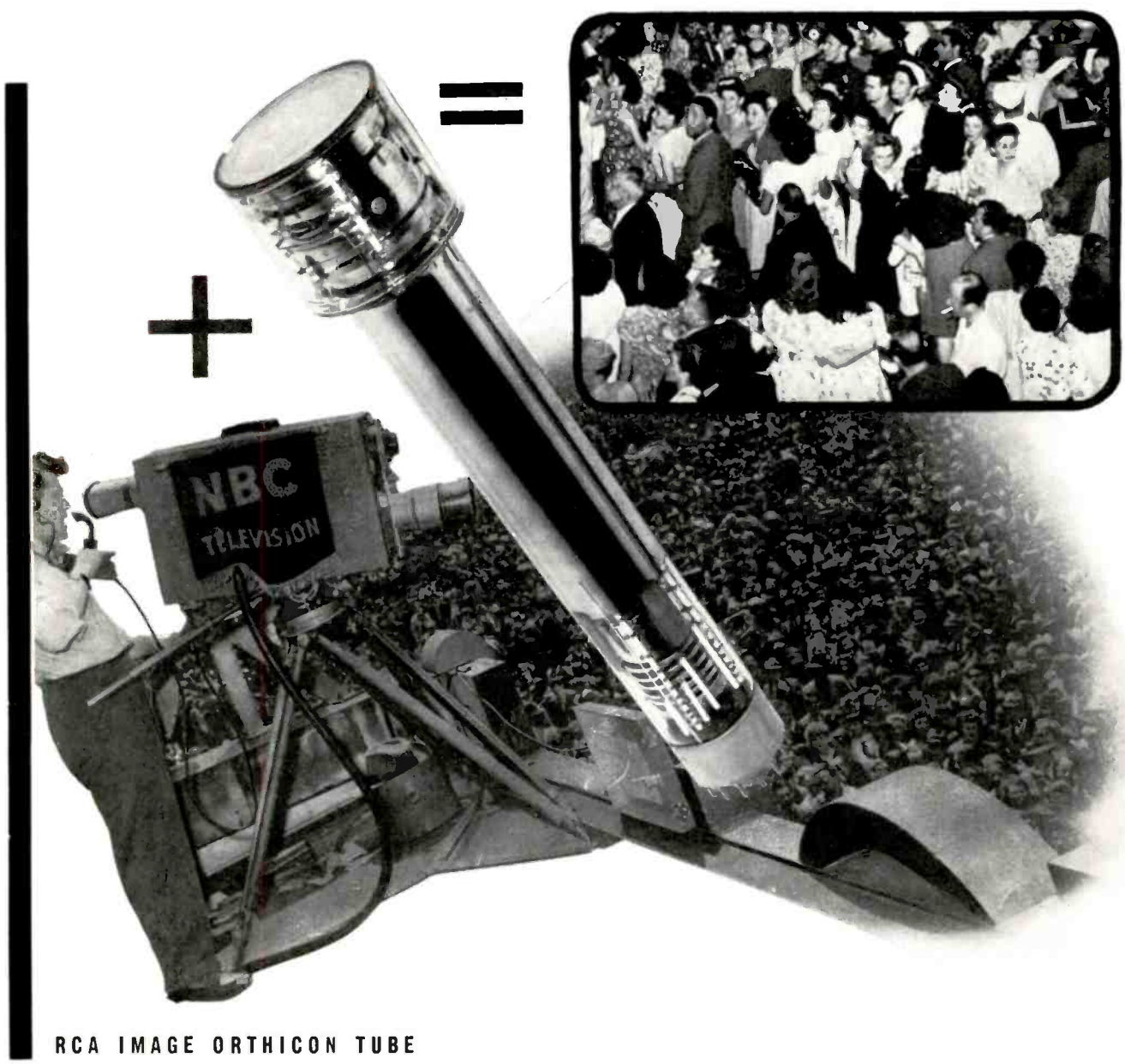
Television

THE BUSINESS MAGAZINE OF THE INDUSTRY



RCA IMAGE ORTHICON TUBE

35¢

November 1945

ELECTRONIC TELEVISION IS AN RCA DEVELOPMENT

This is the sixth in a series of advertisements showing that RCA engineers developed the basic essentials of the electronic television system—*including tubes and circuits.*

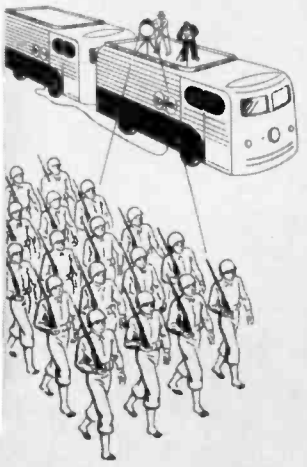
RCA built the first all-electronic television transmitters and receivers—the first commercial television station—established the first television relay system—presented the first electronic theatre television—was the first to televise a baseball game and a Broadway play; and was first to televise from an airplane.

RCA is, and will continue to be, the leader in practical, successful, commercial television. You may expect the best of all kinds of television transmitting and receiving equipment from RCA.

BUY MORE WAR BONDS

6. THE FIELD CAMERA

TO provide the public with the greatest service from television, it was necessary to develop cameras that would operate satisfactorily under the wide variety of conditions encountered in the field. Increased sensitivity was essential because of the low light conditions that frequently exist. Portability and ruggedness were prime requirements. The RCA Field Camera, developed and manufactured before the war, was the first step in this direction. It has been used extensively for televising football and baseball games, boxing and wrestling matches, and many other interesting events. The heart of this camera is, of course, the Orthicon, a 100% RCA creation. RCA was the first to produce a camera using the Orthicon — conceded to be the most satisfactory pick-up tube for outside work. When manufacture is resumed, a new and improved field camera will be available. This RCA camera will bring "on-the-spot" telecasting of sports and news events within the reach of every television station.



The Fountainhead of Modern Tube Development is RCA

RCA

RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION • CAMDEN, N. J.

In Canada, RCA VICTOR COMPANY LIMITED, Montreal

— and Prove Them Over Our Own Experimental Station W2XDK

All the requisites that add up to perfect performance are brought to bear in our manufacture of FM and television transmitters and studio controls. That includes our recognized work in the field of electronics, as well as a long experience in fine metal fabrication. PLUS...our own experimental television station! Checked every step of the way, Sherron models get a final and infallible check — under actual telecasting conditions . . . As manufacturers of custom-built electronic equipment for manufacturers exclusively, we can serve you in the building of the following to your specifications:

- TELEVISION TRANSMITTING . . . both video and audio models.
- STUDIO CONTROL DESKS . . . providing exclusive control for technical director.
- MASTER CONTROL BOARD . . . five available video channels used for monitoring program.
- TRANSMITTING CONTROLS DESKS . . . for operational control for both video and audio.

Sherron Electronics

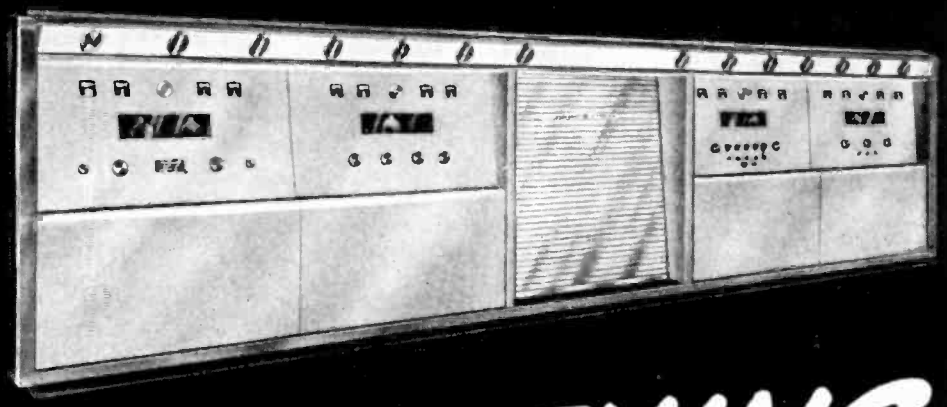
SHERRON ELECTRONICS CO.

Division of Sherron Metallic Corporation

1201 FLUSHING AVENUE, BROOKLYN 6, N. Y.

"Where The Ideal Is The Standard, Sherron Units Are Standard Equipment"

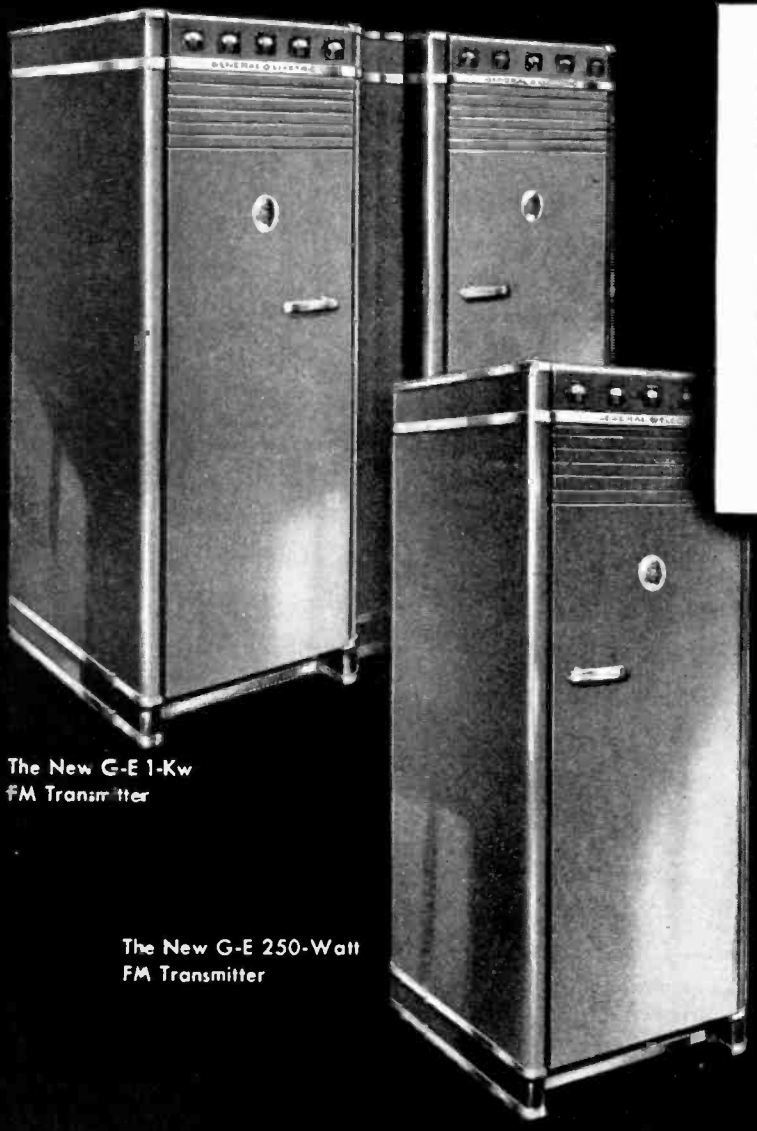
The New G-E 5-Kw
Television Transmitter



The Famous
GL-8002-R
Transmitting Tube

EVERYTHING

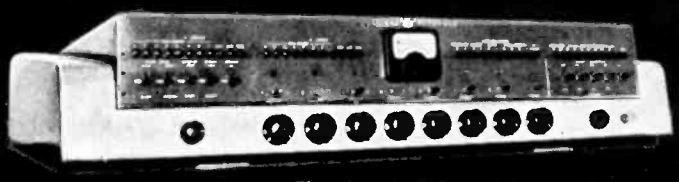
- FM Transmitters
- Television Transmitters
- AM Transmitters
- International Transmitters
- Complete Aural and Visual Equipment for Studios
- Microphones
- Measurement Equipment
- Electronic Tubes
- Studio-to-Transmitter Relay Apparatus
- Micro-Tel Systems
- Intra-Tel Systems
- Power Equipment and Switchgear
- Station Lighting, Heating, Air-Conditioning



The New G-E 1-Kw
FM Transmitter

The New G-E 250-Watt
FM Transmitter

The Famous G-E
Circular Antenna, 2-bay



The New G-E Studio Consolette

STUDIO AND STATION EQUIPMENT • TRANSMITTERS

GENERAL ELECTRIC

160-DB-6914

Ready for business with

FOR BROADCASTING

● To the broadcast industry, General Electric announces its great new line of broadcast station equipment—most comprehensive in the world.

Now G.E. can accept orders for your equipment—FM, Television, AM, and International transmitters, complete aural and visual equipment for station and studio, entire antenna systems with all accessories, electronic tubes for every power and purpose, studio-to-transmitter relay equipment, Micro-Tel and Intra-Tel systems, station lighting, heating, air-conditioning, power equipment, and switchgear—in fact, *everything you need for modern broadcasting.*

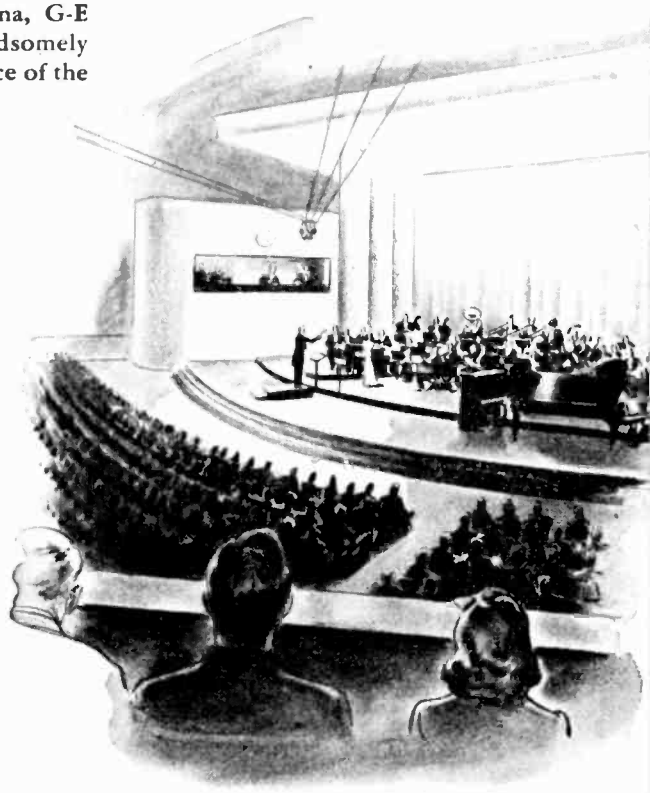
Here is broadcast equipment that opens a brilliant era with new basic accomplishments in modulation quality, extended frequency response, and lower carrier noise levels. Straightforward circuits are your guarantee of reliable operation. Complete accessibility, simplified control systems, fewer tubes and fewer parts are your assurance of minimum supervision and lower maintenance. Ruggedness, compactness, and flexibility of design meet every installation requirement. From microphone to antenna, G-E broadcast equipment is handsomely styled to match the appearance of the finest, most modern station.

For maximum on-the-air reliability, for lower equipment cost per hour of service, specify G.E. throughout your station. You benefit directly through General Electric's coordinated equipment design which assures you properly unified apparatus for top performance. And you buy *one* standard of high quality backed by *one* source of responsibility. Write *Electronics Department, General Electric Company, Schenectady 5, N. Y.*

For information and help, call your nearest G-E broadcast equipment sales engineer. G-E sales offices located in all principal cities are ready to serve you. Specialists are located for your convenience in General Electric Company offices in the following cities:

Boston, Mass. 140 Federal St.	New York City, N. Y. 570 Lexington Ave.	Seattle, Wash. 710 Second Avenue
Atlanta, Ga. 187 Spring St., N.W.	Cleveland, Ohio 4966 Woodland Ave.	Washington, D. C. 806-15th St., N.W.
Kansas City, Mo. 106 W. 14th Street	San Francisco, Calif. 235 Montgomery St.	Chicago, Ill. 840 S. Canal St.

Los Angeles, Calif., 212 N. Vignes St.



FOR EARLIEST POSSIBLE DELIVERY OF YOUR BROADCAST EQUIPMENT, PLACE YOUR ORDER NOW

ANTENNAS • ELECTRONIC TUBES • HOME RECEIVERS

AM • TELEVISION • FM *See G.E. for all three!*

HOW FAR IS AN EXECUTIVE'S VISION? BROAD IS AN EDITORIAL POLICY?

Although we have plenty of statistical evidence that TELEVISION Magazine is read by the top executives throughout the industry, the figures do not, and cannot show the intensity of reader interest, the need for a medium such as TELEVISION, the soundness of the editorial content.

These intangibles turn TELEVISION Magazine from a sound medium into a magazine that you cannot afford to ignore. The television industry is so broad in scope that no man can say where its limits will be. No forward-looking executive can afford to overlook the industry's single monthly authoritative magazine as the bearer of his message, nor can any forward-looking man afford not to read TELEVISION Magazine every month.

Television
THE BUSINESS MAGAZINE OF THE INDUSTRY . . .

THE BUSINESS MAGAZINE OF THE INDUSTRY

Television

VOLUME II, NUMBER 9 NOVEMBER, 1945

articles

departments

COVER: Before and after with the RCA Image Orthicon.

Just talking . . .

Audience studies and surveys of listener likes and dislikes are at their best treading on dangerous water. Quality of present television programming is much too irregular to obtain any definite conclusions as to type of program which will rank highest in popularity.

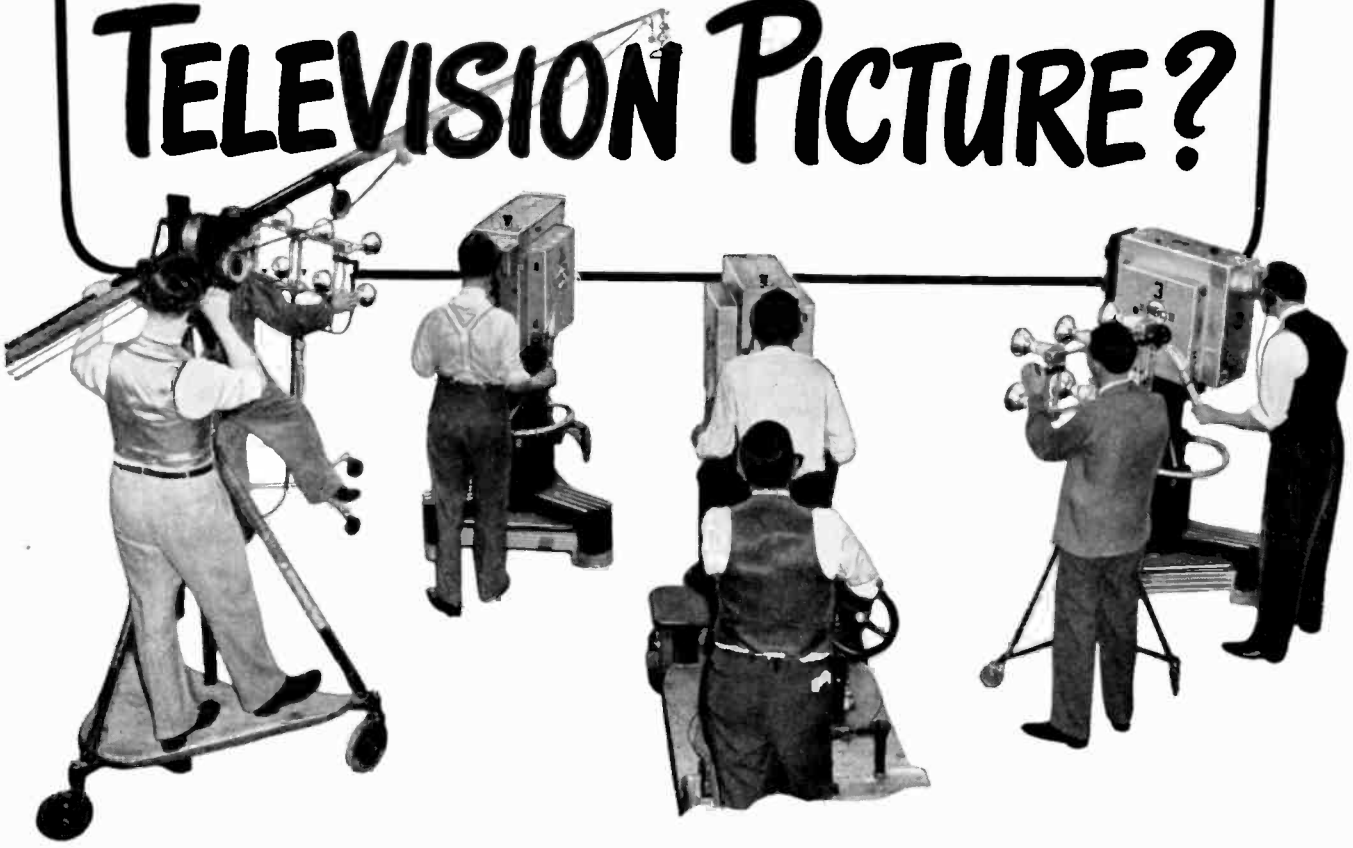
But there is a definite need for some study of audience reaction. The chief reason an advertiser will try television now is because of the chance to experiment with commercial techniques. Up to now there has been no way to really check on the effectiveness of program or commercial techniques. While it is true that some of the operating stations have spent considerable sums to find out what the present television audience likes and dislikes, still much of it has been concentrated on their own programming or on a particular angle for use in a sales presentation.

In view of this need for an impartial poll of listening preferences, TELEVISION Magazine has inaugurated the industry's first audience panel. (Details are on page 27.) Advertisers and programmers will now have a chance to test various techniques and the industry at large will be able to form some opinions as to the types of presentations which rank highest with the viewers.

Frederick A. Kugel, Publisher

Published monthly by Frederick Kugel Company, 600 Madison Ave., New York 22, N. Y. Single copy, 35 cents. Yearly subscription in the United States, its possessions and nations of the Pan American Union, $3.50; in Canada, $4.00; elsewhere, $4.50. Entered as second-class matter February 20, 1945 at the postoffice at New York, New York under the act of March 3, 1879.

When are YOU going to get into the TELEVISION PICTURE?



Clients Now Regularly Sponsoring NBC Television

GILLETTE SAFETY RAZOR CO., INC.
RADIO CORPORATION OF AMERICA
FIRESTONE TIRE AND RUBBER CO.
PAN AMERICAN WORLD AIRWAYS
ELGIN NATIONAL WATCH CO.
UNITED STATES RUBBER CO.
WALTHAM WATCH CO.
BULOVA WATCH CO.

IN LESS TIME THAN YOU PERHAPS SUSPECT. That's why there'll never be a better time than *now*—to gain a practical, working knowledge of this complicated sight medium. There'll never be a better time than *now* to equip yourself to make the most successful commercial use of television, to adapt your advertising skill and experience to this new medium.

Today it is still possible to learn how to adapt your advertising techniques to sight transmission—*for only negligible expenditures.*

We're ready to work with you—whenever you're ready to step into television. The same NBC program, production and technical expertness already winning trade and audience applause for NBC television is available to help you solve your video problems.

NBC TELEVISION

WNBT NEW YORK Television Channel No. 1

NATIONAL BROADCASTING COMPANY
A SERVICE OF RADIO CORPORATION OF AMERICA

Television and the Department Store

A composite analysis of the value of this medium to retailers, including

- Survey of department store plans
- Estimated costs of intra-store systems
- Retail applications of television
- RCA-Gimbels, Philadelphia experiment
- Survey of consumer reaction to tele

BY MARY GANNON

Television meets the department store—Bernard Gimbel (left), discusses with Frank M. Folsom, executive vice president in charge of the RCA Victor division, the extensive intra-store television demonstration at Gimbles-Philadelphia to show the merchandising power of television. Theme piece for window displays appears in background.

OVERALL reaction among department stores to the many possibilities predicted for their utilization of television — both through an intra-store system and as an advertising medium — is definitely on the wait and see side. Most retailers frankly admit they know too little about television, and feel that it is much too early in its development to do more than keep a watchful eye on its growth.

In a survey just conducted by TELEVISION, only 5% have definite plans for an intra-store system, with 14% indicating they are considering it for the future. Nevertheless 40% do consider intra-store television a sound idea, with another 35% waiting for future developments before committing themselves. The estimated cost factor of $50,000 and up for the installation of such a system is a major factor with 72% of those answering, particularly among the smaller stores.

The majority of the small stores do not feel that intra-store systems will be particularly helpful to them, but qualify their negative attitude by expressing their approval of such a system in larger stores, or stores with branches in the surrounding area. Those who do favor the system feel that it poses many problems, such as sufficient space within the store, for both the studio and the viewing sites.

Strong indication that retailers are alert to the potentialities of tele is shown by the 49% who believe it will be an effective advertising medium for stores, with another 32% hedging their reply by indicating its possibilities in the future. Also interesting is the fact that 33% of the stores have set up a separate television department or designated one individual to investigate its possibilities.

With the cost of installing a commercial television station pegged roughly between $250,000 and $500,000, 21% think that such an operation by a department store is a sound and practical idea, with 23% being undecided. Cost again plays a part in this decision, with 77% saying that this factor is important in their planning.

Applications for ownership of television stations have been filed with the FCC by such stores as Maison Planche, New Orleans; Gimbels, Philadelphia and The William H. Block Co., Indianapolis. Another key department store group is the Metropolitan Television — Federated set-up, consisting of Abraham & Straus and Bloomingdale, who have jointly applied for a station in New York; Filene's in Boston, Lazarus in Columbus and Shillito in Cincinnati.

However due to the present situation of too many applicants for too few channels in the lower frequencies, Filene's, Lazarus and Shillito have withdrawn their applications. Indications point that this is not a change of heart toward the possibilities of television, but a determination to hold up future plans until definite FCC standards are formulated.

Macy's Broadcasting Service, Inc., in New York and Bamberger's, Newark are also represented through the Bamberger application.

Television and the Department Store

Main trend of retailers' thinking seems to indicate that they feel television is still in the formative stage and that there are too many loose ends which must be knit together before use of it would prove profitable. With programming and commercial techniques and formats admittedly in the experimental stage even on the television stations now in operation, general feeling seems to be one of waiting for more perfection in the video art. Another big question mark is the expense angle involved and whether immediate returns would offset the investment. Those who are interested in it as an advertising medium state that nothing can be done until stations are established in their localities and until a sufficient number of receiver sets are in the hands of the public. That they will watch the results of tele advertising in other stores located in programming centers is certain as indicated by such oft-repeated comments as "if successful in other stores, we will try it." But there are enthusiasts too, best summed up in a typical comment, "We are using television now and we believe it will revolutionize the advertising of department stores if properly used."

Summing It Up . . .

Weighing the various reactions to the survey and analyzing the figures and the comments, the trend seems to point to a healthy attitude toward television among retailers. There is an awareness that the use of television as an advertising medium has had tremendous potentialities, combined with a determination to watch its development as it applies to retail problems. There is also a frank recognition that, as a group, retailers know very little about television and a realization that the problems of harnessing it to their use will require a good deal of knowledge and experimentation.

Summarization of Department Store Survey Conducted by TELEVISION Magazine

Plan to use intra-store television	5%
Plan not to use it	81%
Awaiting future developments	14%
Consider intra-store tele sound	40%
Do not consider it sound	23%
Awaiting future developments	35%
No answer	2%
Cost of $50,000 and up important factor	72%
Cost not important factor	14%
No answer	14%
Plan to operate own station	7%
Will not operate own station	93%
Consider store operation of tele station sound	21%
Do not consider it sound	53%
Undecided as to whether it's sound	23%
No answer	3%
Cost of $250,000 to $500,000 a major factor in decision	77%
Cost not important factor	7%
No answer	16%
Believe television will be effective advertising medium	49%
Do not believe it will be	14%
Awaiting future developments	32%
No answer	5%
Set up television department	33%
Have not set up department	60%
No answer	7%

Estimated Costs of Intra-Store System

COSTS for an intra-store television system can only be a generalization based on the prewar estimate of what such equipment costs.

DuMont, General Electric and RCA have all developed intra-store systems and evolved their own methods of using them. While the figures given below vary widely, it must be remembered that the same amount and kind of equipment is not included in each estimate, ranging as they do from the minimum to the maximum.

DuMONT — Under the Dumont intra-store system, studio requirements for equipment are estimated as follows:

2 Dumont studio cameras with push dollies and control equipment	$23,000.00
Lighting and Sound equipment	7,500.00
Distribution amplifier	1,000.00
	$31,500.00
Display sets — DuMont 20 inch, direct viewing tube—screen size 13½x18"	$ 500.00
Coaxial cable per foot	.20
Cable outlets — each	1.50

General Electric — Under their plan for an Intra-Tel System, General Electric includes the following:

2 Camera channels	$29,700.00
1 Pulse generator	4,500.00
1 Audio equipment	2,500.00
1 16mm. projector and Film Camera	8,200.00
20 Display projectors	7,000.00
10 Camera outlets	100.00
500 ft. Camera cable	750.00
2000 ft. Receiver cable	400.00
20 Receiver plugs	20.00
4 Portable mercury-vapor flood lights	2,000.00
	$55,000.00

Pointing out that installation costs will vary widely with the location and the prevailing labor rates, they figure that about $10,000 will be adequate allowance.

Estimating the operations involved, G-E based their figures on the conclusion that a staff of 8 will be needed to handle the system.

Five full time technicians will include 2 camera operators; 1 sound operator, 1 control room operator, and 1 maintenance engineer. The programming staff will consist of three — the manager who will coordinate the interest of the display, advertising and department managers, one script writer and a stage director. These people can use the facilities of the art, advertising and display sections of the store as needed.

The yearly operating costs are summarized as follows:

Power	$ 1,000.00
Replacement of tubes and parts	2,000.00
Depreciation	6,500.00
Salaries	40,000.00
	$49,500.00

RCA — Requirements for an intra-store system according to the RCA plan include the following equipment:

2 Portable camera chains
1 Master control unit
1 Portable synchronizing generator
1 Camera dolly
1 or 2 Camera tripods
1 Audio mixer and amplifier
2 Microphones
2 Microphone stands
1 Video distribution amplifier
1 Audio distribution amplifier

TOTAL — $65,000.00

We repeat — these costs are only given as a guide. No final figures have been worked out — but even if they were, it's well to keep in mind that an intra-store television system must be practically tailored made to fit the requirements of each store. And in this personalization of the product to the need, comes a corresponding variation in the final cost.

Retail Applications of Television

Television has been hailed by its enthusiasts as the perfect advertising and promotional medium, with its combined sight and sound appeal. Application of it to department store use can be threefold — through an intra-store television system; as an advertising medium; operation of a station, or a combination of all three. On the positive side, many ideas have been advanced for its use, limited only by the imagination of those who see in it the key to revolutionizing many of the current principles of retail merchandising, advertising and publicity. Here are some theories as to how retail use of television can best be adapted to each of its ramifications.

INTRA-STORE TELEVISION

Primarily, an intra-store television system would permit the telecasting of merchandising specials to strategic locations in the store, pre-picked for the kind and amount of store traffic which they will influence. Common merchandising facts are the statistics on the number of people who enter a store each day, all presumably with the intention to buy, but who leave without making a purchase. Equally common figures are the statistics on impulse buying and the reasoning behind internal store promotions and interior displays to boost this kind of selling. Combine these figures with the possibilities of increased sales checks for the people who do make purchases and you have an idea of the business which can be stimulated and obtained through a more effective promotion medium — which television may readily prove to be.

Uses of the system and its relative advantages can be almost endless. Here are a few of its more practical applications.

Intra-store telecasts can excite customer interest and direct shoppers to parts of the store which ordinarily do not get much traffic, can boost special events, can be an integral part of store-wide promotions.

I. J. Fox's "Salute to the American Fur Farmer" program, over WABD, used models to demonstrate their fur coats.

Demonstrations are proven crowd stoppers — and they're sales getters too. But at best they can only stop the crowd which passes by their particular section. Intra-store television can repeat their performance on all floors.

Telecasts can be institutional — explain some store service more fully, such as home planning services, bridal consultants, gift wrapping, testing laboratories, bureau of standards, etc.

They can be straight promotion on special merchandise for immediate and impulse sales. Accessories, cosmetics, housewares, novelties, toys, gift merchandise come under that category.

They can be used to promote staple merchandise, such as furniture, floor coverings, etc., to acquaint the viewers with the departments, even if an immediate return cannot be expected.

Overall tie-ins could easily be worked out on a coordination theme, a plus service that is missed through the departmentalization of so many stores. This could be done in fashion merchandise, table settings, home furnishings, etc.

In sales training of personnel, which is gaining increased importance with postwar competition, television will also be a natural. The new trend in education is toward the visual — showing while you tell — with an actual demonstration worth more than reams of printed words. Coordination and ensemble training can be quickly given to all salespeople in related departments.

Merchandise training can be given on all new goods as it is received, with the merchandise displayed, the selling features pointed out, the basic information given on materials, finishes, styles, uses, care, etc. Overall store policy, such as changes in sales checks, delivery, routines, the importance of stockkeeping, etc., can be televised to the personnel. And then there's the all important training in sales techniques.

These are but a few of the advantages and benefits which an intra-store television system will offer retailers, according to its proponents. But store opinion seems to point a challenge to prove it first!

AS AN ADVERTISING MEDIUM

Several department stores have already experimented with video as an advertising medium — stores such as Marshall Field and The Fair in Chicago; Macy's and Gimbels in New York; Whitney's in Albany; Robinson's in Los Angeles. Use of this medium can run the gamut of every piece of merchandise in the store, and with this wide scope comes an increase in the possibilities of presentation techniques — and an even greater need for continuous experimentation!

Off-hand, here are three of the more common approaches toward store use of television — all of which can take varying programming and commercial techniques.

Indirect Approach

Every single thing used in a television show can be an indirect ad for the store, from the paper on the wall to the rugs on the floor; from the clothes on the cast to the furniture in the set; from the fashion accessories to the furnishings accessories. Pure entertainment may be presented, with commercial limited to credit announcements stating that everything they see can be purchased at — — —. Or the commercial angle can be interwoven into the story, through the mention of the merchandise by one of the cast.

Using this same technique of the indirect commercial, programs in the nature of public service features could carry a powerful punch for the store. Infants' and children's departments could be promoted through special programs on child care with medical authorities as guests; televised home sewing lessons could boost the fabrics, notions and pattern departments; cooking lessons could incorporate the housewares, kitchen furniture and major appliances, could embrace the curtains, china and glassware and linoleum sections!

Institutional

Program formats designed to emphasize store prestige and special customer conveniences could take many different forms and besides boosting the store, could educate the customer. As an example, returns, besides being an expensive headache, often result in customer dissatisfaction and ill-will. Yet most of these returns are due to customer ignorance and lack of knowledge on the care and use of the merchandise in question. Televised programs, demonstrating the care and conservation of merchandise, with the specific purpose of showing a woman how to get more value and increased wear-life from her purchases, would be good will advertising for the store and should appreciably cut down on returns due to this cause.

Hard-to-Demonstrate Merchandise

Refrigerators, ranges, home cleaning units, laundry equipment — not to mention such scheduled postwar items as prefabricated houses — pose serious demonstration problems for a store. Completion of the sale of almost every major appliance calls for a visit to the customer's home to completely demonstrate all units. Possibilities of giving television demonstrations would avoid this duplication of the salesman's time, resulting in more productive selling on the floor.

Such types of telecasts need not be beamed specifically to the woman householder — for in almost every purchase of this type of merchandise, husband comes along to pass judgment on the mechanical features. Expenditures of this kind call for a joint shopping venture — their promotion via television should be beamed to a combined audience.

Typical of the many variations of programming formats is the nursery scene below, which was part of an AMC program given over WRGB. This particular sketch was used to demonstrate Carter's baby garments to viewers.

Shopping By Television

With the trend toward decentralization of our big cities slated for steady growth in the postwar period, it's a rather definite possibility that for certain merchandise, more people will buy in their own localities rather than going to the main shopping district.

Special daily shopping features, during which a few selected items are shown, the selling points explained, and a brief demonstration given, together with full information on prices, sizes, delivery and ordering instructions, is predicted as a television natural. Through such telecasts a woman, in the comfortable surroundings of her own home, can tune in and very often get a more complete and detailed analysis of an item than she may get at a crowded store counter.

Summing It Up . . .

These are but a few of the potentialities which tele-conscious executives believe the new medium will possess. But how can it be used to best advantage? Will women shoppers in the store want entertainment mixed with the merchandise presentations? Will intra-store television be a novelty that will soon lose its interest? Will a short, punchy commercial, factually given in a demonstration technique, prove more powerful than a dramatization with a subtle, over-all approach?

These are but a few of the programming problems which must be solved — and the answers will come only after much experimentation and careful analysis of customer reaction to the new medium. No one can spring ready made into television. Getting the right type of program for the audience; keying the format to the merchandise; deciding on commercial techniques which are effective for the store; exploring the full potentialities of television as an advertising and merchandising medium, will require much experimentation and some mistakes before a suitable formula is worked out. And experimentation with commercial techniques will require just as much time and study as will the programming angles.

No matter how much anyone has done in television today, the surface has barely been scratched. And that retailers throughout the country are aware of this is shown in their response to TELEVISION's survey.

RCA-Gimbels Philadelphia Experiment

WITH the announced intention of testing out some of these theories, RCA and Gimbels conducted a three weeks series of intra-store television broadcasts in the Gimbel, Philadelphia store. Calling the experiment, "Television Goes to Work," Gimbels and RCA went all out in their exploitation of tele-shopping.

Five windows on the Market Street side — which gets the heaviest traffic — were devoted to a display of RCA electronic equipment and to television programming fare. Full page ads in the papers announced the experiment and stated frankly, "Is shopping by television such a fantastic dream? . . . We don't know . . . " As much emphasis was given to the novelty of television itself, as to its merchandising angles — an important fact to recognize in weighing any reactions to television now. Too few people have seen it to take it for granted as a medium, such as they do their newspapers and radios.

Shown below is a scene from one of the commercial dramatizations which were telecast over Gimbels-Philadelphia intra-store television system. Camera close-up techniques were used to highlight the newest fashions in footwear.

The Gimbel auditorium with a seating capacity of 500 was selected as the television studio, with a glass enclosed control room built at the side of the stage.

Twenty telesites, which accommodated another 500 people, were set up throughout the store. Locations of the telesites were selected with a view to guiding traffic through the store to certain departments which normally do not get much traffic, such as the furniture, rugs, upholstery, house furnishings, lamps, etc., as well as in more active shopping spots, such as ready-to-wear departments, men's clothing and the youth center. They were also placed in locations where people were waiting or resting, such as the foyer of the restaurant and restrooms, the beauty salon, and the credit department.

Most of the television receivers used were pre-war models with a small screen size. But a few of the new postwar projection receivers with a screen size of 16x21-1/3 inches were also installed. While the larger screens were obviously more effective, nevertheless it was surprising how favorable the reaction to the small sized screen was.

PROGRAMMING AND PRODUCTION

Scripting on the Gimbel television project was admittedly an experiment, with the customer slated to be the ultimate judge of what makes the best type of television for a department store presentation. RCA production men cooperated with the Gimbel staff in the preparation of the script, with Gimbel executives selecting the merchandise to be offered. Purpose of such cooperation was to train a tele-wise store staff for future operations. Various techniques for the promotion of merchandise were tried out, from the demonstration technique to the indirect approach. An attempt was made to make the scripts as entertaining and interesting as possible, interweaving drama, comedy, singing, tricks, etc., with the commercial. However Gimbels, at this stage, are in favor of straight merchandising programs.

Talent for the show was drawn from local organizations in Philadelphia — with many of the cast doubling up on the various programs. Professional models were used in the fashion telecasts. Rehearsals for the first ten, ten-minute shows lasted about two weeks, with but a few days of camera rehearsals.

Stage settings presented no problem, for besides the merchandise that is readily available, the properties of the store display departments can be utilized.

The above window display is one of a series which occupied a bank of street level windows in Gimbels-Philadelphia. The displays, which were arranged in sequence, served the two-fold purpose of promoting the extensive intra-store television demonstration and of introducing and merchandising television for the first time to general public.

RCA Victor engineers are shown supervising the installation of intra-store television equipment in the control room set up in the Gimbels-Philadelphia department store.

FORMATS

A wide variety of merchandise was televised, including shoes, nursery furniture, hats, scarves, fur coats, housewares, major appliances, home planning help; and hair restyling. Here are two of the program formats which were used.

Nursery Furniture

Built around the story theme of a young wife adopting a baby, "The Man In The House," was set in a nursery, complete with crib, high chair, dresser, bathinette, swing, toys, and carriage — every one of them an ad for Gimbel's Baby Department. Scene opened with the girl singing a lullaby as she and her mother awaited the arrival of a baby from the adoption agency. Conversation unfolded the "plot," interspersed with the "commercial."

Here a demonstration technique was used — with the mother and daughter taking turns describing the merchandise. This was worked into the script in such fashion as "Look at this dresser Auntie sent — there's a place to hang her little dresses, the corners are rounded, etc." — with the girl pulling the drawers in and out, pointing out the rounded corners, etc. She asked the mother to explain how to use the bathinette. The mother then commented on the crib, the adjustable sides, the fact that it could be converted into a youth bed — all tied in to the baby who was expected momentarily.

Additional direct plug for Gimbel's was given by the nurse at the end of the program, who stressed again that the merchandise came from Gimbel's and invited the viewers to visit the Baby Department.

Home Planning

This program was more of an out and out sales talk, mixed a bit with comedy. Scene opened with a mother, father and daughter — mother, over-dressed and inclined to the "keep up with the Jonses" philosophy, father, wanting solid comfort, and daughter holding out for modern. Family fight was in progress when the telecast opened, with the three about to stalk out of the store. A Gimbel salesgirl approached and suggested that they consult one of the Gimbel's home planners.

She then introduced each of the home planners to the tele audience, with slides used as she narrated their background and their particular talents in decorating. Family was impressed, peace restored, and, after picking their own decorator, were introduced to her. After listening to

their problem, she took them on a tour of Gimbel's furniture department, picking out the piece that each liked best and then suggesting a compromise piece which embodied the particular features which each preferred. Furniture was photographed in advance and glass slides used to show the pieces to the tele-viewers. A complete description of each piece, with particular emphasis on its style angles, was given. Merchandise covered included sofas, tables, breakfronts, coffee tables and chairs.

Interesting plug was given to the RCA television set, both as to its importance as a furniture piece and to its entertainment value. Telecast closed with the now happy family singing the praises of the Gimbel's Home Planning service.

This was highly commercial, with a sales talk on each piece of furniture shown. Flashbacks from the slides of the furniture to the four in the studio helped to keep it from getting too static for the viewers.

TECHNICAL NOTES

In the recently concluded experiment, RCA supplied the equipment and the operating supervision, while Gimbels was responsible for the installation, promotion and programming costs.

On the technical side, RCA provided a crew of ten, including two cameramen, two camera control men, one sound man, one stage technician who handled lights, placing of mikes, etc., three men who serviced and adjusted the receivers, and one supervisor.

The programming staff included a manager, two producers, one writer, one store stylist and three prop men. Fifteen performers were selected for the cast and, as noted, many of them doubled up on the various programs.

Here are a few brief technical notes on the equipment (and the adjustments made in it), which was used in the experiments:

RECEIVERS: TRK type receivers (pre-war) were modified as follows: Second anode voltage was raised from 7,000 volts to 12,000 volts to give a brighter picture. This entailed increasing both vertical and horizontal deflection, because of the greater velocity of the beam with this higher voltage. It was also necessary to increase the range of the brightness control so that the brightness could be reduced sufficiently.

An extra video stage was added so that the input to the receiver could be taken from a standard video transmission line with the synchronizing pulses negative. This also gave a result of better definition, especially in the half-tones of the picture.

Coaxial cable connections were installed on each chassis for convenient coupling to the video transmission line. Also, couplings were made for audio fittings. In addition to the audio fittings for the program line, there was a phone jack and a push button on the rear of each receiver so that the sound power phone could be plugged into any receiver, and by pushing the button operate a signal in the control room, so that communications could be established between any receiver and the control room. This was of great benefit, especially during installation.

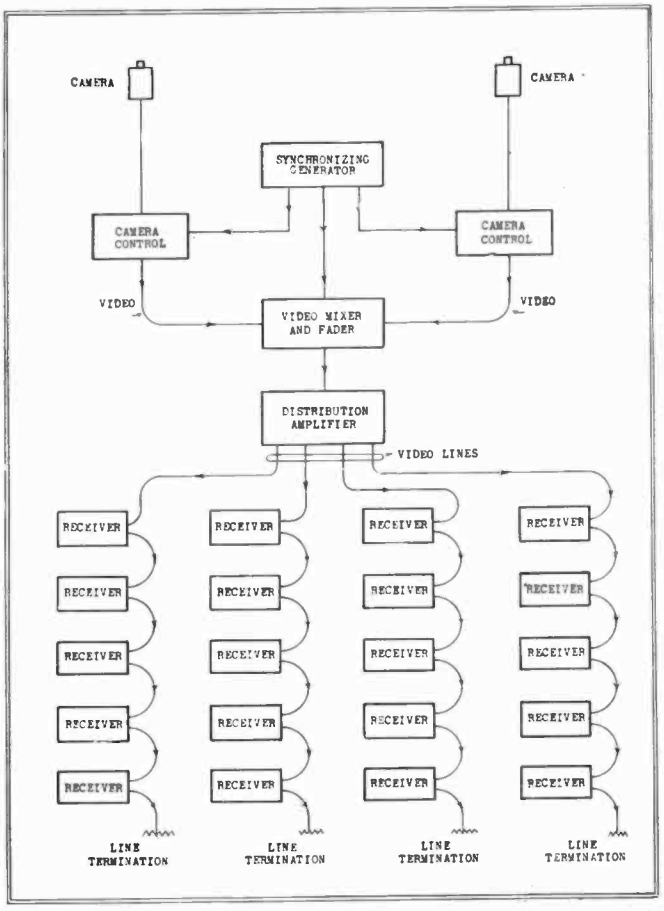
CAMERAS: The cameras used were of the "jeep" type and had only minor alterations. The camera cable carried extra conductors for sound power phones so that communication was established between the camera man and the program director in the control room.

CONTROL ROOM: In the control room were two "jeeps," each one controlling the function of a camera. Each "jeep" had a monitor kinescope which showed at all times the scene appearing before its individual camera. Also in the control room was a TRK receiver, connected to one of the outgoing lines, so that the program director could see at all times which camera was on the line.

A rack contained the following equipment: Synchronizing generator, mixing and fading panel, distribution amplifier, and power supplies.

The synchronizing generator generated synchronizing and blanking impulses. The video output of each "jeep"

Video Distribution System Used in Gimbels' Store



came to the mixing panel where synchronizing impulses were mixed and switching from one camera to the other took place. This switching was accomplished by bias control on amplifiers in the individual camera circuits. This was done by remote control by the program director, who had a switch box on a long cord for this purpose. This fading from one camera to the other could be done instantaneously, or a lap dissolve could be accomplished by a motor driven dual potentiometer which faded one camera out, while, at the same time, the other camera was being faded in.

The output of the mixer went to a distribution amplifier, which consisted of a pre-amplifier of one stage driving a cathode follower stage. This cathode follower fed the inputs of four other amplifiers. Each of these four amplifiers had a 6L6 cathode follower output. Each of these fed an individual video line to which a number of receivers were connected. The number of receivers on each line was decided by the geographical location, rather than trying to keep an even number of receivers on each line.

ILLUMINATION: Inasmuch as the old type iconoscope cameras were used, considerable illumination was required. 500-watt R-2 photo flood lamps were used. For a main light, sixteen of these were mounted high and to the left of the center of action. Four pedestals, each containing four lights in a vertical position, were placed where needed and as required by the particular scene. Also, two wheel base lamps, each containing six of these bulbs, could be placed where needed. The proscenium arch above the action held six more of these bulbs which were used in some scenes. This made a total of fifty 500-watt bulbs, with a power consumption of 25 kw.

STILL PICTURES: For the production of still pictures such as titles and such scenes as were not convenient to produce before the camera, a slide projector was constructed, which simply hung on the front of the camera. This could be quickly attached or detached and consisted only of a 300 watt bulb and a slide holder. The regular camera lens was used to project the image on to the mosaic.

RCA plans to conduct other experiments along this line, not only in department stores, but in broadcast station, schools, etc. as well. Two sets of the elaborate window displays have been produced so that two separate exhbiits may run at the same time. Much interest in the possibilities of intra-store television has been evoked and undoubtedly 1946 will see many of the plans now being formulated brought to fruition.

Consumer Reaction to Store Telecasts

In order to determine consumer reaction to the Gimbel-RCA demonstration, TELEVISION conducted a day-long poll at the store, among the people at various Telesites at the conclusion of each telecast.

The most interesting conclusion that can be drawn from this is that the actual performance of television itself proved the most interesting feature of the demonstration. For the first time, people are seeing the wonder child they have heard so much about, and until the novelty wears off, it would seem to us that an accurate evaluation of the selling possibilities of television cannot be determined.

Trend of the poll indicates however, that these possibilities could run high. Particularly significant are the figures that while only 22% of the people intended to buy as a result of the telecast, 29% indicated their intention of going to the departments to see the merchandise which was televised. Of that same 22%, only 8% were going to make their purchase immediately, with many of the 57% who answered no, qualifying the negative with comments such as "Next week" or "Soon."

There was not one negative answer to the question "Would you like to see Gimbel's continue use of television?", with 86% checking yes, and 14% not answering. On the question of program format, 71% liked the formula of mixing entertainment with the display of merchandise. Of the 11% who wanted their commercials straight, predominant reason was their main interest in tele as a time saver for shoppers.

Pictured above is one of the Gimbel Telesites, specially designed and constructed booths equipped with a receiver and about 20 seats for customers to view the telecasts.

With the exception of the two new projection type receivers, all the television sets in use at Gimbels were pre-war models, with a smaller screen size. At a $250 price, 57% of those viewing the telecasts signified their

intention of buying a television set, with many of the more optimistic mentioning Christmas as the time when they would make their purchase. Great majority of this 57% said as soon as possible, with about 1% saying in a year or two; 6% were undecided. This indecision was based on the more serious reasons that television was still not perfected, that the price was still high, and they would probably wait until prices went down and quality went up before making their purchase.

In view of the old type equipment used, surprisingly enough 82% said they could see the program clearly, with only 12% voting negatively. Of the 82%, many of those who saw the telecast on the small sized screen qualified their positive reply with the wish that the screen was larger.

To the general questions — "What did you get out of the program?" and "What did you find most interesting about the programs?", the answers were many and varied.

Most ambiguous was the comment "Interesting", which, judging from the tenure of the rest of the questionnaire, would seem to indicate the interest in the medium itself over the shopping experiment. A great many, who indicated no urge to buy, commented that they had received ideas, with some stating that the programs showed new styles, new ideas for hair-dos, good salesmanship, suggestive buying, etc., pointed up with comments such as "It showed what kind of hat to wear and when." A few liked the idea of being relaxed and sitting while shopping and thought such an innovation was a time saver. On the negative side, chalk up one each for reactions such as "novelty", "bad acting", "poor picture quality", and a flat "don't like it".

Comments such as "a new experience", "seeing television for the first time", "tele is here", "very progressive", and "the fact that television is possible and successful", all tend to show that if television sets were on sale now, that is where the store would get its biggest remuneration from the demonstration.

Also interesting is the effect of the demonstration upon store traffic, TELEVISION conducted another poll in some of the main traffic areas of the store. Location of the Gimbel-RCA telesites, with the exception of the ones in the foyer of the balcony restrooms and the restaurant, are mostly in out-of-the-way traffic spots, designed more to bring traffic into those sections than to stop traffic as it passes by.

77% of those interviewed had not seen the demonstrations, which is an indication that location of telesites is all important. Feeling is that eventually television receivers will have to be spotted in key locations. While the idea and design of the viewing centers was excellent, it is doubtful, once the novelty wears off, whether people can be lured into out-of-the-way places. Answer probably is in open sites for receivers in key locations. On the practical side, too, unattended receivers are a magnet for kids to fool with as well as their adult counterparts with an urge for tinkering. This presented a very real problem at Gimbels and is something that others should keep in mind in planning such a system.

Of the 23% who had seen a program, out of the group only 8% bought anything as a result. However this figure is qualified somewhat by 38% of those who had witnessed a demonstration softening their negative with "not yet".

Summarization of Consumer Poll Conducted by Television Magazine in Gimbels, Philadelphia

Able to name merchandise shown in television demonstration	82%
Unable to name merchandise	3%
No answer	15%
Intended to buy merchandise shown	22%
No intention to buy	63%
No answer	15%
Going to buy it at once	8%
Not going to buy immediately	57%
No answer	35%
Preferred entertainment mixed with merchandise presentations	71%
Preferred straight merchandising presentations	11%
No answer	18%
Want Gimbels to continue use of television	86%
No answer	14%
Saw program clearly	82%
Did not see program clearly	12%
No answer	6%
Intend to buy television set	57%
Do not intend to buy	17%
Undecided	6%
No answer	20%

Summarization of Store Traffic Poll

Saw television showings	23%
Did not see any programs	77%
Bought merchandise as a result of television demonstrations	8%
Have not made purchase yet	38%
Did not buy anything	27%
No answer	27%

Television Outlook For New York

By FREDERICK A. KUGEL

THAT old refrain "Give my regards to Broadway" will probably change to "Give my regards to the FCC" when the 16 applicants for the New York television stations stake their claims for the seven available channels.

Chairman Porter in chosing New York for the first allocation hearing has certainly put the FCC into the hornet's nest. Whatever the Commission does there will be a minimum of nine dissatisfied applicants. New York is a perfect example of the mess the FCC and industry are faced with, with so few channels available in the low frequencies. It would only be fair for the channel grabbing Inter-Departmental Radio Advisory Committee to sit in at these hearings and see the results caused by their unnecessary demands in the spectrum.

New York's vital statistics make it readily understandable why there are so many with station aspirations. Trading area of more than 10 million people and an annual retail sales figure of 4,950,000,000 put New York City in a class all by itself.

New York will undoubtedly be one of the main programming origination centers. Obviously it is vital from the networks point of view that they have a New York station if they are to maintain their importance in television broadcasting. If the FCC grants stations to all the networks that would take care of 4 channels and leave probably 3 open. DuMont seems to have a priority in that they have been operating now for some five years. This would leave such important contenders as the Daily News, Metropolitan Television (Bloomingdale and A & S), Philco, Raytheon and others like Debs Memorial, Marcus Loew, Sherron Electric, 20th Century-Fox Film Corp., etc. all battling for the remaining two channels. Obviously some of this group will jump on the high frequency bandwagon when it becomes apparent they have no chance for a low frequency station.

There are three active commercial stations in New York — WCBW, CBS; WNBT, NBC; and WABD, DuMont. WABD closed down in September to change to Channel #5. DuMont is now completing construction of their new studio in the John Wanamaker store, and is due to resume operations from there about the first of the year.

There are 16 applicants for commercial stations in New York City, with three more applicants in closely adjacent cities, namely, one in Bridgeport and two in Hartford, Conn. In addition, the following six applicants have applied for experimental licenses in New York City — Columbia Broadcasting System, Allen B. DuMont, Jamaica Radio & Television Corp., Metropolitan Television, Sherron Electronic Corp., Television Productions, Inc., with Bamberger Broadcasting Company applying for one in Newark, N. J., and the North Jersey Broadcasting Company staking their claim in Clifton, N. J.

The following are the present applicants for tele stations:

American Broadcasting Company, Inc.

Address—30 Rockefeller Plaza, New York 20, N. Y.
Officers—Edward J. Noble, Chairman of the Board; Mark Woods, President

Costs—

1. Visual transmitter	$22,000.00
2. Aural transmitter plus tubes	13,750.00
3. Antenna System	2,500.00
4. Studio Equipment	89,000.00
5. Studio Lighting	6,000.00
6. F & M Monitors	4,000.00
7. Land	—
8. Building	—
9. Other items	37,000.00
Total Costs	$174,250.00
Estimated Operation Costs per month	$13,000.00

Financing—General funds of Company
Channel—#6
Kilocycles—82-88 megacycles
ESR—540
Hrs. per wk of operation—15
Antenna—
Height, sea level 968 feet
Height,ground level 902 feet
Location—30 Rockefeller Plaza, New York
Transmitter location—30 Rockefeller Plaza New York, New York
Population—10,920,400
Size of area—Primary—512 sq. miles Secondary—2,176 sq. miles
Location of Studio—New York City
Engineering Consultant—Dr. Frank G. Kear, Consulting Engineer
Miscellaneous—Owns WJZ, WENR, KGO & KECA; Applications pending for FM & Television stations in New York, Chicago, Los Angeles and San Francisco and for increase of power to 50 kw at KGO, San Francisco.

Bamberger Broadcasting Service, Inc.

Address—Pauline Street and Park Avenue, Carteret, New Jersey
Officers—Alfred J. McCosker, Chairman of Board; Theodore C. Streibert, President; J. R. Poppelle, Secretary and Chief Engineer; Rufus C. Maddux, Vice President

Costs—

1. Visual transmitter	$61,500.00
2. Aural transmitter plus tubes	28,000.00
3. Antenna System	15,000.00
4. Studio Equipment	85,000.00
5. Studio Lighting	20,000.00
6. F and M Monitors	5,400.00
7. Land	
8. Building	Field Equipment
9. Other item	60,000.00
Total Costs	$274,900.00
Operation Costs per month	$40,000.00

Financing—Present capital
Cost estimate by—J. R. Poppele
Channel—#7
Kilocycles—174-180 m.c.
ESR—3146
Hrs. per wk of operation—28 hours
Type of equipment—DuMont
Antenna—
Height, sea level 665 feet
Height, ground level 600 feet
Location—N. A.
Transmitter location—444 Madison Avenue
Power, aural and visual—12½ and 25
Population—11,738,187
Size of area—N. A.

N. A. — Not available

Location of Studio—1440 Broadway, New York, N. Y.
Engineering Consultant—George C. Davis, consultant, Washington, D. C., technical research by J. R. Poppele, Chief Engineer and Secretary.
Lawyers—Own lawyers and F. D. Scott
Miscel.—Bamberger is affiliated with the Macy and other department store interests; they operate WOR and WBAM-FM in New York City and have applied for television outlets in Philadelphia and Washington.
Operate department stores in New York City, Newark and Atlanta, Georgia.

Columbia Broadcasting System

Address—15 Vanderbilt Avenue, New York, N. Y.
Officers—Lawrence W. Lowman, Vice-President in charge of television; Dr. Peter C. Goldmark, Director of Engineering Research and Development.
Costs—
1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F & M Monitors
7. Land
8. Building
9. Other item

Total Costs—N. A.
Estimated Costs per month—N. A.
Financing—N. A.
Cost estimate by—N. A.
Channel—#2
Kilocycles—60-66 megs
ESR—1,000
Hrs. per wk of operation—4¼ hours
Breakdown—Live programs—3½ hours; Film—¾ hour
Antenna—
Height, sea level—N. A.
Height, ground level—N. A.
Location—N. A.
Transmitter location—405 Lexington Avenue, Chrysler Building
Power, aural and visual—aural (composite) 300w visual (composite) 250w
Population—N. A.
Size of area—N. A.
Location of Studio—15 Vanderbilt Avenue
Engineering Consultant—Dr. Peter Goldmark
Type Equipment—RCA on station now operating

Debs Memorial Radio Fund, Inc.

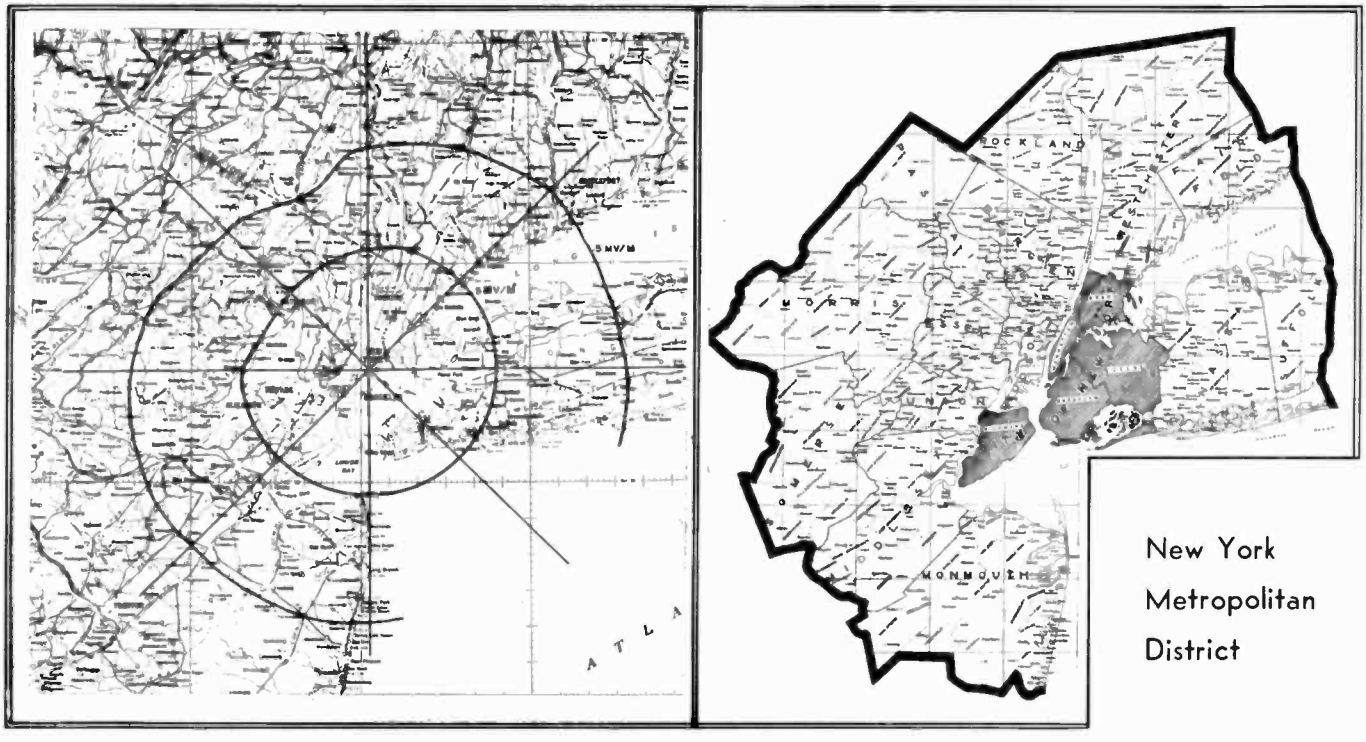
Address—117-119 West 46th Street, New York, N. Y.
Officers—Adolph Held, President; Benjamin Gebiner, Secretary; Alexander Kahn, Treasurer.
Ownership—25 directors are stockholders having equal shares
Costs—

1. Visual transmitter	$105,600.00
2. Aural transmitter plus tubes	71,500.00
3. Antenna System	40,000.00
4. Studio Equipment	93,500.00
5. Studio Lighting	20,000.00
6. F and M Monitors	2,300.00
7. Land	31,000.00
8. Building	150,000.00

9. Other item—$15,000 testing equipment; $42,000 field pick-up equipment

Total Costs—$560,000.00
Estimated Operation Costs per month $12,500
Financing—Existing capital $50,000; loans $500,000; from Forward Association (Jewish Daily Forward)
Cost estimate by—RCA; Benjamin Schlanger — building
Channel—#17
Kilocycles—282,000-288,000
ESR—7400
Hrs. per wk of operation—21 hours
Breakdown—No outside pick-up initially—54 hours studio production—36 hours motion picture film — commercial programs 90%; sustaining 10%
Antenna—
Height, sea level 660 ft.
Height, ground level 660 ft.
Location—336 East 38th Street, New York, N. Y.
Transmitter location—336 East 38th Street, New York, N. Y.
Power, aural and visual 50 kw, 40 kw

At left is the coverage in the New York area which can be given by a 25 kw station, with an antenna height of 650 feet, using two Bay Cross folded dipole antenna. Contour map, courtesy of Allen B. DuMont Labs.



Population—296,766
Size of area Primary — 2360 square miles — secondary 5785 square miles
Location of Studio—336 East 38th Street, New York, N. Y.
Engineering Constultant—Paul Godley, company, Dr. Alfred Goldsmith, New York
Lawyers—Frank Borut, A. Walter Socolow, New York
Miscel.—Applicant owns and operates Station WEVD.

DuMont Television

Address—515 Madison Avenue, New York 22, New York
Officers—Allen B. DuMont, President; Leonard F. Cramer, Vice-Pres.; Raul Raibourn, Treasurer.
Costs—

1. Vis transmitter—N. A.		
2. Aural transmitter plus tubes	$36,000.00	$1.000 Tubes
3. Antenna System	10,000.00	
4. Studio Equipment	65,000.00	
5. Studio Lighting	1,000.00	
6. F and M Monitors—N. A.		
7. Land—N. A.		
8. Building—Rented		
9. Other item—N. A.		
Total Costs	$113,000.00	
Estimated Operation Costs per month	$10.000.00	

Financing—Existing Capital
Channel—Applying for Channel # 5
Kilocycles—N. A.
ESR—N. A.
Hrs. per wk of operation—42
Breakdown—6 hours/day, 7 day/week
Antenna—
Height, sea level 665′
Height ground levle 675′
Location—515 Madison Avenue
Transmitter location—515 Madison Avenue
Power, aural and visual —1kw-4kw
Population—Metropolitan
Size of area—N. A.
Location of Studio—515 Madison Ave., J. Wanamaker
Engineering Consultant—T. T. Goldsmith
Lawyers—Roberts & McInnis
Miscel.—Applicant also has applications for stations in Washington, Boston and Pittsburgh. Also manufactures tubes, receivers, transmitters and test equipment.

Marcus Loew Booking Agency

Address—1540 Broadway, New York, N. Y.
Costs—

1. Visual transmitter	$22,000.00
3. Aural transmitter plus tubes	13,750.00
3. Antenna System	18,000.00
4. Studio Equipment	89,000.00
5. Studio Lighting	6,000.00
6. F and M Monitors	3,500.00
7. Land	N. A.
8. Building	N. A.
9. Other items	N. A.
Total Costs	$142,250.00

Estimated Operation Costs per month—N. A.
Financing—Existing capital
Cost estimate by Jansky & Barley, consulting engineers, Washington, D. C.
Channel—17
Kilocycles—282-288
ESR—To be determined
Hrs. per wk of operation—180 hours a month, 30 hours—outside pickup; 100 hours—studio production; 50 hours—motion picture film
Breakdown—1/3 commercial, 2/3 sustaining
Loews proposes "use of both 35 mm and 16 mm film which may or may not be prepared especially for televised broadcasting." Intends 6 hours a day operation initially.
Antenna—
Height, sea level—N. A.
Height, ground level—N. A.
Location—N. A.
Transmitter location—N. A.
Power (aural and visual—2 kw and 4kw
Population—N. A.
Size of area—N. A.
Location of Studio—N. A.
Engineering Consultant—Jansky & Bailey, Washington, D. C.
Type of equipment—General Electric
Lawyer—Herbert Bingham, Washington, D. C.
Miscel.—Applicant is experienced licensee of AM and FM stations (WHN and WHNF) and is wholly-owned subsidary of major motion picture producer, Loews, Inc. Application is pending for FM station in Washington, D. C.

Metropolitan Television, Inc.

Address—654 Madison Avenue, New York City
Officers—Ira Hirschmann, Vice President
Owned by Bloomingdale Brothers, Inc., Abraham Straus, New York City department stores and by Federated Department Stores.
Costs
1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F & M Monitors
7. Land
8. Building
9. Other item
Total Costs — $450,000

Estimated Operation Costs per month—N. A.
Financing—Present Capital
Cost Estimate by—Experience as experimental outlet
Channel #8
Kilocycles—186-192 mc
ESR—721
Hrs. per wk. of operation—15 hours a week
Breakdown
Type of equipment: General Electric
Antenna
Height, sea level—706 feet
Height, ground level—646 feet
Location—N. A.
Transmitter location—N. A.
Power, aural and visual—4kw peak
Population—N. A.
Size of area—N. A.
Location of Studio—59th and Lexington, Bloomingdale Department Stores
Engineering Consultant—Dr. Frank Kear, Washington, D. C.
Lawyers—Andrew Haley, Washington, D. C.
Miscel: Metropolitan Television filed its original application for a television station back in the summer of 1939. It received a construction permit for experimental operations in December 1940, and planned an original transmitter site atop the hotel Pierre in New York City. Its original plans were halted in early months of 1941 when the national television systems committee recommended to FCC commercialization of first seven tv channels, relegating channel 8 (Metropolitan's) and above to experimentation. Metropolitan was already at work on its experimental station W2XMT on May 31, 1941 when FCC gave tv the "green light" for commercial operations. Under the wartime freeze, its application for a commercial station was dismissed in June, 1942, but has since been reinstated — (April 2, 1943).

The Federated Department store interests and the Metropolitan company are affiliated with the Cincinnati Broadcasting Co., Filene's Television, Inc. and the Central Ohio Broadcasting Co., all of whom have filed tv applications, which have just been withdrawn.

National Broadcasting Company, Inc.

Address—60 Broad Street, New York, N. Y.

Officers—

Costs

1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F & M Monitors
7. Land
8. Building
9. Other item

Space leased.
Total Costs—N. A.
Estimated Operation Costs per month—N. A.
Financing—N. A.
Cost Estimate by—N. A.
Present
Channel #1. Requested #4—66-72 mc
Kilocycles—50-56mc
ESR—1800
Hrs. per wk. of operation—N. A.
Breakdown
Equipment—RCA
Antenna
Height, sea level—N. A.
Height, ground level—1250 ft.
Location
Transmitter location—350 Fifth Avenue
Power, aural and visual—Aural 2200w.—Visual 5200w.
Population—About 10,000,000
Size of area—10,000 sq. miles, approx.
Location of Studio—30 Rockefeller Plaza
Engineer Consultant—NBC Engineering Department
Lawyers—NBC Legal Department

News Syndicate Company

Address—220 East 42nd Street, New York, N. Y.

Officers—Ralph M. Patterson, President and Treasurer, Robert R. McCormick, Vice-President and Secretary

Ownership—Tribune Company (publisher Chicago Tribune, New York Daily and Sunday News)

Costs

1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F & M Monitors
7. Land
8. Building
9. Other item

Total Costs—$450,000—$500,000

Operation Costs per month—$13,500

Financing—Existing Capital
Cost estimate by—based on information gathered from existing television stations
Channel #11
Kilocycles—204,000-210,000
ESR
Hrs. per wk. of operation—in accordance with FCC rules
Breakdown
Antenna
Height, sea level—N. A.
Height, ground level—N. A.
Location—N. A.
Transmiter location—220 East 42nd Street, New York, N. Y.
Power, aural and visual—20kw, 40kw
Population—N. A.
Size of area—N. A.
Location of Studio—220 East 42nd Street, New York, N. Y.
Engineering Consultant—M. R. Johnson, G. E. engineer
Lawyers—George T. Townley — Townley, Updike & Carter New York, Louis G. Caldwell, Reed T. Rollo — Kirkland, Fleming, Green, Martin & Ellis, Washington.
Miscel.—WGN, Inc., wholly owned subsidiary of Tribune Company, operates AM station WGN and FM station WGNB in Chicago — has applied for commercial television station in Chicago.
Mrs. Albert G. Simms, director News Syndicate Company, is president of Rockford Broadcasters, Inc., operating station WROK, Rockford, Illinois.
Among directors of Tribune Company is Eleanor Patterson, publisher Times-Herald, Washington. Application is now under reconsideration.

Philco Radio & Television Corporation

Address—Tioga and C Streets, Philadelphia, Pa.

Officers—John Ballantyne, President; Ernest Lourvian, V. P. in charge of television

Costs—

1. Vis. transmitter	$134,000.00
2. Aural transmitter plus tubes	65,000.00
3. Antenna System	24,000.00
4. Studio Equipment	144,875.00
5. Studio Lighting	5,000.00
6. F & M Monitors	1,000.00
7. Land	5,000.00
8. Building	45,000.00
9. Oother item	
Total Costs	$423,875.00
Estimated Operation Costs per month	$3,110.00

Financing—existing capital
Cost estimate by—N. A.
Channel #9
Kilocycles—180-186mc
ESR—to be determined
Hrs. per wk. of operation—N. A.
Breakdown
Antenna—
Height, seal level—N. A.
Height, ground level—N. A.
Location—N. A.
Transmitter location—N. A.
Power, aural & visual—N. A.
Population—N. A.
Size of area—proposes service to New York City and surrounding area within radius of 40 miles.
Location of Studio—N. A.
Engineering Consultant—F. J. Bingley, Director of Research
Lawyers—Louis Caldwell and Reed Rollo, Washington, D. C.
Miscel:—Philco now operates commercial station WPTZ, in Philadelphia and a network relay chain, under experimental license, between New York and Philadelphia, Philadelphia and Washington, D. C.

Raytheon Manufacturing Company

Address—Foundry Avenue, Waltham, Mass.

Officers—Laurence K. Marshall, president

Costs—

1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F. & M Monitors
7. Land
8. Building
9. Other item

Total Costs—$400,000-$600,000

Estimated Operation Costs per month—N. A.
Financing—existing capital
Cost estimate by—N. A.
Channel—N. A.

(*Continued on page* 40)

STATION OPERATIONS:

Operational and Equipment Costs

BECAUSE estimates of operation costs are mostly shooting in the dark TELEVISION prints almost all sets of figures that come along.

The following costs were submitted to the FCC by Leonard Kramer for the Allen B. DuMont Laboratories and Paul Kesten for CBS.

The DuMont estimates as presented to the FCC are for a "full service" television station. As explained by Mr. Kramer . . .

"Television can make economic sense, but we must consider this: The estimated capital investment for a full-service television station is $272,500. By a full-service television station we mean one capable of producing programs incorporating film, live studio presentations and mobile and remote pick-ups to the extent of 42 hours per week minimum.

"I wish to point out that such a full-service television station is much smaller and less costly to operate than a station such as we will find in New York.

"The annual operating cost of this small full-service television station should be examined. It is reasonable to assume that unpredictable news developments and other events of a current interest or public service nature will require the station operator to be prepared for a seven hour per day operation even though only six hours per day are prescheduled. With this in mind, let us assume that we have a one-studio station, on the air seven hours daily, every day of the year. This requires two full crews working a 48 hour week. The total annual operating cost would then amount to $314,889.87 as shown in the following itemized breakdown."

Breakdown Of Annual Operating Cost Of A Full-Service Television Station

Rental and maintenance of 12,000 sq. ft. of floor space @ $2 per sq. ft. per year	$ 24,000.00
Payroll:	
Administrative Personnel Station Manager, Program Manager, Sales Manager, Chief Engineer, Accountant, 3 Stenographers, 2 Announcer-producers	40,675.00
Technical Personnel 2 Audio Control Operators, 2 Studio Control Operators, 4 Video Pick-up Operators, 2 Mike Boom Operators, 6 Studio Assistants, 2 Film Projectionists, 4 Master Control Technicians, 2 Transmitter Operators, 4 Scenery Shifters and Property Men	117,232.96
Federal Unemployment Insurance and Old Age Benefit	3,158.16
Amortization of Capital Investment averaged over 10-year period at 5% interest	34,743.75
Replacement of technical parts	8,000.00
Maintenance of fixtures	2,000.00
Power for technical equipment, general and studio lighting, and air conditioning (at N. Y. C. rates)	15,000.00
Sustaining Programs 30% of Air Time: 70% films, 30% "live talent" studio shows and pick-ups of local events, sports, parades, educational affairs, club and church programs, etc., including rentals, royalties, scenery, properties, records, transcriptions	27,500.00
Advertising, sales promotion, merchandising cooperation, market surveys	25,080.00
Travel and entertainment expense	10,000.00
Miscellaneous: Stationery, telegrams, telephones, postage, etc.	7,500.00
Total Estimated Annual Operating Cost	$314,889.87

Also interesting is the DuMont breakdown of capital investment for stations.

Breakdown Of Capital Investment Required For A Full-Service Television Station

Two DuMont Studio Cameras, with push dollies, DuMont Studio Control Desk	$ 23,000.00
Specially Designed Mobile Camera Dolly	2,500.00
DuMont Master Control Board	35,000.00
Studio Lighting and Audio Equipment	10,000.00
Two 35 mm. Special Film Projectors @ $6,000.00 ea.	12,000.00
Two 16 mm. Special Film Projectors @ $2,000.00 ea.	4,000.00
Two DuMont Film Pick-up Cameras	6,000.00
DuMont Transmitter 25 KW peak Video and equivalent peak Audio	65,000.00
Suitable Antenna with Supporting Tower located on same building	10,000.00
Spares and Test Equipment	13,000.00
DuMont Field Camera Pick-up Equipment, including two cameras	24,000.00
Field Audio Pick-up Equipment	1,500.00
DuMont Field Relay Transmitter	8,000.00
DuMont Relay Receiver	2,000.00
Truck with Generators and Antenna	5,000.00
Sub-total	$221,000.00
Auxiliary Equipment, Installations, etc. (costs dependent on local conditions)	
Installation of Television Broadcasting Equipment	$ 15,000.00
Structural alterations to an Existing Building, Electrical Wiring, Studio Soundproofing, etc.	25,000.00
Fireproofing of Film Projection Room	1,500.00
Furniture, Fixtures and Decoration	10,000.00
Sub-total	$ 51,500.00
Total Initial Capital Investment	$272,500.00

CBS FIGURES

Paul Kesten on the other hand arrives at a minimum of $3,191,000 for a year's operation on a 42 hour week. Mr. Keston stated:

"Let me lay before you some of the practical facts of television programming which we have learned the hard way — by trial and error, by success and failure, over a period of six years of actual television broadcasting and television programming.

"First, some economic facts. The Columbia Broadcasting System is currently providing only 4 hours a week of television programs through its Station WCBW in New York City. Most, but not all, of that time is filled with television programs which we have specially created for the television medium — not with hand-me-down films that have outworn their usefulness in 3rd and 4th run motion picture theatres. Our policy has been to create the best television programs on the air, whether they are in the field of news, entertainment, discussion, or information. Our idea has been not to spread our efforts thin over more time periods, but to concentrate as much creative and technical skill as possible into each time period.

"What I wish to place before the Commission for its consideration in connection with this 42-hour rule is that the direct program costs of these 4 hours weekly, not including transmitter costs or depreciation, or general overhead, is about half a million dollars yearly. It takes a full-time staff of nearly 80 people and 25,000 square feet of floor-space to produce even this limited output. I might add that it will take considerably more people, more physical faculties and more money to bring even these 4 hours of programming up to the level we are looking forward to.

"But even on this basis of production it would cost by actual calculation a minimum of $3,191,000 a year to do 42 hours a week of such programming. And that, as I have indicated, would not by any means be a lavish budget. It is only a $3,000,000 drop in perhaps a $30,000,000 bucket of really first class television programming. At any rate, the $3,000,000 figure provides less than $1500 an hour for studios, lights, cameras, engineers, cameramen, and all other personnel including the cost of the performance itself. No appreciable amount of this sum could be recovered from advertising revenue during the first year or two of operation because the audience, even under optimistic estimates, will not be large enough. And until transcontinental relay or cables are much farther along than they are now, costs of this same order would be faced by every separate licensee (who has any conscience about his programming) not only in New York City, but in Chicago, Los Angeles, and almost all points in between.

"It is true that eventually a television program created by one station may be photographed onto film from the end of a television tube and then syndicated to other stations. But this is still doubtful. Moreover, even if a station received half a 42-hour schedule from such sources, it would still need a program budget of a million and a half dollars yearly, apart from transmission costs."

CONSTRUCTION COSTS

Construction figures are also interesting, but much more elastic as they can vary with the needs and aims of the various companies. At an estimated cost of $2,000,000, WCAU the 50,000 watt CBS affiliate in Philadephia, will complete the construction of a new television and radio center by December, 1947. The center will occupy an entire block on Broad Street, with the main building a four story structure, 252 feet by 207 feet, built of limestone and stainless steel. A television and FM tower will extend 612 feet above ground level.

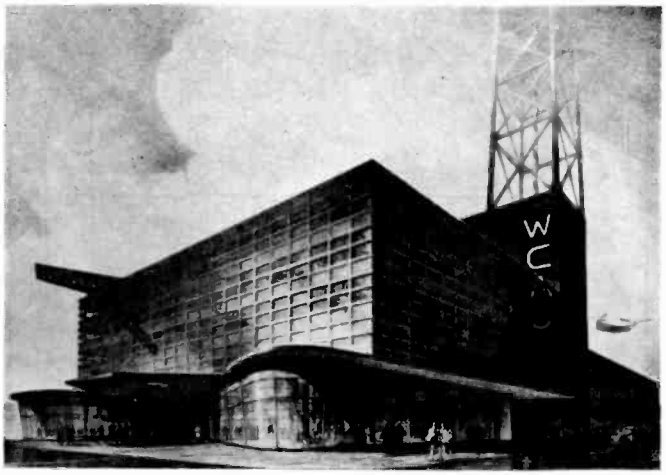
Television facilities will include a 500 seat auditorium on the main floor, with two stages, one directly in front of the other, which will raise and lower by hydraulic pressure. Seating will be horse shoe style, with the first stage located in the center of the horse shoe. This can be raised independently so that television cameras can move all around it to televise the action on the stage, as well as the audience. When larger settings are required, the second stage can be raised to join the forward one. This auditorium will be used for both sound and television broadcasting.

A special television studio will also be included, large enough to set up several sets at one time so that action can be swung from one camera to another. A collapsible soundproof partition will divide the studio into two sections when necessary. Rehearsal studios, film projection rooms, dressing rooms, carpenter shop, paint shop and property storage space are also included in the plans.

Latest developments in acoustics with a combination of polycylindrical construction and adjustable vanes will be incorporated into all studios. Acoustical characteristics can be changed hydraulically from the studio control room, thus regulating the acoustical effects to the size of the group in the studios.

Indications that the much discussed world of tomorrow is beginning to take shape comes with the plans for a specially constructed landing field on the roof of the center for heliocopters, which will be used for television broadcasting from outside points.

Below is the proposed plan for WCAU's $2,000,000 center.



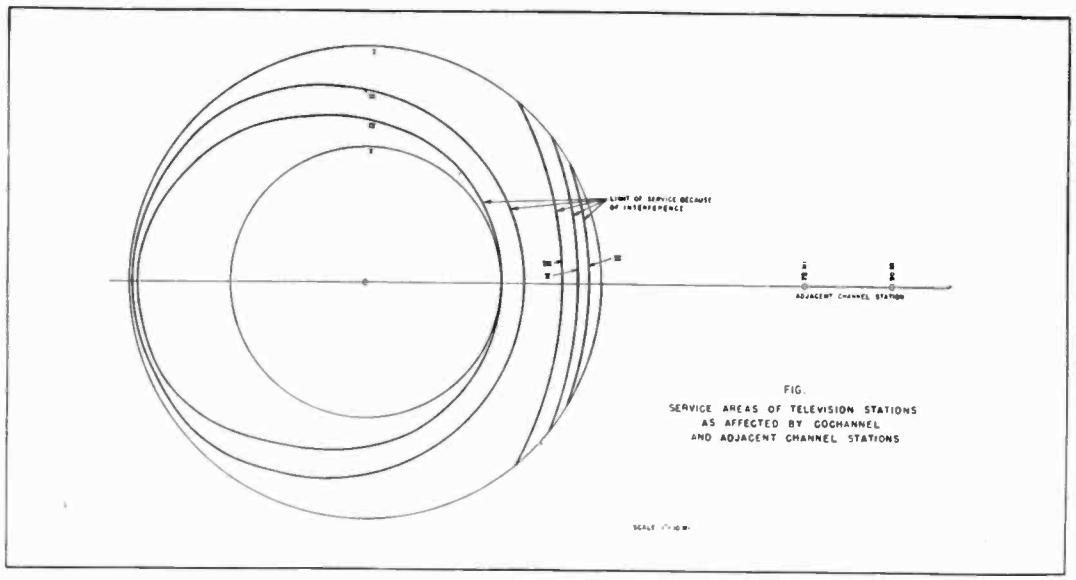


FIG.
SERVICE AREAS OF TELEVISION STATIONS
AS AFFECTED BY COCHANNEL
AND ADJACENT CHANNEL STATIONS

Fig. 1

I. 50 kw — 500 uv/m

II. 50 kw — 2500 uv/m

III. Cochannel separation 170 mi. tropo. progagation

IV. Cochannel separation 150 mi. tropo. progagation

V. Adjacent channel separation 75 mi. theoretical propagation

VI. Adjacent channel separation 90 mi. tropo. propagation

VII. Adjacent channel separation 75 mi. tropo. propagation

Data based upon 46 mc theoretical propagation and tropospherie propagation as shown in fig. 3.

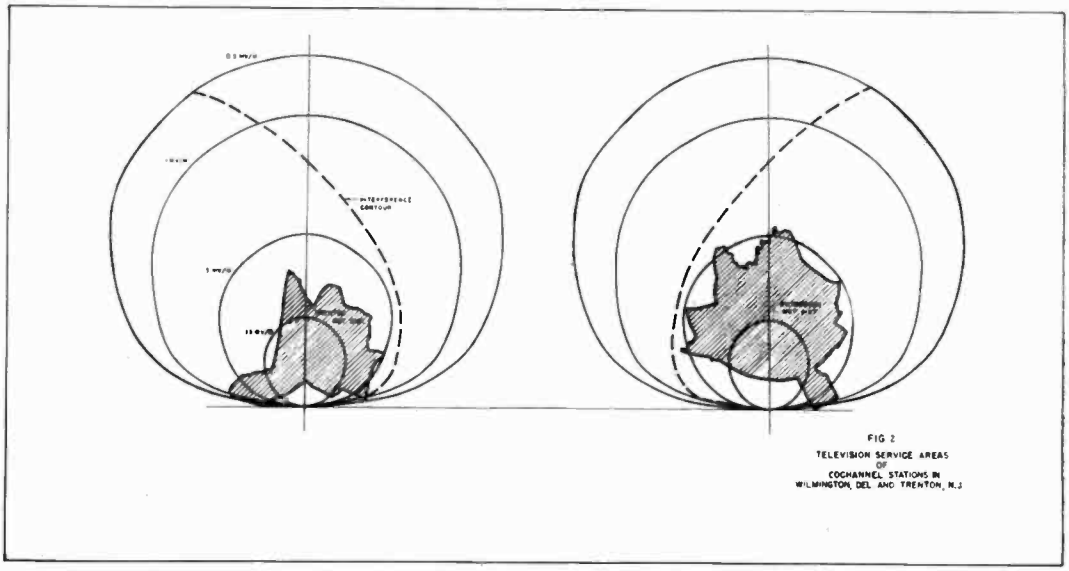


FIG 2
TELEVISION SERVICE AREAS
OF
COCHANNEL STATIONS IN
WILMINGTON, DEL AND TRENTON, N.J

Fig. 2

Computed on the basis of:

a. 98 mc theoretical propagation

b. Smooth earth

c. Minimum signal in lobe equivalent to 50 kw.

d. Each station having a 500 ft. antenna

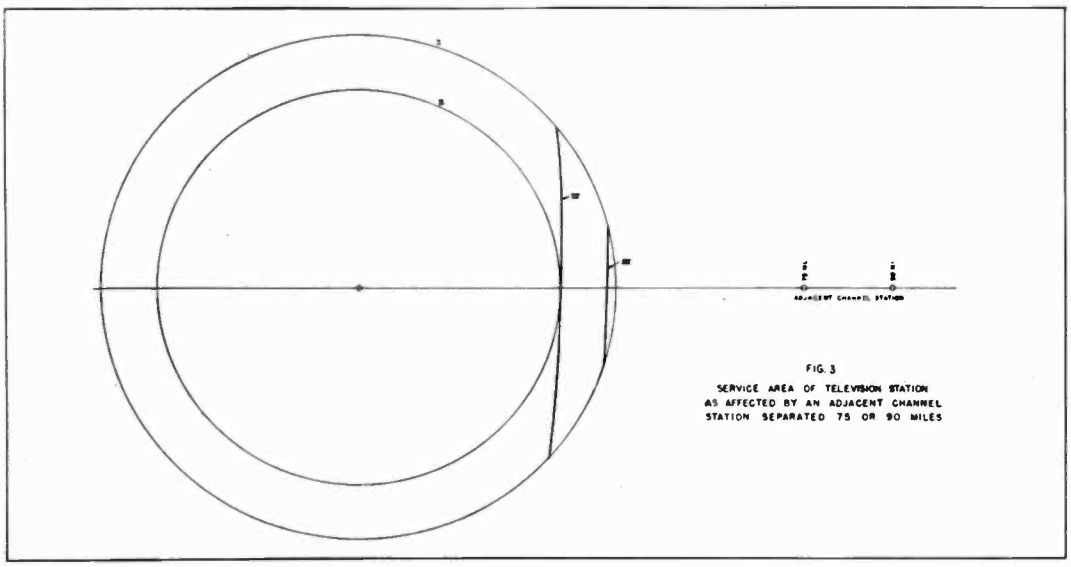


FIG. 3
SERVICE AREA OF TELEVISION STATION
AS AFFECTED BY AN ADJACENT CHANNEL
STATION SEPARATED 75 OR 90 MILES

Fig. 3

I. 0.5 mv/m contour for 50 kw

II. 1.25 mv/m contour for 50 kw

III. Service limit with 90 miles separation

IV. Service limit with 75 miles separation

Data based upon 98 mc theoretical propagation

THE TBA PLAN
For Television Channel Allocations

An analysis of the proposals put forth by this industry organization and why they are practical from an engineering point of view.

By WILL BALTIN, Secretary-Treasurer

WHEN the Television Broadcasters Association, Inc., presented to the Federal Communications Commission its "Industry Allocation Plan" for broad distribution of commercial television channels, it took a step in the right *direction*.

As a matter of fact the logical answer to distribution of 13 commercial channels over a wide area to an avalanche of applicants was to move in the same *direction* in which standard broadcasting moved years ago.

For example, with AM broadcasters clamoring for the same assignment of channels in adjacent areas of the east, midwest and farwest back in radio's early days, the FCC was faced with the dilemma of either insisting that these applicants share time on the air or arrange their antennae in such a way as to eliminate interference.

The answer — and rightfully so — was found in employing directional antennae. The commercial impracticality of time-sharing was established early in radio's history when such procedure was attempted. The era of networks proved its utter hopelessness.

Hence, the answer to channel assignments for television, like radio, may be found in "antenna directivity." Such a policy permits a minimum of 401 high-powered television stations in 135 of the first 140 major metropolitan districts of the United States.

The Engineering Committee of TBA had been giving careful study to various methods of channel distribution for several weeks prior to the FCC hearing on allocations last October. The problem was to create a competitive service for most major markets within the narrow confines of a 13-channel arrangement.

The task did not prove insuperable. History has a way of repeating itself and it was found that by applying the measure of "directivity" employed in standard broadcasting to television, more service to a greater number of people could result. A simple solution, yet one that might very well have been overlooked in an anxious quest for the right answer.

As Colonel William A. Roberts, Washington counsel for TBA, told the Commission at the hearing: "There is nothing untried or new in the method suggested. The principles of certain directional antenna installations of a simple nature are thoroughly understood and accepted, and the Engineers of the Association have merely proposed the substitution of these directional characteristics in suitable instances for the reduction of power to the level of community stations, or the complete elimination of the use of channels by reason of unrestricted interference."

Analysis of Proposals

Actually, what did the TBA proposal mean in terms of providing wider television service where the demand for channel assignment was greatest?

1. It meant that 59 more television stations could go on the air with high-powered transmitters than was possible under an allocation proposal recommended by the FCC.

2. It meant that cities like New Haven, Trenton, Lancaster and others could have television stations of power equal to those of New York City and Philadelphia without depriving larger metropolitan cities of sufficient channels to make possible a truly competitive service.

3. It meant that a commercial television service might be developed more quickly by permitting a greater number of applicants to enter the field now in the prime metropolitan, as well as the secondary metropolitan districts.

Although the TBA plan indicated the 401 high-powered stations were possible in 135 of the first 140 market areas, it made no attempt to show how many hundreds of more stations—high-powered and community—are possible elsewhere in the nation. The number is sizeable.

Dr. Thomas T. Goldsmith, Jr., a member of the Engineering Committee of TBA, in explaining the allocation proposal, told the Commission that the plan was the result of "progressive studies considering the technical requirements, the market considerations and the public service factors leading to a practical television industry."

He explained that the total of metropolitan high-powered stations provided for by the FCC was 342 for the first 140 markets, while the TBA industry plan provided 401 station assignments. New York City, for example, gained three high-powered stations in the TBA plan; Chicago gained two and Lancaster, which failed to be listed for assignment in the FCC proposal, got one station in the TBA proposal.

Dr. Goldsmith said that the use of directional antennae was suggested for only 48 out of the 401 proposed assignments under the TBA plan, in many cases antennae of simple design.

He emphasized the fact that the industry plan "provides high-powered stations in greater quantities in areas which can initiate and sustain a television service" without depriving adjacent districts of less populated sections of local television stations.

Another member of the Association's Engineering Committee, William S. Duttera, supplied the Commission with carefully drawn charts to show how effective directional antennae might be. *(Continued on page 46)*

Long Shots and Close Ups

A Regular Feature on Films by H. G. CHRISTENSEN

Advertising Agencies and Motion Picture Departments

To HGC:

One of our subscribers, (paid up) suggests an article on the whys and wherefors of motion picture departments in advertising agencies. Let's hear from you on this. ***Fred Kugel, Editor***

PS: Be sure and leave your forwarding address!

WELL, after checking with several travel agencies and being assured that since gas rationing ended, hitch-hiking is not so tough if you don't mind walking, Kugel, here I go — and California, here I come — maybe. This is not the kind of an assignment that leads to lasting friendships.

The first "Why" that comes to mind is a big one. WHY do some advertising agencies rush in where motion picture producers fear to tread? In other words, what are the pitfalls awaiting the agency that the producer has learned to avoid — and how do you avoid 'em? Of course some agencies with experience in motion picture departments, avoid these pitfalls by the simple expediency of hiring the most experienced and competent people they can find — in the motion picture business. Sounds like a screwy formula, doesn't it? But we're getting ahead of ourselves, so let's take first things first.

Should advertising agencies have motion picture departments?

Yours Truly has worked with agencies ever since a few far-sighted boys with their weather eye to windward spotted what they thought *might* become a new medium on the horizon — motion pictures. Then and there, some of them decided to get busy and protect their clients, (and that percentage) from the designing producers who "knew it all the time" and many of whom had spent twenty years or more trying to prove it. Having also worked *directly* with many clients over a long period of years on their pictures, and later, with their agencies on others, possibly I can cast a little light on the subject without casting aspersions.

Whether or not an agency should have a motion picture department depends first of all on the *type and number* of accounts they serve, and how many of them can use pictures to advantage. While "pictures" are now definitely established as a visual medium with tremendous flexibility and wide application, there will always be some advertisers and manufacturers who can never use them profitably.

Films and Television

Then too, there's a new medium on the horizon today that comes in for some attention, again from agencies who keep their weather eye "peeled" — How'ja guess it — television. Without trying to get into "one of those things", it's safe to say that pictures will play an important role here. Consider the picture production possibilities of television commercials alone, to say nothing of their use in regular programming. I know there's a lot of "Doubting Thomases"—there always are, but they'll find that television and pictures go hand in hand. And the quicker they "take off the gloves" and give each other a hand, the better for both of 'em. So, again, with an eye to the future, if you have the *right accounts* and *enough of 'em*, here may be another reason for thinking about a motion picture department.

It's obvious that to go any further than the above *without making a complete survey* of the "picture potentialities" of the agency considering such a department, would be the first step of that hitch-hiking trip to California. So for the sake of getting this article finished, let's assume YOUR agency is going to start a motion picture department. What happens next?

Well, kinda quick like, a lot of questions pop up. And you can't "duck" 'em, so let's face a few like—

1 "What do we know about movies now?"

2 "How much *more* do we have to know?"

3 "How and where do we learn it?'

4 "What kind of people do we get to run the department?"

5 "What service can we give the client that the producer can't?"

6 "Will it be worth the additional cost to the picture?"

7 "Can we sell the client on it?"

8 "How do we charge for our service?"

9 "Will we make any money on it?'

Do you want to keep goin'? OKAY! We'll take those questions and *more* in our stride. Next, "What size and type of a motion picture department do you need?" Yep, they come in *all sizes;* from a *one-man* "brokerage" department, who does nothing more than call on competitive producers for ideas and bids — to a full sized one; with a competent department head and the necessary personnel, trained in the motion picture business, and also thoroughly familiar with agency procedure and their client's problems.

Specialists, who can prepare script outlines, carry script responsibilities to final approval, supervise production and finally handle exploitation and the distribution of the picture. This gives a completely rounded out service to the client, in which the agency takes the full responsibility for the final result. This not only saves a lot of work and headaches for both the client and producer, such as duplication of research, contact and other efforts: but eliminates the problem of divided

responsibility, the producer being responsible only to the agency hiring him. Worth 15% — and more? What do you think?

The average guy's opinion of a broker is that he is someone who can get you something that you *can't* get yourself, such as a furnished apartment in New York or two tickets to "Harvey," third row center. But Webster says "Broker, a person who brings two people together and assists in negotiating contracts between them." Well, producers and clients have been negotiating contracts between themselves for the past thirty years, and they don't need an agency *just for that.* You have got to be able to give something that the producer can't—*a plus* to justify your department.

Plus Service

So what service "plus" can the agency render to justify a client in giving them his motion picture business and paying the additional percentage? I'll tell you. They can give the client, wise counsel as to their needs and the assurance that a picture will not be produced, unless, *without question,* it is the best medium to accomplish the particular job at hand; and that when *it is* written and produced, it will be produced by a competent producer and will be integrated with the client's entire advertising and merchandising campaign. You, as an agency, have a far better knowledge of the overall objectives, policies, practices and methods of your clients than any producer could ever have. *This knowledge,* when applied to the preparation of motion picture outlines and scripts, and the supervision of production, by a department who also knows the picture business can not only result in a better picture, but also a great saving of time for *both the client and the producer.* Time saved, in the elimination of duplication of research, and contact, and in effecting a general coordination of effort, is money in any business, *especially* the motion picture business.

Here's another very important point from the client's angle. No agency would jeopardize a large account in order to collect the fee on a ten thousand dollar picture that *wasn't* needed. But I've known producers who'd make 'em, needed or not. Most of 'em go out of business sooner or later, but there's always new ones springing up in their place, and how!

However, some agencies have a strange idea that someone in their radio department should double in brass, by also being the picture department. "Why not," they argue, "radio and movies, they're practically alike, aren't they?" Yep, radio and movies, as alike as *copy* and *art!* Picture men are trained to think visually, pictures *plus* words, not just words alone. Doubling up these two, usually puts you in the brokerage class, collecting ideas, outlines, speculative scripts from *some* producers, submitting them to a client, placing a contract, collecting a percentage (from the client), boosting the cost of the picture. You can call it a motion picture department, but not for long, not if some really smart producer goes to work on that agency's clients *direct* with some very simple and convincing arguments. It has been done.

Another excuse I've heard for this doubling in brass, is "We haven't enough accounts using pictures to keep one man busy all of the time." Well, if you haven't, *forget the whole thing* and let the producers handle it. In that event they'll do a better job than you will, and you'll save a lot of grief for yourself and your client—you may even save a client! This is but one example of "agencies rushing in where producers fear to tread." No producer who wanted to stay in business, would trust the complex operations of his business to experts in some other field, but diletantes in his own. Men who know both radio and commercial pictures equally well, are few and far between.

Personnel Qualifications

If your agency only warrants "a one man" department, and most of them do, *can it be successful,* and what kind of a man does it require? Answer to the first question, *yes,* depending largely on the man. And here's some of the more important qualifications he should have.

Our hero should know all the possible applications of pictures. Then he can assist in achieving the overall objectives of the client's advertising program; building sales, selling the consumer, training the dealer and salesmen, training service men, teaching sales promotion and merchandising, introducing new products, explaining their use and operation, demonstrating manufacturing methods, analysis of markets, labor relations, building institutional prestige and good will, and many others.

He ought to know "Who's who" among the producers in the business, their facilities, quality of their work, qualifications of their staff, company reputation and responsibility, and the type of pictures they are best qualified to produce. Some producers do a far better job on certain types of pictures, than on others—it depends mostly on how they are staffed and equipped.

Next, and very important, your man must know a good script from a bad one; be able to distinguish between a script that "reads well" but won't play, and one that doesn't read well, but will play, and which in the hands of a capable director will result in a top-notch picture. And you can't determine that, solely by the dialogue or narration.

Visualizing Scripts

What's going to be on the screen? That's what counts! If the picture on the screen *doesn't* hold attention, no amount of dialogue or narration *will,* no matter how well it's written. It requires a great deal of experience to determine the visual effectiveness of a motion picture still in its script form. This experience can only be gained in two ways that I know of; by actually producing or directing enough pictures from good and not so good scripts, to know what it takes; or, by actually writing enough scripts, good and otherwise, to know it won't have to be rewritten on the set. Set rewriting is a time-killing and very expensive pastime, which never results in as good a picture as if the script was right from the start.

The more pictures your man has made, or the more scripts he's written, the sounder his judgment. If there are any short cuts to *that* experience, somebody's been holding out on me.

Do the above paragraphs sound to you like a press agent's build-up? Well, if you knew picture production and could read some of the scripts and ideas, submitted to producers by agencies, every word of which, mind you, is "sacred," you'd know what I mean. And because the producer may have been in the business twenty-five years or more, is no reason for listening to his advice. THIS is a *new* medium, yes sir'ee, new, because some agencies are just discovering it's a solution to some of their

(Continued on page 47)

One Man's Reflections

A Regular Feature by DR. ALFRED N. GOLDSMITH

Television Timetable

THE commercialization of television depends not only on the availability of technically adequate equipment, appropriate methods of studio operation, and suitable program material, but also on an intangible psychological factor. Close students of television cannot fail to have been impressed recently by the need for assurance by competent authority, of reasonable stability over a period of years for whatever television set-up or allocation plan may be adopted. In the absence of such a plan, manufacturers are unable to place on the market equipment which will likely be acceptable for a period of years. And prospective investors in television broadcasting stations, facing a period of time during which profits may not accrue, view with some doubt "the spectre of early obsolescence." Psychologically it is clear that future television broadcasters from large networks to less substantial individual stations are concerned with the problem of television stability over the period of formative years.

Under such circumstances one may be permitted to offer a concrete plan whereby several objects will be obtained. In the first place, steady progress will not be disbarred nor will later and possibly radical changes in television be difficult to obtain. On the other hand, there will be reasonable and reassuring stability in the television field for a period of years. And there will be an orderly and, it is hoped, effective method for bringing about change as this is required.

The plan starts on the theory that commercial television would be initiated in the 44-216 megacycle band at the beginning of 1946. And it goes on the further theory that this system alone would be used for a period of years, namely eight years. It further assures that there will be a transition period of an interim type for four years following that, during which period both old and new systems will be in use on the basis of dual operation. And it provides thereafter that the new system will be substantially in use unless excellent reason to the contrary is demonstrated in individual instances.

As a matter of definition, Type One television in the following means commercial television between 44 and 216 megacycles or beyond, on 6-M-channels, with black-and-white 525 line pictures. Type Two television in the following means any more advanced type of television which may be evolved in the next six years or so. This may be, for example, color television of perhaps 800 lines on frequencies, which may be of the order of 500 megacycles or beyond.

In any case, it will represent a substantial advance in beauty, convenience, and light under the existing system. It is not here at present.

The readers will pardon the following rather dry and concrete timetable. Unlike some time tables, it is intended to enlighten its user and will perhaps repay the study necessary to appreciate the meaning of each step which is their outline. The elapsed time given enable the readers to get a definite idea of the schedule which is set forth.

Here is a television time-table affording reasonable stability of operation and yet offering the possibility of ready change to a more advanced form of operation.

EVENT OR STEP	DATE	ELAPSED TIME Years-Months
1. Commercial television of type 1 begins with selling of transmitters and receivers as produced	Jan. 1, 1946	0-0
2. Experimental work on television type 2 begins shortly thereafter, and continues until a number of qualified engineers advise the FCC and their commercial executives that Type 2 television appears technically and production wise feasible (on the basis of equipment performance and limited field tests.) This notification is supposed to occur, for example.	June 1, 1951	5-6
A conference of engineers is called by the FCC to which the public, Radio Manufacturers Association, and the Institute of Radio Engineers are invited (to recommend or not) Type 2 television. Assume that it is recommended. But if not, a future conference of engineers is called in less than one year later on the received recommendation of the engineers.	Sept. 1, 1951	5-8

(*Continued on page 46*)

ADVERTISING

TELEVISION Magazine Continuous Audience Panel

Maintaining a panel of interested cooperating television set owners in New York seemed to be, on the basis of intensive study, the best method at present for obtaining more qualitative indications on audience reaction to television programming and commercial techniques.

Because of the small number of people owning television sets at this time, it was felt that a panel continuously maintained at about 60 families would be sufficient for the present. Those 60 families are selected at random among the known owners of television receivers in any given area.

A convenient form, made for easy answering, is sent to these "promised-to-cooperate" families, which gives us information such as the following:

1. Sponsor identification; effectiveness of commercial.
2. Some degree of qualitative approval or disapproval of the program as well as parts of the program.
3. If the receiver was not in use, what "competition" pulled the audience away?
4. Number, age and sex of audience.

This analysis not only gives us information on effectiveness of commercials, but also a so-called rating which enables us to measure the quality of the audience obtained by age and sex. It also creates a flow chart of station "switching" as well as other confidential information.

The above method is the goal towards which we are currently working and it seems to be giving us valuable information during the present experimental period.

Richard Manville, research consultant, is directing the project and analyzing the results, some of which will be published each month in TELEVISION MAGAZINE, starting with the December issue.

W6XYZ's "Comfort and Luxury" program compares the old with the new to put its point across. Picture above shows the old method of washing by hand, with the one below illustrating the latest and most reasonable washing machine.

STATION ACTIVITIES

Television Productions —

W6XYZ has recently begun experimentations with commercials, which may be presented free of charge over their station. The series, titled "Comfort and Luxury — Preview of New Products," is a ten to fifteen minute weekly presentation.

Format, in skit form, shows a family in need of the product, and while no pretense is made of the program being an entertainment presentation, the humorous situations and the surprise element — "What product is going to save them this time?" — has brought much favorable audience response. Among the items which have been televised are the 1946 Ford, a new, low-priced washing machine, garden and home furniture, the "Californian," a three-wheeled automobile, a portable barbecue and plastic products.

Interesting reaction are the orders for the products shown which pour into the station immediately following the programs, despite repeated mentioning during the telecast that the items are not ready for sale at this time. Great interest has been aroused among advertisers because of its unusual audience appeal.

Don Lee — War contract work has limited W6XAO's programming schedule and the bans have not been entirely lifted as yet. In view of their curtailed activities they have not set any station rates for sponsors. However, program experimentation for the advancement of video techniques is available to recognized sponsors and agencies. With their two studios, and the outdoor swimming pool which is really another stage for televising aquatic events, W6XAO is planning more hours on the air just as soon as their government contract work permits.

"Big Sister", adapted from Lever Brothers daytime radio serial, was the first of four experimental shows to be given over WCBW. Effect of talking directly to the audience was handled in the television "soap opera" by close-up technique at beginning and end of show as shown here. Ruthrauff and Ryan is the agency.

General Electric — At WRGB, commercial sponsorship of experimental programs is encouraged and no charge whatsoever is made. They believe that such a "welcome" policy makes for better and more varied programming and permits a wider production scope without the barriers which would be imposed upon the talent and staff of the station by strictly commercial operation. Any commercial enterprise desiring to present and sponsor a show on WRGB may do so merely by demonstrating a program idea of script that is good television or applying for sponsorship of one of WRGB's own shows. A sponsor may furnish his own talent or he may use the station's. The only requirement is quality of program.

WRGB uses ten minute program periods, with shows running ten, twenty, thirty, forty, fifty or sixty minutes. While this allows a possible maximum of 6 different shows an hour, as against radio's four, the average segment is twenty minutes.

No stipulations or limitations as to types of commercial programs have been set up and the station is particularly interested in any new, unusual, unorthodox programs with real viewer interest. As long as a sponsor can present a show which is good television and can be scheduled so as to offer diversity and good programming on any given evening, there is no limit placed upon the type of show he may present.

Philco — As WPTZ does not have complete facilities just now for commercial programs, no rules have been set up regarding them. The football games being played at Franklin Field this year are being televised for the sixth year under the sponsorship of the Atlantic Refining Company, through their agency N. W. Ayer. The agency produced commercial films which are shown at the beginning, during the half and at the end of the game. No charge has been made for this service. However WPTZ reports that when their new studio is ready for use, they will go into the matter of charges, stipulations, etc., more thoroughly.

COMMERCIAL SHOWS

Atlantic Refining Co. — Building their commercial around their puppet, Sparky Atlantic, the Atlantic Refining Company which is now sponsoring the football telecasts over WPTZ for the sixth year, switch from the puppet to shots of their own service stations. Commercials point out the trouble spots in a car, and how a particular Atlantic product can remedy the situation. A winter scene is also shown, as a forerunner of the heating problem ahead, and an educational "here's what happens to your fuel oil" plugs the sponsor's product. Commercials are shown before the game, during the half and at the end of the game.

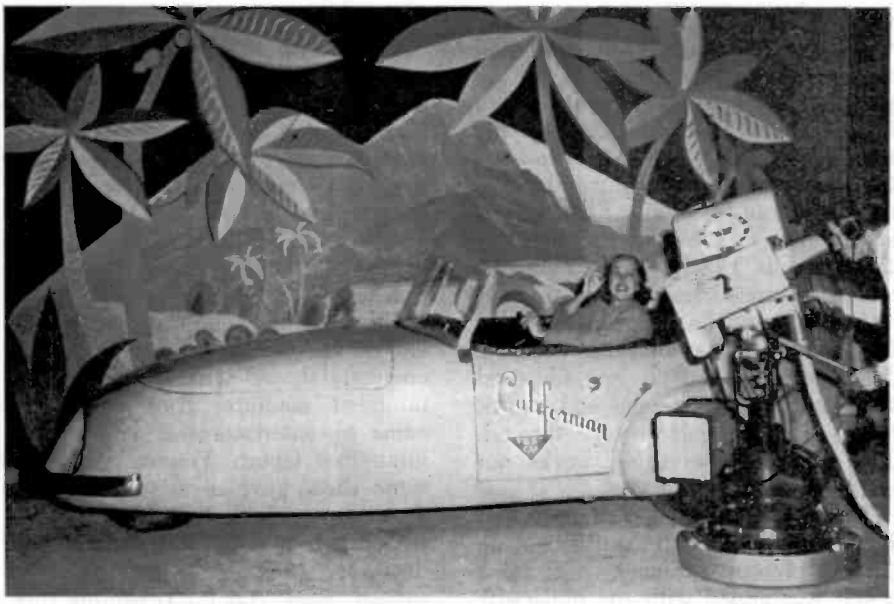
Admiral Radio — Admiral Radio is again conducting their "Young Chicago" series over WBKB. Talent for the program, which is designed to develop future stars, was selected at auditions conducted by the Board of Education in cooperation with Admiral's television department. First show featured novelty acts.

The second on the list was "The Ring," a dramatic playlet, which featured high school students who are members of the Central Radio Work Shop.

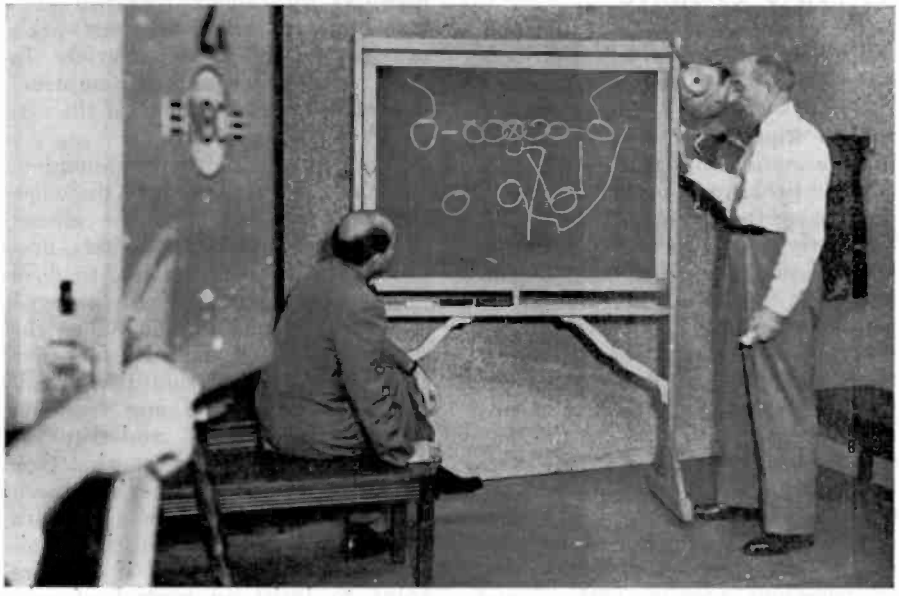
This was exceptionally well done, with the scenes kept to a minimum of two. Story was set in the ancient days of the Far East and concerned what befell the people who came into possession of the ring. The script and action was kept simple. The actors were well trained in their parts and the use of off-stage narrators effectively knit the production together.

Elgin Watch — Elgin Watch has signed with WNBT for thirteen time signals through its agency, J. Walter Thompson. These are shown on Saturday with the football telecasts and the time is given before the game, during the half and at the end.

The 20 second commercial, done on film, opens up with shots of the stars twinkling in the heavens — tying in with the ad theme that Elgin time is timed to the stars. A Lady Elgin wrist watch is shown coming to full screen proportion, then fading out. The same thing is done with a Lord Elgin watch. Then using a montage effect, a clock, painted black with white sweep hands, is superimposed over the film to give the correct time. Off stage narration gives the commercial.



"The Californian", the new three wheeled automobile (shown above) was demonstrated over W6XYZ. Below, Lou Little, football expert, illustrates spectacular grid plays on the blackboard, on "Your Friday Night Quarterback" program, sponsored by Keds, (U. S. Rubber), over WNBT. Agency is Campbell-Ewald Co.



Esso — Esso's sponsorship of special news events over WNBT included the 35 minute Navy Day show. Commercial was very brief, opening with a slide of the word ESSO, followed by a picture of two Esso gas tanks. At the end of the program, film showing the Esso truck rolling down a street was used. Off-stage narration gave the commercial.

The Fair Department Store — The Fair, Chicago department store, made their first experiment with video over WBKB, with a cosmetic plug. In a short skit, titled "Rose Laird Saves the Date," the 79 year old cosmetician appeared and gave teen age girls hints on their personal appearances, with dating as the object.

Lever Brothers — Using an adaptation of their radio serial "Big Sister," Lever Brothers, through Ruthrauff and Ryan, began the first of their experimental series of four at WCBW. With a cast of only three, the show was closely knit and provided good entertainment. Jane, who plays Big Sister to her neighbors, opens the telecast by speaking directly to the viewers, telling them that her neighbors in Glens Falls are their neighbors too for people are

pretty much alike. She chats for a while in a friendly way and the close-up technique here lends the personal, heart-to-heart touch, which keynotes the drama. Then as the story gets underway, the flash back technique is used to introduce the main characters — a discharged serviceman and his wife. Theme of the story is timely, concerning the vet who comes home to find that his wife has made a better go of his business than he did and that the little woman is in no way disposed to relinquish the reigns and return to the fireside. However, through Jane's efforts everything works out all right.

For the commercial, a giant box of Rinso was used, with the theme song "Rinso White." Clever pantomine touch was added with the housewife reaching up to take the clothes off the line in the Rinso box, and a cute little youngster turning handsprings.

AGENCY ACTIVITY

The October issue of TELEVISION carried statements from the operating New York television stations on the various stipulations they have set up for the commercial use of video.

Basic problem is overall policy on advertising techniques and quality at this early stage. Networks naturally are anxious to see that nothing goes wrong at this important period. Indications are that they will probably relax some of their present regulations as they feel their way. But in the meantime, these statements again brought into the open the long smouldering question of "Who's going to produce the television shows— the agencies or the networks?" and due to the comment which was caused, we surveyed some of the tele-conscious agencies both in and out of New York on their reactions.

Agency feeling runs high on the subject — and it all seems to run the same way. Probably the best quick summary of general feeling is the statement of one big agency head who said "We are perfectly willing to let networks direct our shows — as long as they do exactly what we tell them to do!"

From the advertising point of view, agencies feel that they have obtained their accounts based on the formula and pattern of advertising they have devised for a particular product. That this formula has clicked and is paying off is proved by the continued patronage of their clients. Admitted that television commercials require an entirely different type of presentation, still certain basic fundamentals must be kept to maintain the continuity of that particular sponsor's advertising. How then, agency men ask, can a network possibly step in and attempt to call the signals on this phase of production?

From the programming angle, television whether commercial or non-commercial, is primarily an entertainment medium. And when you come to entertainment, you hit an intangible factor. You can take the same show, give it to two different directors — both top notch — and still get two entirely different productions, each of which will be equally good. Agency reasoning then follows that if they prepare a script, have it okayed by the client, cast the show, rehearse it as far as they can go, then move it into one of the networks for camera rehearsal, etc., that it is not within the network's province to step in and interfere. In plain agency jargon, the construction of that script is none of the network's business.

As to the quality of programming, agencies feel that they hold the edge. Networks will not have the money to hire enough top-flight writers, producers, directors, and talent to do a full-time job. Agencies will have — just as they have in radio. When the showdown comes, agencies feel they can take it right from the broadcasters. They are the ones spending the client's money — and they are going to see that they get what they want for the money they're spending. How, they ask, can a network expect to program even the minimum of 42 hours a week if they are going to insist on control of production? How can they possibly maintain a big enough staff to produce enough varied, individual types of programs? Agency business is highly competitive and agency handling would mean a livelier, more varied program format, with plenty of fresh new ideas. While they admit that there may be some turkeys, they feel that the ultimate results will far outweigh the disadvantages.

Agencies claim that the networks are not consistent. When it comes to films, the agency does the scripting, directs the filming, edits, cuts and finally sends it to the network. It then goes on the air — with no control room battles over what's right and wrong. Where's the supervision there the agencies ask?

On the constructive side, the suggestion has been offered that the networks definitely set up standards of what is acceptable and what is not acceptable so that agency people will have some pattern to follow. Much of the friction would also be avoided if the networks embarked on a co-operative training period, where agency tele directors and producers could work right in the studio, get to know something about the camera, etc.

Summing it all up, agency feeling boils down to this: Agencies must of necessity do their own work and be fully and completely responsible for it.

William Esty — Tele activities at this agency are marking time until DuMont goes back on the air. The first in their "Here's How" series made their debut before the station closed down last Septmeber (reviewed in October TELEVISION). This series sponsored by Super Suds (Colgate-Palmolive-Peet) will be resumed on a weekly basis when WABD opens up again in December.

In the meantime, Kendall Foster, television director, is building up their own casting and script writing department. The "Here's How" skits require a lot of doubling in cast, and they are anxious to have their own group of people in order to get the right types. At this stage in television, with the camera and lighting limitations, he does not believe it's necessary to teletest the cast in order to determine the video-genic types. He believes that a knowledge of the bone structure which makes people photogenic is sufficient right now.

Manson-Gold, Minneapolis — Minneapolis advertisers are showing an active interest in television, with many in the national market indicating their intention to get into television almost immediately. Those clients, who are in the local market, primarily, will have to wait until the Twin Cities get their first station.

According to Don Nathanson, this agency is particularly interested in Tele-Cartoons and have made arrangements with a motion picture cartoonist to offer his facilities to advertising accounts. In Mr. Nathan-

(*Continued on page 45*)

WASHINGTON

By DOROTHY HOLLOWAY

CHANCES are by the time this issue is off the press, the FCC will announce final rules and regulations for television. It seems pretty certain that top cities like New York will receive 7 channels, and the smaller cities like New Haven will still be taken care of. FCC plans to do this by limiting population coverage and power stations.

Objections raised to the TBA directional antenna plan are based on problems of antenna sites and possible conflict with the Civil Aeronautics Authority. For example, it might be possible that a ctiy like Wilmington will have an allocation for a station granted but will not be able to operate because the height needed for a directional antenna would not be okayed by the CAA.

Further FCC thinking is indicated in recent speeches by Chairman Paul A. Porter. At a meeting in Cleveland, Porter stated that black and white pictures are now ready for the public, and that high frequency color pictures are still in the experimental stage. He told members of the Radio Council of Cleveland that the FCC favors wide-open competition between black and white television pictures in the low frequencies and those in natural color in the high frequencies.

While there are suggestions before the FCC to guarantee a ten year period of service for low frequency television, Porter himself believes in no such guarantee.

FCC hearings on allocations in Washington revealed the following industry reaction to rules proposed by the Commission:

42 Hour Program Week

The entire industry was unanimously against 42 hours. The feeling was that this was too great a burden at this stage, not only financially, but also as to equipment, facilities, and personnel. It was pointed out that the New York stations might operate 42 hours a week, but this would be out of the question for other stations throughout the country. Further industry reasoning was that a 42 hour weekly requirement would result in a large percentage of inferior programming. The opinion was that less hours at this stage would better serve the public interest in superior programming. CBS plan on this rule, as proposed by Paul Kesten, based on a percentage of television homes within an area is as follows:

1 hour daily until set ownership has reached 10%.
2 hours daily until set ownership has reached 20%.
3 hours daily until set ownership has reached 30%.
4 hours daily until set ownership has reached 40%.
5 hours daily until set ownership has reached 50%.
6 hours daily until set ownership exceeds 50%.

Channel Sharing

NBC. CBS, Raytheon, DuMont, Bamberger's and TBA were all against channel sharing as unsound economically and operationally. American, Sherron Electric and American Television Laboratories were for channel sharing. The latter two because they believed it is the only way that a smaller operator can get into television.

Multiple Ownership

Industry objections were kept down to a whisper. The hope was expressed that FCC would not make any hard and fast rules at this stage.

Common Antenna Sites

Again the industry expressed the hope that no hard and fast rules would be laid down for the time being. Problems on antennas would probably be different in each locality and should be handled according to local requirements.

Motion Picture or Other Mechanical Reproduction Announcements

The feeling was that while there should be some kind of regulation, it would be difficult to formulate it at this time, because of the various uses of film in television. For example, film might only be used as a background or as an insert blended into a live talent program. In this case it would seem difficult and impractical to identify which part was film and which part was live.

Station Identification

The opinion was again that time would best determine the most practical method. At present, identification is accomplished orally, visually, and combinationally.

Channel Allocation

Industry was almost unanimous in backing the TBA plan discussed on page 23, if it proved to be practical. FCC welcomed the plan as an aid to the solution of taking care of the smaller cities and turned the consideration of this industry plan over to the engineering department.

NEW APPLICATIONS

"Stratovision" — Westinghouse's sensational proposal to use airborne relays for coast-to-coast network video operations, now has FCC okay for construction of five developmental stations for use anywhere in the United States to test out the new broadcast method. Company will receive frequency assignments as needed from the FCC chief engineer but has requested five specific channels for initial experimentation: a frequency in the 49 mc band, now given over to commercial FM; the 107 mc channel, pegged for FM broadcasting after January 1; and frequencies in the 500, 900 and 2,000 mc region, spotted for video experimentation.

Initial tests will be made on antenna design and plane equipment, feasibility of relaying programs from moving planes.

Disney in the TV Pictures — Latest Los Angeles application for commercial tv comes from Walt Dis-

ney Productions, which plans a tv station atop Mt. Lowe approximately 15 miles north of the city. The Disney station to be built at a cost of $166,000, proposes service to over 3 million people in the Los Angeles metropolitan area. Planning to be on the air initially 21 hours a week, the station has already worked out elaborate program schedules, making heavy use of film, animated cartoons, and live and outside productions.

Studios will be located at 2400 West Alameda Avenue, Burbank, California in building now housing Disney Productions.

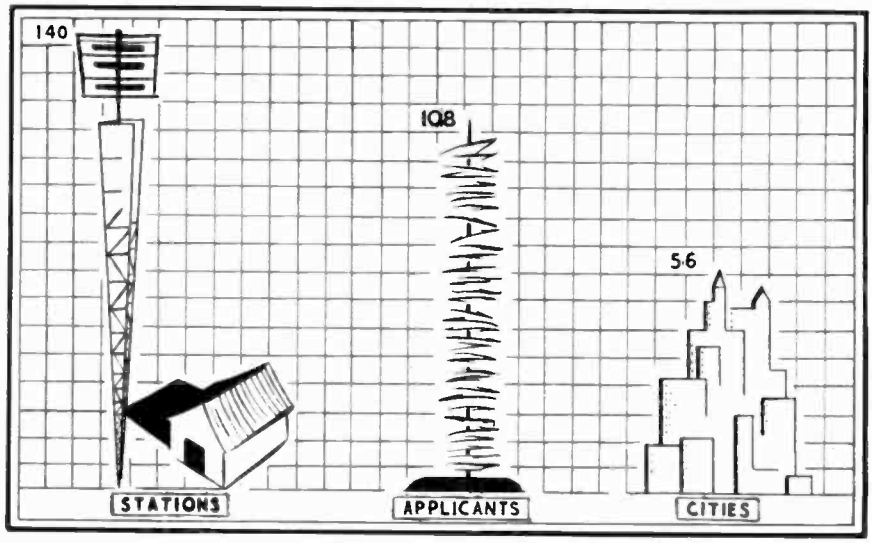
Charles O. Slyfield, head of the Disney Sound Department and a member of the Television Committee of the Academy of Motion Picture Arts and Sciences Research Council, will direct engineering for the station. General policy matters will be handled by Roy Disney, president of Disney Productions and brother of Walter. Walter Disney himself will take over active direction of station programming.

In support of the application, Disney points to his "active experience in the entertainment field since 1920" and the company's pioneer efforts in introducing sound and color to film entertainment. The majority of Disney films produced over past 20 year period are immediately adaptable to television, the application points out.

Station plans operation on tv channel 5, using RCA equipment, with 4 kw aural and 3 kw visual power. Legal counsel is New York firm of Greenbaum, Woolf and Ernst; engineering consultants, Jansky and Bailey, of Washington, D. C.

Disney has already received ok of U. S. Forrest Service for his site on Mt. Lowe and is seeking similar authority to locate an FM outlet on Mt. Wilson.

Fifth Outlet for Pittsburgh — Application for a tv station in Pittsburgh, Pa. — the fifth to date — comes from Allegheny Broadcasting Corporation (196 Union Trust Building), licensee of standard station KQV. Station plans operation on tv channel 6 (82-88 mc), using RCA equipment with 3 kw visual power. Transmitter and studio site has been selected at Grandview Avenue, Shiloh and Wyoming Streets. Total station costs and hours of operation are still undetermined. Officers of the company are: Charles T. Campbell, president; Irwin Wolf, vice president;



George Wasser, vice president and Lee Eckels, secretary-treasurer. Wolf is also vice-president of the Kaufman Department store interests. William Walker, a director of the Allegheny Company, is 100 percent owner of Mode Art Pictures, Inc., producers of industrial motion picture film.

Allegheny has retained George Sutton of Washington, D. C., as legal counsel and F. G. Kear, of Kear & Kennedy, also a Washington firm, as engineering consultants.

Third Outlet for Cincinnati — Mary Pickford, former screen star, will act as consultant to a television station in Cincinnati, Ohio, which has been applied for by the Institutum Divi Thomae Foundation, a non-profit religious and educational foundation with a controlling interest in Sperti, Inc. The station will locate its studios at Celestial Street, Cincinnati and plans to program 4 hours a week initially. Coverage is proposed to over 900,000 people residing within the Cincinnati trading area. Station costs are pegged at $171,300 with monthly operating costs running $10,400 and expected monthly revenue around $11,985. Seventy percent of its programs, according to the FCC application, will be commercial. Unlike majority of tv applicants, the Foundation does not expect to finance station out of existing capital. Application shows cash reserves of only $1,300, but the applicant will make loans up to $170,000 using its real estate and building holdings as security.

Company officers include: George Sperti, president; the Reverend Cletus A. Miller, vice-president and treasurer; and Mildred Sperti, secretary.

Washington legal counsel is C. Edgar Brown. L. E. Pett prepared the engineering data for the application.

West Coast TV — Continuing its tv activity on the West Coast, Televisions Productions, Inc., (a Paramount subsidiary) has filed application with FCC to move its experimental tele station W6XYZ from present location to Mt. Alta, highest point on government-owned Mt. Wilson outside Los Angeles. As preliminary to applying for commercial license, company application says the "experimental operation of W6XYZ and KTLA from the Mt. Alta transmitter site will provide opportunity to test operation of relay transmitter W6XLA and associated equipment." Station is operating on channel 4 (78-84 mc), using 1 kw aural and 4 kw video power. Klaus Landsberg, company engineer, assisted by Raymond Moore and Hugh Latimer, will conduct experimentation at the new site. Company will spend around $2,000 to move transmitter and antenna to temporary installations in trailer-type cabins at the Mt. Alta location.

Paramount Pictures, most active movie tv operator, has announced plans for a new commercial station in San Francisco, as link in proposed coast-to-coast video network. Using Channel 4, they propose to locate their transmitter on Mount Tamalpais.

FCC Grants — FCC have granted DuMont an experimental permit for tv operation in the New York area,

(*Continued on page* 47)

PROGRAMMING

DRAMA

WOR — Mutual's presentation of the Brownstone Theatre over WRGB was slanted to give home viewers the feeling of being in a theatre. The host, Bob Emory, who also produced the shows, opened each telecast with an invitation to join him at The Brownstone Theatre. The camera then took a long shot of the replica of the theatre front — which stood about 5 feet high, dollying in closer to go right through the lobby and to give the impression of entering the theatre. Off stage sounds of people arriving lent the necessary sound effects. A lap dissolve showed the interior, with the narrator, now off scene, continuing to cue the viewers into a theatre atmosphere. A miniature of the curtain was used to show it going up at the beginning and down at the end of the show.

Every effort was made to give the feeling that this was a performance given in a theatre. In the warm-up before the telecast, the studio audience was told to act as they would in a theatre, to applaud in the same way. They were asked to cooperate and follow the cues given to them when applause was wanted. The cast took curtain calls at the end.

But even more interesting than the effort to create a stage atmosphere in the studio and on the viewing screen, is the fact that the whole presentation "behind the scenes" is handled as a theatrical production. Bob Emory has his own stock company at WOR. He believes that this is the best and most economical way of handling dramatic plays on television. By having a stage-wise cast, they are used to the "business" which makes good theatre — the gestures, the ease in moving, the right spacing, all the little intangibles that can add importance to a scene. Then too it simplifies production and casting problems. He knows what each member can do, what parts they are best in, how long it takes them to learn lines, the rehearsal time necessary, etc.

This 5-foot replica of a theatre front is used to put the audience in the mood of theatre-going for WOR-Mutual's Brownstone Theatre presentations. Below is a scene from "The Man Who Went to Gettysburg", recently shown over WRGB.

As WOR-Mutual does not have its own facilities, necessity has been the mother of some short cuts. Each play was completely rehearsed in New York — usually requiring 4 rehearsals before the show was pat. In the meantime a sketch of the scenery was sent to WRGB, together with the video and audio script. If bit players were needed, a description of the characters wanted was also sent ahead. Thus the complete dramatic package was created in New York and went into the WRGB studio ready for adaptation to television. Another five hours of rehearsal time was gone through at WRGB.

In Mr. Emory's opinion, a good 3-act play could be repeated for a week over any station, reaching a different audience each time. He believes that if a play is good, people who missed it the first or second time will be anxious to tune it and catch it on subsequent performances.

WNBT's 95-minute presentation of

Maxwell Anderson's "Winterset" was their first experiment with a full, three act play. Without comparison to the stage or screen, the production can set a standard for television in its own right.

Borrowing the stage techniques of dividing a presentation into scenes and acts, the televised version used slides to announce changes in locale and time. The play was presented in three acts, with two minute intermissions being given between each.

The fundamental theme of "Winterset" concerns a quest for truth, centering around Mio, a man whose life has been blighted by the execution of his father and who is tortured by the belief that he died innocent. His quest leads him to a poverty ridden family of three — an aged father, his son and young daughter, Miriamne, living in the basement of a tenement huddled against one of New York's bridges.

Action centered in one room of a basement tenement apartment, and in the alley immediately outside which faced the river front under the bridge. Scenic effects were exceptionally well executed and camera shooting made the most of the action, giving the effect of distance in what was extremely limited space.

Construction of the script called for many long speeches by Mio, Miriamne and the aged father, particularly. While the close-up technique was used in several instances, camera action varied to include the background and the listeners, thus intensifying the dramatic import of the lines.

Particularly effective shooting was in the third act, during the final scene when Mio and Miriamne stood in the alley, knowing that death lurked in the shadows. This scene was the climax of the play, and the camera although coming in for occasional close-ups of the two, stayed far enough away to give screen viewers the impression that they were caged in on all sides by the gunmen who laid in wait for Mio. Camera techniques, the excellent lighting effects which simulated the shadows of pre-dawn, and the settings, all complemented the excellent acting which carried the play to its powerful conclusion.

The televised adaptation was condensed from the original stage play, with a few scene changes and some minor characters left out. But the script was excellently done and the tighter version in no way detracted from the show. This production should prove one point — that the criticism which has been thrown at television programming up to now has been the result of poor scripts and bad acting, not the medium itself. Here is a prize winning play, which required the most careful production and acting — for the blank verse type of lines which typifies Maxwell Anderson's technique, called for excellent direction and acting ability. And the WNBT staff made the most of them.

EDUCATION

Chicago's Board of Education experiments in cooperation with WBKB gave the high school audience a visual demonstration of television by utilizing the WBKB studio equipment to explain the detailed workings of video. The viewers were taken on a tour of the studio and the detailed operation of a television studio was explained by the narrator. A full production number, featuring a dance specialty, was broken down to its basic elements during the course of the program.

Members of the Chicago Fire Department appeared on the "Fire Prevention" program. They used a miniature set and simulated fires to show the damage that results from neglect in homes, factories, grain elevators and other buildings.

According to George Jennings, Acting Director, Radio Council — WBEZ, Chicago Public Schools, it is still too early in their experimenting with television to have very many definite ideas about the types of program formats and their relative advantages. What they are attempting to do in the current 13-week series is to develop a pattern of techniques. So far, the demonstration type of program seems best. These have included aviation, science, fire prevention, cooking, home mechanics, and so forth.

Student reaction to television is also difficult to determine. Right now the medium is so new that it is more exciting to them than the program content. However, Mr. Jennings feels, that this difficulty will be overcome when television becomes an accepted part of the classroom procedure. A teacher-student survey is made each week in the schools equipped with receivers, in order to get as many varied reactions as possible to the medium of television and their program content.

Experience has shown, however, that even the 18x24 inch screen is too small for general classroom use. They offer as a solution the development of a projection type of television which will be similar to motion picture projections. A screen approximately the size of 16 mm. films could then be set up in classrooms, with the television machine set up in front of it as in ordinary motion picture projection, or behind it as in the so-called daylight motion picture projection.

However, under the Chicago school system, each individual school must purchase its own radio and television equipment. Consequently, the large high schools will probably be better equipped than the ten or fifteen room elementary schools. According to Mr. Jennings, "This is the problem that the Boards of Education are going to have to face, and our hope is that radio, television, motion picture, and other technological aids to the curriculum will prove their value to the extent that Boards of Education will finance the purchase of good standard equipment for all schools."

Commercial sponsorship of educational programs is rather a touchy point. As far as radio has been concerned, it has been the policy of the Radio Council of the Chicago Public Schools to keep away from commercial sponsorship of any kind. With television, it has not been possible to do this as the expense involved is considerably greater and the Radio Council has no budget set up to take care of such items as make-up, costumes, sets, and so forth. Therefore they have cooperated with sponsors such as the Admiral Radio Corporation and the American Gear Company, both of whom have no particular "ax to grind" in so far as students in the elementary and high schools are concerned. On this problem, Mr. Jennings' point is: "I don't think that school systems should accept the sponsorship of soft drinks, candy bars, or other consumer items whose sales appeal is directed primarily to youngsters. This is another problem that will have to be worked out as our experiences in television progress."

Above: Two stars from "Carousel," current Broadway musical hit appear before the WNBT cameras. Right: WCBW's "Choreotones" centers around a type of modern dance that is motivated by a dramatic theme. Particularly interesting are the floor treatments in the above settings which carry out the decorative motif.

Typical record shop setting is used as a background for ABC's "Record Shop", presented over WRGB. An old-fashioned doorbell, which tinkles everytime anyone enters the store, emphasizes gag type format of the program.

WNBT'S suspense drama, "Airtight Alibi", used a simple farmhouse kitchen setting throughout the entire show. Effective handling of the camera, as it followed Abby around the room, gave an effect of distance to the scene.

SPECIAL EVENTS

Spearheaded by the arrival of Admiral of the Fleet Chester W. Nimitz, the return of the victorious United States fleet to home shores was one of the most interesting news events of the past month. WNBT's mobile unit filmed the arrival of the Admiral at the Naval Air Station in Anacostia, as well as the fleet commander's tour of Washington and his subsequent address before both houses of Congress. Films were flown to New York and shown that same night.

A victory for television coverage was chalked up when for the first time WNBT's television newsreel men were given the same position as the motion picture cameras by the New York City welcoming committee in charge of such commitments. Camera crews covered the event from the arrival at La Guardia Field, through the triumphal tour of the city, to the reception given at the Waldorf Astoria. The following day Admiral Nimitz made an exclusive television broadcast over WNBT to wounded servicemen in hospitals in the New York area. The program was beamed to the 10 major hospitals in the section, where 59 television receivers are installed. Although not normally on the air Tuesday and Wednesday, WNBT stayed open both days in order to present the newsreels. Arrival of the fleet in San Francisco and New York was also covered by the WNBT crew. These were pooled newsreel shots which were also available to ABC.

The day-long festivities which climaxed New York's salute to the fleet on Navy Day was condensed into a 35 minute newsreel. Included was the president's arrival in the city, his trip to the Brooklyn Navy Yard for the commissioning of the new carrier and his address. Shots of the carrier and the crowd were shown as he spoke. Then began the return trip through New York to the Mall at Central Park, with the film making the most of the tightly packed, enthusiastic crowds which lined the routes. Action then continued with the boarding of the Missouri and the review of the fleet anchored in the river. Camera crews were aboard the USS Renshaw with the presidential party reviewing the fleet, with other crews aboard the USS Wells, the ship that followed the Renshaw in the review. Aerial shots of the ships that lined the Hudson completed the program.

President Truman's speech outlining the country's foreign policy was televised directly by WNBT's television cameras in Central Park.

ABC edited their coverage of the Navy Day festivities to a 40-minute show which was shown over WPTZ and WRGB. A documentary type newsreel, the show was called "The Navy's Day in New York". Coverage started with the arrival of the ships in New York, notably the Enterprise and Monterey, continued with President Truman's parade through the city, his addresses and the final review of the ships anchored in the Hudson. Continuity was given by flashing the calendar date of each activity on the screen, with a clock insert used to indicate the timing on Navy Day itself. The speeches of the president were not recorded, the film showing long shots and close-ups of the screen, while the commentator gave a synopsis of what the president said. Interesting human feature was the second part of the film, "New York Day at the Navy", which showed the horde of New Yorkers who turned out en masse to visit the battleships. ABC cameramen covered the visits to the Midway, which was anchored in midstream, via barges and LSTs, and also went aboard the famed Missouri.

WCBW's mobile camera units shot the arrivals of the ships in New York and for the two weeks preceding Navy Day, daily happenings concerning the fleet was shown on the regular CBS news programs. This coverage included shots of the ships, their crews and the eager New Yorkers who swarmed aboard them. Important naval personnel appeared on the programs as guests. Typical was the security officer of the Enterprise, who had been on the ship from the time it was commissioned, and recounted the wartime experiences of the Big E.

Good placing of cast around card table eliminated blocking in George S. Kaufman's sketch, "If Men Played Cards as Women Do", which was given over WNBT.

NEWS

At WBKB, their novel news commentary show, "Faces and Places in the News," is proving one of their most interesting television features. Show features Joe Wilson, ABC commentator, and Paul Battenfield, editorial page cartoonist of the Chicago Times. As Wilson gives the news, Battenfied portrays a salient happening by on-the-spot cartoon drawings.

WCBW's Tele-News combines stills, maps, animation, films and cartoons with its commentary. Novel note are the cartoon sketches which visualize some interesting bit of local news.

THRILLS AND CHILLS

WOR-Mutual's terror series, "The Sealed Book" were presented over WRGB. Scene opened with a shot of an old, moth-eaten, dusty book, as the accompanying musical effects cued the audience for horror. Camera dollied in as a creepy, sinister looking hand wiped the dust off and the name "Sealed Book" became visible.

Terror stories require a special technique according to Bob Emory, for there's a very faint line between terror and laughter. An expression of horror that's overplayed can tickle your audience instead of chilling them. In "The Bells," a psychological horror story, which attempted to convince the people involved that they were mentally unbalanced, scenery played an important part. A door figured prominently in the early part of the story, then action shifted to the other side of the set. A panel was put in place over the door and the sanity of the people who remembered it being there was questioned.

In "The Spider's Web," tarantula spiders were gotten to add a note of realism — and the studio audience were shown them in the warm-up which preceded the broadcast.

WNBT's presentation of "Airtight Alibi" proved that elaborate productions aren't necessary to make the best shows. This suspense drama, using two characters and a farmhouse kitchen setting, packed a punch that would have kept any viewer chained pretty close to his video set. Based on the hatred of a farmhouse wife for her domineering husband, play opened on a lonely winter landscape with snow falling (film insert), with an off-stage narrator describing the bleak scene and the approach of a stealthy figure. Camera then switched to the somber, workworn Abby, nervously entering the house, with the narrator pointing out her nervousness and the intensity with which she looked at the clock. Action then centered in the farmhouse kitchen, with Abby busily getting dinner. Her husband entered, beginning a tirade of abuse. Audience sympathy is quickly gained for Abby as one hateful sentence follows another. Excellent camera shooting here added motion, for the camera followed Abby back and forth, from the stove, to the table to the chair, giving an illusion of space and action to the dialogue. Both characterizations were excellent, with Abby lashing out with the pent-up hatred of an abused life as she watched her poisoned husband dying.

W6XYZ, in a public service program, employs a new visual aid to illustrate employment statistics. Program also featured a guest speaker from U. S. E. S.

Good theatre came to the fore here for the only action was the facial expressions of the two characters — one twisted in pain; the other contorted with hatred. Drama built to a climax with the formulation of the airtight alibi and it seemed as if the "perfect crime" had at last been committed. Probably to escape the accusation that the show justified murder, an anti-climatic note was introduced as the director burst onto the set, bawling out the actors for muffing their roles.

WBKB's, "The Murder of Michael Malloy," was another in their "X Marks the Spot" video series. The setting was Third Avenue in New York City and the plot was adapted from one of the world's most famous murder cases.

COMEDY

King's Record Shop, presented by ABC over WRGB, combines both audience and listener participation in their format. Show, which runs for a half hour, opens up with some sort of a gag each week. Typical is a recording of a Bing Crosby record, with the opening shot showing John Reed King supposedly singing. Camera then moves back. King turns the record off and continues singing in his own cracked voice. Contrast is good for a laugh. Set is that of a typical record shop, including a door with a bell which rings when anyone enters. As each person comes in, King asks them to select a record — which can range from jive to classics to the Gettysburg address! — and the home listeners phone in their answers.

The phone rings right on the program — and a double prize is given, to the first person answering correctly as well as to the studio contestant. If the musical question is answered on the first try, a $1 is given to each; $2 on the second try; $4 on the third — and so on up. $32 has been the tops so far. The last person to answer correctly is invited down to the next week's show. There's time for about five or six such stunts a night. In addition, other gags are added — such as having a bunch of kids come in and jitterbug around with King.

The use of title cards and slides is very well handled. As an example, when King gives the phone number of the studio, a slide, coming in over

WNBT's amateur program featured a group of NBC guidettes, shown here with Ralph Dumke who acted as emcee. Program furnished good formula for inexpensive programs, using local talent. Girls were rehearsed before appearing.

the voice shows, in visual terms, a telephone dial with the phone number.

"Who's Cuckoo Now," which is really a Paul Knight package show produced in cooperation with ABC over WRGB, uses a one-man radio station as its format. This set-up gives a chance for a lot of gag type stunts, depending on a list of crazy characters who come wandering into the studio in search of a job, and stay to heckle and show off their stuff. This is also a half hour show.

WNBT's presentation of "If Men Played Cards As Women Do," a George Kaufman script, had the makings of a good comedy skit but somehow it fell flat of the expected. With a cast of four, the theme centered around a bridge party with four husky males mouthing the dialogue of four fluttery females, typical of the Billie Burke characterizations. Conversation centered around clothes, gossip, cattiness, recipes, etc., with the final touch added by all men keeping their hats on. It was an uneasy type of characterization — the four men, all Broadway players, were heavy built types, and to their credit on the side of good taste, made no effort to add effeminate gestures or characteristics to lend credence to the dialogue. Good theatre depends on coordination of speech with appearance and body movement. To have done so in this case would undoubtedly have left television wide open to censorial criticism.

The skit would have made good radio — the lines were good, the delivery good, the listening audience could have filled in the details, or left them out. But the viewing audience had the difficulty of fitting the quick feminine rush of chatter to the masculine appearance and gestures of the players — and somehow it didn't quite go over.

VAUDEVILLE REVIVAL

W6XAO brought yesteryear's vaudeville stars, whose names once blazed out from the marquee of the famous old Palace Theatre, before the television cameras, in "We Played the Palace."

In the revival, the old time stars gave the numbers which made them famous, headed by Trixie Friganza, in her "Bag of Trix" comedy act. Other numbers included a gay nineties quartette rendering several barber-shop numbers, old time songs such as "The Curse of An Aching Heart," magic act, the original Oriental Rhumba, and the "On the Water Wagon" act, so popular to the vaudeville audiences of past years.

At WCBW "Laughtime," the first package show presented by CBS from outside directors, was an experiment in adapting basic American humor of the old variety type sketches to television. Using the old vaudeville technique of the dumb comedian with a straight man, the gag angle was handled by having every statement of the comedian twisted into a veritable crime against society.

QUIZ SHOWS

WRGB gave a new twist to the quiz show format with its presentation of "Behind the Eight Ball." Before the show went on the air, members of the audience were selected to participate and asked to prepare three questions each. In order to fill 30 minutes of quizzing, about 15 to 20 people were selected, and seated on bleachers within the camera range. A huge eight ball, covered with one dollar bills fastened on with pins is the focal point of interest. One contestant stands — behind the eight ball — while another contestant asks him his three questions. For each one which he answers correctly, the man "on the spot" can help himself to a dollar bill. If he answers all three correctly, he remains behind the eight ball and a second quizzer from the audience puts his three questions. The answer man stays there until he fails, when the quizzer takes over behind the eight ball and another member of the audience asks his questions.

The first show gave promise of being a very entertaining and telegenic program. However the success of audience participation shows depends to a great degree on the con-

testants and the master of ceremonies. And obviously the questions, too, must be of such nature that the average person stands a chance of answering them.

SERIAL

WCBW experimented with a television serial in its three-part presentation of "Three Houses," with a Tuesday, Wednesday and Friday showing. Format concerned a family of new comers to the town and the doings of the young folks in the three houses. There was no suspense angle involved in the serial, with each episode a separate little plot. Continuity relating the preceding events was given in off-stage narration by Mrs. Shipley, the new comer. As she spoke, cartoon sketches of the three houses were shown, with the young folks of each being superimposed over the sketches of the houses.

A young Naval lieutenant furnished the romantic interest for the daughter of the new comers, with a 10-year old boy, the "fixer upper," and his adolescent sister, helping to mix things up. Comedy angle was typically of the adolescent type, centering in the last episode on getting a date for the 15-year old girl. Everything worked out better than expected with the blind date actually displaying all the signs of calf love, even to tripping over everything in the room in his ogling of the glamourized youngster. The make friends with your neighbors theme was pointed up by more off-screen narration at the end, again against the background of the sketches of the three houses.

AMATEUR GROUPS

WCBW's group of high school youngsters, drawn from the radio classes of the high schools in New York, don't stick to serious subjects in their television version of a legislative body. Their debate on the pros and cons of whether a boy should be compelled to dance with girls at school affairs was riotously funny — particularly so since the teen-age kids seem to consider it such a serious problem. The youngsters are perfectly natural before the cameras, the whole program has an air of informality, with the group playfully heckling the speakers.

A board of three sits on the rostrum to conduct the forum, with the kids seated on a bleacher-like arrangement. Cameras come in for a close-up of the speaker, then pick up the expressions of the others as they listen. The program is rehearsed only for camera positions, but the speeches of the kids are unrehearsed. A poll is taken at the end, with the camera following each youngster as they give their vote. In case of a tie, as this particular debate was, the home viewers are asked to send in their answers.

This program would be a natural for small station operation, with its economy of production and high local interest.

WNBT made use of the talent hanging around right under their feet when they auditioned a group of their Radio City Guidettes — the attractive looking girls who show the visitors to the center around the place. As most of them have acting aspirations, good amateur talent was available.

The auditioning was exceptionally well done. Scene opened with five of the Guidettes around a "name" master of ceremonies, who commented upon the work they did at the center, then spoke to each girl, getting her name and her ambition. The thing here that raised this above the usual level of amateur shows, was that the girls did have talent, were rehearsed and put on a darn good show. Audience response was captured by the ease of the mc and the real eagerness of the kids themselves. You just wanted to see them make good.

The program was well balanced, opening with a dramatic recitation, followed by a ballet dance; a comic incident; another dramatic portrayal, and with an operatic aria as a finale. Petrillo ban made it necessary to record the song before the broadcast.

NOVELTY

W6XYZ's sustaining program, "Do's and Don'ts of Dressing" features Paramount's designer, Edith Head. This show is presented in skit form, with Miss Head holding the interest of the feminine televiewers by such tricks as changing a casual dress into a most elegant evening dress. Paramount starlets serve as models.

WBKB showed their televiewers the outstanding paintings of Marcel Vertes, French artist, which were exhibited in a one-man show at the Associated American Artists Galleries. The director of the galleries, guest starred on the program which originated in the studio and discussed the backgrounds of each painting. Particular emphasis was given to the ballet portraits, for which Mr. Vertes is internationally known.

A group of youngsters from New York high schools star in WCBW's "There Ought To Be A Law." Unrehearsed except for camera positions, format is a natural for inexpensive program fare, and would have very high local interest.

Television Outlook For New York (*Continued from page 19*)

Kilocycles—44,000-50,000
Hrs. per wk. of operation—as required
Breakdown—
Antenna—
Height, sea level 801 feet
Height, ground level 739 feet
Location—60 East 42nd Street, New York, N. Y.
Transmitter location—60 East 42nd Street, New York, N. Y.
Power, aural & visual — N. A.
Population—N. A.
Size of area—Primary 1260 sq. miles; Secondary 4860 sq. miles
Location of Studio—60 East 42nd Street, New York, N. Y.
Engineering Consultant—Raymond M. Wilmotte, Washington
Lawyers—Garret S. Hoad, Boston—Monroe Oppenheimer, Washington
Miscel:.—Company has announced plans for operating a transcontinental micro-wave relay from Boston, New York and Washington. Raytheon has also submitted application for a high frequency video station at Chicago as well as for low frequency television stations in Chicago, Waltham and New York. Company manufactures electronic equipment and tubes.

Twentieth Century-Fox Film Corporation

Address—444 West 56th Street, New York
Officers—Spyros P. Skouras, president; E. I. Sponable, director of television activities

Costs

1. Vis. transmitter	$86,000
2. Aural transmitter plus tubes	64,000
3. Antenna System	18,000
4. Studio Equipment	89,000
5. Studio Lighting	6,000
6. F & M Monitors	3,500
7. Land	20,000
8. Building	70,000
9. Other item	16,000 (studio to transmitter relay; $45,000 portable mobile unit)
Total Costs	$417,500
Operation Costs per month	$25,000

Financing—Existing Capital
Cost Estimate by General Electric
Type of Equipment—General Electric
Channel #5
Kilocycles—72-78
ESR—5420
Hrs. per wk. of operation—150 a month
Breakdown—30% outside pickup; 60% studio production; 60% film. All sustaining programs initially. Other programs may originate from theatres in New York area owned by applicant.
Antenna
Height, sea level—1,125 ft.
Height, ground level—1,500 ft.
Location—625 ft. hill
Transmitter location—Prospect Ave., near Eagle Rock Ave., West Orange, N. J.
Population—11,973,100
Size of area—7,080 sq. miles
Location of Studio—460 West 54th Street, New York
Engineering Consultant—H. E. Bragg, own company.
Lawyers—Doueks and Scharfeld, Washington, D. C.
Miscel.—This company also has an application for an experimental station in Boston, which is being reconsidered. Fox West Coast Theatres, a subsidiary of 20th Century has an application for a commercial station in Hollywood.

WLIB, Inc.

Address—846 Flatbush Avenue, Brooklyn 26, New York
Officers—Dorothy S. Thackrey, Chairman of Board; Edgar H. Twamley, Gen. Mgr.
Costs—

1. Visual transmitter	$22,000.00
2. Aural transmitter plus tubes	13,750.00
3. Antenna System	2,500.00
4. Studio Equipment	89,000.00
5. Studio Lighting	5,000.00
6. F and M Monitors	
7. Land	4,000.00
8. Building	20,000.00
9. Other items—remote equipment	50,000.00
Engineering services	40,000.00
Total Costs	$246,250.00
Estimated Operation Costs per month	$13,000.00

Financing by Dorothy S. Thackrey.
Cost estimate by Frank G. Kear based on pre-war prices
Channel #17
Kilocycles—282,000-288,000
ESR—2080
Hrs. per wk of operation—15
Breakdown—
Antenna—
Height, seal level—N. A.
Height, ground level—N. A.
Location—N. A.
Transmitter location—Fort Lee, N. J.
Power, aural and visual—N. A.
Population—11,455,130
Size of area—Primary—10,626,590; Secondary—11,827,860
Location of Studio—Fort Lee, N. J.
Engineering Consultant—Lohnes & Culver, consulting engineer
Lawyers—Greenbaum, Wolff and Ernst
Miscel.—Dorothy S. Thackrey, sole stockholder, owns and publishes New York Post. WLIB, Inc., operates WLIB, AM station in New York, has FM application pending for New York station.
Applicant will originate its own programs.

ADJACENT AREAS

The Connecticut Television Co.

Address—Darien, Conn.
Officers—Pres.-Treas.—Ralph C. Powell; Vice Pres.—Charles P. Pelham; Sec.—John P. Satterfield
Costs
1. Vis. transmitter
2. Aural transmitter plus tubes
3. Antenna System
4. Studio Equipment
5. Studio Lighting
6. F & M Monitors
7. Land
8. Buildings
9. Other items
Total Cost—$207,250
Operation Cost per month—$12,000
Costs estimates by GE — pre-war basis
Channel #8
Kilocycles—186,000 to 192,000
ESR—N. A.
Hrs. per wk. of operation—15
Antenna—Booth Hill, Conn. (6 miles N of Bridgeport)
height above sea level—903 feet
height above ground level—515 feet
location—N. A.

Transmitter location—Fairfield, Conn.
Power, aural and visual—Aural 2kw; Visual 4kw
Population of area—1,584,000
Size of area—965 sq. miles primary—3,975 sq. miles secondary
Location of Studio—Fairfield, Conn.
Engineering Consultant—Raymond M. Wilmotte, Wash., D. C.
Lawyers—Cravath, Swaine & Moore, N. Y.
Miscel.—Station will serve New Haven and Bridgeport but *not* Hartford. Signal will reach part of upper New York City and portions of north shore L. I.
Here is an example of three men with financial, advertising and technical experience, pooling experience and money in a new industry.

Bremer Broadcasting Corp. (WAAT)

Address—11-15 Hill Street, Newark, N. J.
Officers—Mathew B. Rosenhaus, Pres.; Albert H. Pollack, Sec.-Treas.; Irving R. Rosenhaus, Vice Pres. and Gen. Mngr.

Costs

1. Vis. transmitter 2. Aural transmitter plus tubes	$52,000
3. Antenna System	10,000
4. Studio Equipment	65,000
5. Studio Lighting	3,500
6. F & M Monitors	3,000
7. Land	not necessary
8. Building	15,000
9. Other item	16,000
Total Costs	$164,500

Operation Costs per month—$5,000 to $10,000
Financing—new capital
Cost estimate by Dumont, GE, RCA
Aural transmitter—Dumont type 1001
Channel #5
Kilocycles—84,000 to 90,000
ESR—Vis. 1588, Aural 794
Hrs. per wk. of operation—4 to 10
Antenna
Height, sea level—785
Height, ground level—155
Location—Marcella Ave. and Mt. Pleasant Ave., W. Orange
Transmitter location—Marcella Ave. and Mt. Pleasant Ave. W. Orange, N. J.
Power, aural and visual—Visual 4kw, Aural 2kw
Population—9,146,300
Size of area—primary, 1,090 sq. miles, secondary, 5,753 sq. miles
Location of Studio—11-15 Hill Street, Newark
Engineering Consultant—Frank V. Bremer
Lawyers—Segal, Smith & Henessey, Washington, D. C.
Miscel.—Pollock who owns most of the stock lives in Florida and apparently leaves the management up to the Rosenhaus brothers, one of whom is president and the other vice president and general manager. Though WAAT is in an enviable position as a money maker applicant's resources are not sufficient at the moment to finance a station without outside money.

The Travellers Broadcasting Service Corp.

Address—700 Main Street, Hartford Conn.
Officers—L. Edmund Zacher, Pres.; Paul Morency, Gen. Mgr. (now gen. mgr. for WTIC, Travellers' station)

Costs

1. Vis. transmitter	$23,000
2. Aural transmitter plus tubes	12,000
3. Antenna System	15,000
4. Studio Equipment	97,000
5. Studio Lighting	5,000
6. F & M Monitors	2,000
7. Land	none necessary
8. Buildings	none necessary
9. Other items	55,000
Total Cost	$209,400

Estimated Operation Cost per month—$10,000
Costs estimates by equipment manufacturers
Equipment—RCA
Channel #3
Kilocycles—60,000 to 66,000 kc.
ESR—1210
Hrs. per wk. of operation—15¾ hrs.
Antenna
Height above sea level—1080 feet
Height above ground level—400 feet
Location—Avon, Conn., (presently WTIC)
Transmitter location
Power, aural and visual—Vis. 4kw, Aural 3kw
Population of area—total: 1,342,556
Size of area—primary, 977 sq. miles; secondary, 4,066 miles,
Location of Studio—26 Grove St., Hartford, Conn.
Engineering Consultant or Technician—A. D. Ring, Ring & Clark, Washington, D. C.
Lawyers—Kirkland, Fleming, Green, Martin & Ellis
Miscel.—Applicant has well considered programming plans plus tie-up with NBC via WTIC. Has excellent location stands to be a key station for chain as well as local telecasting. Because of possible station interference with New York, this is put in this group.

Westchester Broadcasting Corporation (WFAS)

Address—Cor. Post Road and Chester Ave., White Plains, N. Y.
Officers—Col. J. Noel Macy, Pres.; Frank A. Seitz, Vice Pres.

Costs

1. Vis. transmitter	$22,000
2. Aural transmitter plus tubes	13,750
3. Antenna System	5,500
4. Studio Equipment	89,000
5. Studio Lighting	5,000
6. F & M Monitors	5,000
7. Land	one necessary
8. Building	8,000
9. Other item	40,980
Total Costs	$189,200

Estimated Operation Costs per month—$3500 to $10,000
Financing—N. A.
Cost estimate by N. A.
Channel #13
Kilocycles—230,000 to 236,000
ESR—1063
Hrs. per wk. of operation—4 hours
Antenna
Height, sea level—515 feet
Height, ground level—305 feet
Location—Atop Roger Smith Hotel, White Plains
Transmitter location—Post Road and Chester Ave., White Plains
Power, aural and visual—Visual 4kw, Aural 2kw
Population—2,650,247
Size of area—primary, 469 sq. miles; secondary 2,232 miles
Location of Studio—Post Road and Chester Ave., White Plains
Engineering Consultant or Technician—Grant & Wrathall, Washington, D. C., McNary & Wrathall, Washington, D. C.
Lawyers—Fisher & Wayland, Washington, D. C.
Miscel.:—The Macys, of course, are well known in Westchester county for their newspaper interests. They own almost all the small local papers: Garrison, Post Chester, White Plains, etc., In addition they also have large real estate holdings including the firm that owns the Hewlett Bay Corp. Indications are that they intend to fashion their television station, if their application should be approved, in the same mold as they have formed their newspaper and radio interests. Ie: a permanently small organization, not intended to compete with New York organizations, yet serving the locally wealthy surburban communities.

WHEN the bell finally rings for the slug fest between the FCC and the New York applicants, the New York hearings will verbally rival the hard hitting punches expected in the pending Louis-Conn battle.

EQUIPMENT

By T. R. KENNEDY Jr. and JACK KILPATRICK

PRODUCTION OUTLOOK

CBS color project has had its effect on many radio manufacturers. A large percentage of the mid-west companies are undecided on what types of receivers to make, and just how far out on the limb they should go in the production of low frequency receivers. However in spite of this trend, Philco, RCA, and DuMont are all aiming for delivery of their first low frequency television receivers for approximately April 1946 delivery. A few of the other companies like G-E will probably start delivery in the fall of '46.

Transmitter production outlook is not as encouraging. Allocations not being settled has definitely held up production. Probably a handful of transmitters will come off the lines by June '46, mainly for present station replacements and possibly to take care of a few new stations. Probably won't be until late '46 or early '47 before there will be any appreciable transmitter production. An important point to keep in mind is that after delivery of a transmitter there will be a three to six months period for installation and propagation tests.

NETWORK FACILITIES

Everyday presents some new concrete evidence that radio relay is not only practical but will be here much sooner than any of us think. Within the past month Western Union has announced that its initial experiments and tests made in cooperation with RCA have convinced them of the practicability of radio relay and they are now inaugurating concrete plans for this type of communication which will eventually take the place of a large portion of their wire facilities.

Western Electric and Bell Laboratories have also successfully demonstrated radio relay for multiplex telephony along with other uses.

While both of these demonstrations were only for voice transmission, it is the contention of the manufacturing companies that there is no major problem involved in eventually stepping up the frequency transmission for television.

RCA IMAGE ORTHICON

One of the most important developments yet to be disclosed is the new RCA Image Orthicon, a culmination of wartime research and application in electronics, which offers a solution to many of the major illumination problems in television programming. Because of its extreme sensitivity, this new electronic "eye" can transmit a television picture at normal room lighting, operating all the way down the illumination scale to such low light intensity as that furnished by candlelight or a match. Particularly spectacular is its ability to "see" under black, infra-red lighting.

Among the specific advantages of the Image Orthicon, according to RCA engineers, is its ability to widen the range of programming operations to all out-of-door events and indoor pick-ups where lighting conditions cannot be regulated and where low lighting often prevails. Conversely, due to its stability, the image is protected from sudden bursts of brilliant light, such as exploding photo-flash bulbs, etc. Unvarying transmission, despite wide fluctuations of light and shadow, is also provided by the improved gain control system. The increased sensitivity of the tube results in a greater depth of perception and clearer viewing, as well as inclusion of background which might otherwise be blurred. The tube design lends itself to use in lightweight, portable television camera equipment, and its small size will facilitate the use of tele-photo lens.

The Image Orthicon will be incorporated in a new, supersensitive television camera which will be manufactured by RCA Victor with deliveries scheduled in about six months. According to RCA, this portable camera is light-weight, simple to operate and can be quickly set up and placed in operation.

Due to its lack of contrast, the Image Orthicon will not be used for studio televising until further tests have been completed. However, it is only a matter of a short time until such experiments will be completed.

How The Tube Works

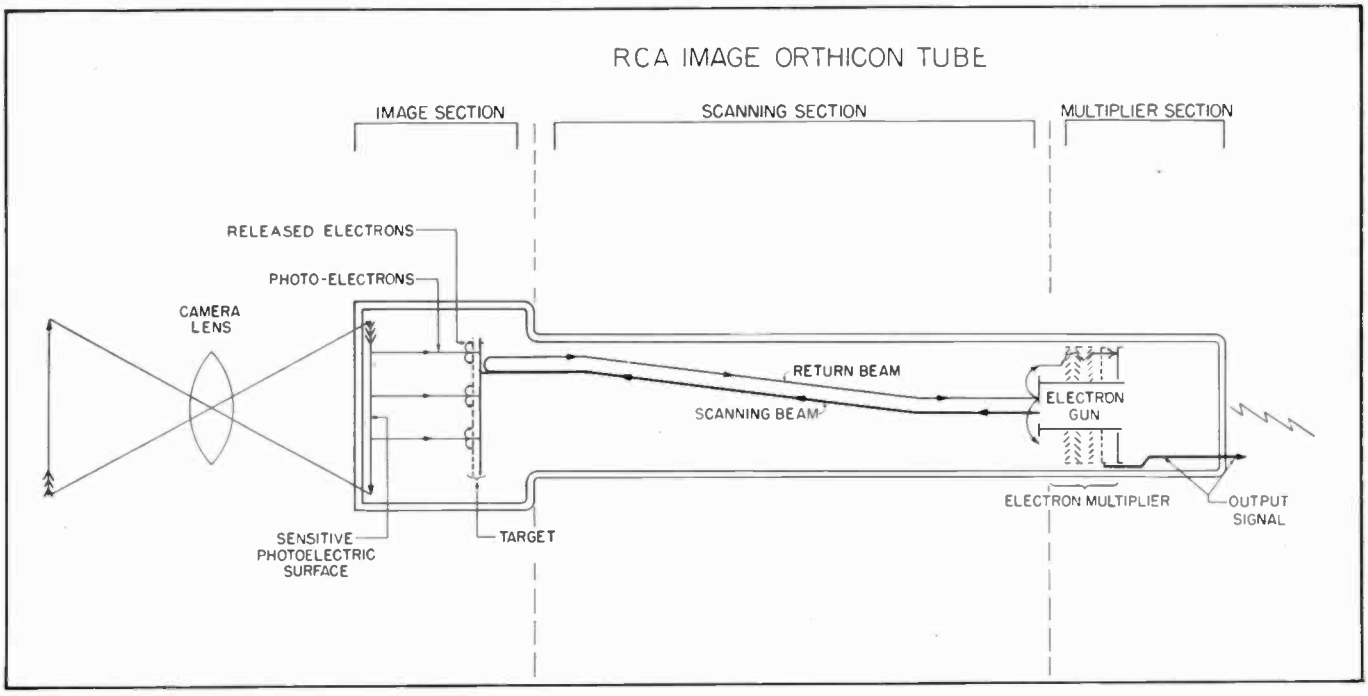
The Image Orthicon has an overall length of about 15 inches. Diameter of the shank is about 2 inches, with the head about 3" around and 3" long. Basic construction consists of three parts: An electron image section, which amplifies the photoelectric current; an improved Orthicon-type scanning section, smaller and simpler than those built before the war; and an electron multiplier section, which magnifies the relatively weak video signals before transmission.

This super-sensitivity to low light levels is based on the principle known as secondary electronic emission. This involves the use of electrons emitted from a primary source as missiles to bombard a target or a series of targets, known as stages or dynodes, from each of which two or more electrons are emitted for each electron striking it.

An optical lens system picks up the light from the scene being televised and focuses it on the photo-sensitive face of the tube, which emits electrons from each illuminated area in proportion to the intensity of the light striking the area.

Accelerated by a positive voltage applied to a grid placed directly behind the photo-sensitive face and held on parallel courses by an electromagnetic field, streams of electrons flow from the back of the photo-

HERE'S WHAT HAPPENS IN RCA'S "IMAGE ORTHICON" PICK-UP TUBE



This simplified functional drawing of the new RCA Image Orthicon, an ultra-sensitive television camera pick-up tube, shows how the tube's response to the light of a single candle, or even a match, is built up to provide a signal which can reproduce images on home receiver screens. A light image from the subject (arrow at extreme left) is picked up by the camera lens and focused on the light-sensitive face of the tube, releasing electrons from each of thousands of tiny cells in proportion to the intensity of the light striking it. These electrons are directed on parallel courses from the back of the tube-face to the target, from which each striking electron liberates several more, leaving a pattern of proportionate positive charges on the front of the target. When the back of the target is scanned by the beam from the electron gun in the base of the tube, enough electrons are deposited at each point to neutralize the positive charges, the rest of the beam returning, as indicated, to a series of "electron multiplier" stages or dynodes surrounding the electron gun. After the returning "signal" beam has been multiplied many times, the signal is carried out of the tube to the television broadcast transmitter.

sensitive face to a target. As a result of this bombardment, secondary emission of electrons from the target leaves on the target a pattern of varying positive charges which correspond to the pattern of light from the scene being televised.

A beam of electrons generated by an electron gun in the base of the tube scan the back of the target. However the electrons making up this beam are slowed down so that they will stop just short of the target and return to the base of the tube except when they approach a section of the target which carries a positive charge. When this occurs, the beam will deposit on the back of the target enough electrons to neutralize the charge, after which it will again fall short of the target and turn back until it again approaches a positively charged section.

Picture information is imposed upon the returning beam by the varying losses of electrons left behind on the target. This beam is directed at the first of a series of dynodes near the base of the tube. Secondary electrons "knocked out" of this electrode by the bombardment strike a second dynode, and this process continues, with the strength of the signal multiplying at each stage until it reaches the signal plate and is carried out of the tube through an external connection.

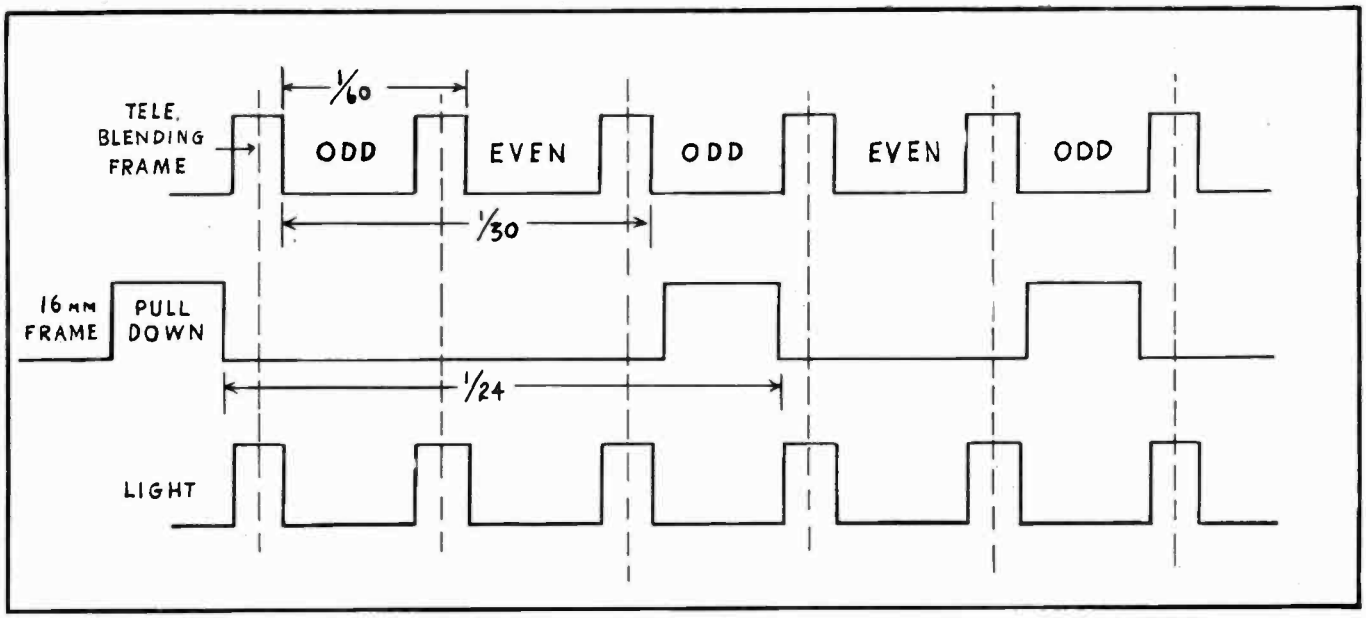
FILM PROJECTOR

DESPITE the use of films on television programming and the certain boost in its usage when local stations begin programming, no special film projector has been developed for television as yet.

According to Harry C. Milholland, development engineer at Allen B. DuMont Laboratories, small stations might find it easier to start film operations with 16 mm. film. No special preventative measures have to be taken to conform with the fire laws, as is the case with 35 mm., and it can be mailed in ordinary containers. Although 35 mm. does give a better reproduction than 16 mm., the present limitations of video makes this a minor point when compared with the convenience and cost factors.

To convert a standard 16 mm. projector to television use, is a highly technical, hand tooled job. A standard sound film runs in 24 frames. Television runs in 30 frames. To synchronize the two, the original shutter is taken out but the sound system is left intact. In DuMont's adaptation, two shutters are used — one placed in front of the projection camera, the other in back between the film and the light source.

Both shutters have 2 slots mounted on the same shaft of revolution, and are identical, with the slots lined up together. These shutters revolve at 1800 rpm, and as each slot passes the lens, it lets through light pulses



Above diagram shows the passage of light through the motion picture frames to the television blending. Light pulses are let through every 60th of a second, thus synchronizing the standard 16 mm. sound film, which runs in 24 frames, to television which runs in 30 frames. This is accomplished by means of specially constructed shutters.

once every 60th of a second. The projector runs at normal sound speed. For optical reasons, DuMont uses two shutters as it increases and sharpens the light passage and makes the light pulse go straight up.

Light power also has to be jacked up, and a veriack or step-up transformer is used. To avoid poor light, due to drop in line voltage, they substitute a 100 watt lamp instead of the usual 750 or 500 watt light.

In developing a camera for television, Mr. Milholland believes that a heavy duty, 16 mm., which would hold up as does the standard 35 mm. projector, should be the aim. In addition, any such projector should have an excellent sound system, a projector free from any vertical or horizontal unsteadiness, good workmanship and construction, and a strong light source, because when the flash goes on, it's only for about 100th of a second.

But equal attention should also be paid to the 16 mm. films which are used over the projector. For it's a truism that you can't expect the projector to turn out a better looking or sounding picture than is put into it. Wrong developing techniques and high speed solutions often result in coarse grained, low picture resolution, and give an unsteady picture even though the projector is firm and sturdy.

PATENTS

A color television system, two improvements in scanning devices, and an apparatus for reducing echo effects won patents recently at the United States Patent Office in Richmond.

George C. Sziklai, Princeton, N. J., received No. 2,386,074 on October 3 on the color system (10 claims allowed, application Nov. 29, 1943, assigned to Radio Corporation of America). His patent covers a set-up in which signals representing different primary colors are generated and transmitted by known methods. The novelty lies in providing "a brilliant projected reproduction" at the receiver in natural colors. The system is held to work effectively on projection screens.

In this system, sets of modulated signals representing one or more colors control the amount and color of light transmitted from a light source to a viewing surface. A new image reproducing tube is provided under this patent, as is a novel light controlling device for transmitting light of a predetermined color and intensity. The tube has two cathode ray gun structures for developing beams of electrons. Control grids for modulating the beams are provided, plus the usual horizontal and vertical deflecting coils.

Incoming video signals are modulated and separated into two distinct sets—one representing the signals produced when the original is scanned through a red colorfilter, for example, and the other when scanned through a green filter. Separation is accomplished by transmitting the signals as modulations of two different frequencies and selecting these modulated frequencies by tuned circuits.

The light control comprises a fixed screen or raster and radiant energy sensitive screens or rasters. The stationary raster may be formed of glass, mica, transparant plastic, or wire mesh. It is treated with an opaque substance to provide alternate opaque and transparent strips. The other rasters, physically deformable upon impingement of a cathode ray beam, are formed of thin films (about one-fifty thousandth of an inch thick) of cellulose acetate, cellulose nitrate, or gelatin.

Scanning Devices

John C. Wilson, Bayside, N. Y., won No. 2,384,717 on September 11 on a television scanning system (12 claims allowed, application July 1, 1941, assigned to Hazeltine Corporation). This patent covers an arrangement for controlling the aspect ratio of television scanning—that is, the relative amplitudes of the scanning deflections in two scanning directions.

In some types of receivers, the rel-

ative maximum amplitudes of the scanning deflections may vary with humidity, temperature, or undirectional operating voltages which affect the scanning generators. Unless the ratio of the picture dimensions or the aspect ratio is constant, objectionable distortion results.

In this system, a single control operates scanning amplitudes in two directions. A line-scanning generator and a field-scanning generator are coupled to an output circuit of the detector through a synchronizing-signal separator. The line-scanning generator also is coupled to line-deflecting windings, and the field-scanning generator is coupled to field-deflecting windings of the cathode ray tube.

George L. Beers, Haddonfield, N. J., was granted No. 2,385,563 on September 25 on a deflection scanning system (14 claims allowed, application Jan. 30, 1943, assigned to RCA).

This patent covers a method for improving the system utilized for scanning the elements in a television picture by controlling the velocity of movement or the change in velocity of movement of an exploring point or a scanning beam. The change in velocity is converted into a frequency charge which is subsequently used to produce a change in the relative phase between two potentials. The change in phase is used to provide a control potential which may vary in both magnitude and polarity, and is useful in many ways—to maintain synchronism, and to control the velocity of an exploring point, such as the end of a moving stylus or the spot produced by an electron beam impinging on a surface to be explored.

A feature of the patented system is a special grid composed of equally spaced beam intercepting lines or strands to produce a signal in addition to the picture signals. Frequency in cycles per second of this additional signal depends on the velocity of the scanning beam and the number of lines or strands. Only one strand intercepts the cathode ray beam at a time. It is recommended that the strands be composed of fine wires (such as Tungsten wire .001 inch in diameter, spaced 1/25 inch apart). The grid should not utilize a photo electric cell, or the control pulse will vary in amplitude.

Echo Effects

Frank J. Bingley, Chestnut Hill, and William E. Bradley, Northampton, Pa., won No. 2,386,087 on October 3 on a system for reducing echo effects in the reconstituted television picture (35 claims allowed, application March 6, 1942, assigned to Philco Radio and Television Corp.)

Echoes generally appear by combining or beating with the picture carrier. Thus, the echo may add to or subtract from the picture carrier, depending upon the phase relation between the two signals at a given instant. The transmitting and receiving antenna are fixed, but the source of reflections which form echoes—high buildings, gas tanks, hills, or bridges—usually are fixed also. Therefore, the echo signal must be cured within the transmitter.

This patent covers a system of periodically changing the polarity of the echoes seen at the receiver, so that they are opposite in successive frames. The phase of the echo carrier is changed in respect to the picture carrier, and is timed so that the successive echoes balance each and other out as far as the impression upon the observer is concerned.

Advertising

(*Continued from page 30*)

son's opinion, the question of distribution of television films will be one of the most important problems to face the television film producer.

Marschalk & Pratt — Having handled the Esso sponsorship of special event features over WNBT, this agency is now interested in starting a newsreel type of show for Esso as a regular weekly feature. As soon as available network facilities can be secured, this program will get underway. John Allen, television director at the agency, finds that film is best for the type of commercial necessary for Esso. Their type of demonstration usually requires an outdoor scene, a car, etc. — certainly not feasible to do live in any studio right now. Agency prefers film at this stage as it rules out any chance for mistakes. In the absence of networks, it's a good means of getting additional coverage by shipping the commercial and newsreel film to other stations for televising.

St. Georges & Keyes, Inc. — This agency is now carrying on active experimental work for MIDO Watch Company of America and the Revere Copper and Brass Company Incorporated. A separate Television department headed by Victor Van Der Linde has been set up and is already functioning.

CURRENT SPONSORS

WBKB (B. & K.), Chicago

American Gear professional basketball team, experimental educational program in cooperation with the Chicago Board of Education; Commonwealth Edison Co., "Telequizicalls," "Welcome to the Walkers" and "Cooking by the Dial," direct; The Fair Department Store, "Rose Laird Saves the Date," direct; Marshall Field & Co., "Wednesday Matinee," variety program, direct.

WPTZ (Philco), Philadelphia:

Atlantic Refining Company, weekly football games, through N. W. Ayer & Sons, Inc., New York.

WNBT (NBC), New York:

Bulova Watch Co., N. Y., time signals through the Biiow Co., N. Y.; Elgin Watch Co., time signals through J. Walter Thompson Co., N. Y.; Firestone Tire & Rubber Co., Akron, "Voice of Firestone-Televues"; travel films through Sweeney & James Co., Cleveland; Gillette Safety Razor Co., Boston; "The Cavalcade of Sports," remote boxing matches through Maxon, Inc., Detroit; Pan American Airways System, N. Y., "Wings of Democracy," live talent and travel films through J. Walter Thompson Co., N. Y.; RCA Victor Division of RCA, N. Y., "The World in Your Home," film program through J. Walter Thompson Co., N. Y.; U. S. Rubber Co., Keds, live and film "Friday Night Quarterback" through Campbell - Ewald Co., New York; Waltham Watch Co., Waltham, Mass., film and time through N. W. Ayer & Son, Inc., N. Y.

WCBW (CBS), New York:

Bulova Watch Co., N. Y., time signals through the Biiow Agency, N. Y.; Lever Brothers, "Big Sister" through Ruthrauff & Ryan.

One Man's Reflections (*Continued from page 26*)

EVENT OR STEP	DATE	ELAPSED TIME (Years-Months)
The industry leaders (for example the RMA or TBA) consider the engineers' report and determine whether the public service and commercial prospects of the new type of television are good. Assume they favor the introduction of Type 2.	Jan. 2, 1952	6-0
FCC calls public hearings on the subject of desirability of Type 2, and the promulgation of standards for Type 2 operation. Assume the FCC decisions are favorable and definite.	April 1, 1952	6-3
The FCC issues allocations and standards of good engineering practice for Type 2.	June 30, 1952	6-6
The radio industry begins the construction of prototype television transmitters and receiver models of Type 2.	July 1, 1952	6-6
The engineers' field-test the proceedings and report to FCC and their executives. It is assumed the report is favorable.	Jan. 1, 1953	7-0
Commercial production is then planned and ready.	Jan. 1, 1954	8-0
The transition period then begins. Type 1 transmitter may no longer be installed; old Type 1 transmitter may continue to be operated; Type 2 transmitter may be installed and may be operated. There is thus dual operation during the transition period.	Jan. 1, 1954	8-1
The transition period ends. Type 2 transmitters are favored; Type 1 transmitters may be closed down by the FCC except in exceptional cases. All receivers should be Type 2 exclusively.	Jan. 1, 1954	8-0
Receivers to be sold should be of Type 2 *and* Type 1 or, if preferred, of Type 2 only. They should, however, include Type 2 as stated.	Dec. 31, 1958	12-0
The new period begins ushering in Type 2 television in substantially exclusive commercial use.	Jan. 1, 1958	12-0

BOILED down, the foregoing means that whenever engineers develop a new type or system of television and the executives favor its introduction the FCC will issue standards; the industry will field-test the equipment and if successful, manufacture the equipment. And there will be an interim or transition period between the old and new. This period will be followed by definite operation under the new system.

The preceding plan should give reasonable assurance to all concerned of fair stability of operation without however, barring progress wherever it can be demonstrated to be desirable and justified. It is accordingly recommended for close study.

THE TBA PLAN (*Continued from page 23*)

Coverage Figures

Duttera indicated, as did Dr. Goldsmith and Colonel Roberts, that "no complicated or unused directional antenna system has been considered." He submitted several charts showing the service areas of television stations as affected by co-channel and adjacent channel stations. (See Figs. 1 and 3.)

In order to outline the potentialities of the use of directive dipoles, Duttera cited as an example the coverage that might be obtained in the Trenton and Wilmington metropolitan areas if stations in these cities were to operate on the same frequency. (This is shown in Fig. No. 2. The interference contour is a dashed line in both cases.) Both cities are only 57 miles apart, yet with each employing a full-powered metropolitan transmitter, combined with directivity in antenna design, the metropolitan districts of both, with some additional adjacent areas, could be provided with a television service.

Duttera advised the FCC that "no attempt has been made to determine the ultimate possible, nor can any such determination be made at the present time." He added that much depends on "further development of directional transmission; a greater knowledge of propagation; utilization of shielding effects of mountainous terrain; developments in the receiver antenna; satellites, and upon the possible use of directional receiving antennae."

Advertising Agencies and Motion Picture Departments (*Continued from page 25*)

client's problems and it took a war to get that over!

Don't go 'way, there's more. Assuming *your* man has decided a certain script has "the makin's" of a good picture, he's not thru yet. Does it fulfill all the client's objectives and comply with his policies? Has the script got the *right appeal* for the audience for which it's being made? Will the production cost come within the budget? If not, what script changes can be made, so that it will? Can they be made without sacrificing important objectives or lowering production quality? Is the production schedule within reason? Just a few more things he's gotta know.

Production Factors

Now, let's say the script is ready to go into casting and production. Does your man realize the importance of casting? The producer may select an actor for the part of a Sales Manager. He doesn't want him wearing a moustache and bald and on the shady side of fifty — and that gal you're considering for the part of a secretary — absolutely outta the question, he likes blondes. But the president of the company likes brunettes, you remind him, and so on, all thru the cast.

Next, your Man, Friday — must be capable of following thru on actual production. This doesn't necessarily mean he *has* to be a director. You're probably better off if he isn't, unless he's learned the art of "self-restraint." 'Cause if he hasn't, and *both he and the producer* try to direct the picture you'd better look for another account. But he should know enough about production and *all about the account* to be able to decide any questions that may arise on matters of policy, procedures or methods, concerning either the client or the agency; and authorize any changes, script or otherwise that will result in a better picture. Such a gent is a far cry from a "broker" — he's a life-saver to the agency, client and producer. *You* won't have to justify him, he'll justify himself. A leading agency recently put on a man answering to the foregoing description and more. The success of their department is, I believe, assured.

There is *one great difference*, however, between an agency's motion picture department and its other departments, which should be pointed out, as it's important.

The various other departments can expertly appraise layouts, copy, art work, photographs, engravings, printing, lithography, radio programs, etc.

Don't forget, that when you get up a double-page spread for your client, you and he sees various sketches on the artwork before approval. Layout, copy, type face and size, composition are tried several ways until the best attention getter and eye-appeal is achieved. In fact, you *both* see exactly how it's going to look before it appears in the Sateve Post. If the copy has a new "slant," the chances are it has been pre-tested. You can't do that with a picture, *you can't make up samples*. You can audition a *radio* show — but you can't audition a picture, and then if it's a flop, start over again. Would that we could — think of the aspirins we'd be ahead.

There's only *one thing* to do with a picture — MAKE IT! It's all you *can* do. It *can't* be pre-tested. Nor can it be produced in lay-out form in a half a dozen different ways to see which one you like best; except in the case of a picture done completely in animation. Here, of course, a story board is always made and approved before going into production. This is not practical in actual motion picture production. You've got to finish it, screen it, show it to your audience— after *that*, you can appraise it, and NOT BEFORE! So, if you start a department, you can see that it had better be in capable, experienced hands. Get the best or don't get any.

I could write a book on this subject — it's very close to my heart — but whadda 'ya say we continue this in this next issue of Television. We'll talk about, "Where to find such people" — "Should we handle all types of pictures, or specialize" — "How do we charge" — "Can we make any money out of the department" and a few more. In the meantime if you have any specific questions, shoot 'em in.

Washington

(*Continued from page 32*)

on frequency to be assigned by commission chief engineer.

In Chicago, Raytheon received an experimental station grant to develop equipment for transmitting and receiving high-quality color tv programs.

Statement of the ownership, management, circulation, etc., required by the Acts of Congress of August 24, 1912, and March 3, 1933.

Of TELEVISION, published Monthly at Grand Central Annex, New York City, New York, for October 1, 1945, State of New York, County of New York.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Lawrence Sweeney, who, having been duly sworn according to law, deposes and says that he is the business manager of the TELEVISION and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations.

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Frederick Allen Kugel, 600 Madison Avenue, New York City; Editor, Frederick Allen Kugel, 600 Madison Avenue, New York City; Managing Editor, Mary Gannon, 600 Madison Avenue, New York City; Business Manager, Lawrence Sweeney, 600 Madison Avenue, New York City.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholdrs owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Frederick Kugel, 600 Madison Avenue, operating as Frederick Kugel Company.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation or whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

LAWRENCE SWEENEY,
Business Manager.

Sworn to and subscribed before me this 7th day of November, 1945. Isadore Greenfield.
(SEAL) My commission expires March 30, 1946.

EDITORIAL

FACTS

There's still too much talk and too little action in the industry. At the risk of being a bit dull TELEVISION Magazine will stick to presenting the facts and skip all the exciting prophecies about the thousands of receivers that will be sold, about the dominant role film will play, and for good measure we will leave out of the pages of TELEVISION all the expert opinions on programming and advertising by those who might have produced one or two shows. Television has a long row to hoe and if more concentration were put into preparation and less into prophecy the industry would be much better off. No matter how fascinating crystal ball gazing might be, we believe too much of that sort of stuff will, to paraphrase F. J. Bingley at the last TBA convention, turn the crystal ball into an eight ball.

PROGRESS

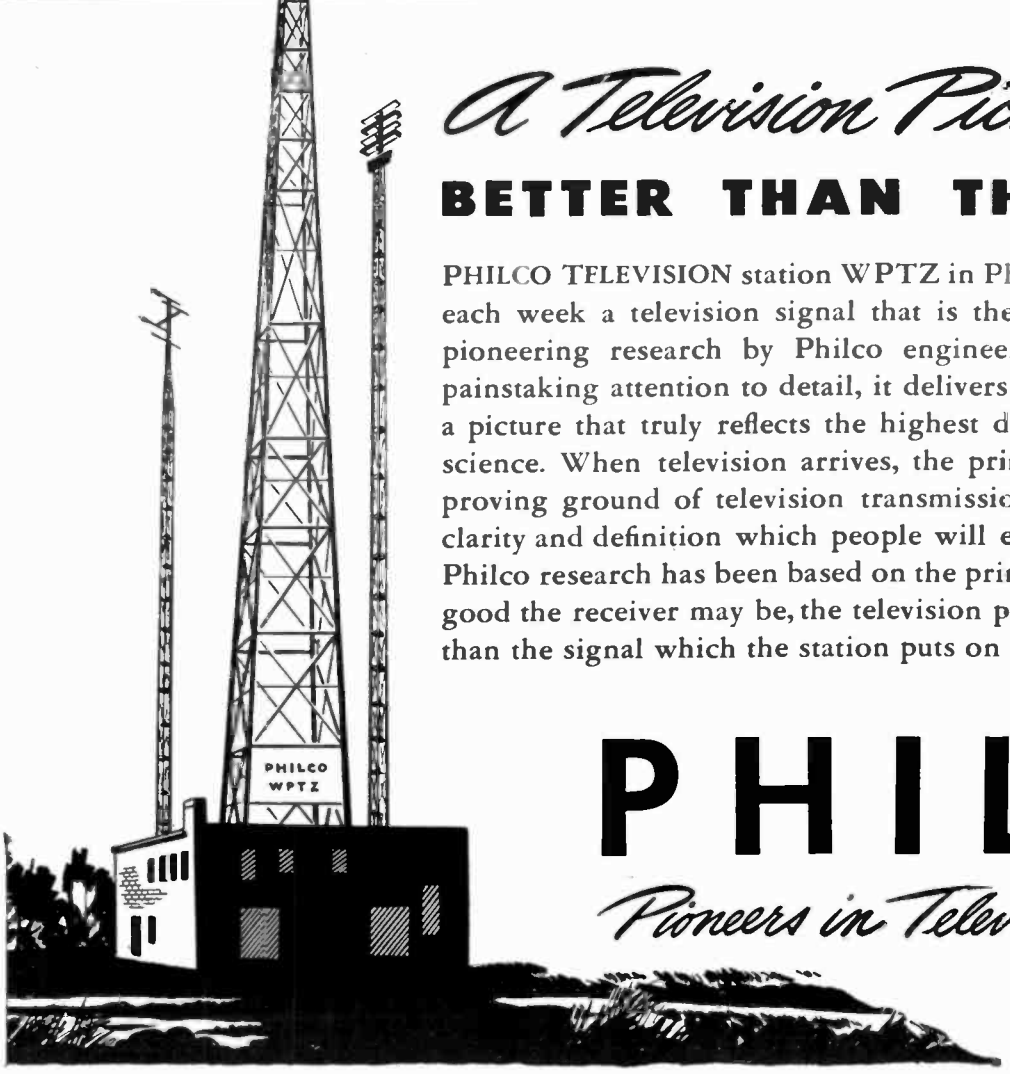
Television allocations still being up in the air certainly hasn't helped bring television around the proverbial corner any faster. This hasn't greatly alarmed a good many broadcasters who are enjoying a prosperity they would just as soon not have disturbed. They are not particularly anxious to start sinking money in "new ventures" such as television.

Unfortunately for this group there is such a thing called progress and no matter how strong their "ostrich" policy is, there is nothing that can possibly stop television from moving forward.

We are fully convinced that, whether it be high or low or color, whether New York is allocated 4 to 7 channels or whatever new obstacles the industry may be confronted with, television will be just too powerful an entertainment and advertising medium to be held back.

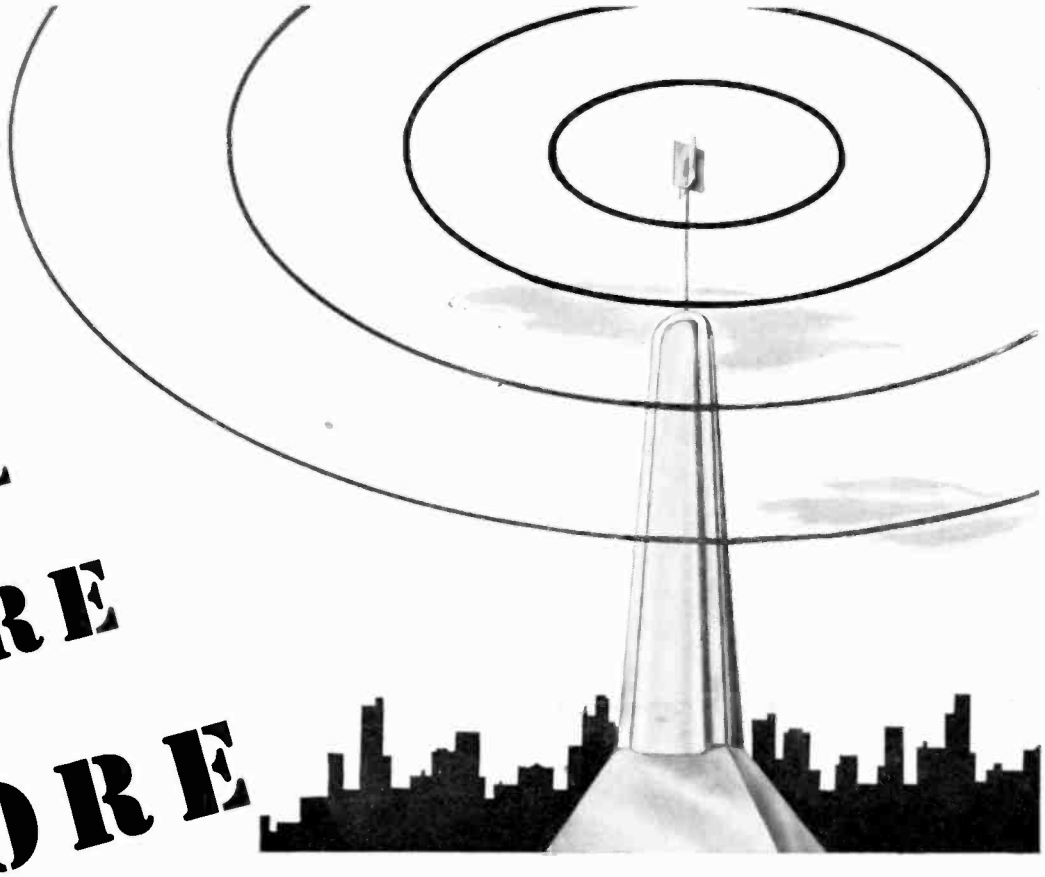
A Television Picture IS NO BETTER THAN THE SIGNAL

PHILCO TELEVISION station WPTZ in Philadelphia puts on the air each week a television signal that is the result of many years of pioneering research by Philco engineers. In technique and in painstaking attention to detail, it delivers to the television receiver a picture that truly reflects the highest developments of television science. When television arrives, the principles developed in this proving ground of television transmission will contribute to the clarity and definition which people will enjoy in their homes. For Philco research has been based on the principle that no matter how good the receiver may be, the television picture can never be better than the signal which the station puts on the air.



PHILCO

Pioneers in Television Research



MORE MORE MORE

TELEVISION "Know How" THAN ANY OTHER COMPANY!

DuMont engineers have designed and built more television stations than any other organization...are now completing the world's first "Television City" in New York.

During more than four years of operational trail-blazing, DuMont equipment design has been steadily improved to keep pace with increasingly elaborate programming experimentation. Today, DuMont design boasts incomparably simplified precision controls...provides high efficiency, extreme flexibility and rugged dependability at *low operating cost.*

DuMont experience assures the finest craftsmanship for the least outlay...offers a pattern of station operation for your study and a plan for training your personnel...starts you off in television on the right foot!

DUMONT *Precision Electronics and Television*

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TELEVISION STUDIOS AND STATION WABD, 515 MADISON AVENUE, NEW YORK 22, NEW YORK