500	1	Lafayette, Ind.
WBBC	--	500	2	Brooklyn, N. Y.
WCGU	--	500	2	Brooklyn, N. Y.
WCMA	--	500	1	Culver, Ind.
WKBF	*	500	1	Indianapolis, Ind.
WLTH	*	500	2	Brooklyn, N. Y.
WSGH	--	500	2	Brooklyn, N. Y.

Lino E. Cosculluela
Peery Building Co.
College for Women
Purdue University
Brooklyn Broadcasting Corp.
U. S. Broadcasting Corp.
General Broadcasting Corp.
Indianapolis Broadcasting, Inc.
The Voice of Brooklyn, Inc.
Paramount Broadcasting Co.

1410 kilocycles 212.6 meters

73

KFLV	†	500	4	Rockford, Ill.
KGRS	1000	1		Amarillo, Texas
WBCM	*	500	C	Bay City, Mich.
WDAG	250	1X		Amarillo, Texas
WHBL	*	500	4	Sheboygan, Wis.
WLEX	--	500	2	Lexington, Mass.
WMAF	--	500	2	S. Dartmouth, Mass.
WODX	--	500	3	Mobile, Ala.
WRBX	*	250	--	Roanoke, Va.
WSFA	†	500	3	Montgomery, Ala.
WSSH	†	500	2	Boston, Mass.

Rockford Broadcasters, Inc.
Gish Radio Service
James E. Davidson
National Radio & Broadcasting Corp.
Press Pub. Co.
Lexington Air Stations
Round Hills Radio Corp.
Mobile Broadcasting Corp.
Richmond Development Corp.
Montgomery Broadcasting Co., Inc.
Tremont Temple Baptist Church

1420 kilocycles 211.1 meters

7

KBPS	--	100	4	Portland, Ore.
KFIZ	100			Fond du Lac, Wis.
KFQU	*	100	5X	Holy City, Cal.
KFWQ	100			Seattle, Wash.
KFXD	100		XY	Nampa, Idaho
KFX Y	100			Flagstaff, Ariz.
KFYO	100		+	Abilene, Texas
KGFF	100			Alva, Okla.
KGGC	100		5	San Francisco, Cal.
KGIW	100			Trinidad, Colo.
KGIX	100			Las Vegas, Nevada
KGKX	100			Sand Point, Idaho
KICK	*	100		Red Oak, Iowa
KLPM	†	100		Minot, North Dakota
KORE	100			Eugene, Ore.
KTAP	100			San Antonio, Texas
KTUE	100		X	Houston, Texas
KXL	100		4	Portland, Ore.
WEDH	*	30		Erie, Pa.
WEHS	100		2	Evanston, Ill.
WELL	50		X	Battle Creek, Mich.
WFDW	100			Talladega, Ala.
WHDL	§	10	D	Tupper Lake, N. Y.
WHFC	100		2	Cicero, Ill.
WHIS	†	100		Bluefield, W. Va.
WIAS	100			Ottumwa, Iowa
WIBR	50			Steubenville, Ohio
WILM	100			Wilmington, Del.
WJBO	§	100		New Orleans, La.
WKBI	*	50	2X	Chicago, Ill.
WLBF	100			Kansas City, Kas.
WMBC	100		X+	Detroit, Mich.
WMBH	100			Joplin, Mo.
WPAD	†	100	CP	Paducah, Ky.
WSPA	*	100	+	Spartanburg, S. C.
WTBO	*	100	--	Cumberland, Md.

Benson Polytechnic Institute
Reporter Printing Co.
W. E. Riker
KFQW, Inc.
Service Radio Co.
Mary M. Costigan
T. E. Kirksey
KGFF Broadcasting Co.
Leonard Gate Broadcasting Co.
Leonard E. Wilson
Las Vegas, Nevada, Radio Corp.
C. E. Twiss and F. H. McCann
Red Oak Radio Corp.
John B. Cooley
Eugene Broadcasting Station
Alamo Broadcasting Co.
Harris County Broadcast Co.
KXL Broadcasters, Inc.
Erie Dispatch-Herald
WEHS, Inc.
Enquirer-News Co.
Raymond G. Hammett
Tupper Lake Broadcasting Co., Inc.
Triangle Broadcasters
Daily Telegraph
Poling Electric Co.
George W. Robinson
Delaware Broadcasting Co., Inc.
Valdemar Jensen
Fred L. Schoenwolf
WLBF Broadcasting Co.
Michigan Broadcasting Co., Inc.
Edwin Dudley Aber
Paducah Broadcasting Co.
Voice of South Carolina
Associated Broadcasting Corp.

1430 kilocycles 209.7 meters

63

KECA	†	1000	N	Los Angeles, Cal.
KGNF	†	500	D	North Platte, Neb.
WBAK	--	500	X+	Harrisburg, Pa.
WCAH	*	500	1C	Columbus, Ohio
WCBC	*	500	2	Memphis, Tenn.
WHP	*	500	1C	Harrisburg, Pa.
WNBR	*	500	2	Memphis, Tenn.

Pacific Development Radio Co.
Herbert Logan Spencer
Penna. State Police
Commercial Radio Service Co.
Memphis Broadcasting Co.
Pennsylvania Broadcasting Co.
Memphis Broadcasting Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1440 kilocycles 208.2 meters

KLS	*	250	D
WBAB	--	500	2
WCBA	--	250	1
WHEC	*	500	2C
WMBD	--	500	3+
WNRC	*	500	---
WOKO	--	500	2
WSAN	--	250	1
WTAD	--	500	3

Oakland, Cal.
Rochester, N. Y.
Allentown, Pa.
Rochester, N. Y.
Peoria Heights, Ill.
Greensboro, N. C.
Poughkeepsie, N. Y.
Allentown, Pa.
Quincy, Ill.

13		
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Warner Bros.
Hickson Electric & Radio Corp.
B. B. Musselman
Hickson Electric & Radio Corp.
Peoria Heights Radio Laboratory
Wayne M. Nelson
Hudson Valley Broadcasting Co.
Allentown Call Publishing Co., Inc.
Ills. Stock Medicine Broadcasting Co.

1450 kilocycles 206.8 meters

KTBS	--	1000	---
WBMS	*	250	1
WCSO	--	500	2
WFJC	*	500	2N
WHOM	--	250	1
WKBO	--	250	1
WNJ	§	250	1
WSAR	--	250	---
WTFI	--	500	---

Shreveport, La.
Hackensack, N. J.
Springfield, Ohio
Akron, Ohio
Jersey City, N. J.
Jersey City, N. J.
Newark, N. J.
Fall River, Mass.
Toccoa, Ga.

13		
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Tri-State Broadcasting System, Inc.
WBMS Broadcasting Corp.
Wittenberg College
W. F. Jones Broadcasting, Inc.
New Jersey Broadcasting Corp.
Camith Corp.
Radio Investment Co.
Doughty & Welch Electric Co., Inc.
Toccoa Falls Institute

1460 kilocycles 205.4 meters

KSTP	*	10000	NX
WJSV	*	10000	---

St. Paul, Minn.
Alexandria, Va.

14		
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National Battery Broadcasting Co.
Independent Publishing Co.

1470 kilocycles 204.0 meters

KGA	†	5000	---
WLAC	--	5000	1C
WTNT	--	5000	1

Spokane, Wash.
Nashville, Tenn.
Nashville, Tenn.

13		
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Northwest Broadcasting System, Inc.
Life & Casualty Insurance Co.
Tennessee Publishing Co.

1480 kilocycles 202.6 meters

KFJF	--	5000	C
WKBW	*	5000	C

Oklahoma City
Buffalo, N. Y.

13		
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National Radio Mfg. Co.
Buffalo Broadcasting Co., Lessees

1490 kilocycles 201.2 meters

WCHI	--	5000	1
WCKY	*	5000	1N
WJAZ	--	5000	1
WORD	--	5000	1

Chicago, Ill.
Covington, Ky.
Chicago, Ill.
Chicago, Ill.

14		
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Radiophone Broadcasting Corp.
L. B. Wilson, Inc.
Zenith Radio Corp.
People's Pulpit Association

1500 kilocycles 199.9 meters

KDB	*	100	---
KGFI	--	100	X+
KGFK	†	50	---
KGIZ	--	50	---
KGKB	--	100	---
KGKY	--	100	---
KPJM	*	100	---
KPO	†	50	---
KREG	†	100	---
KUJ	--	100	3
KUT	--	100	---
WBBS	*	50	2
WCLB	--	100	1
WKBV	--	100	+
WKBZ	†	50	---
WLBX	--	100	1
WLOE	*	100	2+
WMBA	--	100	---
WMBJ	†	100	---
WMBQ	--	100	1
WMPG	†	100	---
WNBF	*	100	---
WOPI	--	100	---
WPEN	--	100	+
WQDV	--	100	---
WRDW	*	100	CP
WRRL	--	100	1

Santa Barbara, Cal.
Corpus Christi, Texas
Moorhead, Minn.
Grant City, Mo.
Brownwood, Texas
Scottsbluff, Nebr.
Prescott, Ariz.
Wenatchee, Wash.
Santa Ana, Cal.
Longview, Wash.
Austin, Texas
Boston, Mass.
Long Beach, N. Y.
Connersville, Ind.
Ludington, Mich.
Long Island City, N. Y.
Boston, Mass.
Newport, R. I.
Wilkinsburg, Pa.
Brooklyn, N. Y.
Lapeer, Mich.
Binghamton, N. Y.
Bristol, Tenn.
Philadelphia, Pa.
Tupelo, Miss.
Augusta, Ga.
Woodside, N. Y.

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Dwight Faulding
Eagle Broadcasting Co., Inc.
Lautzenheiser & Mitchell
Grant City Park Corp.
Eagle Publishing Co.
Hilliard Co., Inc.
Miller & Klahn
Wescoast Broadcasting Co.
Pacific Western Broadcasting
Columbia Broadcasting Co., Inc.
Rice Hotel
Boston Broadcasting Co.
Arthur Fasje
Knox Battery & Electric Co.
K. L. Ashbacher
John N. Brahy
Boston Broadcasting Co.
LeRoy Joseph Beebe
Rev. J. W. Sproul
Paul J. Gollhofer
First M. P. Church
Hewitt-Wood Radio Co., Inc.
Radiophone Brdcastg. Station, Inc.
Wm. Penn Broadcasting Co.
Blair & Anderson
Warren C. Davenport's Musicov. Inc.
Long Island Broadcasting Corp.

KCYS.
1500
MTRS.
199.9
DIAL

INDEX BY LOCATIONS WITH MAP KEY

	Watts		Keys.				
ALABAMA							
Birmingham O-21	5000	WAPI	1140	San Jose J-1	500	KQW	1010
	100	WBRC	930	Santa Ana M-3	100	KREG	1500
	100	WKBC	1310	Santa Barbara M-2	100	KDB	1500
Gadsden O-21	50	WJBY	1210	Santa Maria L-2	100	KSMR	1200
Mobile O-20	500	WODX	1410	Stockton J-2	250	KGDM	1100
Montgomery P-21	500	WSFA	1410		100	KWG	1200
Talladega O-21	100	WFDW	1420	CANAL ZONE			
				Balboa FF-26	750	NBA	850
ALASKA							
Anchorage	100	KFQD	1230	COLORADO			
Juneau	10	KFIU	1310	Colorado Springs K-11	1000	KFUM	1270
Ketchikan	500	KGBU	900	Denver K-11	500	KFEL	920
					100	KFUP	1310
ARIZONA							
Flagstaff M-7	100	KFX Y	1420		500	KFXF	920
Jerome M-6	100	KCRJ	1310		1000	KLZ	560
Phoenix N-6	500	KOY	1390		12500	KOA	830
	500	KTAR	620		500	KPOF	880
Prescott M-6	100	KPJM	1500	Edgewater K-10	50	KFXJ	1310
	100	KGAR	1370	Fort Morgan J-11	100	KGEW	1200
Tucson O-7	500	KVOA	1260	Greeley J-11	500	KFKA	880
				Gunnison K-9	50	KFHA	1200
				Pueblo L-11	250	KGHF	1320
				Trinidad L-11	100	KGIW	1420
				Yuma J-12	50	KGEK	1200
ARKANSAS							
Blytheville M-19	50	KLCN	1290	CONNECTICUT			
Fayetteville M-16	1000	KUOA	1390	Bridgeport H-27	500	WICC	1190
Fort Smith N-16	50	KFPW	1340	Hartford H-27	50000	WTIC	1060
Hot Springs N-17	1000	KTHS	1040	New Haven H-27	500	WDRG	1330
Little Rock N-17	100	KGHI	1200	Storrs H-28	250	WCAC	600
	250	KGJF	890				
	1000	KLRA	1390	DELAWARE			
	500		1250	Wilmington J-26	250	WDEL	1120
Paragould M-18	100	KBTM	1200		100	WILM	1420
CALIFORNIA							
Berkeley J-2	100	KRE	1370	DISTRICT OF COLUMBIA			
Burbank M-3	500	KELW	780	Washington J-26	250	WMAL	630
Culver City M-3	250	KFVD	1000		500	WRC	950
El Centro N-4	100	KXO	1200		100	WOL	1310
Fresno K-2	100	KMJ	1210	FLORIDA			
Hayward J-1	100	KWB	1370	Clearwater R-24	1000	WFLA	620
Hollywood M-3	1000	KFWB	950	Gainesville Q-24	5000	WRUF	830
	5000	KNX	1050	Jacksonville Q-24	1000	WJAX	900
Holy City M-3	100	KFOU	1420	Miami T-25	1000	WQAM	560
Inglewood M-3	500	KMIC	1120	Miami Beach T-25	1000	WTOG	1300
Long Beach M-3	1000	KFOX	1250	Orlando R-24	500	WDBO	1120
	1000	KGER	1360	St. Petersburg S-24	1000	WSUN	620
Los Angeles M-3	1000	KECA	1430	Tampa R-24	1000	WDAE	1220
	5000	KFI	640		100	WMBR	1370
	500	KFSG	1120	GEORGIA			
	1000	KGEF	1300	Atlanta O-22	250	WGST	890
	100	KGJF	1200		5000	WSB	740
	1000	KHJ	900	Augusta O-23	100	WRDW	1500
	500	KMPC	710	Columbus O-22	50	WRBL	1200
	500	KMTR	570	Macon O-23	250	WMAZ	890
	500	KTM	780	Rome N-22	100	WFDV	1370
Oakland J-1	1000	KTBI	1300	Savannah O-24	500	WTOG	1260
	250	KLS	1440	Thomasville Q-22	50	WQDX	1210
	500	KLX	880	Toccoa N-23	500	WTFI	1450
	500	KROW	930	HAWAII			
Pasadena M-3	50	KPPC	1210	Honolulu	500	KGMB	1320
	1000	KPSN	1360		500	KGU	940
Sacramento J-2	100	KFBK	1310	IDAHO			
San Bernardino M-3	100	KFXM	1210	Boise G-5	1000	KIDO	1250
San Diego N-3	500	KFSD	600	Idaho Falls G-7	500	KID	1320
	250	KGB	1330	Nampa G-5	50	KFXD	1420
San Francisco J-1	1000	KRFC	610	Pocatello H-7	250	KSEI	900
	500	KFWI	930	Sand Point D-6	100	KGKX	1420
	100	KGGC	1420	Twin Falls H-6	250	KGIQ	1320
	7500	KGO	790				
	100	KJBS	1070				
	5000	KPO	680				
	1000	KTAB	560				
	1000	KYA	1230				

INDEX BY LOCATIONS WITH MAP KEY

ILLINOIS

	Watts	Watts	Kcys.
Carthage J-18	50	WCAZ	1070
Chicago I-20	10000	KFKX	1020
	10000	KYW	1020
	500	WAAF	920
	25000	WBBM	770
	1000	WCFL	970
	5000	WCHI	1490
	100	WCRW	1210
	100	WEDC	1210
	50000	WENR	870
	500	WGES	1360
	25000	WGN	720
	1000	WIBO	560
	5000	WJAZ	1490
	25000	WJBT	770
	50	WKBI	1420
	25000	WLIB	720
	5000	WLS	870
	5000	WMAQ	670
	5000	WMBI	1080
	5000	WORD	1490
	500	WPCC	560
	100	WSPC	1210
	100	WHFC	1420
Cicero I-20	100	WJBL	1200
Decatur K-19	100	WEHS	1420
Evanston I-20	100	WKBS	1310
Galesburg J-18	100	WEBQ	1210
Harrisburg L-19	100	WCLS	1310
Joliet I-19	100	WKBB	1310
La Salle J-19	100	WJBC	1200
Mooseheart I-19	20000	WJJD	1130
Peoria Heights J-19	500	WMBD	1440
Quincy K-18	500	WTAD	1440
Rockford I-19	500	KFLY	1410
Rock Island I-18	100	WHBF	1210
Springfield K-19	100	WCBS	1210
Streator J-19	50	WTAX	1210
Tuscola K-20	100	WDX	1070
Urbana J-20	250	WILL	890
Zion I-20	5000	WCBD	1080

INDIANA

Anderson J-21	100	WHBU	1210
Connersville K-21	100	WKBV	1500
Culver I-20	500	WCMA	1400
Evansville L-20	500	WGBF	630
Fort Wayne J-21	100	WGL	1370
	10000	WOWO	1160
Gary I-20	1000	WJKS	1360
Hammond I-20	100	WVAE	1200
Indianapolis J-21	1000	WFBM	1230
	500	WKBF	1400
Lafayette J-20	500	WBAA	1400
La Porte I-20	100	WRAF	1200
Marion J-21	50	WJAK	1310
Muncie J-21	50	WLBC	1310
South Bend I-20	500	WSBT	1230
Terre Haute K-20	100	WBOW	1310

IOWA

Ames I-17	5000	WOI	640
Boone I-17	100	KFGQ	1310
Cedar Rapids I-18	100	KWCR	1310
Ciarinda J-16	500	KSO	1380
Council Bluffs J-16	1000	KOIL	1260
Davenport I-18	5000	WOC	1000
Decorah H-18	50	KGCA	1270
	100	KWLC	1270
Des Moines I-17	5000	WHO	1000
Fort Dodge I-16	100	KFJY	1310
Iowa City I-18	500	WSUI	880
Marshalltown I-17	100	KFJB	1200
Muscatine J-18	5000	KTNT	1170

Ottumwa J-17	100	WIAS	1420
Red Oak J-16	100	KICK	1420
Shenandoah J-16	500	KFNF	890
	500	KMA	930
Sioux City I-15	1000	KSCJ	1330
Waterloo I-17	500	WMT	600

KANSAS

Dodge City L-13	100	KGNO	1210
Gueda Springs	250	WLBO	680
Kansas City K-16	100	WLBF	1420
Lawrence K-16	1000	KFKU	1220
	1000	WREN	1220
Manhattan K-15	500	KSAC	580
Milford K-14	5000	KFKB	1050
Topeka K-16	500	WBW	580
Wichita L-15	1000	KFH	1300

KENTUCKY

Covington K-22	5000	WCKY	1490
Hopkinsville M-20	1000	WFIW	940
Louisville L-21	10000	WHAS	820
	30	WLAP	1200
Paducah M-19	100	WPAD	1420

LOUISIANA

Haynesville P-17	10		1120
Monroe P-18	50	KMLB	1200
New Orleans R-19	100	WABZ	1200
	1000	WDSU	1250
	100	WJBO	1420
	30	WTBW	1200
	500	WSMB	1320
	5000	WWL	850
Rayne Q-18	150		1120
Shreveport P-17	50	KRMD	1310
	1000	KTBS	1450
	100	KTSL	1310
	100	KWEA	1210
	10000	KWKH	850

MAINE

Augusta F-28	100	WRDO	1370
Bangor F-29	100	WABI	1200
	500	WLBZ	620
Portland F-28	1000	WCSH	940

MARYLAND

Baltimore J-26	10000	WBAL	1060
	250	WCAO	600
	100	WCBM	1370
	250	WFBR	1270
Cumberland J-25	100	WTBO	1420

MASSACHUSETTS

Auburn H-27	1000	WHDH	830
Boston G-28	50	WBBS	1500
	1000	WBIS	1230
	500	WBZA	990
	1000	WEEI	590
	100	WLOE	1500
	1000	WNAC	1230
	500	WSSH	1410
Fall River H-28	250	WSAR	1450
Lexington G-28	500	WLEX	1410
	100	WLEY	1370
New Bedford H-28	100	WNBH	1310
S. Dartmouth H-28	500	WMAF	1410
Springfield H-27	15000	WBZ	990
Wellesley Hills G-28	500	WBSO	920
Worcester G-28	100	WEPS	1200
	100	WORC	1200
	250	WTAG	580

INDEX BY LOCATIONS WITH MAP KEY

New York City I-27	5000	WABC	860
	250	WBNY	1350
	5000	WBOQ	860
	250	WCDA	1350
	50000	WEAF	660
	500	WEVD	1300
	250	WGBS	600
	1000	WHAP	1300
	250	WHN	1010
	30000	WJZ	760
	250	WKBQ	1350
	5000	WLWL	1100
	500	WMCA	570
	250	WMSG	1350
	500	WNYC	570
	1000	WOV	1130
	250	WPAP	1010
	500	WPCH	810
	250	WQAO	1010
	250	WRNY	1010
Patchogue I-27	100	WPOE	1370
Poughkeepsie H-27	500	WOKO	1440
Rochester G-25	500	WABO	1440
	5000	WHAM	1150
	500	WHEC	1440
Saranac Lake F-26	50	WNBZ	1290
Schenectady G-27	50000	WGY	790
Syracuse G-25	1000	WFBL	1360
	250	WSYR	570
Troy G-27	500	WHAZ	1300
Tupper Lake F-26	10	WHDL	1420
Utica G-26	100	WIBX	1200
Woodside I-27	100	WWRL	1500
Yonkers I-27	100	WCOH	1210

NORTH CAROLINA

Asheville M-23	1000	WWNC	570
Charlotte M-24	5000	WBT	1080
Gastonia M-24	100	WRBU	1210
Greensboro M-24	500	WNRC	1440
Raleigh M-25	1000	WPTF	680
Wilmington N-26	100	WRBT	1370
Winston-Salem M-24	100	WSJS	1310

NORTH DAKOTA

Bismarck F-13	1000	KFYR	550
Devils Lake E-14	100	KDLR	1210
Fargo F-15	1000	WDAY	940
Grand Forks E-15	100	KFJM	1370
Mandan F-13	100	KGCU	1200
Minot E-13	100	KLPM	1420

OHIO

Akron I-23	1000	WADC	1320
	500	WFJC	1450
Canton I-23	10	WHBC	1200
Cincinnati K-22	100	WFBE	1200
	1000	WKRC	550
	50000	WLW	700
	500	WSAI	1330
Cleveland I-23	1000	WHK	1390
	500	WJAY	610
	50000	WTAM	1070
Columbus J-22	500	WAIU	640
	500	WCAH	1430
	750	WEAO	570
	50	WMAN	1210
Dayton J-22	200	WSMK	1380
Hamilton K-21	100	WRK	1310
Mansfield J-22	100	WJW	1210
Mount Orab K-22	100	WHBD	1370
Springfield J-22	500	WCOS	1450
Stuebenville J-23	50	WIBR	1420
Toledo I-22	500	WSPD	1340
Youngstown I-23	500	WKBN	570
Zanesville J-23	100	WALR	1210

OKLAHOMA

	Watts		Keys.
Alva M-14	100	KGFF	1420
Chickasha N-14	250	KOCW	1400
Elk City N-13	100	KGMP	1210
Enid M-15	100	KCRC	1370
Norman N-15	500	WNAD	1010
Oklahoma N-15	5000	KFJF	1480
	100	KFXR	1310
	100	KGFG	1370
	1000	WKY	900
Picher M-16	500	KGGF	1010
Ponca City M-15	100	WBBZ	1200
Tulsa M-16	5000	KVOO	1140

OREGON

Astoria D-2	100	KFJI	1370
Corvallis E-2	1000	KOAC	550
Eugene F-2	100	KORE	1420
Marshfield F-1	100	KOOS	1370
Medford G-2	50	KMED	1310
Portland E-3	5000	KEX	1180
	100	KBPS	1420
	500	KFJR	1300
	1000	KGW	620
	1000	KOIN	940
	500	KTBR	1300
	500	KWJJ	1060
	100	KXL	1420

PENNSYLVANIA

Adamsburg	100	WGM	940
Allentown I-26	250	WCBA	1440
	250	WFSN	1440
	100	WFBG	1310
Altoona I-25	10	WNBW	1200
Carbondale H-26	50	WIBG	930
Elkins Park I-26	30	WBDH	1420
Erie H-24	100	WSAJ	1310
Grove City I-26	500	WBAK	1430
Harrisburg I-25	100	WCOD	1200
	500	WHP	1430
Jeannette J-24	100	WOPP	840
Johnstown J-24	100	WJAC	1310
Lancaster I-25	100	WGAL	1310
	100	WKJC	1200
	100	WJBU	1210
Lewisburg I-26	500	WLWB	1260
Oil City I-24	10000	WCAU	1170
Philadelphia I-26	100	WELK	1370
	500	WFAN	610
	500	WFI	560
	50	WFKD	1310
	100	WHAT	1310
	500	WIP	610
	500	WLIT	560
	100	WPEN	1500
	250	WRAX	1020
Pittsburgh J-24	50000	KDKA	980
	500	KQV	1380
	1000	WCAE	1220
	1000	WJAS	1290
Reading I-26	100	WRAW	1310
Scranton H-26	250	WGBI	880
	250	WQAN	880
State College I-25	500	WPSC	1230
Washington J-24	100	WNBO	1200
Wilkes-Barre I-26	100	WBAX	1210
	100	WBRE	1310
Wilkinsburg J-24	100	WMBJ	1500
Williamsport I-25	50	WRAC	1370

PORTO RICO

San Juan W-34	500	WKAQ	890
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RHODE ISLAND

Newport H-28	100	WMBA	1500
Pawtucket H-28	100	WPAW	1210

INDEX BY LOCATIONS WITH MAP KEY

Providence H-28	100	WDWF	1210
	250	WEAN	780
	250	WJAR	890
	100	WLSI	1210

SOUTH CAROLINA

Charleston O-25	100	WCSC	1360
Columbia N-24	500	WIS	1010
Spartanburg N-23	100	WSPA	1420

SOUTH DAKOTA

Brookings H-15	500	KFDY	550
Mitchell H-14	50	KGDA	1370
Oldham H-15	15	KGDY	1200
Pierre G-13	200	KGFX	580
Rapid City H-12	100	WCAT	1200
Sioux Falls I-15	2000	KSOO	1110
Vermillion I-15	500	KUSD	890
Watertown G-15	100	KGCR	1210
Yankton I-15	1000	WNAX	570

TENNESSEE

Bristol L-23	100	WOPI	1500
Chattanooga N-21	1000	WDOD	1280
Knoxville M-22	50	WFCB	1200
	50	WNBj	1310
	1000	WNOX	560
Lawrenceburg N-20	500	WOAN	600
Memphis M-19	500	WGBC	1430
	100	WHBQ	1370
	500	WMC	780
	500	WNBR	1430
	500	WREC	600
Nashville M-20	5000	WLAC	1470
	5000	WSM	650
	5000	WTNT	1470
Springfield M-20	100	WSIX	1210
Union City M-19	100	WOBT	1310

TEXAS

Abilene P-13	100	KFYO	1420
Amarillo N-12	1000	KGRS	1410
	250	WDAG	1410
	100	KUT	1500
Austin Q-14	500	KFDM	560
Brownsville U-15	500	KWWG	1260
Brownwood P-14	100	KGKB	1500
College Sta. Q-15	500	WTAW	1120
Corpus Christi S-14	100	KGFI	1500
Dallas P-15	10000	KRLD	1040
	5000	WFAA	800
	500	WRR	1280
Dublin P-14	100	KFPL	1310
El Paso P-9	100	KTSM	1310
	100	WDAH	1310
Fort Worth P-15	100	KFJZ	1370
	1000	KTAT	1240
	10000	WBAP	800
Galveston R-16	100	KFLX	1370
	500	KFUL	1290
Greenville O-15	15	KFGM	1310
Harlingen T-14	500	KRGV	1260
Houston R-16	1000	KPRC	920
	500	KTRH	1120
	100	KTUE	1420
	100	KTLC	1310
San Angelo Q-13	100	KGKL	1370
San Antonio R-14	100	KMAC	1370
	100	KONO	1370
	100	KTAP	1420
	1000	KTSA	1290
Waco Q-15	5000	WOAI	1190
Wichita Falls O-14	1000	WACO	1240
	250	KGKO	570
UTAH			
Ogden I-7	500	KLO	1400
Salt Lake City I-7	1000	KDYL	1290
	5000	KSL	1130

VERMONT

Burlington F-27	100	WCAX	1200
St. Albans F-27	5	WQDM	1370
Springfield G-27	10	WNBX	1200

VIRGINIA

Alexandria J-26	10000	WJSV	1460
Arlington J-25	1000	NAA	690
Danville L-25	100	WBTM	1370
Emory L-23	100	WEHC	1200
Lynchburg L-25	100	WLVA	1370
	500		590
Newport News L-26	100	WGH	1310
Norfolk L-26	500	WPOR	780
	500	WTVR	780
Petersburg L-26	100	WLBG	1200
Richmond K-26	100	WBBL	1210
	100	WMBG	1210
	5000	WRVA	1110
Roanoke L-24	250	WDEJ	930
	250	WRBX	1410

WASHINGTON

Aberdeen D-2	75	KXRO	1310
Bellingham C-3	100	KVOS	1200
Everett C-3	50	KFBL	1370
Lacey D-3	10	KGY	1200
Longview D-3	100	KUJ	1500
Pullman E-5	500	KWSC	1220
Seattle C-3	250	KFQW	1420
	5000	KJR	970
	1000	KOL	1270
	1000	KOMO	920
	100	KPCB	650
	50	KRSC	1120
	1000	KTW	1270
	100	KVL	1370
	500	KXA	570
	100	KFIO	1120
Spokane D-5	1000	KFPY	1340
	5000	KGA	1470
	1000	KHQ	596
Tacoma D-3	500	KMO	860
	1000	KVI	700
Wenatchee D-4	50	KPQ	1500
Yakima D-4	50	KIT	1310

WEST VIRGINIA

Bluefield L-24	100	WHIS	1420
Charleston K-23	250	WOBu	580
Fairmont J-24	250	WMMN	890
Huntington K-23	250	WSAZ	580
Wheeling J-24	5000	WWVA	1160

WISCONSIN

Beloit I-19	500	WISJ	560
Eau Claire G-18	1000	WTAQ	1330
Fond du Lac H-19	100	KFIZ	1420
Green Bay G-19	100	WHBY	1200
Janesville I-19	100	WCLO	1200
La Crosse H-18	1000	WKBH	1380
Madison H-19	750	WHA	940
	500	WIBA	1210
Manitowoc H-20	100	WOMT	1210
Milwaukee H-20	250	WHAD	1120
	250	WISN	1120
	1000	WTMJ	620
Poynette H-19	100	WIBU	1310
Racine I-20	100	WRJN	1370
Sheboygan H-20	500	WHBL	1410
Stevens Pt. G-19	2000	WLBL	900
Superior F-17	1000	WEBC	1290

WYOMING

Casper H-10	100	KDFN	1210
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INDEX BY LOCATIONS WITH MAP KEY

CANADA				PRINCE EDWARD ISLAND			
	Watts		Kcys.		Watts		Kcys.
ALBERTA				Charlottetown C-31			
Calgary B-7	500	CFAC	690		250	CFCY	960
	500	CFCN	690		30	CHCK	960
	500	CHCA	690	Summerside C-31	100	CHGS	1120
	500	CJCI	690	QUEBEC			
	500	CNRC	690	Montreal E-26	500	CFCF	1030
Edmonton A-8	250	CHMA	580		5000	CHYC	730
	500	CJCA	930		5000	CKAC	730
	500	CKUA	580		5000	CNRM	730
	500	CNRE	930	Quebec D-27	100	CHRC	880
Lethbridge C-8	50	CJOC	1120		22	CKCI	880
Red Deer A-8	1000	CHCT	840		50	CKCV	880
	1000	CKLC	840		50	CNRR	880
	1000	CNRD	840	SASKATCHEWAN			
BRITISH COLUMBIA				Fleming C-13	500	CJRW	600
Chilliwack B-3	5	CHWK	1210	Moose Jaw C-11	500	CJRM	600
Kamloops B-5	15	CFJC	1120	Pilot Butte	500	CHWC	960
Sea Island	50	CJOR	1210	Regina C-12	500	CJBR	960
Vancouver B-3	50	CHLS	730		500	CKCK	960
	50	CKCD	730	Saskatoon B-11	500	CNRR	960
	50	CKFC	730		500	CFQC	910
	50	CKMO	730	Yorkton C-13	500	CNRS	910
	100	CKWX	730			CJGX	630
	500	CNRV	1030	HAITI			
Victoria C-3	500	CFCT	630	Port au Prince X-30	1000	HHK	920
MANITOBA				MEXICO			
Brandon D-14	500	CKX	540	Chihuahua, Chih. R-9	250	XFF	920
Winnipeg D-15	5000	CKY	780	Guadalajara, Jal. X-10	101	XEA	1200
	5000	CNRW	780	Jalapa, Ver. Y-14	350	XFC	630
				Juarez, Chih.	101	XEJ	860
				Merida, Yuc. X-19	105	XEY	550
				Mexico City Y-13	1000	XEB	670
					1000	XEN	730
					101	XEO	980
					101	XER	1070
					500	XEX	920
					500	XEZ	700
					50	XFA	540
					2000	XFG	640
					1000	XFI	590
					500	XFX	840
				Monterrey, N. L. U-13	101	XEH	960
					500	XET	890
				Morelia, Mich. Y-12	101	XET	1000
				Oaxaca, Oax. AA-14	105	XEF	1130
				Reynosa, Tams.	2000	XED	770
				Saltillo, Coah.	10	XEL	1090
				Tampico, Tams.	501	XEM	840
					500	XES	890
				Toluca, Mex.	50	XEC	1330
				Veracruz, Ver.	101	XEU	800
				Villahermosa, Tab.	250	XFE	920
				CUBA			
				Caibarien W-25	250	CMHD	920
				Cienfuegos W-25	200	CMHA	1150
				Colon W-24	300	CMGA	830
				Havana W-23	100	CMBC	1220
					200	CMBY	610
					100	CMBZ	1010
					500	CMC	840
					100	CMCE	1280
					250	CMCF	1010
					500	CMCQ	950
					500	CMI	770
					2000	CMK	730
					100	CMQ	1220
					1000	CMW	600
					500	CMX	900
				Santiago X-28	150	CMKC	1360
				Tuinucu	500	CMHC	790
				COSTA RICA			
				San Jose FF-23	50	TIX	750

CFAC 690		CJRW 600		CMKc 1360		KFDM 560	
Calgary, Alta.		Fleming, Sask		Santiago, Cuba		Beaumont, Tex.	
CFBO 890		CJSC 690	57	CMQ 1220		KFDY 550	
St. John, N. B.		Toronto, Ont.	50	Havana, Cuba		Brookings, S.D.	
CFCA 840	33	CKAC 730		CMW 600	78	KFEL 920	
Toronto, Ont.		Montreal, Que.		Havana, Cuba		Denver, Colo.	
CFCF 1030	20 1/2	CKCD 730		CMX 920		KFEG 680	
Montreal, Que.		Vancouver, B.C.		Havana, Cuba		St. Joseph, Mo.	
CFCH 600		CKCI 880		CNRA 630		KFGQ 1310	
Iroq's Falls, Ont.		Quebec, Que.		Moncton, N.B.		Boone, Iowa	
CFCL 580		CKCK 960		CNRC 690		KFH 1300	
Toronto, Ont.		Regina, Sask.		Calgary, Alta.		Wichita, Kansas	10
CFCN 690		CKCL 580	84	CNRD 840		KFHA 1200	
Calgary, Alta.		Toronto, Ont.		Red Deer, Alta.		Gunnison, Colo.	
CFCO 1210		CKCO 890		CNRE 930		KFI 640	67 1/2
Chatham, Ont.		Ottawa, Ont.		Edmonton, Alta.		KFIO 1120	
CFCT 630		CKCR 1010		CNRH 930		Spokane, Wash.	
Victoria, B. C.		Waterloo, Ont.		Halifax, N. S.		KFIU 1310	
CFCY 960	25	CKCV 880		CNRL 910	29	Jeanu, Alaska	
Ch'lottet'n, P.E.I.		Quebec, Que.		London, Ont.		KFIZ 1420	
CFJC 1120		CKFC 730		CNRM 730		Fond du Lac, Wis	
Kamloops, B. C.		Vancouver, B.C.		CNRO 600		KFJB 1200	
CFLC 1010		CKGW 690	57	Ottawa, Ont.		Marshalltown, Ia.	
Prescott, Ont.		Toronto, Ont.		CNRQ 880		KFFF 1480	
CFNB 1210		CKIC 930		Quebec, Que.		Oklahoma City	
Fredericton, N.B.		Wolfville, N.S.		CNRR 960		KFJI 1370	
CFQC 910		CKLC 840		Regina, Sask.		Astoria, Ore.	
Saskatoon, Sask.		Red Deer, Alta.		CNRS 910		KFJM 1370	
CFRB 960	25 1/2	CKKM 1210		Saskatoon, Sask.		Grd. Forks, N.D.	
Toronto, Ont.		Cobalt, Ont.		CNRT 840		KFJR 1300	
CFRC 930		CKMO 730		Toronto, Ont.	35	Portland, Ore.	
Kingston, Ont.		Vancouver, B.C.		CNRV 1030		KFJY 1310	
CHCA 690		CKNC 580	84	Vancouver, B.C.		Fort Dodge, Ia.	
Calgary, Alta.		CKOC 880	31	CNRW 780		KFJZ 1370	
CHCK 960		Hamilton, Ont.		Winnipeg, Man.		Ft. Worth, Tex.	
Ch'lottet'n, P.E.I.		CKPC 1210		CNRX 960		KFKA 880	
CHCS 880		Preston, Ont.		Toronto, Ont.	57	Greeley, Colo.	
Hamilton, Ont.		CKPR 930		CPRY 690	57	KFKB 1050	
CHCT 840		Midland, Ont.		Toronto, Ont.		Milford, Kansas	19 1/2
Red Deer, Alta.		CKUA 580		HHK 920		KFKU 1220	
CHGS 1120		Edmonton, Alta.		KBPS 1420		Lawrence, Kans.	
Sum'rside, P.E.I.		CKWX 730		Portland, Ore.		KFKX 1020	21
CHLS 730		Vancouver, B.C.		KBTM 1200		Chicago, Ill.	
Vancouver, B.C.		CKX 540		Paragould, Ark.		KFLV 1410	
CHMA 580		Brandon, Man.		KCRC 1370		Rockford, Ill.	
Edmonton, Alta.		CKY 780		Enid, Okla.		KFLX 1370	
CHML 880	31	Winnipeg, Man.		KCRJ 1310		Galveston, Tex.	
Hamilton, Ont.		CMBC 1220		Jerome, Ariz.		KFMX 1250	
CHNS 930		Havana, Cuba		KDB 1500		N'thfield, Minn.	
Halifax, N.S.		CMBY 1400		S. Barbara, Cal.		KFNF 890	
CHRC 880		Havana, Cuba		KDFN 1210		Shenandoah, Ia.	30 1/2
Quebec, Que.		CMBZ 1010		Casper, Wyo.		KFOR 1210	
CHWC 960		Havana, Cuba		KDKA 980	24	Lincoln, Nebr.	
Pilot Butte, Sask.		CMC 840	35	Pittsburgh, Pa.		KFOX 1250	
CHWK 1210		Havana, Cuba		KDLR 1210		Long Beach, Cal.	
Pittswick, B.C.		CMCE 1280		Devils Lake, N.D.		KFPL 1310	
CHYC 730		Havana, Cuba		KDYL 1290		Dublin, Texas	
Montreal, Que.		CMCF 1010		Salt Lake City		KFPM 1310	
CJBR 960		Havana, Cuba		KECA 1430		Greenville, Tex.	
Regina, Sask.		CMCQ 950		Los Angeles, Cal.		KFPW 1340	
CJCA 930		Havana, Cuba		KELW 780		Ft. Smith, Ark.	
Edmonton, Alta.		CMGA 830		Burbank, Cal.		KFPY 1340	
CJCB 880		Colon, Cuba		KEX 1180		Spokane, Wash.	
Sydney, N.S.		CMHA 1150		Portland, Ore.		KFQA 1090	
CJCY 690		Cienfuegos, Cuba		KFAB 770		St. Louis, Mo.	
Calgary, Alta.		CMHC 790		Lincoln, Nebr.	44	KFQD 1230	
CJCG 910	29	Tuinucu, Cuba		KFBB 1280		Anchorage, Alas.	
London, Ont.		CMHD 920		Great Fls., Mont.		KFV 1420	
CJGX 630		Caibarien, Cuba		KFBK 1310		Holy City, Cal.	
Yorkton, Sask.		CMH 770		Sacramento, Cal.		KFQW 1420	
CJOC 1120		Havana, Cuba		KFBL 1370		Seattle, Wash.	
Lethbridge, Alta.		CMK 730	50	Everett, Wash.		KFRC 610	
CJOR 1210		Havana, Cuba				San F'nscisco, Cal.	
Sea Island, B.C.						KFRU 630	
CJRM 600						Columbia, Mo.	70
Moose Jaw, Sask.							

KFSD 600 San Diego, Cal.	KGFF 1420 Alva, Okla.	KIDO 1250 Boise, Idaho	KPJM 1500 Prescott, Ariz.
KFSG 1120 Los Angeles, Cal.	KGFG 1370 Oklahoma City	KJT 1310 Yakima, Wash.	KPO 680 San F'nisco, Cal.
KFUL 1290 Galveston, Tex.	KGFI 1500 Corpus Ch'sti, Tex	KJBS 1070 San F'nisco, Cal.	KPOF 880 Denver, Colo.
KFUM 1270 Col. Spgs., Colo.	KGFJ 1200 Los Angeles, Cal.	KJR 970 Seattle, Wash.	KPPC 1210 Pasadena, Cal.
KFUO 550 St. Louis, Mo.	KGFK 1500 Moorhead, Minn.	KLCN 1290 Blytheville, Ark.	KPK 1500 Wenatchee, Wash
KFUP 1310 Denver, Colo.	KGFL 1370 Raton, N. M.	KLO 1400 Ogden, Utah	KPRC 920 Houston, Texas
KFVD 1000 Culver City, Cal.	KGFW 1310 Ravenna, Nebr.	KLPM 1420 Minot, N. Dak.	KPSN 1360 Pasadena, Cal.
KFVS 1210 Cape Gir'r'd'u, Mo	KGFX 580 Pierre, S. D.	KLRA 1390 Little Rock, Ark.	KQV 1380 Pittsburgh, Pa.
KFWB 950 Hollywood, Cal.	KGGC 1420 San F'nisco, Cal.	KLS 1440 Oakland, Cal.	KQW 1010 San Jose, Cal.
KFWF 1200 St. Louis, Mo.	KGGF 1010 Picher, Okla.	KLX 880 Oakland, Cal.	KRE 1370 Berkeley, Cal.
KFWI 930 San F'nisco, Cal.	KGGM 1230 Alb'g'rque, N.M.	KLZ 560 Denver, Colo.	KREG 1500 Santa Ana, Cal.
KFXD 1420 Nampa, Idaho	KGHF 1320 Pueblo, Colo.	KMA 930 Shenandoah, Ia.	KRGV 1260 Harlingen, Texas
KFXF 920 Denver, Colo.	KGHI 1200 Little Rock, Ark.	KMAC 1370 San Antonio, Tex.	KRLD 1040 Dallas, Texas
KFXJ 1310 Edgewater, Colo.	KGHL 950 Billings, Mont.	KMBC 950 Kan. City, Mo.	KRMD 1310 Shreveport, La.
KFXM 1210 San Ber'd'no, Cal.	KGIQ 1320 Twin Falls, Ida.	KMED 1310 Medford, Ore.	KROW 930 Oakland, Cal.
KFXR 1310 Oklahoma City	KGIR 1360 Butte, Mont.	KMIC 1120 Inglewood, Cal.	KRSC 1120 Seattle, Wash.
KFY 1420 Flagstaff, Ariz.	KGIW 1420 Trinidad, Colo.	KMJ 1210 Fresno, Cal.	KSAC 580 Manh't'n, Kans.
KFYO 1420 Abilene, Texas	KGLX 1420 Las Vegas, Nev.	KMLB 1200 Monroe, La.	KSCJ 1330 Sioux City, Ia.
KFYR 550 Bismarek, N.D.	KGIZ 1500 Grant City, Mo.	KMMJ 740 Clay Ctr., Nebr.	KSD 550 St. Louis, Mo.
KG A 1470 Spokane, Wash.	KGJF 890 Little Rock, Ark.	KMO 860 Tacoma, Wash.	KSEI 900 Pocatello, Idaho
KGAR 1370 Tucson, Ariz.	KGKB 1500 Brownwood, Tex.	KMOX 1090 St. Louis, Mo.	KSL 1130 Salt Lake City
KG B 1330 San Diego, Cal.	KGKL 1370 San Angelo, Tex.	KMPK 710 Los Angeles, Cal.	KSMR 1200 Santa Maria, Cal.
KGHU 900 Ketchikan, Al'ka.	KGKO 570 Wichita Fils., Tex	KMTR 570 Los Angeles, Cal.	KSO 1380 Clarinda, Iowa
KGIX 1310 St. Joseph, Mo.	KGKX 1420 Sand Point, Ida.	KNX 1050 Los Angeles, Cal.	KSOO 1110 Sioux Falls, S.D.
KGHZ 930 York, Nebr.	KGKY 1500 Scottsbluff, Nebr.	KOA 830 Denver, Colo.	KSTP 1460 St. Paul, Minn.
KGCA 1270 Decorah, Iowa	KGMB 1320 Honolulu, T. H.	KOAC 550 Corvallis, Ore.	KTAB 560 San F'nisco, Cal.
KGCR 1210 Watertown, S.D.	KGMP 1210 Elk City, Okla.	KOB 1180 State Coll., N.M.	KTAP 1420 San Antonio, Tex.
KGCU 1200 Mandan, N.D.	KGNF 1430 No. Platte, Neb.	KOCW 1400 Chickasha, Okla.	KTAR 620 Phoenix, Ariz.
KG CX 1310 Wolf P't, Mont.	KGNO 1210 Dodge City, Kans.	KOH 1380 Reno, Nevada	KTAT 1240 Ft. Worth, Tex.
KGDA 1370 Mitchell, S. D.	KGO 790 San F'nisco, Cal.	KOIL 1260 Council Bluffs, Ia.	KTBI 1300 Los Angeles, Cal.
KGDE 1200 Ferg's F'ls, Minn	KGDS 1410 Amarillo, Texas	KOIN 940 Portland, Ore.	KTBR 1300 Portland, Ore.
KGDM 1100 Stockton, Cal.	KGU 940 Honolulu, Hawaii	KOL 1270 Seattle, Wash.	KTBS 1450 Shreveport, La.
KG DY 1200 Oldham, S. D.	KHOL 620 Portland, Ore.	KOMO 920 Seattle, Wash.	KTHS 1040 Hot Spgs., Ark.
KG E 1300 Los Angeles, Cal.	KGY 1200 Lacey, Wash.	KONO 1370 San Antonio, Tex	KTLC 1310 Houston, Texas
KGEK 1200 Yumo, Colo.	KHJ 900 Los Angeles, Cal.	KOOS 1370 Marshfield, Ore.	KTM 780 Los Angeles, Cal.
KGER 1360 Long Beach, Cal.	KHQ 590 Spokane, Wash.	KORE 1420 Eugene, Ore.	KTNT 1170 Muscatine, Iowa
KGEW 1200 Ft. Morgan, Colo.	KICK 1420 Red Oak, Iowa.	KOY 1390 Phoenix, Ariz.	KTRH 1120 Houston, Texas
KGEZ 1310 Kalispell, Mont.	KID 1320 Idaho Falls, Ida.	KPCB 650 Seattle, Wash.	KTSA 1290 San Antonio, Tex.

KTSL 1310	WABC 860	WCAD 1220	WDBJ 330
Shreveport, La.	New York City	Canton, N. Y.	Roanoke, Va.
KTSM 1310	WABI 1200	WCAE 1220	WDBO 1120
El Paso, Texas	Bangor, Maine	Pittsburgh, Pa.	Orlando, Fla.
KTUE 1420	WABQ 1440	WCAH 1430	WDEL 1120
Houston, Texas	Rochester, N. Y.	Columbus, Ohio	Wilmington, Del.
KTW 1270	WAHZ 1200	WCAJ 590	WDGY 1180
Seattle, Wash.	New Orleans, La.	Lincoln, Nebr.	Minneap., Minn.
KUJ 1500	WACO 1240	WCAI 1250	WDOJ 1280
Longview, Wash.	Waco, Texas	Northfield, Minn.	Chattan'ga, Tenn
KUOA 1390	WADC 1320	WCAM 1280	WDRC 1330
Payetteville, Ark.	Akron, Ohio	Camden, N. J.	N. Haven, Conn.
KUSD 890	WAGM 1310	WCAO 600	WDSU 1250
Vermillion, S. D.	Royal Oak, Mich.	Baltimore, Md.	New Orleans, La.
KUT 1500	WAU 640	WCAI 1280	WDWF 1210
Austin, Texas	Columbus, Ohio	Asbury Pk., N. J.	Providence, R. I.
KVI 760	WALR 1210	WCAT 1200	WDZ 1070
Tacoma, Wash.	Zanesville, Ohio	Itapic City, S. D.	Tuscola, Ill.
KVL 1370	WAPI 1140	WCAU 1170	WEAF 660
Seattle, Wash.	Birmingham, Ala.	Philadelphia, Pa.	New York City
KVOA 1260	WASH 1270	WCAX 1200	WEAI 1270
Tucson, Arizona	Gr. Rapids, Mich.	Burlington, Vt.	Ithaca, N. Y.
KVOO 1140	WBAA 1400	WCZA 1070	WEAN 780
Tulsa, Okla.	Lafayette, Ind.	Carthage, Ill.	Providence, R. I.
KVOS 1200	WBAK 1430	WCB 1440	WEAO 570
Bellingh'm, Wash.	Harrisburg, Pa.	Allentown, Pa.	Columbus, Ohio
KWCR 1310	WBAL 1060	WCBD 1080	WEBC 1290
Cedar Rapids, Ia.	Baltimore, Md.	Zion, Ill.	Superior, Wis.
KWEA 1210	WBAP 800	WCBM 1370	WEHQ 1210
Shreveport, La.	Fort Worth, Tex.	Baltimore, Md.	Harrisburg, Ill.
KWG 1200	WBAX 1210	WBS 1210	WEHR 1310
Stockton, Cal.	Wilkes-Barre, Pa.	Springfield, Ill.	Buffalo, N. Y.
KWJJ 1060	WBBC 1400	WCCO 810	WEDC 1210
Portland, Ore.	Brooklyn, N. Y.	Minneap., Minn.	Chicago, Ill.
KWK 1350	WBBL 1210	WCDA 1350	WEDH 1420
St. Louis, Mo.	Richmond, Va.	New York City	Erie, Pa.
KWKC 1370	WBDM 770	WCFL 970	WEI 590
Kansas City, Mo.	Chicago, Ill.	Chicago, Ill.	Boston, Mass.
KWKH 850	WBFR 1300	WCGU 1400	WEHC 1200
Shreveport, La.	Brooklyn, N. Y.	Brooklyn, N. Y.	Emory, Va.
KWLC 1270	WBBS 1500	WCHI 1490	WEHS 1420
Decorah, Iowa	Boston, Mass.	Chicago, Ill.	Evanston, Ill.
KWSC 1220	WBZ 1200	WCKY 1490	WELK 1370
Pullman, Wash.	Ponca City, Okla.	Covington, Ky.	Philadelphia, Pa.
KWWG 1260	WBCM 1410	WCLB 1500	WELL 1420
Brownsville, Tex.	Bay City, Mich.	Long Beach, N. Y.	BattleCreek, Mich
KXA 570	WBEN 900	WCLO 1200	WEMC 590
Seattle, Wash.	Buffalo, N. Y.	Janesville, Wis.	Ber'n Spgs., Mich
KXL 1420	WBGF 1370	WCLS 1310	WENR 870
Portland, Ore.	Glens Falls, N. Y.	Joliet, Ill.	Chicago, Ill.
KXO 1200	WBIS 1230	WCMA 1400	WEPS 1200
El Centro, Cal.	Boston, Mass.	Culver, Ind.	Worcester, Mass.
KYRO 1310	WBMS 1450	WCOC 889	WEVD 1300
Aberdeen, Wash	Hackensack, N.J.	Meridian, Miss.	New York City
KYA 1230	WBNY 1350	WCOD 1200	WEW 760
San F'nisco, Cal.	New York City	Harrisburg, Pa.	St. Louis, Mo.
KYW 1020	WBOQ 860	WCOH 1210	WFAA 800
Chicago, Ill.	New York City	Yonkers, N. Y.	Dallas, Texas
KZM 1370	WBOW 1310	WCRW 1210	WFAN 610
Hayward, Cal.	Terre Haute, Ind.	Chicago, Ill.	Philadelphia, Pa.
NAA 690	WBRC 930	WCSC 1360	WFBC 1200
Arlington, Va.	Birmingham, Ala.	Charleston, S. C.	WFBK 1200
NBA 850	WBRE 1310	WCSH 940	WFBE 1200
Balboa, C. Z.	Wilkes-Barre, Pa.	Portland, Maine	Cincinnati, Ohio
TIX 750	WBRO 920	WCOS 1450	WFBG 1310
San Jose, C. R.	Well't'yH's, Mass	Springfield, Ohio	Altoona, Pa.
VAS 690	WBT 1080	WDAE 1220	WFBL 1360
Louisburg, N. S.	Charlotte, N. C.	Tampa, Fla.	Syracuse, N. Y.
WAAF 920	WBTM 1370	WDAF 610	WFBM 1230
Chicago, Ill.	Danville, Va.	Kansas City, Mo.	Indianapolis, Ind.
WAAM 1250	WBZ 990	WDAG 1410	WFBR 1270
Newark, N. J.	Springfield, Mass.	Amerילו, Texas	Baltimore, Md.
WAAT 940	WBZA 990	WDAH 1310	WFFD 1310
Jersey City, N. J.	Boston, Mass.	El Paso, Texas	Flint, Mich.
WAAW 660	WCAC 600	WDAY 940	WFDV 1370
Omaha, Nebr.	Storrs, Conn.	Fargo, N. D.	Rome, Ga.

WMMN 890 Fairmont, W. Va.	30 1/2	WORC 1200 Worcester, Mass.		WREN 1220 Lawrence, Kans.		WTIC 1060 Hartford, Conn.	19
WMPC 1500 Lapeer, Mich.		WORD 1490 Chicago, Ill.		WRHM 1250 Minneapolis, Minn.	11 1/2	WTMJ 620 Milwaukee, Wis.	92
WMRJ 1210 Jamaica, N. Y.		WOS 630 Jeff's'n City, Mo.	70	WRJN 1370 Racine, Wis.		WINT 1470 Nashville, Tenn.	5 1/2
WMSG 1350 New York City		WOV 1130 New York City		WRK 1310 Hamilton, Ohio		WTOC 1260 Savannah, Ga.	
WMT 600 Waterloo, Iowa	7 1/2	WOW 590 Omaha, Nebr.	8 1/2	WRNY 1010 New York City		WVA 1200 Hammond, Ind.	
WNAC 1230 Boston, Mass.	11 3/4	WOWO 1160 Ft. Wayne, Ind.	14 1/2	WRR 1280 Dallas, Texas		WWJ 920 Detroit, Mich.	28
WNAD 1010 Norman, Okla.		WPAD 1420 Paducah, Ky.		WRUF 830 Gainesville, Fla.	36	WWL 850 New Orleans, La.	3 1/2
WNAX 570 Yankton, S. D.	88	WPAP 1010 New York City		WRVA 1110 Richmond, Va.	17	WWNC 570 Asheville, N. C.	88
WNBF 1500 Bingh'm't'n, N. Y.		WPAW 1210 Pawtucket, R. I.		WRSI 1330 Cincinnati, Ohio	9	WWSL 1500 Woodside, N. Y.	
WNBH 1310 New B'd'd, Mass.		WPCC 560 Chicago, Ill.		WSAJ 1310 Grove City, Pa.		WVVA 1160 Wheeling, W. Va.	14 1/2
WNBJ 1310 Knoxville, Tenn.		WPCH 810 New York City		WSAN 1440 Allentown, Pa.		WXYZ 1240 Detroit, Mich.	1 1/2
WNBO 1200 Washington, Pa.	3 3/4	WPDF 1200 Flint, Mich.		WSAR 1450 Fall River, Mass.		XEA 1200 Guadalajara, Jal.	
WNBR 1430 Memphis, Tenn.		WPEN 1500 Philadelphia, Pa.	5	WSAZ 580 Hunt'gton, W. Va.	84	XEB 670 Mexico City	
WNBW 1200 Carbondale, Pa.		WPG 1100 Atl'ntic City, N. J.	17 1/2	WSB 740 Atlanta, Ga.	48	XEC 1330 Toluca, Mex.	
WNBX 1200 Springfield, Vt.		WPOE 1370 Patchogue, N. Y.	8	WSBC 1210 Chicago, Ill.		XED 770 Reynosa, Tams.	
WNBZ 1290 SaranacL'ke, N. Y.		WPOR 780 Norfolk, Va.		WSBT 1230 South Bend, Ind.		XEF 1130 Oaxaca, Oax.	
WNJ 1450 Newark, N. J.		WPSC 1230 State College, Pa.		WSFA 1410 Montgomery, Ala.	11 1/2	XEH 960 Monterrey, N. L.	
WNOX 560 Knoxville, Tenn.	92	WPTF 680 Raleigh, N. C.	54	WSGH 1400 Brooklyn, N. Y.		XEI 1000 Morelia, Mich.	
WNRC 1440 Greensboro, N. C.		WQAM 560 Miami, Fla.	92	WSIX 1210 Springfield, Tenn.		XEJ 860 Juarez, Chlh.	
WNYC 570 New York City		WQAN 880 Scranton, Pa.		WSJS 1370 Winst'-Sal., N. C.		XEL 1090 Saltillo, Coah.	
WOAI 1190 San Antonio, Tex.	13 1/2	WQAO 1010 New York City		WSM 650 Nashville, Tenn.	65	XEM 840 Tampico, Tams.	
WOAN 600 Law'nceb'g, Tenn.		WQBC 1360 Vicksburg, Miss.		WSMB 1320 New Orleans, La.		XEN 730 Mexico City	
WOAX 1280 Trenton, N. J.	10 1/2	WQDM 1370 St. Albans, Vt.		WSMK 1380 Dayton, Ohio	7 1/2	XEO 980 Mexico City	
WOBT 1310 Union City, Tenn.	10	WQDV 1500 Tupelo, Miss.		WSPA 1420 Spartanburg, S. C.		XER 1070 Mexico City	
WOBU 580 Charlest'n, W. Va.	84	WQDX 1210 Thomasville, Ga.		WSPD 1230 Toledo, Ohio	96	XES 890 Tampico, Tamp.	
WOC 1000 Davenport, Iowa	22	WRAF 1200 La Porte, Ind.		WSSH 1410 Boston, Mass.		XET 890 Monterrey, N. L.	
WOCL 1210 Jamestown, N. Y.	12 1/2	WRAK 1370 Williamsport, Pa.		WSUI 880 Iowa City, Ia.		XEU 800 Veracruz, Ver.	
WODA 1250 Paterson, N. J.	11 3/4	WRAW 1310 Reading, Pa.		WSUN 620 St. Petersb'g, Fla.	72	XEX 920 Mexico City	
WODX 1410 Mobile, Ala.		WRAX 1020 Philadelphia, Pa.		WSVS 1370 Buffalo, N. Y.	8	XEY 550 Merida, Yuc.	
WOI 640 Ames, Iowa		WRBJ 1370 Hattiesburg, Miss.		WSYR 570 Syracuse, N. Y.		XEZ 700 Mexico City	
WOKO 1440 P'ghkeepsie, N. Y.		WRBL 1200 Columbus, Ga.		WTAD 1440 Quincy, Ill.		XFA 540 Mexico City	
WOL 1310 Washington, D. C.		WRBQ 1210 Greenville, Miss.		WTAG 580 Worcester, Mass.		XFC 630 Jalapa, Ver.	
WOMT 1210 Manitowoc, Wis.		WRBT 1370 Wilmington, N. C.		WTAM 1070 Cleveland, Ohio	18 1/2	XFE 920 Villahermosa, Tab	
WOOD 1270 Gr. Rapids, Mich.	10 3/4	WRBU 1210 Gastonia, N. C.		WTAQ 1330 Eau Claire, Wis.		XFF 920 Chihuahua, Chih.	
WOOP 840 Jeannette, Pa.		WRBX 1410 Roanoke, Va.	7	WTAR 780 Norfolk Va.	42	XFG 640 Mexico City	
WOPI 1500 Bristol, Tenn.		WRC 950 Washington, D. C.	25 1/2	WTAW 1120 College Sta., Tex.		XFI 590 Mexico City	
WOQ 1300 Kansas City, Mo.		WRDO 1370 Augusta, Me.		WTAX 1210 Streator, Ill.		XFX 840 Mexico City	
WOR 710 Newark, N. J.	5 1/4	WRDW 1500 Augusta, Ga.		WTBO 1420 Cumberland, Md.		8WMC 720 St. Johns, N. F.	
		WREC 600 Memphis, Tenn.	28	WTFI 1450 Toccoa, Ga.		10BP 1200 Wingham, Ont.	

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The Short Wave Stations

Following is a list of the Stations in the United States which have been reported to us as broadcasting on short waves. These are largely experimental and change their frequencies from time to time. A list of the amateurs using short waves may be secured by sending 25 cents in coin to Superintendent of Documents, Government Printing Office, Washington, D. C.

Call	Station	Owner	City and State	Meters	Watts
W1XAA	WRAH	Stanley N. Read	Providence, R. I.		75
W1XAB	WCSH	Congress Square Hotel Co.	Portland, Maine	63.79	250
W1XAE	WBZ	Westinghouse Elec. & Mfg. Co.	Springfield, Mass.	70.0	
W1XAF	WEEI	Edison Elec. Illuminating Co.	Boston, Mass.		
W1XAG		Edison Elec. Illuminating Co.	Boston, Mass.		
W1XY	WBRL	Booth Radio Laboratories	Tilton, N. H.	105-109	250
W2XAC	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAD	WGY	General Electric Co.	Schenectady, N. Y.	19.56	
W2XAE	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAF	WGY	General Electric Co.	Schenectady, N. Y.	31.48	
W2XAG	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAH	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAK	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAL	WRNY	Aviation Radio Station, Inc.	New York	49.67	500
W2XAO		Atlantic Broadcasting Co.	New York	105.9	100
W2XAQ	WOR	L. Bamberger Co.	Newark, N. J.	65.4	50
W2XAW	WGY	General Electric Co.	Schenectady, N. Y.		
W2XBA	WAAM	WAAM, Inc.	Newark, N. J.	65.18	50
W2XBB	WCGU	Chas. G. Ungar	Coney Island, N. Y.	54.02	150
W2XBR	WBNY	Baruchrome Corp.	New York City	49.83	
W2XCD		DeForest Radio Co.	Passiac, N. J.	187.30	
W2XE	WABC	Atlantic Broadcasting Co.	Richmond Hill, N. Y.	49.02	50
W2XZ		National Broadcasting Co.	Bellmore, L. I.	49.15	50000
W3XAU	WCAU	Universal Broadcasting Co.	Philadelphia, Pa.	49.50	
W3XK		C. Francis Jenkins Labs.	Washington, D. C.		
W3XL	WJZ	Radio Corp. of America	Bound Brook, N. J.	59.96	30000
W3XN		Bell Telephone Laboratory	Whippany, N. J.		
W4XD	WSM	Nat'l Life & Accident Ins. Co.	Memphis, Tenn.	31.43	
W4XE		William Justice Lee	Winter Park, Fla.	200.	250
W6XA	KNX	Los Angeles Express	Los Angeles, Cal.	107.1	100
W6XAD	KFWO	Lawrence Mott	Avalon, Cal.	53.07	100
W6XAF	KNRC	Clarence B. Juneau	Santa Monica, Cal.	108.2	100
W6XAI	KGGM	Los Angeles Radio Club	Los Angeles, Cal.	66.04	50
W6XAK	KFWH	F. W. Morse	Chico, Cal.	108.2	50
W6XAL	KFQZ	L. E. Taft	Hollywood, Cal.	66.04	50
W6XAN	KRLO	Freeman Lang	Los Angeles, Cal.	105.9	250
W6XAR	KJBS	J. Brunton & Sons	San Francisco, Cal.	32.	50
W6XAU	KHJ	Times-Mirror Co.	Los Angeles, Cal.	104.1	50
W6XAX	KGO	General Electric Co.	Oakland, Cal.	10-40	10000
W6XAZ		Nelson Radio Co.	San Diego, Cal.	106.	50
W6XBA	KFSG	Air-Fan Radio Corp.	Los Angeles, Cal.	108.2	250
W6XBE	KFBC	W. K. Azbill	San Diego, Cal.		
W6XBH	KFQU	W. E. Riker	Holy City, Cal.	31-106	50
W6XBR	KFWB	Warner Bros. Picture Studio	Los Angeles, Cal.	40-105	50
W6XBV	KGER	C. Merwin Dobyns	Long Beach, Cal.	48.86	
W6XBX	KFVD	McWhinnie Electric Co.	Venice, Cal.	105.	50
W6XN	KGO	General Electric Co.	Oakland, Cal.	23.35	10000
W7XAB	KFPY	Symons Investment Co.	Spokane, Wash.	105.9	
W7XAO	KWJJ	Wilbur Jerman, Inc.	Portland, Ore.	53-54	100
W7XC	KJR	Northwest Radio Service	Seattle, Wash.	105.2	
W7XO	KJR	Northwest Radio Service	Seattle, Wash.		
W8XAC	WHAM	Stromberg-Carlson Tel. Mfg. Co.	Rochester, N. Y.		
W8XAL	WLW	Crosley Radio Corp.	Cincinnati, Ohio	49.50	500
W8XOA	WJR	WJR, Inc.	Detroit, Mich.	32.	75
W8XF	WHK	Radio Air Service Corp.	Cleveland, Ohio	66.04	500
W8XJ	WEAO	Ohio State University	Columbus, Ohio	54.02	250
W8XK	KDKA	Westinghouse Elec. & Mfg. Co.	Pittsburgh, Pa.	25.25	40000
W8XP	KDKA	Westinghouse Elec. & Mfg. Co.	Pittsburgh, Pa.	10-150	500
W8XS	KDKA	Westinghouse Elec. & Mfg. Co.	Pittsburgh, Pa.	62.57	
W9YA	KOA	General Electric Co.	Denver, Colo.	31.48	
W9XAA	WCFL	Federation of Labor	Chicago, Ill.	49.34	
W9XAB	WNAL	R. J. Rockwell	Omaha, Nebr.	105.	50
W9XF	WENR	Great Lakes Broadcasting Co.	Chicago, Ill.	49.83	
W9XU	KOIL	Mona Motor Oil Co.	Council Bluffs, Iowa	61.06	500

W1/2 X A R

RADIO PICTURE 1613
41 P. A. K. ROY

1604

Principal Broadcasting Stations of the World

Fill in your dial numbers and you will then know where these foreign stations should be received on your set

Keys	Call	Watts	City	Country	Keys	Call	Watts	City	Country
153.5		7000	Angora	Turkey	73	617 OKP	5000	Prague	Czechoslovakia
155		7000	Kaunas	Lithuania					
160		6500	Hilversum	Holland	72	620 AQM	500	San Salvador	Salvador
167		40000	Lahti	Finland		621 RV40	1200	Gomel	Russia
174	CFR	12000	Paris	France		626 5GB	25000	Daventry	Great Britain
183.5		26000	Konigs-wusterhausen	Germany	70	630	1200	Simferopol	Russia
184		10000	Norddeich	Germany		635	13000	Langenberg	Germany
193	5XX	25000	Daventry	Great Britain		644 YN	5000	Lyon	France
193.3		7000	Angora	Turkey		653 EAJ22	1000	Salamanca	Spain
202.5	RA1	40000	Moscow	Russia		662	8000	San Sebastian	Spain
207.5	FL	12000	Eiffel Tower	France		665 2FC	5000	Sydney	Australia
212.5		8000	Warsaw	Poland		665 CWOW	500	Montevideo	Uruguay
217.3	RV8	10000	Baku	Russia		666.5 RA2	1000	Moscow	Russia
222.5	SASG	30000	Motala	Sweden		680 1RO	50000	Rome	Italy
230	RV4	25000	Kharkov	Russia				Bogota	Columbia
240	RA32	4000	Novosibirsk	Russia	57	689 SASA	1500	Stockholm	Sweden
240		5000	Stamboul	Turkey	57	690 6WF	5000	Perth	Australia
250		16000	Reykjavik	Iceland	56	698	2500	Belgrade	Yugoslavia
260		7500	Kalundborg	Denmark					
268.6	RA	4000	Novosibirsk	Russia	428	700	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
272	RA1	40000	Moscow	Russia		700 CWOA	1000	Montevideo	Uruguay
279.6	RA4	4000	Rostov-Don	Russia		702.5	4000	Kharkov	Russia
280	HDO	6500	Hilversum	Holland		705 LOP	1000	LaPlata	Argentina
280.1		2500	Scheveningen	Holland		705 COMK	2000	Mukden	China
283		10000	Tiflis	Russia		707 EAJ7	2000	Madrid	Spain
300	RV3	20000	Leningrad	Russia		716	1500	Berlin	Germany
310		1000	Guatemala	Guatemala	50	720.5 RV13	4000	Odessa	Russia
320	RV49	50000	Moscow	Russia		725 2RN	1000	Dublin	Ireland
331	RV19	4000	Ashkabad	Russia		727	10000	Rabat	Morocco
343	RV13	2000	Samarkand	Russia		734	10000	Katowice	Poland
344.8	RA11	4000	Tiflis	Russia			5000	Adelaide	Australia
353	RA14	4000	Rostof	Russia	48	739	4000	Nijini-Novgorod	Russia
357	RA13	1800	Nijini-Novgorod	Russia		743 HBA	1000	Berne	Switzerland
365	RV5	25000	Sverdlovsk	Russia					
375	RV9	10000	Kiev	Russia					
385	RV29	2000	Petrozavodsk	Russia					
400	RV21	4000	Erivan	Russia					
416.6	RV2	20000	Moscow	Russia	47	750	10000	Osaka	Japan
428	RV10	4000	Minsk	Russia				Nairobi	Kenya, East Africa
461.5	RV45	1000	Orenburg	Russia					
471.5	RV44	1200	Omsk	Russia			1000	Buenos Aires	Argentina
511	RV22	2000	Ufa	Russia				Recife	Brazil
527		2500	Ljubljana	Yugoslavia				Rio Janeiro	Brazil
531		2000	Smolensk	Russia				Sao Paulo	Brazil
98	545 MT1	20000	Budapest	Hungary			50	Valparaiso	Brazil
96	550.5 CMAT	200	Tacna	Chile			1000	Glasgow	Scotland
94	554 RV32	1200	Stavropol	Russia			1500	Lima	Peru
96	563 SAS.D	10000	Sundsvall	Sweden	43	760	500	Montevideo	Uruguay
82	572 KCX	1500	Munich	Germany			1000	Dairen	Japan
83	581 ORV	3000	Riga	Latvia			12000	Bucharest	Roumania
83	585	15000	Vienna	Austria			1500	Frankfurt	Germany
81	590 BAV	1000	Archangel	Russia	45	770	10000	Sendai	Japan
79	599	7000	Brussels, No.	Belgium			1000	Genoa	Italy
			Milan	Italy			5000	Brisbane	Australia
							1200	Dnepropetrovsk	Russia
							8000	Toulouse	France
							1000	Buenos Aires	Argentina
							500	Mendoza	Argentina
							500	Montevideo	Uruguay
							10000	Kumamoto	Japan
							1000	Moscow	Russia
							1000	Manchester	Great Britain
499	600	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
603.5		1200	Moscow	Russia	41	790	10000	JOGK	Japan
76	608	60000	Oslo	Norway			792.5	RV37	1000
							797	2ZY	1000

RADEX RADIO MAP OF NORTH AMERICA

Twelve times the size of this page with all states and provinces accurately shown and all cities which contain broadcasting stations plainly lettered. Guide lines with key to correspond with that given in Index by States and Cities. Time zones correctly marked. Simple method of measuring distance between any two cities. Just the thing you have been looking for.

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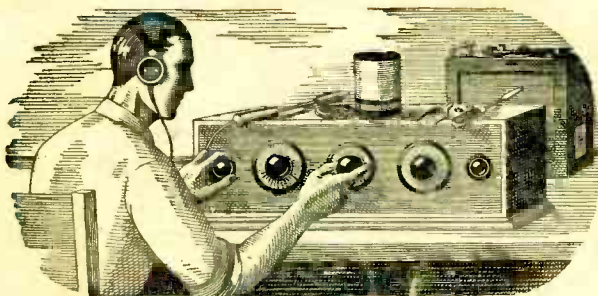
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Write Name Plainly.....

Street and Number.....

City and State.....



If all the Radio sets I've "fooled" with in my time were piled on top of each other, they'd reach about half way to Mars. The trouble with me was that I thought I knew so much about Radio that I really didn't know the first thing. I thought Radio was a plaything — that was all I could see in it for me.

I Thought Radio Was a Plaything

But Now My Eyes are Opened, and I'm Making Over \$100 a Week!

\$50 a week! Man alive, just one year ago a salary that big would have been the height of my ambition.

Twelve months ago I was skimping along on starvation wages, just barely making both ends meet. It was the same old story — a little job, a salary just as small as the job.

If you'd told me a year ago that in twelve months' time I would be making \$100 and more every week in the Radio business — whew! I know I'd have thought you were crazy. But that's the sort of money I'm pulling down right now — and in the future I expect even more. Why, only today —

But I am getting ahead of my story. I was hard up a year ago because I was kidding myself, that's all — not because I had to be.

When broadcasting first became the rage, I first began dabbling with Radio. There's a fascination — something that grabs hold of a fellow — about twirling a little knob and suddenly listening to a voice speaking a thousand miles away!

Up to a year ago, I was just a dabbler — I thought Radio was a plaything. I never realized what an enormous, fast-growing industry Radio had come to be — employing thousands and thousands of trained men. I usually stayed home in the evenings after work, because I didn't make enough money to go out very much.

And as for the idea that a splendid Radio job might be mine, if I made a little effort to prepare for it — such an idea never entered my mind. When a friend suggested it to me one year ago I laughed at him.

"You're kidding me," I said.

"I'm not," he replied. "Take a look at this."

He pointed to a page ad in a magazine I'd seen many times but just passed up. This time I read the ad carefully. It told of many big opportunities for trained men to succeed in the great new Radio field. With the advertisement was a coupon. I sent the coupon in, and in a few days received a handsome 64-page book, telling about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities. Well, it was a revelation to me. I read the book carefully, and when I finished it I made my decision.

What's happened in the twelve months since that day, seems almost like a dream to me now. For ten of those twelve months, I've had a Radio business of my own. At first, of course, I started it as a little proposition on the side, under the guidance of the National Radio Institute. It wasn't long before I was getting so much to do that I quit my measly little clerical job, and devoted my full time to my Radio business.

Since that time I've gone right on up. They would have given me just as much help, too, if I had wanted to follow some other line of Radio besides building my

own retail business — such as broadcasting, manufacturing, experimenting, sea operating, or any one of the score of lines they prepare for you. And to think that until that day I sent for their eye-opening book I'd been wailing "I never had a chance."

Now I'm making, as I told you before, over \$100 a week. And I know the future holds even more, for Radio is one of the most progressive, fastest-growing businesses in the world today. And it's work that I like — work a man can get interested in.

You may not be as bad off as I was. But think it over — are you satisfied? Are you making enough money, at work that you like? Would you sign a contract to stay where you are now for the next ten years — making the same money? If not, you'd better be doing something about it.

This new Radio game is a live-wire field of golden rewards. The work is fascinating, absorbing, well paid. The National Radio Institute — oldest and largest Radio home-study school in the world — will train you inexpensively in your own home to know Radio from A to Z.

Take another tip — No matter what your plans are, no matter how much or how little you know about Radio — clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation — the book is free, and is gladly sent to anyone who wants to know about Radio. Just address J. E. Smith, President, National Radio Institute, Dept. OK52, Washington, D. C.

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Dear Mr. Smith: — Please send me your 64-page free book, giving all information about the opportunities in Radio and how I can learn quickly and easily at home to take advantage of them. I understand this request places me under no obligation, and that no salesman will call on me.

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