Television

THE MAGAZINE OF VIDEO FACT

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JUNE 1945

ELECTRONIC TELEVISION IS AN RCA DEVELOPMENT

This is the second of 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.

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THE Iconoscope gave electronic television its primary essential—an electron tube that produces electrical impulses corresponding, with high fidelity, to the light energy in the various areas of the scene being scanned.

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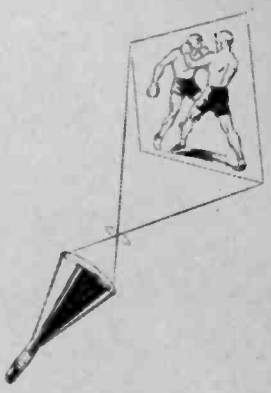
This is the Kinescope, developed by Dr. V. K. Zworykin, Associate Director of RCA Laboratories.



The Fountainhead of Modern Tube Development is RCA

RCA

RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION • CAMDEN, NEW JERSEY

In Canada, RCA VICTOR COMPANY LIMITED, Montreal

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Publishing a magazine on television is a tough job. Relatively few people know anything about television. But hundreds of "prophecies" about the future of television and "expert" opinions somehow make the news almost every day.

Our Task

To separate fact from fancy.

To bring you solid information which will help you and your staff prepare for television.

To act as an educational force within the industry by exchanging useful ideas and specialized knowledge.

Prepare For Television By Reading TELEVISION

Every month TELEVISION will bring you factual articles on every phase of the industry and report and analyze all significant developments.

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Television

The Business Magazine of the Industry

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DEPARTMENTS

Frederick A. Kugel, Editor and Publisher
Thor Krogh, Managing Editor; Dorothy Holloway, Washington;
Frances Sage, West Coast; T. R. Kennedy, Jr., Technical Editor.

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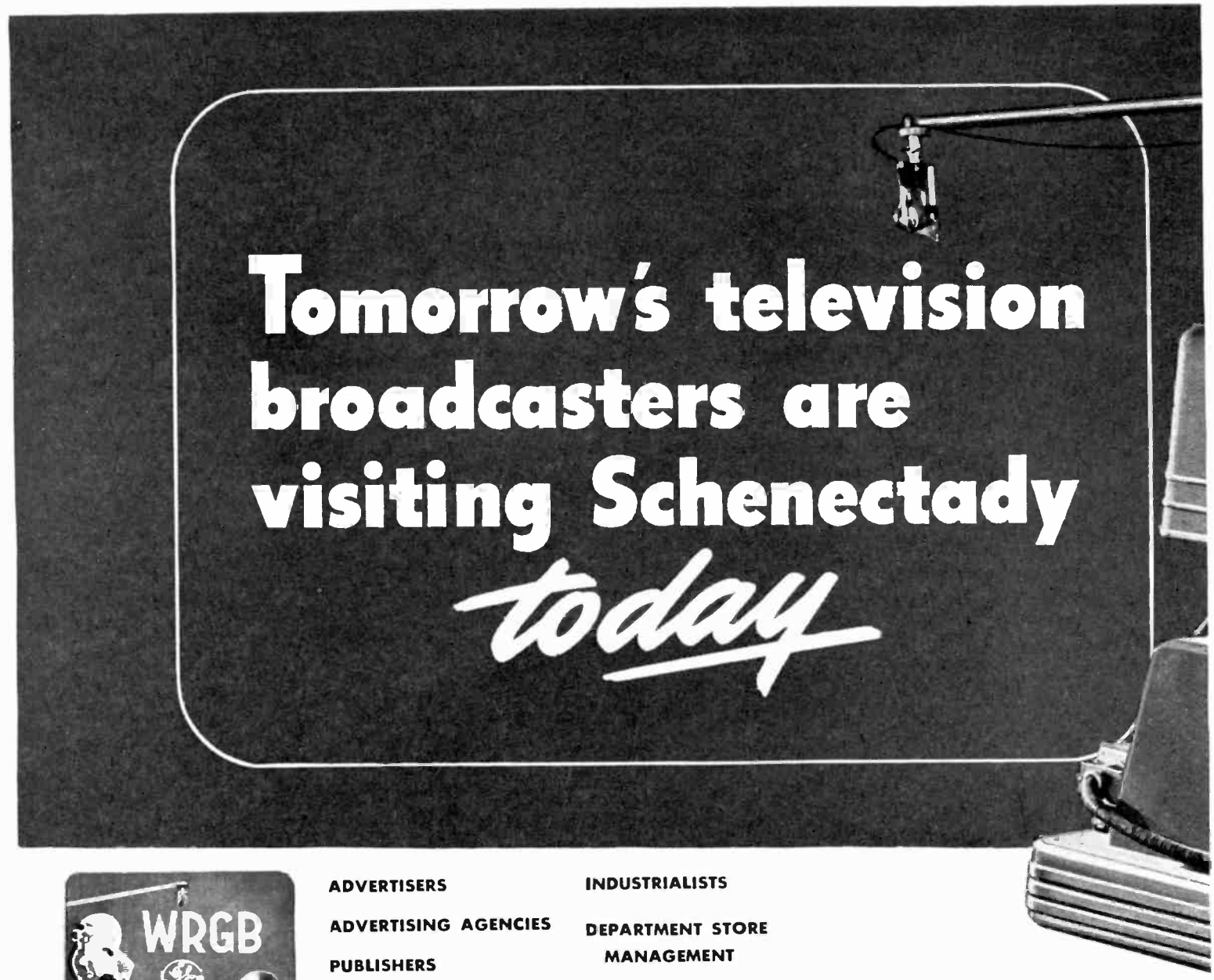
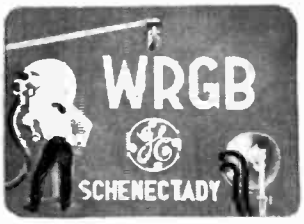


Tomorrow's television broadcasters are visiting Schenectady *today*



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MOTION PICTURE EXECUTIVES

AT THE world's most powerful and best equipped television station, General Electric's WRGB in Schenectady, future telecasters from all over the United States and from many foreign countries are acquiring a knowledge of the actual equipment needed for producing the finest of television pictures. Here they are studying station operation and management, promotion, programming, and maintenance.

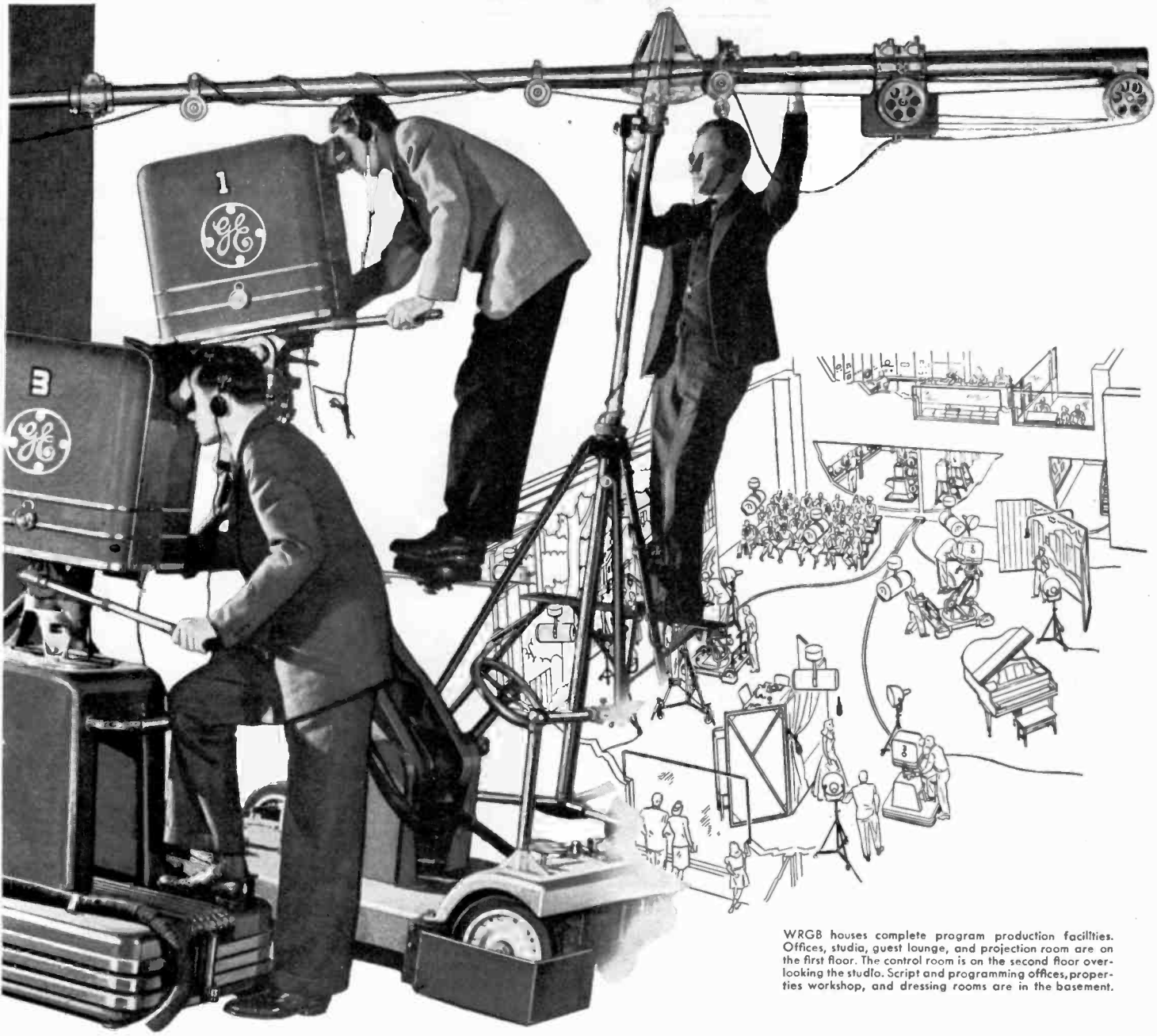
WRGB is a *complete* television broadcast station. It contains all of the studio equipment necessary for modern television broadcasting, including workshops for building props, workshops for constructing experimental electrical equipment, dressing rooms for actors, transmitting and receiving equipment, studio control and monitoring equipment, film projectors. At WRGB you will have an opportunity to analyze the elements of your future television station and to discuss at length your plans with G-E experts — for the WRGB staff includes television specialists experienced in script writing, costume and stage set designing, lighting effects, camera operation, stage and technical direction, equipment design, maintenance, and operation.

If you have not yet seen General Electric television in action and are not yet making use of General Electric's 20 years of television experience, plan to visit WRGB at Schenectady—now. *Electronics Department, General Electric, Schenectady 5, N. Y.*

STUDIO AND STATION EQUIPMENT • TRANSMITTERS

GENERAL ELECTRIC

156-D2-6912



WRGB houses complete program production facilities. Offices, studio, guest lounge, and projection room are on the first floor. The control room is on the second floor overlooking the studio. Script and programming offices, properties workshop, and dressing rooms are in the basement.

PRODUCTION TECHNIQUE. At WRGB, programs are created, studied and analyzed. Every phase of show production is included—auditioning, casting, scene design, script writing, rehearsing, make-up, and lighting. Programming records, rich in experience, are available for your study. G. E. invites you to use them.

STUDIO AND TRANSMITTER EQUIPMENT. G. E. will have equipment for everything in television—from cameras and microphones to transmitting antennas and home receivers. G. E. can supply you with complete lighting, heating, air-conditioning and substation installations. General Electric is the only manufacturer who can offer this complete service.

AUDIENCE SURVEYS. WRGB checks audience reaction and establishes a rating for every show. The response from the television audience measures the success of WRGB's weekly features—reactions that provide abundant information which G. E. is gladly sharing with tomorrow's television broadcasters.

BUSINESS ASPECTS. Television is destined to become a great new industry that provides sales power unsurpassed by any other advertising medium. Every advertiser, manufacturer, and merchandiser is a prospective time-buyer. Estimates put the potential television audience at 48,000,000 people—twenty-four months after equipment production begins.

PLAN NOW to visit Schenectady to study G-E facilities. Every Wednesday and Friday are "open house" days. Write for the folder, "How to get to Schenectady," or see your G-E broadcast equipment representative. He will be glad to help you plan your visit. *Electronics Department, General Electric, Schenectady 5, N. Y.*

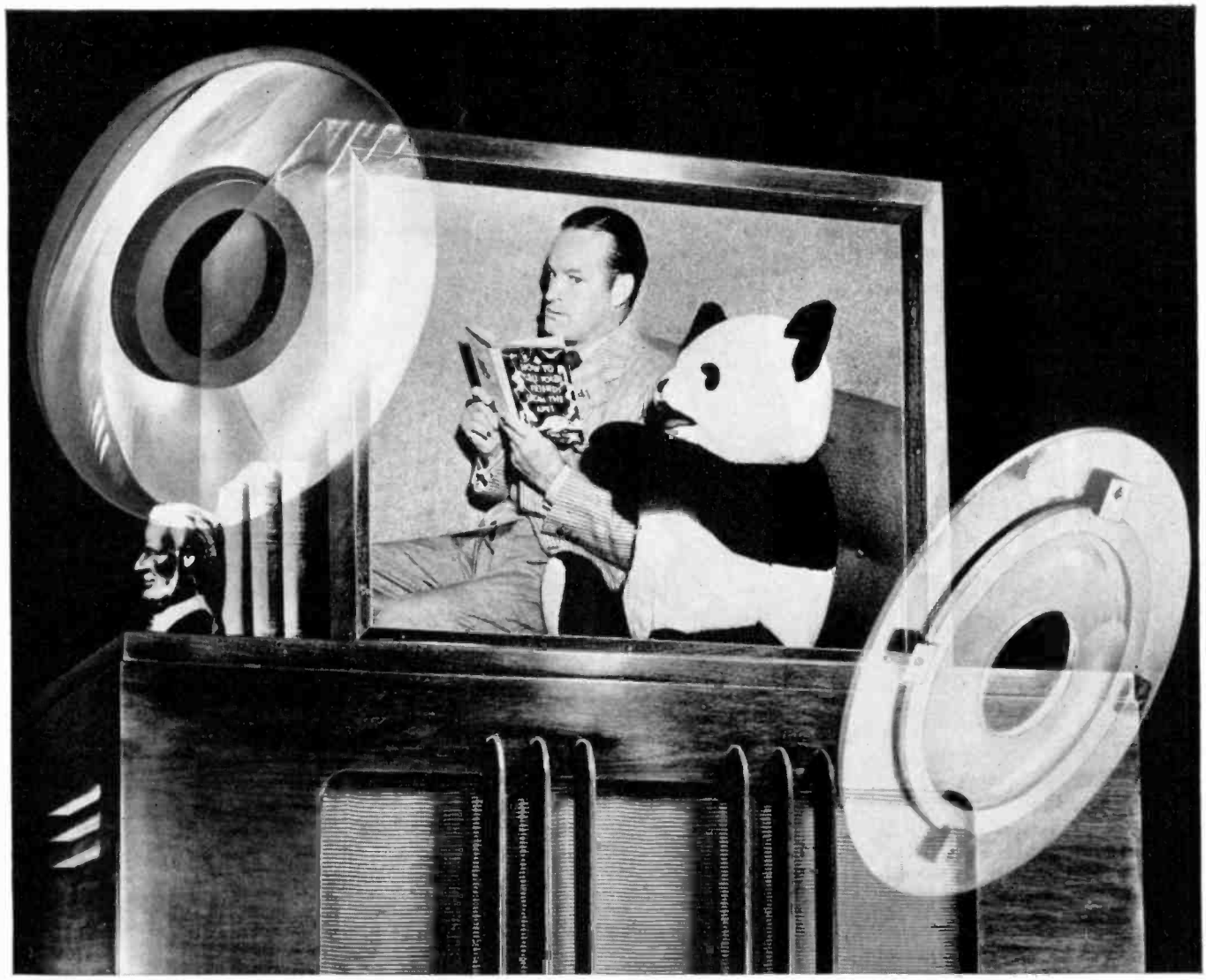
Establish a priority on delivery of your television equipment. Write for your copy of the "G-E Television Equipment Reservation Plan."

Hear the G-E radio programs: "*The World Today*" *news, Monday through Friday 6:45 p. m., EWT, CBS.* "*The G-E All-Girl Orchestra,*" *Sunday 10 p. m., EWT, NBC.* "*The G-E House Party,*" *Monday through Friday, 4 p. m., EWT, CBS.*

ANTENNAS • ELECTRONIC TUBES • HOME RECEIVERS

FM • TELEVISION • AM

See G.E. for all three!



RCA Laboratories model with an 18 by 24-inch screen showing how Bob Hope may appear on future home television.

New Projection Television - Bob Hope's face "big as life"

Can you picture Bob Hope on television . . . seeing his face *big as life*—right in your own living room?

Well, you will—for now, thanks to RCA research, all limitations on the size of home television screens have been removed.

RCA Projection Television sets can have 18 by 24-inch pictures, or for that matter, pictures as large as the screen in a "movie" theater!

When you tune in an NBC television broadcast you'll almost think the actors are in the same room with you—and trust NBC, America's No. 1 network in sound broadcasting, to bring you the best in television entertainment.

This revolutionary improvement was achieved in RCA Laboratories by development of an entirely new reflector and lens, shown in phantom above. This lens, of inexpensive plastic, is 8 times as efficient for the purpose as the finest optical lens.

When you buy an RCA radio, phonograph or television receiver—or any other RCA product—you receive the benefit of the latest research development of RCA Laboratories. It is this *plus value* which is your assurance of lasting satisfaction.

The widespread public recognition of this plus value has given to RCA world leadership in the radio, phonograph, television and electronic art.

Dr. D. W. Epstein with a projection television tube, reflector and lens unit. Here the image on the end of the tube hits the reflector, is corrected by the lens, projected to the screen, then enlarged . . . making possible larger and clearer television than ever before.

RADIO CORPORATION of AMERICA

PIONEERS IN PROGRESS

RCA

Television

PHILADELPHIA TELEVISION OUTLOOK

Second in a series on analysis of cities television plans.

Philadelphia will have to start calling itself something besides the City of Brotherly Love once the ten station applicants start battling for the four or five channels that will probably be available. According to FCC allocations there will be thirteen channels for television but in the crowded eastern area, about all Philadelphia can hope for is four or five (the Television Broadcasters Association in their proposals for 140 cities allot Philadelphia only four channels).

There will be much at stake with Philadelphia being the country's third largest city with a population of almost 2,000,000. There are an estimated 922,453 radio homes in the metropolitan trading area which takes in 3,844,960 persons and has an annual retail sales figure of $1,437,276,000. Wilmington, Delaware and Trenton, N. J. are considered in the Philadelphia market area and according to the contour map are reached by a 25 kw station just outside of the primary area.

To date the following applications for video stations in Philadelphia have reached the FCC:

Philco Radio & Television Corp.
Tioga and C Streets
John Ballantyne, President
Ernest Loveman, V-P in charge of television broadcasting
F. J. Bingley, chief engineer

Philco has one of the most comprehensive plans for television in the industry. At the present time Philco is operating the only commercially licensed station in the area, WPTZ. W. W. Merkle is station manager and Paul Knight is in charge of programming. At the same time Philco is active as licensee of experimental station W3XE, four experimental relays and is working on a fifth on which construction is almost complete.

Philco has also applied for an experimental outlet using the ultra high frequencies between 524-544 mc, with aural and visual power of one kw using special emission. Primary experimentation will involve "development of broad band high-definition system to include color," says the application. Research program will take several years and cost about $500,000. Experimental facilities will be located on the same site as Philco's commercial broadcast station WPTZ —Mermaid Avenue, West of Cheltenham Avenue.

Philco will spend $100,000 for its high-frequency transmitter and locate its antenna some 180 feet above ground. Philco's Chief Engineer, F. J. Bingley, who has been engaged in television research since 1931, will direct the experimentation, assisted by N. F. Smith, W. W. Merkle, and A. M. Hopwood, all on the company's engineering staff.

The Philadelphia Inquirer, a Division of Triangle Publications, Inc.
400 North Broad Street
Walter H. Annenberg, Publisher

The company recently amended its application for a commercial permit to apply for Channel No. 4 rather than No. 6, using aural power of 3 kw, visual, 4 kw, and RCA-type transmitting equipment. They plan to locate transmitter and antenna on top of the Philadelphia Inquirer Building at the above address. At the same time, the application states the Inquirer "proposes to house a 'radio city' in Philadelphia to house its FM and television studios."

It will program 20 hours a week initially, servicing some 3,124,144 people including over 112,000 in Wilmington, Delaware. Total cost of studio and transmitting equipment is $210,500 with monthly operating costs of $35,000. Applicant plans to rebroadcast and use chain television programs. Worthington Lent of Washington is engineering consultant.

WDAS Broadcasting Station
1211 Chestnut Street
Alexander W. Dannenbaum, President

Licensee of standard outlet WDAS for the past 14 years and applicant for an FM station in the city, this applicant plans to use DuMont transmitting equipment on Channel No. 9, with maximum visual power of 4 kw and 2 kw aural. Transmitter will be located at Woodside Park, at Ford and Midvale Avenues where it will give coverage to 2,439,874 people, including service to Wilmington and as far north as Phoenix, Pa. Total cost of station facilities is pegged at $120,000 with no estimates given of operating expenses. An elaborate program schedule is proposed, about 40 hours a week. They will broadcast intermittently from 2 p.m. to 10:45 p.m. Monday through Sunday.

WFIL Broadcasting Co.
Widener Building
Roger W. Clipp, President

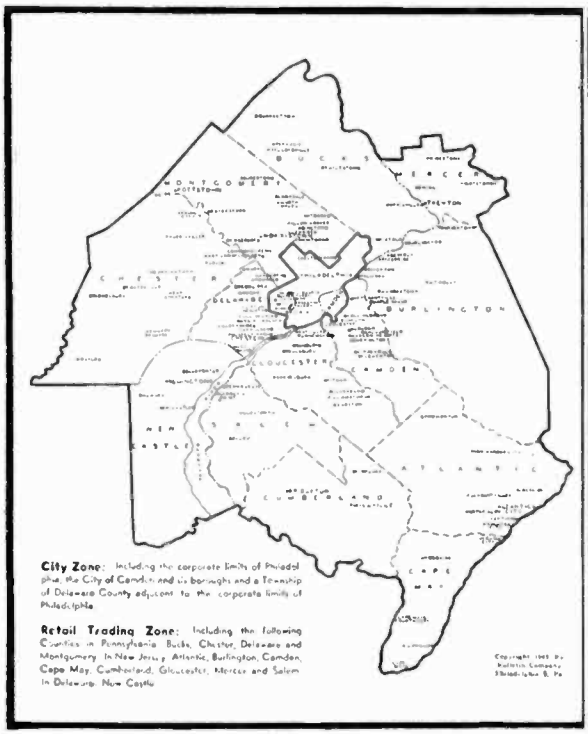
WFIL is seeking Channel No. 7 with power of 2 kw aural and 4 kw visual for its commercial station in the city. Present plans are to use General Electric type transmitter which will be located on top of the Widener Building near City Hall Square. Applicant, 100% owned by Lit Brothers, Philadelphia department store, is also licensee of standard station WFIL and FM outlet WFIL-FM.

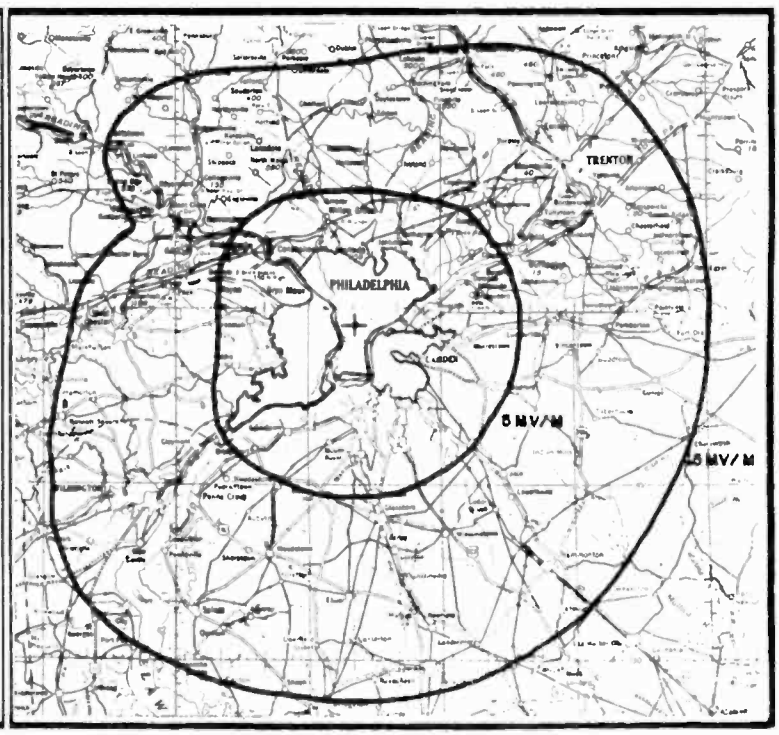
The station plans an 8-hour a week operation to start, on the air from 8 to 9 p.m. weekdays and 8 to 10 p.m. Sundays, serving approximately 2,944,066 people. Forty percent of its proposed programs will be entertainment, 30% educational or religious, and 25% news and sporting events. WFIL says it will "keep an up-to-date list of television receiver owners in the area and will make a monthly survey of a representative number of these listeners to learn the excellence of its reception at points throughout the city, nature of interference, relative signal strengths of television stations, etc."

On the basis of estimates supplied by RCA and GE, WFIL will spend about $289,000 for studio and transmitting equipment with a monthly operating expense ranging from $9,000 to $15,000. Its engineering proposal calls for installation of a 250-foot antenna atop the Widener Building, itself some 242 feet high. A steel tower on the building now carries a 50-foot turnstile FM antenna for the applicant's FM station and it is proposed to use the same tower for the television antenna. Paul Godley Co. of Montclair, N. J. is consulting engineer.

Philadelphia Daily News, Inc.
2601 Parkway
Lee Ellmaker, President

Proposed station will use Channel 9 with DuMont transmitting equipment, aural power of 2½ kw and visual 5 kw. Estimates supplied by the DuMont Laboratories give total cost of studio and transmitting equipment at $174,000, with monthly operating costs of $15,000 and monthly revenues estimated at $16,800. Site of transmitter is planned at 2601 Parkway at the entrance to Fairmont Park. Antenna will be 320 feet above ground level and about 400 above sea level.





Trading area map (left). This area can easily be covered by a 25 kw station. Contour map (right) showing primary area (inner circle) with calculated signal strength of five millivolts and secondary area (outer circle) with calculated 0.5 millivolt signal limit.

The Daily News will program about 51 hours a week, 70% of its programs commercial and 30% sustaining. Plans are to make heavy use of film. The station will give partial coverage to Bristol, Morristown, Conshohocken, Chester, Wilmington and Burlington.

WCAU Broadcasting Company
1622 Chestnut Street
Dr. Leon Levy, President

Seeks Channel 5, using power of 2 kw aural and 4 kw visual. Formerly had a permit for experimental operation under call W3XAU. Site of proposed station is 1616 Walnut Street. Total cost is estimated at $126,500 with a monthly operating expense of $5,000. Service area will cover some 3,032,056 people. WCAU plans to experiment generally with all types of studio and outdoor pickups and with relay transmission between Philadelphia and New York. Initially, the station will program 18 hours a week Monday through Saturday, with 60% of its programs entertainment, 14% educational or religious and 26% news and special events. When made available, CBS chain programs will be carried.

Dr. Leon Levy, President, will direct television station operations and George Lewis, Acting Technical Director of WCAU and with the station for the past 10 years, will supervise the television engineering.

Hearing on the application of WCAU for a commercial station was held September 18, 1942 on the issues of manpower and material set forth in the FCC's freeze policy of April 1942. In April 1943, WCAU sought reinstatement of its application again. No action has been taken since that time.

Seaboard Radio Broadcasting Corporation
1524 Walnut Street
Paul F. Harron, President

Want Channel 18 (on old basis) for its commercial station and proposes using RCA-type transmitter with power of 3 kw aural and visual 4 kw. It will locate the transmitter at a site south of Spring Mill in the Township of White Marsh, Pa. Total cost is estimated at 197,500 and monthly operating costs at $10,000. Seaboard plans to program 18 hours a week to start, with 55% of its programs, entertainment, 20%, educational and religious, and 25%, news and special events. No rebroadcasting or chain broadcasting of television programs is contemplated at the present time. Applicant also operates WLBG, WIBG and WHOM. Paul Godley of Montclair, N. J. is Consulting Engineer.

Bamberger Broadcasting Service
1440 Broadway, New York, N. Y.
Theodore C. Streibert, President
Jack Poppele, Chief Engineer

Applicant seeks Channel 7 and power of 3 kw, aural and 1 kw, visual for its television outlet. To date no definite site has been selected other than "in or near Philadelphia." Proposes to service approximately 3,080,000 people. Studio and transmitting equipment will cost $274,900 and $21,000 a month will take care of operating costs. Expects to realize about a $1,000 a month in revenue during the first year's operation. The company is a subsidiary of R. H. Macy & Co. of New York and is also licensee of WOR in New York and FM outlet, WBAM.

Westinghouse Radio Stations
1619 Walnut Street
G. H. Bucher, President

Proposes to locate its transmitter and antenna 729 feet above sea level on top of the Philadelphia Savings Fund Society Building, two blocks east of City Hall Square at 12th and Market Streets. Seeks Channel 7, with 4 kw visual and 3 kw aural power. General Electric, RCA or "equivalent" transmitting equipment will be used.

The applicant, 100%-owned by Westinghouse Electric and Manufacturing Company of East Pittsburgh, is licensee of KYM-FM and also has applied for Channel No. 1 for commercial television outlet in Pittsburgh.

Westinghouse will spend approximately $236,000 for the Philadelphia station and $12,000 a month to operate it. The station will program 15 hours a week initially and does not contemplate "rebroadcasting" tele programs. Although no contracts have been drawn, it is probable some form of chain broadcasting will be employed.

Ring & Clark, a Washington firm, are consulting engineers and D. A. Dyer is Engineering Manager for Westinghouse.

Pennsylvania Broadcasting Co.
35 South Ninth Street
Benedict Gimbel, Jr., President

The company applied for Channel 4 for its General Electric transmitter type television outlet, using peak power of 2 kw aural and 4 kw visual. Applicant is 100%-owned by Gimbel Brothers Department stores and operates WIP and WIP-FM in the city. Total cost of the station is set at $211,250 with operating costs from $3,500 to $12,000 a month according to GE postwar equipment cost estimates.

The antenna will be located atop a building at 35 South 9th Street, some 510 feet above ground and 570 feet above sea level. The station will service about 3,229,705 people and program 30 hours a week. Grant R. Wrathall of Washington, D. C. is Engineering Consultant.

Solution?

Any tasks the FCC thought were difficult in the past will be child's play compared to determining who shall be awarded television licenses in cities like Philadelphia where the applicants greatly exceed the available channels. The old reliable "public interest" clause might well turn out to be a boomerang rather than a "cover-all" as it has in the past.

WHAT WNEW IS DOING ABOUT TELEVISION

by WILLIAM B. McGRATH

One of the most progressive independent stations in radio, WNEW, is wasting no time getting into television. Some of the knowledge gained is discussed by their television director, William B. McGrath.

In the fall of 1944, Station WNEW began its first experiments in television. Through the cooperation of DuMont Station WABD, we were given access to their equipment, personnel, and air time.

It was WNEW's purpose to have its staff learn, through actual experience, the progress television had already made, problems involved in the production of programs, technical and showmanship factors—and what could be expected in the immediate video future. As members of our staff were to maintain their regular positions while learning the new art, it was thought wise to plan only one show every three weeks; at least, until such time as we were sufficiently advised to consider more frequent telecasts. This eventually proved to be a wise decision.

We further planned to televise those programs from our regular radio schedule which had proved successful air entertainment, with the intentions of determining how difficult the conversion might be. If not too many hazards were encountered, we would have a large pool of available material from which to draw. Our chief interest was to have our radio production men learn video production; our engineers, the technical principles; our script writers, the differences in writing for television; and our other departments, their corresponding roles in the new medium.

Here are some of the shows we produced, and a few observations that should prove of interest to those who find themselves ready to enter television programming, production, and direction.

"The Crime Quiz"

We first did what others will invariably do—attempt too ambitious a program as an opener. "Crime Quiz", as it is regularly heard over WNEW, is a "who-done-it" information please show. It consists of a board of experts on crime and criminology, which supplies answers to questions sent in by the radio audience. It seemed a natural for television because there were a lot of "visual" possibilities. Our first realization was that we had to think in terms of pictures rather than words. With "Crime Quiz", we planned a corpse on which several clues to its death would be planted. We procured several objects connected with famous crimes. We thought of getting, from the Eden Musee, wax figures of famous criminals which the experts could identify. We discovered (fortunately in time) the heat of the studio lights would have melted these priceless objects to candle fodder. When our program was ready to be televised, we had on hand 50 props, 4 different sets, 14 actors, and a planned series of camera movements that would have driven the most experienced operator to the nut house.

I will tell you how we overcame one simple problem. Multiply it by a hundred, and you will know why our director ended up with a shock of his own hair in each fist. The show was to open with a whimsical ghost emerging from a cloud of smoke to warn the audience of the impending crime wave about to envelope each and every viewer. To produce smoke, some of our predecessors had used dry ice agitated with running water. So we blithly ordered a one-hundred pound cake of it, and a few gallons of water. The amount of smoke we got from this arrangement wouldn't have hidden a flea on a white sheet. Someone suggested blowing cigar smoke into the lenses. This not only asphyxiated the cameraman, but threw the smoker into a series of paroxysms that required all but medical attention.

In the course of these various experiments, an unalert cameraman left his camera, completely out of focus, on the ghost. The result was exactly what we wanted. The eerie effect of a white apparition proved one of the hit "shots" of the show. With our many props, actors,

Scene from "Once There Were Four" showing captured Russian in Nazi prison camp. Dramatization was the story of four comrades fighting the Germans.

Scene from "British Buddies" which shows the broad strokes of the background scenery made to create greater detail on the viewing screen. In the ten-foot set, depth was created by means of the short focal field of the video lens.

camera actions, and "defocusing", WNEW turned in a very acceptable bit of television entertainment.

We also turned in a resolution. Our next show would be much more simple.

"The Wifesaver"

The "Wifesaver", Allan Prescott, is known to a large radio audience as a humorous household-hinter whose programs have proved many hours of entertainment for harried housewives. It seemed like a good idea for television, so we planned to produce the show somewhat along the lines of the familiar motion picture "short". The "Wifesaver" was to narrate for fifteen minutes on ideas for time-saving in the home. Actors were used to pantomime the action. We took certain liberties with the script by having several suggestions backfire at the expense of the actors. This provided a certain amount of humor that added to the visual interest.

This time, all went well—with one exception.

After the dress rehearsal, our studio developed technical difficulties. Scheduled to go on the air in a half-hour, we found it would be necessary to shift our program to the other studio, 40 floors above in the same building. Having experienced many such emergencies in early radio, we felt confident our training would sustain us.

"Let's get these sets dismantled and up to the 42nd floor," we said.

"You can't. This is Sunday and only the passenger elevators are running. They're not large enough," we were told.

"Well, let's gather all the props and get them upstairs."

"You can't get into the studio. It will be in use until you go on."

We were beginning to lose hold. In radio, you could grab a record and slap it on a turntable. In television, you had to grab a bunch of actors, a set, props, and ten technicians. What you did with them determined whether or not you stayed on the air.

Skipping the rantings, epithets, and other details, we inserted a fifteen-minute film, allowing us that time to set up in the new studio. Some monks' cloth was thrown up, and the actors advised that "this hole in the curtain is the entrance to the kitchen—this one, the door out of the house." The shape of the studio was different than the one in which we rehearsed; but we took along our original camera crew, and everything went off smoothly. In fact, the show received so many favorable reviews, we began to wonder about the importance of scenery in certain television productions.

"British Buddies"

We were beginning to learn—and by learning what *not* to do—we were making progress. By limiting the number of sets, actors, props, and abundance of detail—we could spend more time in rehearsing with cameramen in the studio, more time in perfecting a simple but impressive script. By taking advantage of present limitations of the art, we were learning to develop effects that had not been previously used.

In planning "British Buddies", we included 15 minutes of film for the half-hour show. This allowed us all of the rehearsal time to concentrate on the 15 minutes of studio

origination. Good film was expensive. Working in cooperation with the British Information Service, we procured portions of film from "Desert Victory", and, with careful editing, weaved it into the story we were telling.

Our studio set was small. No more than ten feet on all sides. Because of the short focal field of the television lens, we were able to create an illusion of depth. Detail was created with broad strokes to be visable in the small viewing screens common to most receivers. We were learning to avoid *infinite* detail which is eventually lost in transmission.

The results were gratifying. Technically, the show was good. Our next step was to improve the material.

"The Town Crier of Chungking"

Many shows were done between our early experiments and "The Town Crier of Chungking". Each show advanced us a little further along the way of knowing more about the possibilities of the new art. When we decided to do "Town Crier", we were biting off a large chunk. We knew that, but felt sufficiently advised to try it.

"Town Crier of Chungking" was the story of a charming little old Chinese lady who led thousands of guerillas against the invading Japs. The story was condensed into 23 minutes. We had stopped fitting shows to the accepted 15-minute segments of radio time.

One of the Chinese guerilla fighters in "The Town Crier of Chungking."

Cast of "The Town Crier of Chungking," WNEW's top video show.

We spent several days editing scripts, plotting camera actions, simplifying sets. Actors were carefully cast for their appearance as well as their ability. They were rehearsed on all action and lines before we entered a television studio.

Cameramen were given a plan of studio action before rehearsal so they could place in their minds the approximate routine they were to follow. Five hours of studio rehearsal were scheduled, and we used every minute of it.

Hollywood make-up artist Richard Willis was hired to transform the actors to their Chinese characters. Recorded music was selected for opening, closing, and background build-up.

A multiplicity of close-up shots were employed. These provided more personal interest when viewed on a small screen (detail is difficult to discern on shots of large areas with many characters included).

Ten good pre-selected shots were used as a basis around which to project the visual action. This preselection insured eye appeal from the very start, and contributed to the fine reception accorded the show.

Conclusion

Some sort of conclusions should be in order; yet, it seems too soon to make any definite rule of thumb about programming and production.

There are a few fundamentals by which WNEW will abide for the present. We shall probably keep our scripts, sets, and props as simple as possible. The number of actors, limited. We won't attempt anything that calls for a motion picture comparison (Hollywood has had too much of a head start). We will continue to take advantage of the present technical limitations rather than be limited by them. Close-up shots will be used freely while there remains a predominence of small-tube receivers.

Scripts will be prepared well in advance. Studio plans of camera actions will be made available to individual cameramen before rehearsal. Actors will know all lines and actions before a camera is turned on. Thus we will be able to use all of our available studio rehearsal time for the cameramen, and the working out of picture detail.

WNEW plans to continue its experiments in cooperation with the DuMont Television Station WABD. The experience we have gained so far will prove invaluable to our future plans, and we feel most fortunate that such facilities have been made available to us. In the not-too-distant future, WNEW will have its own television station. What we have learned technically and program-wise will guide many of our initial operations. New techniques and advances will be made before we actually get under way. Through DuMont we will continue to keep abreast of developments in the actual presentation of programs.

WNEW is laying the groundwork for a predominant position in the television industry. Our fingers are in the pie. We'll be ready.

POST-WAR DuMONT CAMERAS

by HERBERT T. TAYLOR, JR.

First preview of the post-war video camera is described by Mr. Taylor, director of equipment sales for Allen B. DuMont Laboratories.

More important than all the impressive array of equipment on the floor of the television studio is the television camera. This is the quarterback of the equipment line-up.
Little wonder then, that the attention of broadcasters and programming agencies is centered around the television camera more than any other facility of the medium.

The DuMont camera has as its main feature the electronic viewfinder which provides a "televised picture" identical and simultaneous with the one recorded by the iconoscope tube.

The trial-and-error experimentations in developing their camera have clearly indicated to DuMont the requirements of a postwar commercial television camera.

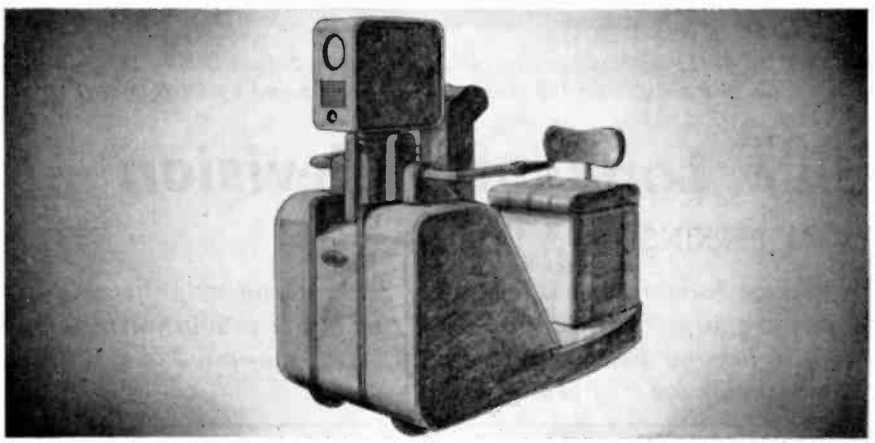
The future television camera must be more flexible than anything used today. It must have the mobility of anything Hollywood has been able to produce. In addition, it must duplicate freedom of movement in a fraction of the time it takes Hollywood to set up for a scene. For economic reasons, it must accomplish all this at a fraction of the cost.

To more clearly describe what is required, let's make this comparison: In the motion picture industry, if an overhead shot of eight feet is required, and provision is made for the camera to dolly in and gradually lower to the actor's height for a close-up, a huge camera dolly must be employed. Two men must wheel the dolly into position; another must raise and lower the cameraman to the proper position. There we find this single operation requires the coordination of at least four men, a task which requires much rehearsal. If the proper coordination is not there, possibly many retakes are needed.

The television camera must be able to duplicate this normal Hollywood operation, but, as previously indicated, it must do it in a fraction of the time and at a fraction of the cost.

DuMont now has two camera arrangements under design offering greater flexibility and constructed so simply that only one camera operator is utilized.

The first design (see illustration 5) mounts the camera at the front of the dolly on a pneumatic piston-driven extension pole which permits the camera head to be lowered to three feet above the floor level and raised to a height of eight feet. The camera is raised or lowered by pressing the pedals located directly behind the camera base and directly in front of the camera operator. The manual equipment used to focus, tilt, and pan the camera, in addition to directing the dolly, is on a form similar to motorcycle handlebars which are mounted on a post rising from the floor of the dolly and located directly to the rear of the camera head. A small motor, also controlled by foot pedals, provides the motive power for the dolly.



This design is made possible by the electronic viewfinder which is mounted on the same post supporting the camera and dolly directional controls and takes its position directly in front of the camera operator's seat.

The second DuMont Camera may take two forms:

The first resembles a crane in appearance. The foundation is mounted on a dolly base, designed to give weighted balance to the crane arm, which is in two pieces joined by a rotating plate. The camera head is mounted at the end of the crane or boom and is controlled hydraulically from the control board mounted directly in front of the camera operator's seat. These controls will permit the camera to be raised to a height of 14 feet or lowered to a few inches above floor level. The camera can be extended 14 feet either to the left or right as the occasion may demand. It permits the camera dolly to remain in one place, dolly in for a close-up or dolly back for a long shot merely by extending or retracting the camera crane or boom. The camera head may also be retracted to a place directly over the head of the camera operator for an overhead long shot. Through this arrangement the camera can cover almost every foot of a fair-sized studio.

The other arrangement is a method of mounting the camera on a cable suspended from tracks attached to the ceiling of the studio and controlled by a remote desk at floor level. This method utilizes the same control arrangement described in the second camera dolly.

The important point of the future DuMont camera operation, however, is that because of the electronic viewfinder, it is no longer necessary for the cameraman to be directly associated with his camera. The described arrangement of the viewfinder permits the camera operator to sit in one place, independent of the camera, and see, simultaneously, precisely the picture recorded by his camera.

Col. Lemuel Q. Stoopnagle, as emcee, applauds a dancer during "Photoquiz" show. The contestants are shown at left and their scores at the right. Of the three programs produced by Look magazine on WRGB, this show received the highest rating.

LOOK *Looks at Television*

by AL PERKINS

Al Perkins, former Walt Disney story director and script head of CBS, is now in charge of television, radio, and movie production for LOOK. In this article he discusses television from the viewpoint of a successful picture-magazine's approach to it.

The first time I went to Schenectady to visit General Electric's television station WRGB, I was struck by the similarity between its appearance and that of a Hollywood studio. There were the same batteries of lights overhead, the same litter of scenery around the walls, the same mob of scurrying actors, costumed extras, and technicians getting in one another's way. Then, as the telecast began, I went up to the client's booth to catch the show, and immediately all similarity to Hollywood ended.

The program was "Alice in Wonderland," performed by a cast of dramatic-school amateurs working from the script of a stage play. Now there is no denying that "Alice," beloved classic though the book may be, is not much of a story in any other medium. Disney has long fought shy of it, and a studio on the Coast once made a lamentable version that was one of the most resounding flops of the year. But compared to the "Alice" of the television screen, the one produced in Hollywood was another "Gone With the Wind."

I was so discouraged by the visual aspects of this telecast — the dreadfull "stage waits," the flat lighting, the missed cues, the camera wobbling over the performers' feet when it should have been on their faces — that I wanted to cancel LOOK's agreement with GE to put on three live telecasts based on features in the magazine.

"Why don't we bring up three film programs instead?" I asked. "We're making movies every month under the title of 'World Spotlight' and I'm sure that . . ."

"Sorry," said Program Manager Bob Stone firmly. "We're not interested."

"Why?"

I have never forgotten his answer. "Because," he said, "we already know we can televise movies. Now we want to find out what television can do with real things and real people."

That was to me then, and is to me still, the core of the television problem as it relates to a picture-magazine like LOOK. We already know that if the stuff in our magazine makes a good movie, that same movie will make a good telecast. But what we don't know, and what we are constantly trying to find out, is what *else* can we do in this big new visual medium beside make movies?

Learning the Hard Way

In an attempt to find at least a few of the answers to this question, we went ahead with our three telecasts in Schenectady, preparing the scripts and conducting preliminary rehearsals in New York, then taking the troupe up the Hudson the day before the show, in order to have two full days of camera rehearsal.

The material that we chose for the experiment was taken from the most popular picture-features in the magazine. We did a television version of the mystery-feature "Photocrime." A

A tense moment in "Murder at Midnight," a video version of Look's "Photocrime" feature.

few weeks later, we put on a visual question-and-answer game adapted from "Photoquiz." And the next month we got right out on a limb, took a very serious anti-inflation picture-story called "Don't Buy Another Depression," and televised it.

The results were surprising. As everyone knows, WRGB has a limited viewing-audience of perhaps 1,000 persons a night, grouped around a few hundred home-receivers in the Albany-Troy-Schenectady area. But the audience, although small, is active and enthusiastic, and its reactions, as indicated on survey-cards sent in after each telecast, can be presumed to indicate how a nation-wide television audience would react.

Our favorite script of the three was the serious treatment of the danger of inflation. Into this 15-minute broadcast we jammed every trick in the visual catalogue. We opened with a quartet singing an anti-inflation song and a small boy blowing up a balloon to the bursting-point at the exact moment called for in the lyric. (Obtaining the balloon, incidentally, was a major assignment in itself. Toy balloons are unobtainable today and we finally had to settle for beachball-bladders.) Next we had the Executive Editor of LOOK at a desk talking about inflation, and illustrating his remarks with charts and various desk-props like piles of coins. We followed him with an unshaven actor made up as "Old Man Depression" selling apples on the street corner, and shaking his head in alarm when ragged street-urchins fought for scraps in the garbage-pail at his feet. Then came a one act play that showed a typical family embarking on a wild spending spree until Father put a stop to it. And, to top it all off, we ran a few hundred feet of stock-shots from the last depression. All these elements were blended into a coherent whole by GE's skilled engineers, and the telecast proceeded without incident, but this program got the lowest rating of any of our three . . . 1.77 out of a possible 3.0, which can be called "fair" only by a vigorous stretch of the imagination.

On the other hand, "Photoquiz," which in television form we regarded more or less tolerantly as an amusing pictorial divertissement, achieved the very high viewer-rating of 2.61, the highest in the series, and well up among the top ratings of all WRGB shows. And the televersion of "Photocrime," a mystery drama starring Peggy Conklin and full of masked narrators and blood-stained corpses, did almost as well . . . 2.40 out of 3.0.

Why the Difference?

What interested me most as producer of these programs was the fact that the telecast we were proudest of, and whose production apparently made fullest use of every facet of the new medium, proved to be least appealing to the viewing audience, whereas the program that was most casually produced, and was almost eighty percent ad libbed, wowed them at whatever is television's equivalent of the box office.

Thinking it over afterward, studying the 16mm. films that we shot of each telecast, and listening to the acetate recordings, I came to the conclusion that *immediacy* is of greater importance in television than many of those connected with the industry think.

I am convinced the reason people liked the "Photo-quiz" program was that something was going on for the first time before their very eyes; that their television-screens, in other words, were windows giving them a look in upon something that no one, not even the performers, had ever seen before. The pictorial questions . . . the disguised photographs to identify, the breeds of dogs to name, the dancesteps to recognize . . . were as fresh and new to the viewers as they were to the contestants. Thus the program gave each viewer a chance to identify himself with the program . . . to play the question-

Daniel D. Mich, executive editor of Look, presides over the inflation program "Don't Buy Another Depression."

Representing the dangers of another inflation, an apple-seller of the '30's is featured in "Don't Buy Another Depression." Note depth-effect of background scenery.

As off-stage quartet sings anti-inflation song, boy explodes inflated balloon on cue to show danger of inflation in Look's third program, "Don't Buy Another Depression."

and-answer game in his own home, with his own family and friends, at the same time that other family groups were visibly playing it on the air.

Let the Audience Participate

The same factor of audience-interest held true to a lesser degree in "Photocrime." The show opened in conventional mystery-story fashion. In a mansion of hatred atop a lonely hilltop, human passions were seething. Snarling actors quarrelled violently with each other; jealously and greed stalked the hallways; gamuts of emotion were run. Then somebody got shot, and somebody else called the cops.

As the detective closed in relentlessly on the culprit, however, we did something a little different. We stopped the show just before the arrest of the murderer and reviewed the visual clues that had enabled the flatfoot to trap the killer. And we asked the television audience to put the clues together for themselves and to make up their own minds as to who was the guilty one out of all the possible suspects. Following this interlude, we came back to our detective making the actual arrest, and then wound up the story as rapidly as we could.

Contrasting this with the technique used in "Don't Buy Another Depression," we found the reason, or at least one of the reasons, why our "best" show placed last in the final popularity poll. This telecast, although it tried desperately to tie in the subject of inflation with the viewer's own problems, by its very nature emerged in the form of a lecture, with the participants in the show in effect holding up warning fingers and telling the audience what to do and what not to do. Audiences in general don't like to be lectured to, even during a lecture, and in the intimate home-atmosphere of television, they prefer outright entertainment to education and instruction.

It would appear from these frankly experimental telecasts, therefore, that a picture-magazine can set up for itself certain fairly definite rules governing its approach to television.

(1) Magazine material rich in entertainment value can, when properly treated, emerge as equally delightful entertainment on the television screen.

(2) The best material to work with is that which contains the vital factor of immediacy, or into which can be injected a feeling that the show is largely impromptu—a program in which the distant audience can feel it is playing a definite part.

(3) In such a program, shows using live actors have a definite advantage over productions presented in the form of motion-picture film.

(4) For dramatic and documentary programs where the factor of immediacy is unimportant, motion-picture film is best. Film is also most effective where audience participation is present in some degree, but is outweighed by rehearsed dramatic action. Thus "Photo-crime" would unquestionably have been a better telecast had it first been recorded on film. "Photoquiz," on the other hand, would have lost almost all of its appeal in movie form. In this production, it was the unexpected, unrehearsed situations, and the ad lib studio laughs, that earned the program its top popularity rating.

TELEVISION STATION DESIGN

WGN contest for combination Radio and Television Set-up

A unique plan for a radio television studio, suggesting a possible new trend for the future, has been presented by the winners of the $10,000 WGN studio theater design competition.

The design which won the $5,000 first prize in the competition for "the most beautiful and efficient radio-television studio" was submitted by Arthur Frederick Adams, celebrated designer of theatrical building projects, and William F. Clark, engineer, both of Chicago. Plans for the construction of the new building just south of Tribune Tower after the war are being formulated.

Specifications for the large studio theater of 2,000 seats and the smaller studio theater of 600 seats are given in the winning design.

An interesting feature of the designs are the provisions for accommodating scenery shifts, one of the most perplexing problems to be faced when telecasting "live" programs. This problem and how their studio design proposes to handle it is explained as follows by the winners:

"From the best thought in design of television studios for "live talent" shows, two or more studios are required for rehearsals, with studio setups left in place while actors and action shifts from one studio to another. The movie industry, with more experience in this matter, uses fixed sets; and practical television experience points in the same direction.

"This trend of thought, due to space requirements, could not be applied to this problem, so we have reversed the idea and believe we have a workable plan, noiseless in operation and simplified to gain experience for a guide in future trends. It may not fill all requirements but will be a basis on which improvements can be made.

"Instead of the usual painted fixed sets for background scenes, there can also be more modern background scene projected, through plastic fireproof curtains lowered from the top of the studio stage, by rear projectors with wide angle lenses, thus eliminating moving or shifting of scenery and cutting down noise.

"The design calls for mobile, folding scenery for backgrounds of sets, properties, and sponsors' products (with or without secondary backgrounds) placed on five hydraulic operated lifts to be raised from lower level to the stage at the proper time for rehearsals and previews. The scenery for background sets will be so constructed that they will remain fixed during the televisioning by cameras yet can be easily and noiselessly moved and stored.

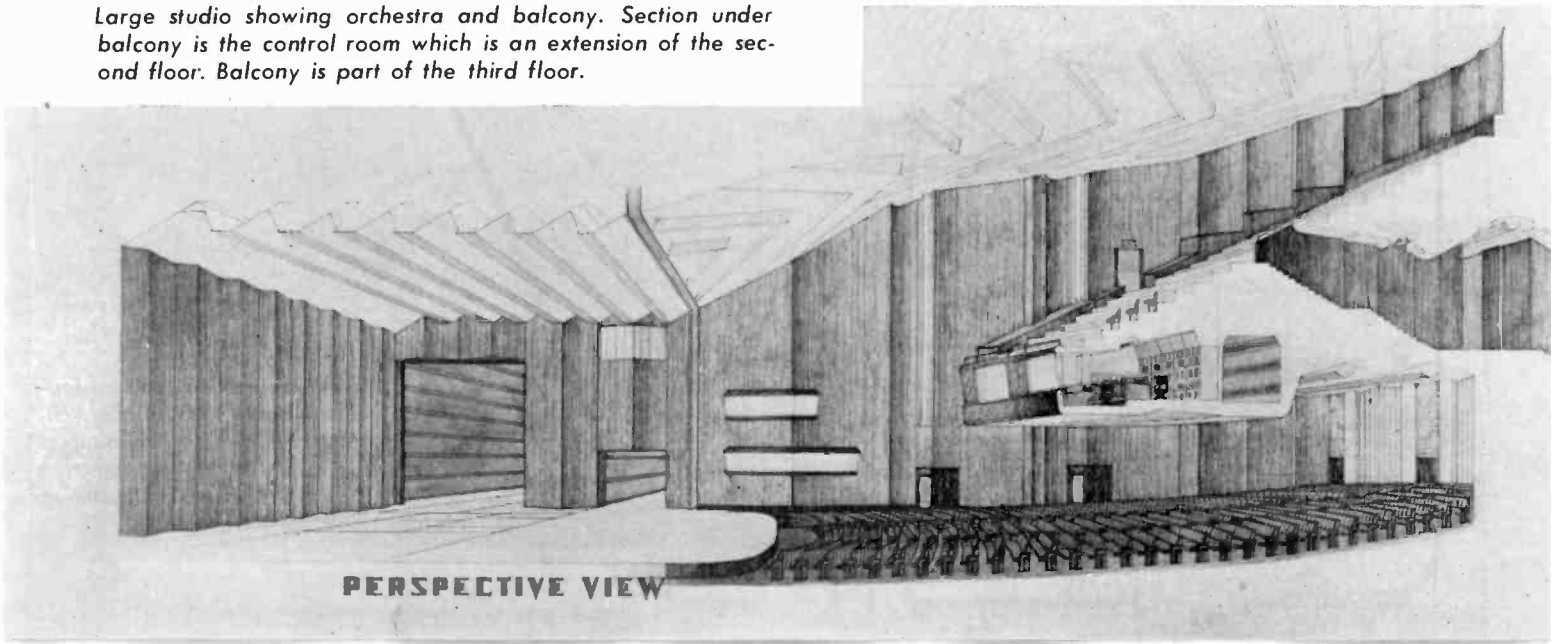
"The stage devices may be placed in various positions on the stage, and may be operated independently or together and in sequence so that three cameras can be operated separately or simultaneously. The two or more extra lifts will give enough interval of time for removal of such sets not to be used in the finish of a sequence of pictures. By staggering the programs between the large and small studios and other studios on the upper floors, there will be time to reset the television studio stage for a different television show following the first one placed on the air.

"As the type of entertainment changes during the daily or evening schedule, these fixed background sets can be covered with curtains forming the background for the next show following; or they can be raised aloft. The advantages we see are as follows:

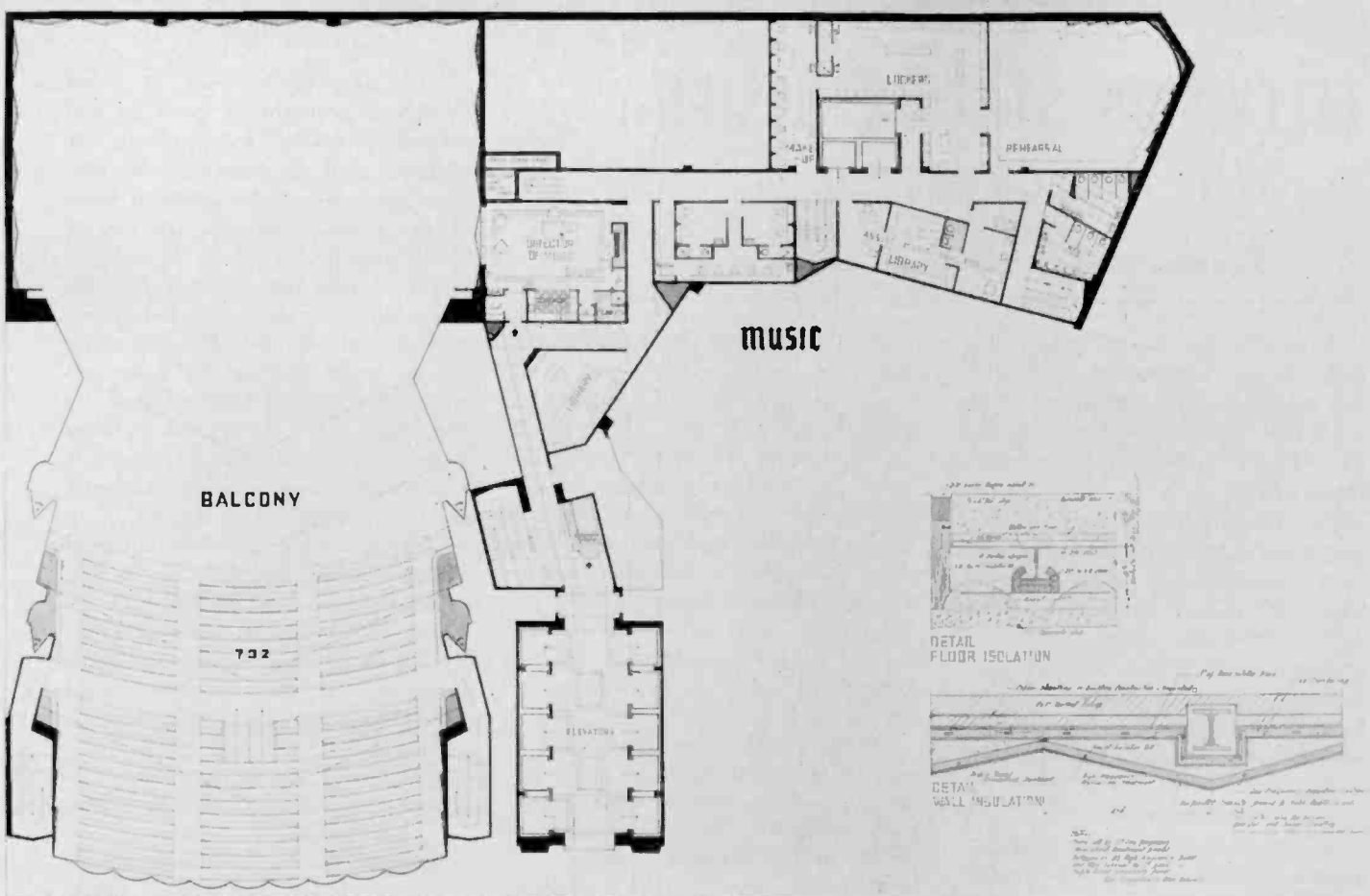
1. There is less noise created.
2. Actors remain on one stage, less confusion.
3. Easier to remove the properties and change the type of entertainment.
4. Easier for the program director to control rehearsals and previews before going on the air.
5. Duplicate sets of cameras, control equipment, etc., not required, therefore cheaper first cost.
6. Less space occupied."

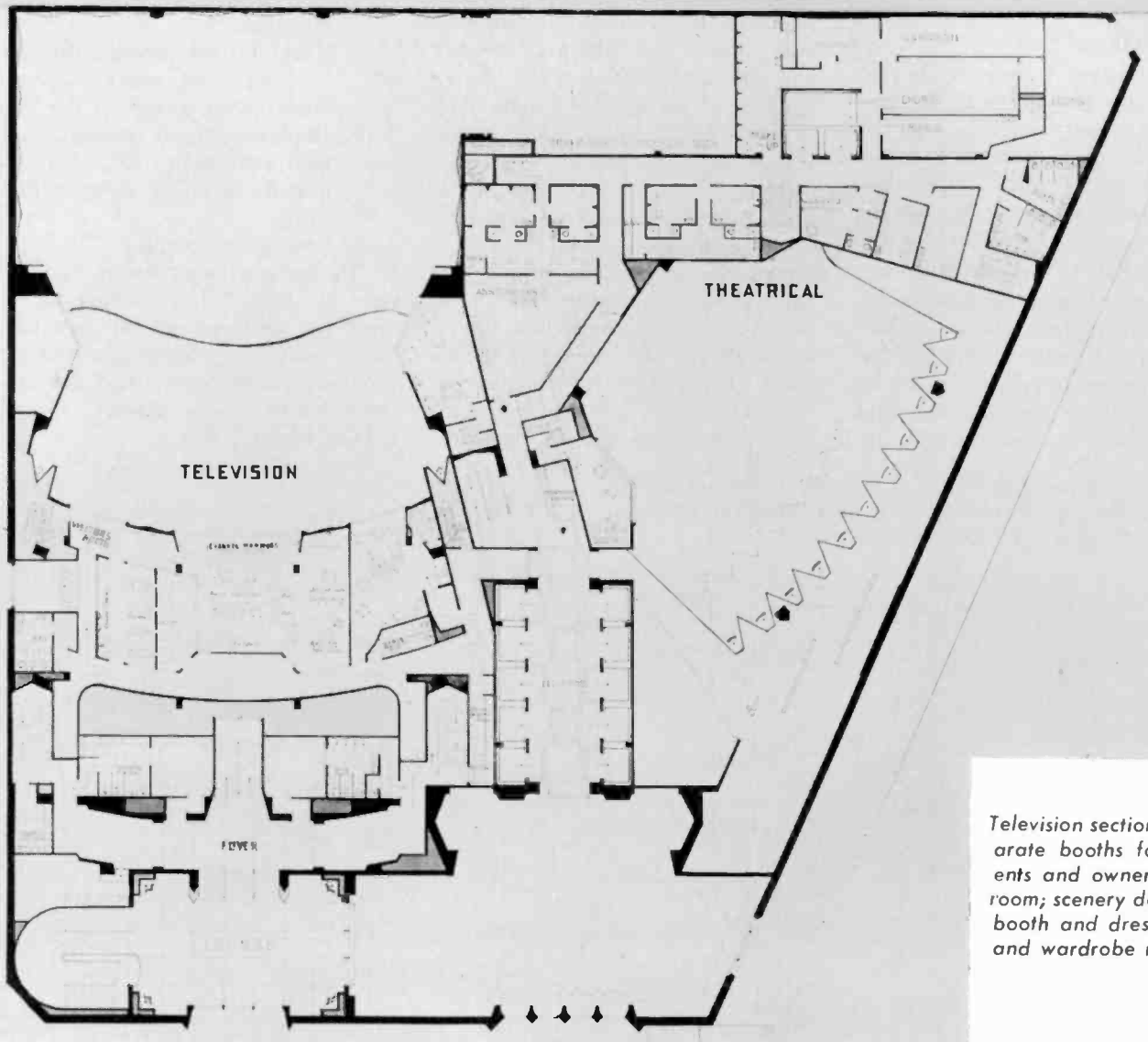
The prize-winning design is planned to take full advantage of all post-war developments in materials, air conditioning, lighting, television, frequency modulation, and any improvements in the present type of broadcasting.

Large studio showing orchestra and balcony. Section under balcony is the control room which is an extension of the second floor. Balcony is part of the third floor.

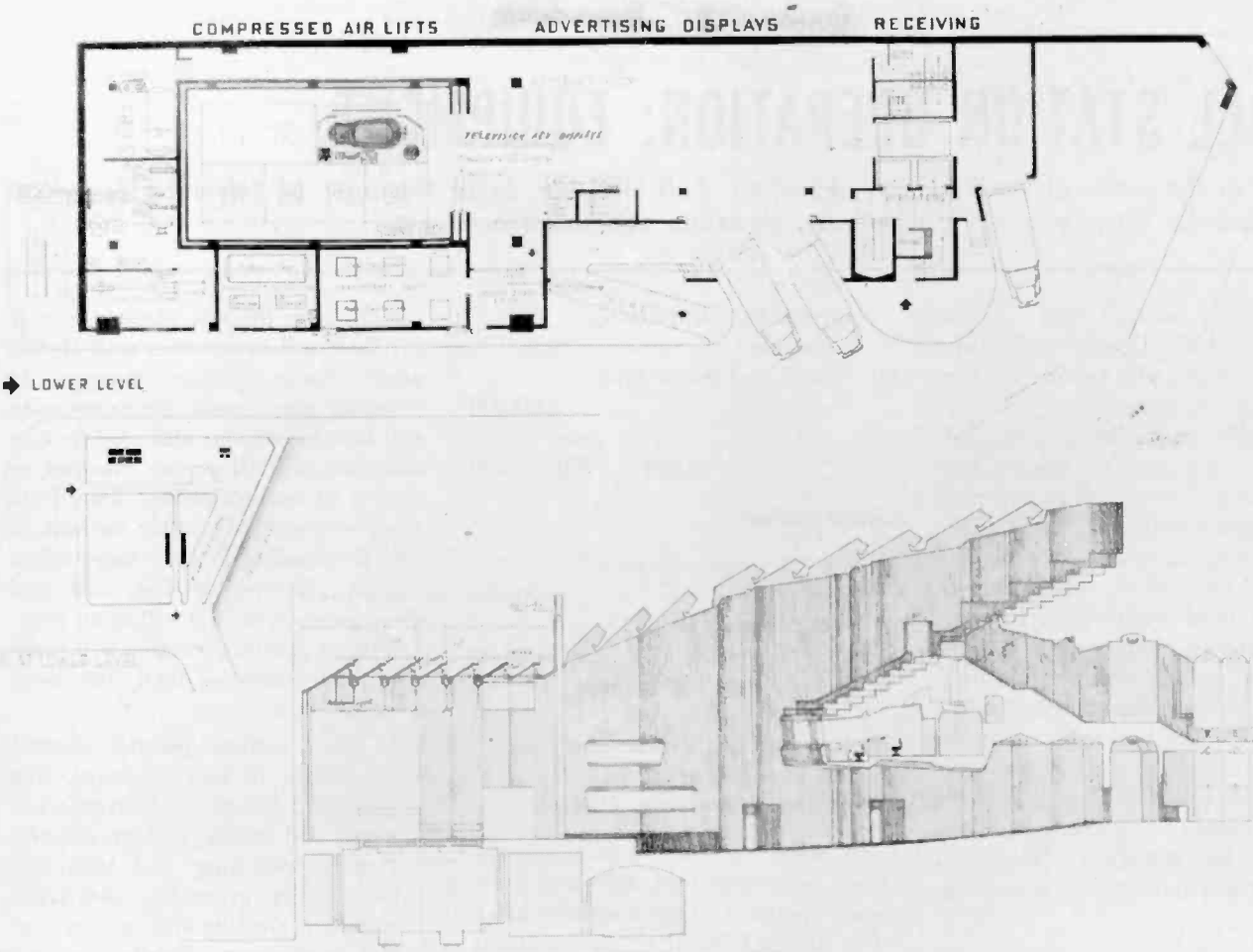


PERSPECTIVE VIEW





Television section contains separate booths for visitors, clients and owners; announcers room; scenery dock; projection booth and dressing, make-up and wardrobe rooms.



Section in upper diagram besides featuring compressed air lifts and ample space for advertising displays, contains transformer vault, heating equipment, stage lift equipment room and receiving and assembly rooms.

SMALL STATION OPERATION: EQUIPMENT

Second in the series of small station operation. J. D. McLean, Sales Manager of Television Broadcast Equipment for General Electric Company, describes equipment and costs.

With plans for television networks the theme of the day, the small video station postwar will assume an ever increasing importance.

Naturally built for considerably less than the cost of master television stations, the small station postwar probably will have facilities for the televising of motion pictures and a mobile unit which might also be used for local studio programming.

The original conception of a satellite station is one which would originate no local programming. It would serve its locality by broadcasting the programs fitted to it by a television network. However, the picture of the satellite station — its equipment, its operation and status — is changing. Newer trends indicate an increase in scope.

Basic Equipment for a 4-kw Satellite Television Station

The basic satellite station will need an antenna and receiver to pick up the sight and sound signals from the nearest television relay point; a monitor for observation of these sight and sound signals; and a transmitter and antenna to broadcast the picture and sound to the surrounding area. The power output will depend upon the local contour and area to be covered.

It is impossible for us to estimate post-war prices for television equipment because of the uncertain price levels of labor and materials. We can only give *pre-war costs* for this type of equipment. Based upon *pre-war price* levels are the following costs of apparatus for a 4 kw satellite station, one that would provide program service within roughly a radius of fifteen to twenty-five miles of the station.

1 4-kw visual and 2-kw aural transmitter, including tubes	$35,750.00
1 Relay pick-up receiver and converter unit	1,000.00
1 Visual and aural receiving and transmitting antenna (does not include antenna supporting structure)	10,000.00
1 Visual and aural monitors	2,000.00
Total	$48,750.00

Accessories

1 Visual frequency monitor	$ 900.00
1 Visual modulation monitor	1800.00
1 Aural frequency monitor	800.00

Equipment for Visual and Aural Identification of Satellite Television Station

In some localities satellite stations may be installed by television network operators to serve smaller localities. If the Federal Communications Commission authorizes the construction of these satellite stations they may require some means of station identification. The addition of equipment for aural and visual identification of a satellite station involves the inclusion of a monoscope and suitable transcription equipment such as a magnetic wire recorder.

1 Monoscope Unit	$1,000.00
1 Synchronous pulse generator, mixer, amplifier, and power supplies	4,500.00
1 Audio amplifier, microphone, control panel, plugs and cables	1,500.00
1 Magnetic Wire Recorder	700.00
	$7,700.00

Equipment for Originating 16 mm Film Program

To originate 16 mm or 35 mm film programs, the station will need a studio motion picture projector film pick-up camera, a camera amplifier, and control equipment. With these facilities and a 16 mm silent motion picture camera, the satellite station operator also can take and transmit pictures of local events. For example, certain newspaper interests planning to enter the field of television broadcasting after the war propose to supply their still cameramen with 16 mm silent motion picture cameras. In covering news events, the cameraman will take his regular still photographs and then will shoot one hundred or so feet of motion picture film. With equipment available after the war, it will be possible to take these silent motion pictures, develop, edit and show them on the air within an hour. Television station operators will probably make many of their own commercial films.

1 16 mm motion picture channel (including 16 mm projector, film rewinder, splicer and accessories, plugs, and cables, pick-up camera, camera mounting and tube, camera sweep generator, and video amplifier, shading and camera control equipment, distribution and mixing panel	$11,400.00

Portable Pick-up Equipment

Mobile units as pointed out before are expected to be essential units of any small television station. The General Electric Company will build mobile television equipment which will consist of the following units:

2 Visual channels including two cameras, cables, synchronous pulse generator, visual transmitter and receiver, control and monitoring equipment.

2 Aural channels including microphones, amplifiers, cables, aural transmitter and receiver.

1 Truck, antennas, gas engine power supply.

Post-war prices may vary widely from those given above, depending upon the existing prices of labor and materials at the time the equipment is built and upon the quality of equipment being manufactured. Undoubtedly they will change. Even so, they are essentially landmarks pointing the way for the economic patterns of the small television station. The small station will match stride for stride the progress of the large stations, keynoting the advance of television.

ONE MAN'S REFLECTIONS

A Regular Feature by DR. ALFRED N. GOLDSMITH

Multiple-Dwelling Television

The modern apartment house — more elegantly termed a multiple-dwelling residence — presents some interesting problems to the television industry. These local villages contain anywhere from two to several hundred families, each of whom ultimately will desire television service. Consider a typical instance, of fifty families in a ten-story apartment house. Each of these families will wish to listen to any one of say four local television broadcasting stations which serve this area. Since television antennas must be directional (to bring in a strong signal and to reduce or eliminate "ghost" images), must cover a wide frequency range (which may require several antennas for each listener), and are elaborate as compared to broadcasting antennas, the problem of antenna installation on the roof of this building is a serious one. Obviously we cannot face the prospect of several hundred individual antennas on a dwelling roof, thus converting it into a sort of large-scale porcupine! Furthermore, so many antennas in a limited space would interfere with each other by shielding, reflection, or otherwise.

It is clearly out of the question to supply even one antenna to each family, much less a group of antennas. All of this is apart from the fact that the complications of such an arrangement would be particularly undesirable. There would be many transmission lines running from the roof to apartments far below. Either duct space would have to be provided or an unsightly "spider web" would result.

If each family were to be provided with an adjustable antenna, this would require a type of antenna which could be rotated by remote control into pre-arranged positions for each station, and perhaps even tuned by some sectionalizing or slide-trombone construction, also remotely controlled. Even allowing for public acceptance of some added complication for television-antenna installations, such arrangements would be a severe handicap. And yet, on any frequencies between 50 and 1000 megacycles, the preceding discussion fairly represents the salient facts.

When individual action seems impracticable or breaks down, joint action must be considered. This suggests at least two possible solutions of the multiple-dwelling television-antenna problem.

The first possibility is to have the tenants voluntarily group themselves, and to have each group install its own television antennas and radio-frequency transmission or distribution lines to the apartments and receivers of the individuals in the group. This has the advantage that the quality of the installation is determined by the tenants themselves and may be as high as they wish — and are prepared to handle financially. The difficulties, however, are numerous. It is not easy to reach agreements between groups of tenants and to avoid subsequent disputes. The maintenance of the installation will call for someone who will service any radio-frequency amplifiers which are involved — and this servicing group must be compensated by joint tenant action. This means that some socially-minded and self-sacrificing individual will have to represent the group of tenants in a matter of this sort — and such individuals are not always easy to find. Nevertheless, in smaller buildings (for example, two-to-five-family houses), where the tenants know each other fairly well, such an arrangement may prove feasible. It will usually require the assent of the owner.

A second possible solution is one where the landlord provides television signals to all tenants on suitable terms. This service may be called for in the lease of each apartment and included in the rent — or alternatively, it may be optional with the tenant to secure such service at a pre-arranged monthly fee.

In this case, the landlord would be obligated to install suitable master antennas, a radio-frequency distribution system, and individual outlets in the apartments which are served. The advantages of this system are that it enables any standard television receiver to be used by the tenant and that it provides convenient service. It also avoids congested antenna intallations on the roof. Some of the possible disadvantages of such a system include the necessary rental or service charge paid by the tenant to the landlord — although, in one form or another, an equivalent charge would necessarily be borne by each member of the television audience. Difficulties may arise in the case of certain landlords who would unknowingly or otherwise accept low-grade and unsatisfactory antenna and distribution systems with consequent imperfect service to the tenants and inevitable complaints. The landlord must also face the problem of supervision and maintenance. Some building superintendents, mechanically and electrically inclined, will do a good job of maintaining a large-scale television installation; others will not. It may be necessary for such organizations as the Radio Manufacturers Association and the American Institute of Architects to agree on what constitutes a standard and acceptable television installation of this type. In any case, it would seem as if such arrangements will prove necessary for buildings housing tens or hundreds of families.

Television service will be a most attractive feature of future homes. It will require, nevertheless, a new viewpoint on the part of the owners of apartment buildings and of the architects, contractors, and service organizations which the landlord may use in order that high-grade television programs may be faithfully and reliably reproduced in the home at a minimum of expense and without inconvenience. Given reasonably thoughtful planning at an early date, there should be no major difficulties in reaching the desired results.

ADAPTING RADIO PROGRAMS FOR TELEVISION

Although the American Broadcasting Company have only recently started experiments in video programs, their slant on television programming is worth passing on to radio directors anxious to produce video shows.

When the American Broadcasting Company announced its policy of adapting radio shows for television, it was because they believe that a great number of radio shows, built essentially for standard broadcasting, can with proper adaptations, meet the same exacting requirements for television broadcasting.

It was on this basis that the network selected, as its first program to be televised, "Ladies Be Seated", an audience participation show.

They believed that the nature of the program would make it a natural for television. An audience participation show was chosen because it is perhaps the easiest and most economical to produce. The script problem is practically eliminated. The director and emcee work only with an outline of the stunts and gags with approximate running time and notations of the various camera angles. There is no talent problem to speak of — the emcee, who, in most cases has the necessary showmanship and the audience comprise the cast.

Having the same format in both the television and radio versions, "Ladies Be Seated" features the emcee, Johnny Olsen, who interviews contestants and then asks them to perform a stunt or enact a gag. Cash prizes are then awarded to all participants. The emcee is assisted by the same staff who work with him on the radio program.

The main problem in telecasting an audience participation show is to find gags and stunts that will televise successfully. George Wiest, director of both the television and radio productions of "Ladies Be Seated", uses some six or seven gags and stunts each day in his radio show. Very few of these, however, can be adapted for television.

Probably the greatest advantage in presenting an audience participation program is that the only rehearsals necessary are some four or five hours of camera rehearsal. During this time the emcee is given the opportunity to run through his bag of tricks with stand-ins taking the place of the actual contestants. At the same time, the director can work out his various camera shots.

A tough problem in television production is to have shows run on split second "radio-time." With present equipment and the switching from one camera to another and insertion of film portions in live programs, split second timing is not so easy as radio directors might think.

The American Broadcasting Company has gone after this problem and has solved it in "Ladies Be Seated." In order for the emcee to gauge the running time of each stunt and the program itself, Mr. Wiest installed an electric clock on one of the cameras. On another camera he hung a chart showing the ending time for each gag. In this way, the emcee can watch the running time of the show and stunt by merely throwing an occasional glance at the clock or chart and gear his show accordingly. At the same time, Mr. Wiest from the control room, continues to guide the show with instructions to the assistant director on the set.

Chester J. LaRoche, vice-chairman of the American Broadcasting Company declared that the network "believes that some programs produced for standard broadcasting will not fit the requirements of television, and in these cases, there should be no deviation, and no impairment of program quality, to fit the newer medium. At the same time, television when it produces a new art form, will develop programs that do not meet the standards for regular broadcasting."

Paul Mowrey, enterprising director of the American Broadcasting Company's television division, has started the ball rolling with a hand picked group of television adaptations. Some of the programs televised include "Quiz Kids", "Kiernan's Corner", "Letter To Your Serviceman", "Ladies Be Seated" and "Breakfast Club."

The "Quiz Kid" program, with live dramatic commercials, showed every indication of developing into an extremely successful video program.

"Kiernan's Corner," which centered around the commentator acting as a host to guest-stars, was built into a "living newspaper" idea.

"Letter To Your Serviceman," directed by Harvey Marlowe, consists of a weekly variety show which features guest-stars and pin-up girls requested to appear on the program by servicemen writing in to the station.

A special Seventh War Loan television adaptation of Don McNeil's "Breakfast Club," sponsored by Swift & Co., was recently presented on the DuMont station, WABD. This type of program, because of its fast pace and variety format, is a television natural.

Such advertisers as Swift & Co., John David Stores and Chef Boy-Ar-Dee have begun sponsorship of American Broadcasting Company video shows on both WABD and WRGB, indicating acceptance of the network's policy. Under the network's cooperative sponsorship plan for television, the advertisers sponsor a program only to the extent of production costs (costs for talent and studio properties).

Meanwhile, the American Broadcasting Company is quietly going ahead with a definite and clear-cut policy in adapting its outstanding radio shows for television and at the same time giving its staff a good thorough training. When the network eventually obtains its own television studio, they will be able to forge ahead with the invaluable experience they are gaining today.

PROGRAMMING

TELEVISION COVERS V-E DAY

Eleanor Roosevelt is interviewed over NBC by Julien Bryan, noted cameraman and lecturer. George Thomas Folster, NBC overseas correspondent looks on.

Coverage of V-E Day activities by video stations in the Schenectady-New York-Philadelphia area on May 8 soundly demonstrated the vital role that television can play as a public service and news medium. Gearing their programs to the momentous news of Germany's surrender, video stations thoroughly covered the event with dramatic remote pick-ups and films of jubilant crowds, relays to other stations, stirring studio programs, and documentary and news films. Stations proved that they are *now* in a position to handle news of national importance more effectively than any other medium.

WRGB (GE) and WNBT (NBC) led all other stations in the number of television broadcast hours. The NBC station began the day-long program at 8:54 a.m. with the formal recorded announcement of victory by President Truman and concluded its presentation at 10:56 p.m. that evening with a film of Verdi's "Hymn to the Nations" by the NBC Symphony Orchestra directed by Toscanini. The 14-hour uninterrupted program which was relayed to WRGB in Schenectady and WPTZ (Philco) in Philadelphia is believed to be unprecedented in the annals of television broadcasting. WPTZ carried the entire NBC show and WRGB combined its own program with that of NBC's.

Throughout the day WNBT made remote pick-ups of the crowds celebrating the victory in Times Square and integrated this with talent in the studio and documentary films. In the studio, talking against a backdrop of United Nations' flags, were military personnel, prominent civic leaders, clergymen, and network commentators. The program was highlighted during the day with the appearance of Eleanor Roosevelt who warned civilians against apathy and war weariness. Mrs. Roosevelt was interviewed by Julien Bryan, well known cameraman and lecturer who served as studio narrator most of the day.

Interspersed with the studio programming was effective film material, specially edited for the occasion by Paul Alley, NBC television newsreel editor. Historic films of the surrender of France in 1940, a Russian film titled "Day after Day" and newsreels of the liberation of Paris were among the film presentations.

The General Electric station went on the air at 10:30 a.m. with a relay from NBC's video station showing scenes of the crowds in Times Square and the interview with Mrs. Roosevelt. At noon, a half-hour program was presented from their studio which featured prominent citizens of Schenectady, including the Mayor and members of the clergy, who paid tribute to those who had resisted the Nazis throughout the world.

Following this program, WRGB again picked up WNBT until 6:05 p.m., when films taken in and around Schenectady during the day were shown. Schenectady, essentially a war plant city, reacted solemnly to the news, and these films were in direct contrast with the NBC relay of the crowds celebrating in Times Square. The opportunity of being able to view the reactions of two cities to an event of national importance shows the tremendous educational as well as dramatic possibilities which television has as a news and public service medium.

As a final contrast, films showing the excitement and demonstrations in New York City at the end of World War I were presented. To add punch to the plea, "Stay on Your Job until Japan is Finished", WRGB showed films of the bombing of Pearl Harbor and what to expect from the Japanese. The NBC relay was again resumed following this film program. WRGB signed off at 11 p.m.

Refugees representing liberated countries are interviewed by Frances Scott in the American Broadcasting Company program on WABD.

NBC cameraman with remote pick-up atop the marquee of the Hotel Astor televises the crowds in Times Square.

The American Broadcasting Company and WABD (DuMont) joined in presenting a special program, "Salute to the Armed Forces," on Monday, May 7, the day before V-E Day. Starting at 11:13 a.m., television cameras in the studio windows recorded scenes of the skyline of New York City with ticker-tape falling and of the street-crowds below celebrating the "unofficial" European victory.

Direct wires to WABD piped the American Broadcasting Company's radio coverage of the event. To supplement the five-hour program, a special film was taken by RKO Television of the network's newsrooms and executives. The film cameramen were given specific instructions to take a majority of close-up shots. Because of the time element, no positive was made and the negative was used for the screening.

On V-E Day, the network and WABD presented a two-hour program at the regular broadcast time, 8 p.m. The first part of the program included the formal recorded announcements by President Truman and Prime Minister Churchill. This was followed by the RKO Television films taken on the previous day.

The second half of the program consisted of studio interviews with representatives of liberated countries in Europe, films of the three major invasions that led to the unconditional surrender of Germany and films released by the Navy Department showing action that took place in major Pacific battles. The two-hour program was under the supervision of Paul B. Mowrey, manager of the network's television division and was directed by Harvey Marlowe of the American Broadcasting Company.

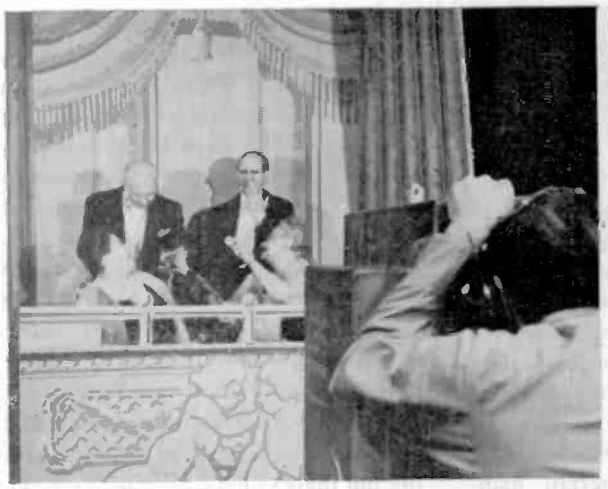
WCBW (CBS) opened its two-hour program with a ten-minute news summary by Allan Jackson which was followed by the proclamations of President Truman and Prime Minister Churchill. This was a rebroadcast with the flags of the United Nations waving in the background. A compilation of documentary war films covering outstanding events in Europe from 1922 to the present time were then shown.

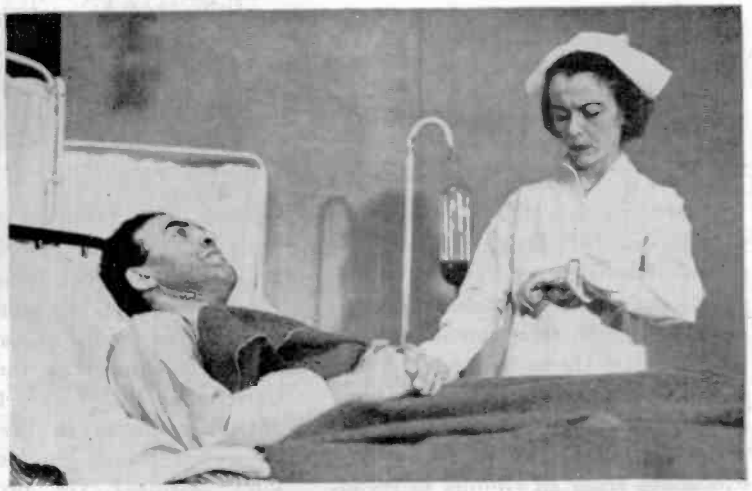
Arthur Godfrey, John Reed King and Dwight Cooke, all of CBS, conducted interviews with prominent civic leaders, representatives of the United Nations and wounded servicemen back from the fighting fronts.

An analysis of the war was presented by various CBS newscasters. The network concluded its coverage with a rebroadcast of a portion of President Roosevelt's famous "Brotherhood Speech" of 1943. The entire program was produced by Gilbert Seldes, director of CBS television programs.

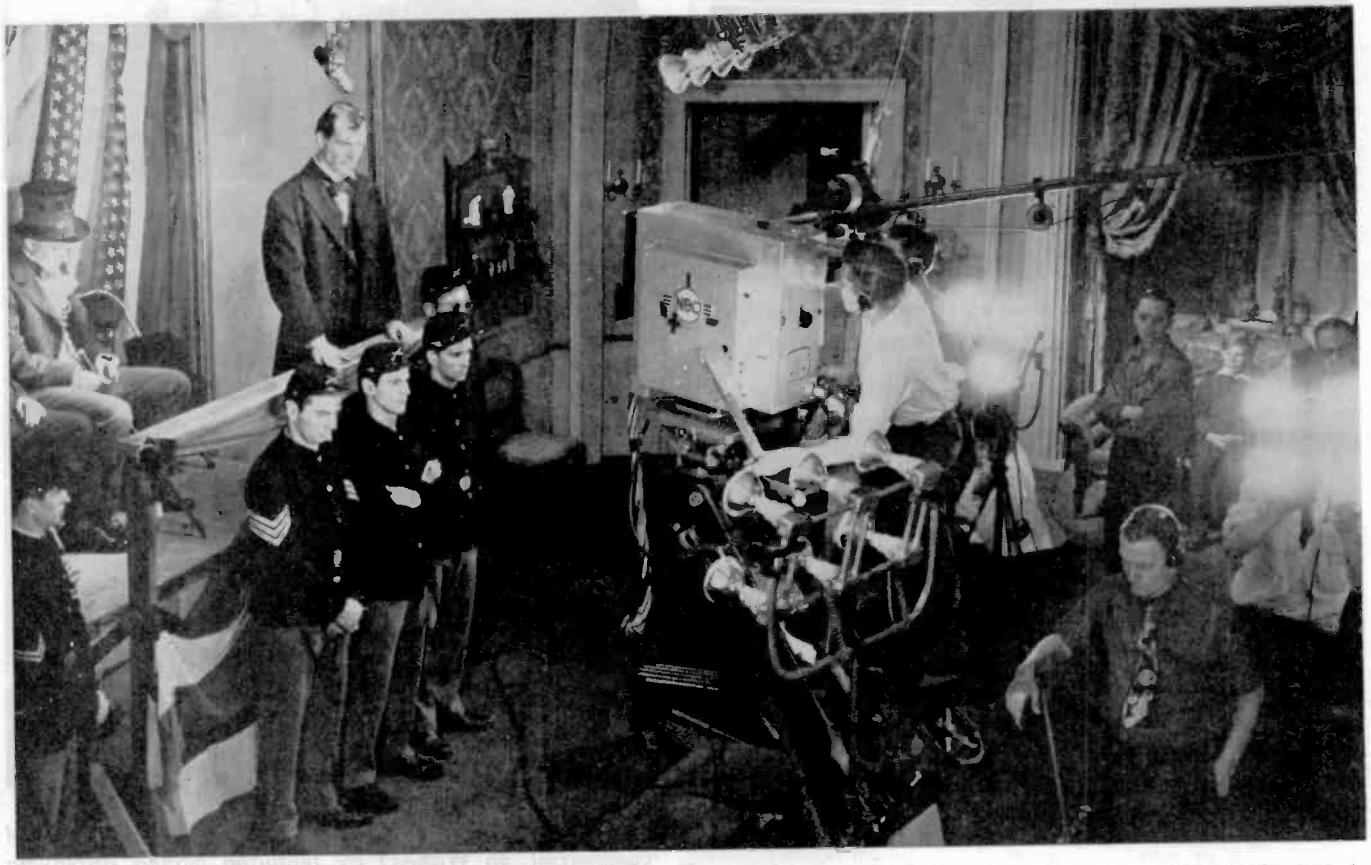
If television with its present limited equipment, staff and budgets could turn in such an amazing job of news coverage now, it is not unreasonable to state that television will become the greatest news medium yet known to man.

Clergy at Schenectady participated in the GE program. Rev. Bertram Atwood is shown delivering a sermon praising those who defied the Nazi throughout the world.





Marking the first Norman Corwin work to be televised, CBS presented "Untitled" in support of the Seventh War Loan Drive. The story dealt with a soldier who arose from his grave in a battlefield overseas to tell the story of his home and army life. He berated those on the homefront who refused to take the hard war seriously. Flashbacks, film and slide insertions were used to dramatize the story. Pictured above is a flashback of "life on the homefront" as contrasted to soldier getting blood transfusion.



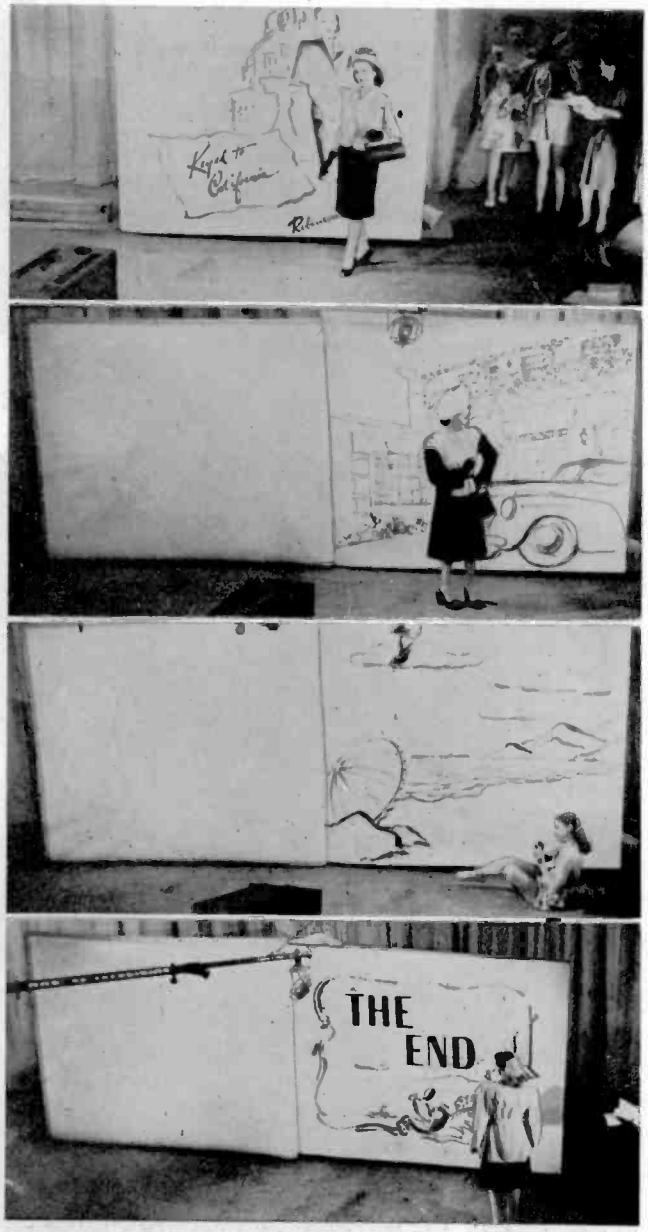
On the debating platform with Stephen Douglas, Abe Lincoln delivers one of his historic addresses in NBC's "Abe Lincoln in Illinois." Story was presented in three parts over a three-week period on WNBT.

COMMERCIALS

Interesting to watch is the progress of the Gimbel Bros.' Philadelphia stores television program experimentation. That Gimbels is serious about television is apparent not only from the two shows they have put on at DuMont and NBC but even more so from their latest program attempt on the GE station, WRGB. Top executives from all Gimbel stores attended. The program was a half-hour commercial centering on Gimbel's Laboratory of Living where all products sold in the store are tested. This portion of the program was produced on film with the live talent part taking the viewers to six different departments in the store. The show was jointly produced by Hoyland Bettinger, GE program manager, and Gimbels under the supervision of David Arons, store publicity director. While the show was purely experimental, they feel that they are on the right track and plan to continue trying new approaches to video programming. Department stores are not going to miss the television boat. Marshall Field & Co. has been sponsoring a series of programs on WBKB in Chicago; R. H. Macy & Co. is continuing its five minute shopping program every Wednesday night on WABD and Robinsons and others on the west coast are now trying out their video wings on W6XAO.

Tips on gardening—one in a series of shows presented on WBKB by Marshall Field & Co., Chicago. Advertising is placed direct.

A five-minute visit to Macy's garden department. Program is produced for Macy on WABD by RKO Television Corp.



Robinson's department store, Los Angeles, presents novel commercial on W6XAO by featuring models displaying latest fashions with a fashion magazine as a background. Agency is Mays & Bennett Advertising Co., Los Angeles.

Reproduction of music department in Gimbel's as used during the program on WRGB.

Bernice FitzGibbon (left), advertising director of Gimbel's New York store, and Violet Symon (center) advertising manager of the Pittsburgh store, being televised while listening to a sales talk on towels.

Mother and daughter on shopping spree stop before Gimbel's window showing two models featuring latest summer fashions.

After mother and daughter enter store, the two window models suddenly come to life and discuss the two shoppers.

TELEVISION IN REVIEW

ADVERTISING

With an increase in sponsorship of television programs last month, indications show that advertisers and agencies realize that *now* is the time to experiment.

Some advertisers, such as Johansen Bros. Shoe Company on W6XAO, in order to discover the effectiveness of their video commercials, are following up their programs with surveys to get audience reaction.

WABD (DuMont), New York

Newest advertisers to make their television debut on the DuMont station last month were the Pal Blade Company and the U. S. Rubber Company.

Pal Blade presented a quarter-hour program, "The History of Shaving" or "The Care and Feeding of Whiskers." Instead of the customary brief commercials, the presentation was in the form of one continuous commercial. The script plunged directly into its main subject, shaving, and by means of flashbacks, portrayed man shaving down through the ages from a comic point of view. A cast of 11 in appropriate costumes acted out scenes against specially painted backdrops. The program was produced and directed by Carl Mark, television director of Al Paul Lefton Co., the Pal Blade agency.

U. S. Rubber Co. last month began a series of weekly half-hour programs titled "Serving through Science." Demonstrations with various rubber products, such as rubber life rafts and maps, pointed out the important role rubber is playing in the winning of the war. The television operations of U. S. Rubber Company are under the direction of Charles J. Durban, assistant director of advertising. Mr. Durban directs and produces the series. Agency is Campbell-Ewald Co., New York.

The circus was again brought to the DuMont studio in the Alexander Smith & Sons Carpet Company program which featured acrobats, clowns, a snake trainer, fire-eater, juggler and sword swallower appearing in Ringling Bros. & Barnum & Bailey's Circus in New York. The show was produced by Bud Gamble.

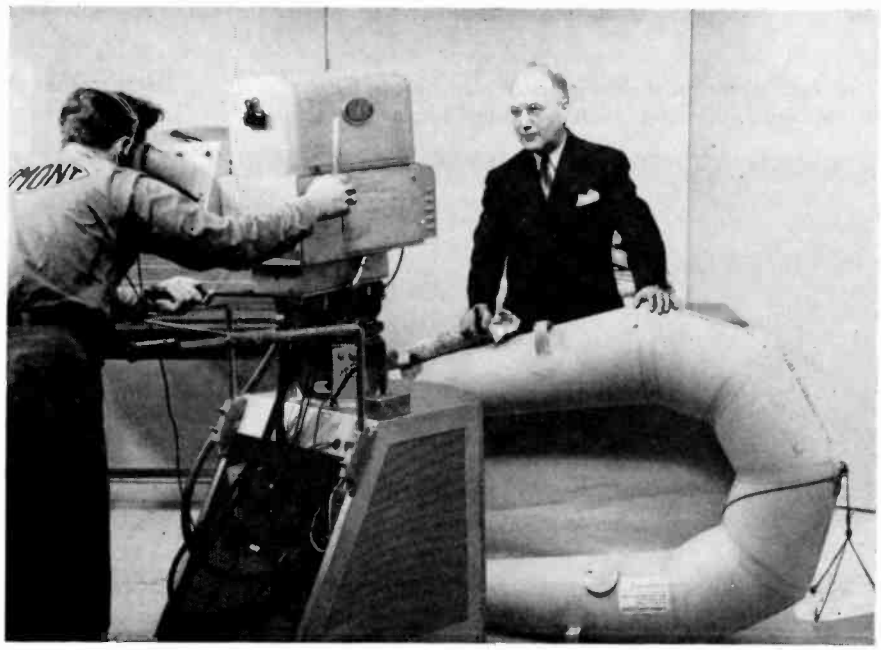
WABD advertisers last month were: Alexander Smith & Sons Carpet Co., Yonkers, N. Y., "The Magic Carpet," live studio program with films through Anderson, Davis & Platte, Inc., N. Y.; Lever Bros. Co., Cambridge, Mass., "I Challenge You," audience participation program for Lifebuoy, Spry and Rinso through Ruthrauff & Ryan, Inc., N. Y.; Liberty Music Shop, New York, test pattern music, direct; R. H. Macy & Co., N. Y., "Teleshopping at Macy's," films and live commercials through RKO Television Corp., N. Y.; Pal Blade Co., N. Y., "The History of Shaving," live dramatic program for razor blades through Al Paul Lefton Co., N. Y.; Sanforizing Division of Cluett Peabody & Co., N. Y., "Fashions Coming and Becoming," fashion programs through Young & Rubicam, Inc., N. Y.; and U. S. Rubber Co., N. Y., "Serving through Science," live studio program and films through Campbell-Ewald Co., N. Y.

WNBT (NBC), New York

Pan American Airways System, New York, continues to present "Wings of Democracy," combination studio live talent and film program. The commercial, usually tieing in with Pan American newspaper and magazine advertising, consists of model Pan American planes in flight against animated cloud backgrounds. These commercials were prepared by Audio Productions, New York, at a total cost of $200. The travel films featured in the program are compiled from film libraries in New York.

The Bulova Watch Company, in addition to sponsorship of time signals on regular WNBT programs, on V-E Day presented a series of one-minute time signals at various intervals throughout the day and evening.

With no change in sponsors last month, WNBT advertisers included: Botany Worsted Mills, Passaic, N. J., weather reports through Alfred J. Silberstein, Inc., N. Y.; Bulova Watch Co., N. Y., time signals through the Biow 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



Charles J. Durban, assistant director of advertising for U. S. Rubber Co. in "Serving Through Science" program which premiered on WABD last month.

and travel films through J. Walter Thompson Co., N. Y.; and RCA Victor Division of RCA, N. Y., "The World in Your Home," film program through J. Walter Thompson Co., N. Y.

WRGB (GE), Schenectady, N. Y.

The General Electric station last month had two new advertisers, the Alexander Smith & Sons Carpet Company and Gimbel Brothers Stores.

The Gimbel program, "Backstage at Gimbels," was built around a motion picture film of Gimbel's Laboratory of Living where products sold in the department store are tested for quality, durability, etc. Live talent was used for continuity. The format consisted of a mother and daughter shopping at Gimbels'. As they went from counter to counter films were cued in showing how the merchandise they saw displayed was made or developed.

The Alexander Smith Carpet Company program, "The Magic Carpet," also featured on WABD, opened with three children watching goldfish in a bowl and wishing they could visit subterranean regions. The action shifted to the children on a magic carpet flying through the air and landing on a tropical shore from where they descended to the ocean floor. The under-water effect was created by a lap dissolve of undersea film over live action on the studio set. Show was produced by Bud Gamble. Alexander Smith agency is Anderson, Davis & Platte, Inc.

American Broadcasting Company, New York

With Chef Boy-Ar-Dee Quality Foods having begun sponsorship of the "Ladies Be Seated" program on WRGB (GE) each Sunday evening, the network now has commercial support for its two television programs. "Letter To Your Serviceman" is sponsored weekly by John David, Inc., men's clothing concern, on WABD. Under the network's "share the cost" policy, sponsors pay the production costs only, with emphasis placed upon the promotional value of their investment. Agency for Chef Boy-Ar-Dee is McJunkin Adv., Chicago, and John David place their advertising direct.

WBKB (B & K), Chicago

The Balaban & Katz station continues with its three consistent advertisers — Commonwealth Edison Company, The Admiral Corp. and Marshall Field & Co. The Edison Company is currently presenting three different programs on WBKB. They include "Telequizicalls," a video-quiz program; "Welcome to Walkers," a humorous family-life skit which alternates on Thursdays with "Telequizicalls" and a Wednesday afternoon show, "Cooking by the Dial."

Admiral Corp., placing its advertising direct, continues with "Young Chicago," prepared in cooperation with the Radio Council of the Chicago Board of Education. Talented high school students are featured in the program.

Marshall Field & Co., also placing its advertising direct, sponsors "Wednesday Matinee", a variety show featuring both dramatic and fashion programs.

W6XAO (Don Lee), Hollywood

Johansen Bros. Shoe Co., St. Louis, using television for the first time presented a five-minute commercial, "Lorraine," which was a romantic presentation of merchandise in story form. The film was produced by Sawyer-Feld Productions of Hollywood for the Ansfenger Advertising Company, St. Louis, Johansen Bros. agency. Following the presentation, post-card questionnaires were sent to television set-owners in the Los Angeles area to test the reaction to the commercial. According to the Don Lee television director, Harry R. Lubcke, the cards requested audience comment on interest-holding qualities of the story and of the commercial.

WASHINGTON

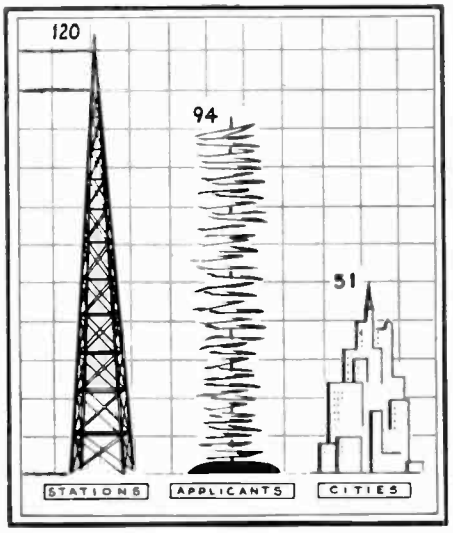
FCC Applications

A. Frank Katzentine 1759 North Bay Road Miami Beach, Florida.

This applicant, licensee of standard broadcast WKAT in Miami, has filed for a commercial television station to be operated on Channel 2, 60-66 mc, with a peak visual power of 4 kw and aural power of 2 kw. General Electric transmitting equipment is planned with the transmitter operating from present WKAT properties. Approximately 240,253 people will be served.

The estimated operating costs and revenues were not submitted but $165,500 will be spent for studio and transmitting facilities. Remote pick-ups will be used, particularly during the winter season.

Although no contracts have been made, applicant plans to arrange for transmission of network programs and to lean heavily on films. The applicant states that program plans will be filed in detail when the "freeze policies" are lifted. McNary and Wrathall of Washington are engineering consultants.



Oregonian Publishing Co. Caroline Leadbetter, President 615 S.W. Alder Street Portland, Oregon.

Applicant requests a construction permit for a commercial television outlet on Channel 4, 78-84 mc, using RCA equipment with aural power of 3 kw and visual power of 4 kw. The transmitter will be located at a site in Multnomah County and will serve approximately 659,842 people. Total cost is estimated at $183,000 and monthly operating expenses at $15,000.

The station will broadcast four hours a week initially, all sustaining programs. About 60% of the programs will be studio productions and 40% films and outside pick-ups. Applicant plans to rebroadcast and carry chain television programs when they are available.

Engineering is under the direction of Harold Singleton, chief engineer of KGW, standard broadcast station operated by the applicant. They also publish the *Portland Oregonian*.

Palmer K. and Lois C. Leberman, 70 Pine Street New York, New York.

This is an application for a commercial station with General Electric transmitting equipment, using Channel 10, 186-192 mc, with aural power of 2 kw and visual, 4 kw.

Studio and transmitter costs will total $79,500. Serving 11,280,000 people in and around metropolitan New York, station will program about 12 hours a week, 10 of them film programs and outside pick-ups. Transmitter and antenna will be located atop of the Cities Service Bldg., 70 Pine St. in New York.

Mr. Leberman, now a commander in the Navy, is president and director of standard broadcast station KRSC in Seattle, Washington. He also publishes the *Family Circle Magazine*. Raymond M. Wilmotte of Washington, D. C. is consulting engineer.

Columbia Broadcasting System New York, New York.

Since CBS has been unable to complete construction on its new experimental television station, W2XCS in New York, they have asked for extension of completion date from May 1945 to November 1945.

Philco Radio & Television Corp. Philadelphia, Pa.

Philco has filled eight applications for portable-mobile television licenses to cover construction permits for new experimental television relay broadcast stations. The areas cover central and northeast Maryland, southeast Pennsylvania and the District of Columbia. Stations include W3XPD-E-F-G-H-I-K-L.

Applicant also filed three applications for licenses to cover construction permits which authorized increase in power, change in emission and area of W10XP, W10XPA and W10XPC.

In addition, an application was filed for a license to cover a construction permit for a new experimental television broadcast station, W10XPR.

Area of latter applications cover the District of Columbia, Philadelphia, and New York, N. Y.

The Connecticut Television Co. Greenfield Hill, Conn.

Company has modified an earlier application for a commercial television station, changing its original request for Channel 8, 162-168 mc. to Channel 8, 186-192 mc, which is the FCC's proposed allocations for post-war television. At the same time, the application was amended to change the transmitter site to Booth Hill, Conn. and to make minor changes in antenna structure.

North Jersey Broadcasting Co. James V. Cosman, President 7 Church Street, Paterson, New Jersey.

This is an application by the licensees of standard station WPAT, Paterson, N. J., for experimental television station to be located at the corner of Broad and Hepburn Streets in Clifton, New Jersey. Plans call for the use of frequency bands from 514-530 mc. 900-920 mc and 1302-1325 mc, with composite-type apparatus, using initially 1 kw power and eventually a maximum of 5 kw. No regular experimental broadcasts will be made for two or three years after construction of station is begun.

The company has a contract with Federal Telephone & Radio Corp. to build two transmitters; one for location atop of the present WPAT tower in Clifton and a second on High Mountain in North Haledon, N. J. About half the research program will be devoted to color television propagation and the other half to the development of television equipment. Expenses for the first year estimated between $50,000 and $75,000, will be shared by North Jersey and Federal Telephone. The latter company is providing the equipment.

Ultimate purpose is to "establish an experimental color television station located so as to give maximum acceptable service to residents of New York metropolitan area." Lt. Comdr. J. V. Cosman, president, will direct the research program assisted by Federal Telephone & Radio and WPAT engineering staff.

Philco Radio & Television Corp. Springfield Township Pennsylvania.

Philco has applied for an experimental television station to be operated on 524-544 mc, with aural and visual power of one kc. (for further information see "Philadelphia Television Outlook" story on page 5).

FCC Decisions

Sherron Metallic Corp. 1201 Flushing Avenue Brooklyn, New York.

Granted a construction permit for a new experimental television broadcast station using peak 10 kw visual and aural power with frequencies to be assigned by the FCC.

Permittee states $45,000 has been appropriated for an experimentation program which will probably require some use of all channels assigned to television above 100 mc. During the war, firm has manufactured factory test equipment for cathode-ray tubes, radar components, etc. and plan to market a line of television studio and transmitter equipment after the war. Paul Gollhofer, former owner of WMBQ in Brooklyn will direct the experimentation.

STATIONS

Modern air-force fighter and knight of old compare armor in WCBW show.

WCBW (CBS), New York

The outstanding program of the month was a television adaptation of

Norman Corwin's "Untitled" in support of the Seventh War Loan Drive. This marked the first Corwin show on television. The production was staged in cooperation with the Treasury Department and under the supervision of Gilbert Seldes. Show was produced and directed by Ben Feiner. Featured in the show was John Hersey, author of *A Bell For Adano* who made a bond plea and spoke briefly on behalf of Mr. Corwin.

How ancient armor's basic design influenced the make-up of bombing crew's flak suits was demonstrated in a program presented by the station in cooperation with the Metropolitan Museum of Art in New York. In the first portion of the program, a medieval castle was recreated on the stage. Leonard Heinrich of the Metropolitan fashioned a part of modern arm on an anvil during the show. Stephen Grancsay, the museum's curator of arms and armor, was the narrator.

Other station programs during the month included news analysis by Allan Jackson and Dwight Cooke; "The Missus Goes A-Shopping" with John Reed King; "Opinions on Trail"; boxing and wrestling matches originating in the studios; and a number of film presentations.

WCBW continues to broadcast two-hour programs Tuesday, Thursday and Friday evenings. The station's test pattern transmissions have been increased to four a week, making a total of three and a half testing hours on the air each week.

Col. Lawrence W. Lowman, CBS vice-president on leave of absence with the armed forces, will return to the network on July 1 as vice-president in charge of television.

"Unconditional Surrender," a new book by Everett Holles, former WCBW news analyst, was given an animated review by Dwight Cooke on WCBW. The story is a record of the Allied conquest from Africa through to Berlin, describing the Battle of Britain, Russia, Tunisia and the American stand at Bastogne. Still pictures, maps and animated effects were used to illustrate the review.

"Young Women in Wartime" was presented by CBS television in collaboration with the staff of *Mademoiselle* magazine. The program pointed up in a series of dramatic incidents the importance of work for those on the homefront.

Scene from "Hansel and Gretel," showing puppets and simple set used on W6XYZ.

W6XYZ (Television Productions), Hollywood

The station was on the air approximately 20 hours last month with such feature presentations as "Hits & Bits," a musical variety program emceed by Richard Lane and wrestling and boxing matches originating in the studios.

Other programs included a series of weekly travel films slides; "Worldwide Paramount News" narrated by Keith Heatherington; "Scanning the Globe," news analysis by Jack Latham and "Events of the Week" with commentary by T. B. Blakiston.

WABD (DuMont), New York

In order to accommodate more advertisers and agencies during the week-day, WABD has eliminated the Sunday show and has added Thursday to the Tuesday-Wednesday evening schedule. Station will be on the air from approximately 8 to 9:30 p.m.

A number of new programs will soon make their debut on the DuMont station. Bud Gamble, free-lance producer and director, will offer a series of two dramatic presentations — "Around Our Town" and "Talent-Scout." Both programs have already been sold commercially. John Hewlett, producer, presented a program based on interviews with prominent authors. The first guest in the series was Kathleen Winsor, author of "Forever Amber."

Several DuMont programs last month were devoted to the Seventh War Loan Drive. Doug Allen's "Thrills and Chills" featured outstanding news photographers and cameramen. Motion pictures were shown to illustrate the cameramen's battle-line experiences.

Philip Fuhrmann, formerly sales executive of the American Broadcasting Company, WMCA and WNEW, New York, has been appointed sales manager of the DuMont station.

Last month WABD was on the air 42 hours. This included 12 hours of test patterns, 10 hours of commercial programs and 20 hours sustaining shows.

New DuMont Station

The Allen B. DuMont Laboratories, Inc., last month established a low-powered experimental television station, W3XWT, in Washington, D. C. Station operates on Channel 1, 50-56 mc.

Dr. Thomas T. Goldsmith, Jr., director of research, is directing a number of tests to determine field strength and propagation data in and around Washington as a preliminary to constructing a large station in the Capital.

The company has leased space on the tenth floor of the Harrington Hotel and plans call for the erection of a permanent antenna on the hotel roof as soon as the WPB permits. On Thursday, May 10th, the transmitter was placed in operation with a temporary antenna structure in order to carry out the tests.

A tie-in between the Washington station and WABD is being planned —probably using existing radio relays.

American Broadcasting Co.

The Don McNeill "Breakfast Club" show which has been making a war bond tour throughout the country, last month was featured in a special Seventh War Loan Drive program on the DuMont station through the courtesy of the sponsor, Swift & Co. The early morning west coast audience participation show was presented in the same style as when aired on the radio. Harvey Marlowe was the consultant producer and director. This type of program proves again the tremendous possibilities of an audience participation show.

WNBT (NBC), New York.

The American Museum of Natural History in New York inaugurated a monthly series of programs designed to acquaint viewers with the world of science. The program consists of discussions and "behind the scenes" dramatizations of scientific subjects. The half-hour show features live talent as well as films of expeditions taken by members of the museum.

The network is cooperating with the New York Yankees in telecasting a weekly program of the baseball games which are beamed especially to hospitalized servicemen in New York. Two cameras are used both perched in a box between first base and home plate. Bill Stern, NBC director of sports, handles the play-by-play description. The series is under the supervision of Burke Crotty, NBC television director of field broadcasts who recently returned from the Army.

Outstanding program on WNBT last month was a three-part presentation of Robert Sherwood's prize-winning play, "Abe Lincoln in Illinois." Program was produced by Edward Sobol, NBC television producer.

To keep New York viewers up-to-date on the latest news, WNBT was the first to present official Navy pictures of the U.S.S. Franklin. Films showed how the ship sailed 13,000 miles into New York harbor under her own power after being hit by Jap bombs. Paul Alley, NBC television newsreel editor, edited and narrated the films.

Burton Holmes, well-known traveller and lecturer, has begun a series of programs on WNBT. The 75-year old lecturer is making his television debut because he is "interested in television."

National Posture Week was celebrated by the NBC station with a presentation of a playlet, talks and hints on good posture. An eminent professor of orthopedic surgery spoke and introduced the play which keynoted the event. Featured in the dramatization were three WAC lieutenants.

Last month WNBT was on the air some 90 hours, including the 14 hours of programming on V-E Day. Test patterns consisted of 39 hours and 51 hours were straight programming. Greatest portion of programs were remote pick-ups of boxing and wrestling matches from St. Nicholas Arena and Madison Square Garden in New York.

W6XAO (Don Lee), Hollywood

Leslie Charteris, creator of the well-known "Saint" mysteries, and writer Anson Bond, who combined to form the Charteris-Bond agency to handle television productions, presented their first video show on the Don Lee station, "The Murder of Miss Television of 1945." The scene of action was a television studio with two girls vying for the television-queen title. With three film stars enacting the roles, the Charteris-Bond partners directed "stills" of the crime, with successive steps in the murder depicted. The photo-crime was filmed at the same time as a special assignment for *Screen Guide* magazine..

Cartoonist Bruce Russell of the Los Angeles Times performing before cameras on W6XAO.

A special program was presented featuring Bruce Russell, editorial cartoonist of the *Los Angeles Times* who described his experiences in drawing for a large metropolitan daily.

In a Seventh War Loan program the main attraction was a film presentation, "The Admiral's Reply." Featured in the show was Rear Admiral D. C. Ramsey, former chief of the Naval Bureau of Aeronautics, who spoke on what America still has to face in the Pacific. His talk was illustrated with graphic sketches and photographs of the Nipponese life and homeland. Also included were captured Jap newsreels.

Novel sidelight to the Johansen Bros. Shoe Co. five-minute film commercial, "Lorraine," was a live non-commercial presentation of the show with the same cast. This program was written by film director Peter Godfrey.

Professor Sherwood of the political science department with the University of California at Los Angeles was featured in a program on the San Francisco World Security Conference. Charts dealing with various phases of the conference and used at the conference tables were shown to illustrate the talk.

A two-hour program with live talent and films continues to be presented every two weeks.

WPTZ (Philco), Philadelphia

Philadelphia's reaction to the outstanidng V-E Day program relayed from NBC in New York to the Philco station was extremely favorable as indicated by the large number of letters sent to the station by viewers in the WPTZ area. Station carried the entire 14-hour NBC presentation of the European victory.

WBKB (Balaban & Katz), Chicago.

The station's outstanding program during the past few weeks has been the "Treasury Hour" show, a half-hour weekly program devoted to the Seventh War Loan Drive. Outstanding stars of stage, screen and radio are featured with returned war heroes. Television receivers in Chicago's Treasury Center pick up the show originating in the WBKB studios. To high-light the show, bond purchasers at the Center are taken to the station to be interviewed.

Herb Lyons, publicity director of WBKB, recently scripted and directed a half-hour program titled, "The Fire Dance." Leading Chicago radio stars

were featured in the musical-variety program which had a Mexican background.

The four winners of the Annual Chicago Press Photographers Association Award for outstanding news shots during the past year were interviewed and the winning photographs were televised.

The U.S. Navy continues its recruiting program each week. Titled "The Recruiters," show features outstanding Navy talent in a musical variety program.

WBKB is keeping pace with the momentous news happenings of the day by presenting three news analysts each week—Joe Wilson, Paul Battenfield and Don Faust. Maps, photos and animations are used by the nswcasters to point up significant battle developments.

Ann Hunter, WBKB television and radio news commentator, having recently returned from covering the final phases of the war against Germany, is scheduled to resume her newscasts shortly.

WBKB continues to operate Tuesday, Thursday and Friday evenings at 7:15 and Wednesday afternoons at 12:30 and 3:30.

WRGB (GE), Schenectady

The Can Manufacturers Institute, in cooperation with the U.S. Army Quartermaster Corps, presented a special program dedicated to the Seventh War Loan Drive. Combining live talent with film, the program traced the history of food-preserving methods from the time of Napoleon to the canned rations now used by our fighting forces. The probable place of canned foods in our post-war living was also discussed. Col. Rohland A. Isker with the Division of the Subsistence Research and Development Laboratory of the Chicago Quartermaster Depot described the army canned rations now used.

The General Electric station last month played host to a group of dealers of the Alexander Smith & Sons Carpet Co. when the "Magic Carpet" show was brought to the G. E. station for a special program. The show is a regular feature on the DuMont station, WABD.

A program featuring leading educators was presented by the American Broadcasting Company on behalf of the Northeastern Radio Council. Included in the round-table discussion show were Dr. John Studebaker, U.S. Commissioner of Education; Mable Hodgkins, president of the Northeastern Radio Council; Gloria Chandler, radio consultant for the Association of Junior Leagues of America and R. W. Howard Pillsburgy, superintendent of Schenectady schools.

WOR, New York

A permanent television stock company is being organized by Bob Emory, television director and producer of WOR. According to Mr. Emory, only actors with legitimate stage experience will be used as they do not have to be taught the fundamentals of stage business for television. WOR's policy now is to present straight dramatic productions, with concentration on mystery shows.

The station's outstanding program of the month was "One Who Came To Gettysburgh," a story about Abraham Lincoln performed by the WOR Brownstone Theatre Players. Other productions performed by the group players during the past month included "Heritage of Wimpole Street," "The Singapore Spider" and "The Necklace."

Station continues to present a weekly half-hour program on WABD Tuesday evenings.

WNEW, New York

The radio station continues to present bi-weekly programs on WABD. Productions last month included the "Town Crier of Chungking," a true story of a Chinese woman guerilla fighter and "The Story of Bess," a dramatization of a bomber. William McGrath, George Foster and Jack Grogan of WNEW direct and produce the programs.

FCC TELEVISION ALLOCATIONS

The FCC last month announced the assignment of seven channels for television between 174 and 216 mc. with the 480-920 band reserved for the new wide-band color television. Six additional bands will be provided, in the 44-108 mc region. The precise allocation within this region remained undecided, but the Commission indicated three possible alternative allocations. Following the FCC announcement that tests would be conducted in the 44-108 mc region this summer with final allocations to be made in the fall, Television Broadcasters Assn. and FM Broadcasters Inc. submitted petitions urging the FCC to allocate the 44-108 mc band immediately and that alternative No. 1 be adopted—which may result in an early allocation announcement by the Commission.

TBA Resolution

The TBA board of directors have presented a resolution to the FCC requesting them "to adopt at once for television, alternative plan No. 1 which gives television 68 to 74 mc, 78 to 108 mc and 174 to 216 mc.

The resolution points out that "cutbacks in use of personnel, plants and materials for military purposes in the electronics industry are now taking place and will become more rapid, while several months of design and production engineering must follow the definite allocation of channels before civilian production in quantity can use such released labor." It also explains that "regional and individual assignments of frequencies must follow such allocation of frequencies and local construction and employment by individual stations will be further deferred."

Alternative No. 1 was selected "because of its long range superiority for television, considering all factors." The resolution promises industry support for the proposed FCC propagation tests.

FCC Report

Following is the complete allocation report as released by the Commission.

"Those who took part in the Commission's proposed allocations were Ben Adler, American Broadcasting Company; T. A. M. Craven, Cowles Broadcasting Company; Allen B. DuMont and Dr. Thomas Goldsmith of Allen B. DuMont Laboratories; O. B. Hanson, National Broadcasting Company; Thomas E. Harris, Radio Corp. of America and NBC; Joseph H. Ream, Columbia Broadcasting

System; and William A. Roberts. Television Broadcasters Association.

In addition, the following organizations submitted briefs: Radio Corp. of America and NBC; Columbia Broadcasting System; American Broadcasting Co.; Cowles Broadcasting Co.; Television Broadcasters Association and Allen B. DuMont Laboratories.

No objections were made or exceptions taken to the Commission's proposed allocations regarding this service. Proposals were submitted, however, regarding further suggested channel assignments.

TBA, Allen B. DuMont Laboratories, and RCA all proposed that the six megacycle band which the Commission had left unassigned be allocated now for the benefit of television instead of reserving the allocation of this band as had been proposed by the Commission in its proposed report. The Commission is unable to comply with this request so far as this unassigned space is concerned. Two megacycles are being assigned to facsimile. As to the remaining four megacycles, the Commission finds that the needs of the fixed and mobile services for these frequencies in this portion of the spectrum outweigh the requirements of television. However, the Commission is able to assign an additional channel to television as the band between 174 and 180 mc which the Commission's proposed report assigned to navigation aids has been assigned to television.

TBA further proposed that a definite nation-wide television allocation plan be set out by the FCC and that television be given the primary right on the channels that it is to share with other services. The Commission expects to issue a nation-wide television allocation plan for assignment of television channels as soon as possible. However, it is not contemplated that any service should have primary right to the shared channels. The assignments of the services to these channels will be on a mutually non-interfering basis so that interference will not result either to television or to the sharing services.

No final decision is being made at this time concerning the precise location of the six television channels in the 44-108 mc region. Three alternative allocations are suggested. It should be noted that under alternative No. 3, television channel 5 would not be immediately available because of the presence of aviation markers centering on 75 mc. Under alternative plans 2 and 3, the FM or fixed and mobile services would be assigned to this portion of the spectrum and hence all television channels would be available at once.

The fear has been expressed that if FM moves higher in the spectrum, television stations authorized to operate on channel No. 1, might be permitted to operate on sound channels during such time as their video was not in operation and thus prejudicing FM service. This fear is groundless. The Commission expects licensees of television stations to make full use of their facilities for television purposes. We reiterate the statement made in our proposed report that if, after a reasonable period, licensees of television stations are not using the facilities sufficiently to warrant an unlimited assignment, consideration will be given to other applications for all or part of the time of such stations.

Alternative Allocations

Thus, the allocation which the Commission is making available for television below 300 mc is as follows:

Frequency Band Megacycles

	Alt. No. 1	Alt. No. 2	Alt. No. 3
Ch. 1	68-74 mc	44-50 mc	44-50 mc
2	78-84	50-56	54-60
3	84-90	60-66	60-66
4	90-96	86-92	66-72
5	96-102	92-98	72-78
6	102-108	98-104	78-84

Additional channels under all three alternatives are as follows:

Ch. 7	174-180 mc
8	180-186
9	186-192
10	192-198
11	198-204
12	204-210
13	210-216

Television channels 7 through 13 will be available temporarily for television relay purposes until such time as these facilities are required for television broadcasting.

The portion of the spectrum between 480 and 920 mc has been made available for experimental television. The portion between 1245 and 1325 mc has been assigned for television relay stations to be used by "pick-up" stations for relaying program material to the main television station for broadcasting. In addition, frequencies between 480 and 920 mc will be available for this type of service until they are needed for television broadcasting. The determination of the channel width to be used must wait until the channel requirements of the equipment developed are known.

As was pointed out in the proposed report, the Commission is still of the opinion that there is insufficient spectrum space available below 300 mc to make possible a truly nation-wide and competitive television system. Such a system, if it is to be developed, must find its lodging higher up in the spectrum where more space exists and where color pictures and superior monochrome pictures can be developed through the use of wider channels. In order to make possible this development of television, the Commission has made available the space between 480 and 920 mc for experimental television. The time which may elapse before a system can be developed to operate on wider channels on these ultra-high frequencies is primarily dependent upon the resourcefulness of the industry in solving the technical problems that will be encountered. In this portion of the spectrum it is contemplated that the Commission will license the entire band between 480 and 920 mc for experimental television and will not designate any particular channels. Applicants desiring to operate in this portion of the spectrum should consult with the chief engineer as to the exact frequency band they should utilize.

The Commission repeats the hope expressed in its proposed report that all persons interested in the future of television will undertake comprehensive and adequate experimentation in the upper portion of the spectrum. The importance of an adequate program of experimentation in this portion of the spectrum cannot be overemphasized, for it is obvious from the allocations which the Commission is making for television below 300 mc that in the present state of the art the development of the upper portion of the spectrum is necessary for the establishment of a truly nation-wide and competitive television system."

TELEVISION
with the accent on "VISION"

(A portrayal of Benjamin Franklin before the camera of Philco Station WPTZ on the program from the Franklin Institute, Philadelphia, dedicating the opening of the Mt. Rose relay station linking New York and Philadelphia.)

WHEN television is launched on a post-war world, a strictly limited group of "lookers" will recognize the technical advances achieved since 1941.

But television's appeal to its great, new mass audience will rest on a principle laid down by a certain W. Shakespeare when he said "The play's the thing . . ."

Philco Television Station WPTZ has presented many types of programs . . . from films to football games on Franklin Field in Philadelphia. When the war is won, and television becomes available to the greatly increased audience, the work WPTZ has already done will be of immense value to the commercial success of the newest of the arts.

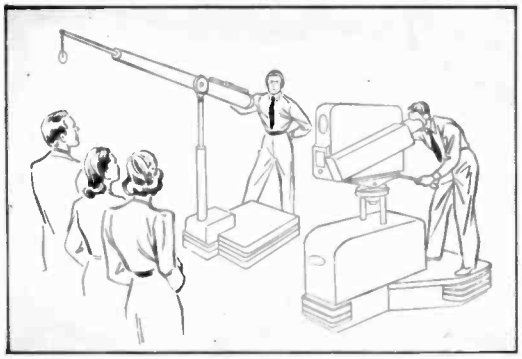
Much experimentation still lies ahead. But a solid foundation has already been laid by the pioneer stations such as WPTZ . . . and by the creation of network facilities linking Washington, Philadelphia and New York which is one more Philco "first" . . . and a noteworthy contribution to television transmission and reception in the Nation's most heavily populated area.

PHILCO

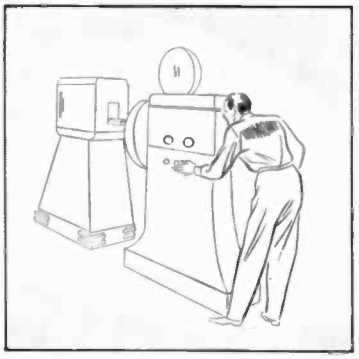
Pioneers in Television Research

DuMONT—FOR THE TOOLS OF TELEVISION

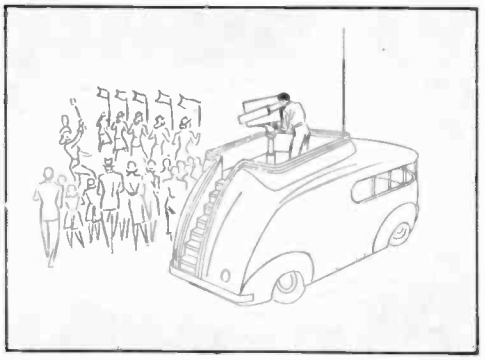
DuMONT POSTWAR TELEVISION BROADCASTING EQUIPMENT



LIVE TALENT STUDIO. DuMont's Iconoscope Cameras pick up the scene and action. An electronic viewfinder enables cameramen to see exactly what looker-listeners see at home. DuMont's Sound Boom picks up voices and music.

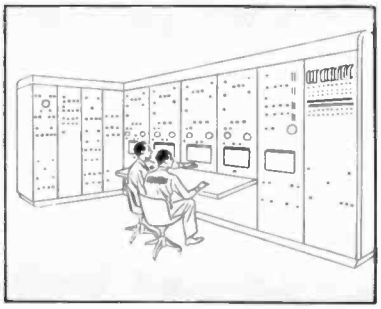


FILM STUDIO. Motion pictures, newsreels, commercials, etc., on 16 mm and 35 mm films require specially adapted projectors and DuMont Film Pickup Cameras.

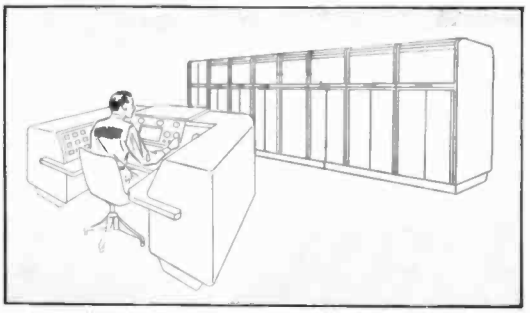


FIELD EVENTS. A DuMont-equipped Television Truck is a small station in itself . . . including cameras, control and sound equipment, relay transmitter and directional antenna. The relay receiver is located with the main transmitter.

PRODUCER'S CONTROL DESK. Monitors show scenes being picked up by different cameras . . . with the largest monitor showing the scene selected for broadcasting. The producer sees the scene exactly as looker-listeners see it on DuMont Telesets.



MASTER CONTROL BOARD. The Master Control Board is the heart of the television station. Engineers manipulate shading and other controls to add technical refinements with electronic artistry to all programs.



TRANSMITTER AND CONSOLE. All meters, oscillographs, controls and clocks are separately mounted in the console for safety, easy visibility and centralized operation. Video and audio signals (sight and sound) are transmitted from different antennae located on the same transmitting tower.

DuMont knows television. • DuMont has equipped more television stations than any other company. These stations are demonstrating the efficiency, the extreme flexibility, the rugged dependability and the greater economy of DuMont Television Broadcasting Equipment.

• DuMont has pioneered in television station operation. It has thus set a broad profit pattern for postwar commercial television.

• DuMont recognizes your needs. It offers the DuMont Equipment Reservation Plan which insures early peacetime delivery and personnel training.

• Study television's economies — get in touch with DuMont today.

DUMONT *Precision Electronics and Television*

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