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Television

THE MAGAZINE OF VIDEO FACT



Televising Baseball • Conde Nast Publication's Video Experiment

35 CENTS

July-August 1945

ELECTRONIC TELEVISION IS AN RCA DEVELOPMENT

This is the third 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.

BUY WAR BONDS

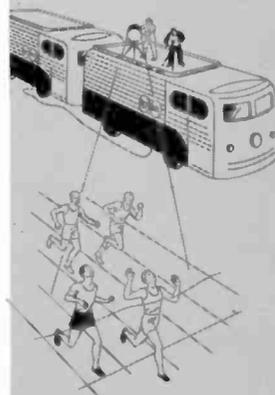
3. THE ORTHICON

IN a paper presented before the New York Section of the I.R.E., June 7, 1939, Albert Rose and Harley Jams, of the RCA Research Laboratories, announced the Orthicon, a new television pick-up tube. In its issue of the following month, this tube was characterized by "Electronics" as "... one of the most significant advances in television electronics since the advent of the Iconoscope itself... A new and greatly improved form of the Iconoscope, using low-velocity electrons for scanning, thereby avoids spurious

signals, obtains storage efficiency ten to twenty times that of the Iconoscope, and produces an output current linearly related to the light input."

With this tube, storage efficiency was stepped up to almost 100 per cent, compared to 5 to 10 per cent previously obtained, and overall sensitivity increased 20 times. The practical effect of this tube was to free television from the limitations of the studio and its artificial lighting, and make the whole world of living events a stage for television.

The Fountainhead of Modern Tube Development is RCA



RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION • CAMDEN, NEW JERSEY

In Canada, RCA VICTOR COMPANY LIMITED, Montreal



We're still feeling our way. That's about all anyone can do about television these days. Our readers have helped us a lot in telling us what they want and don't want. Naturally, advertisers want more on advertising. Engineers would like more technical articles. Broadcasters are mainly interested in station operation. Publishers want to know what other publishers are doing and so it goes down the line.

Because the television industry is a composite one, our task the way we see it, is to present a factual overall picture of the entire industry and its related fields. A case in point is the film production series we plan to inaugurate with our September issue. An agency executive the other day suggested that we try a department on this subject. He thought there was a lot that the program director of a radio station or the radio director of an agency had to learn about film production if he was to use it intelligently in television programming. Why not some solid elementary information? Undoubtedly, some of our West Coast readers will look upon such a step as too elementary and for the most part, it will be that, except where it keeps them posted as to what television is doing with films.

However, at this stage of the game, we are not aiming for the handful of men who really know what television is all about. We're trying to do a comprehensive educational job for the industry. While a station owner may never concern himself with the details of film production once television is under way he will want to have some idea of film costs, production problems and uses in television. The same goes for the agency executive.

This is in line with our policy of presenting factual information, to help the prospective video broadcaster and advertiser prepare for television.

FREDERICK A. KUGEL
Publisher

NOTICE:—Our printers have closed shop for a two week vacation. Consequently we are combining our July and August issues. Subscriptions will be extended accordingly.

Television

The Business Magazine of the Industry

Published Monthly

July-August

Volume II

Number 6-7

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COVER: NBC Mobile crew televising the baseball game at Yankee Stadium.
PICTURE CREDITS: NBC—Sydney Desfor; WABD, DuMont—Larry Colwell.
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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It's all in knowing

● This year, top honors in three classifications of the Annual American Television Society Awards have been given NBC television station WNBT, New York.

WNBT is pleased and proud. Pleased, because although awards are not our foremost goal, these ATS citations are, we feel, recognition of our efforts to make each WNBT television program the finest to be seen on the air.

Proud, because now and then we come up with a "MEN IN WHITE," (Sidney Kingsley's

Pulitzer Prize play) cited by the ATS as the *Outstanding Television Drama Production* of the 1944-45 season; or an "ABE LINCOLN IN ILLINOIS," (by Robert Sherwood) produced after the deadline for the 1944-45 awards, but hailed in *Variety's* recent review as "television's greatest play to date."

Although productions of the calibre of these two are still too often the exception in television—even at WNBT—they do represent forward strides. And it is just possible that



OUTSTANDING TELEVISION DRAMA PRODUCTION

This is Edward Sobol, who produced the award-winning WNBT television drama, "MEN IN WHITE." Sobol's television experience began at WNBT in 1939—the same year the NBC television station inaugurated America's first public television service. Sobol has been actor, director, business and production manager in the legitimate theatre.



OUTSTANDING TELEVISION DRAMA PRODUCTION

This is Ronald C. Oxford, WNBT stage manager for Mr. Sobol in the presentation of the prize-winning "MEN IN WHITE" production. Born in England, Oxford's career as actor, director, producer for the last fifteen years has taken him from his birthplace to the theatre, to Hollywood, to Radio City, and in February, 1944 to WNBT television.

HOW...

they reflect the finest television broadcasting facilities in the business; the longest practical television production experience in the industry.

WNBT thanks the ATS and the society's judges for their recognition of the job we're trying to do well. WNBT publicly salutes the distinguished production and technical staffs whose skill has made it possible for WNBT to win more 1944-45 ATS awards than any other television broadcaster.

If you are considering an initial venture in television, remember the accumulated experience and technical and production knowledge that brought these awards to WNBT are available to all WNBT advertisers.

NBC TELEVISION

WNBT NEW YORK

NATIONAL BROADCASTING COMPANY

A SERVICE OF RADIO CORPORATION OF AMERICA



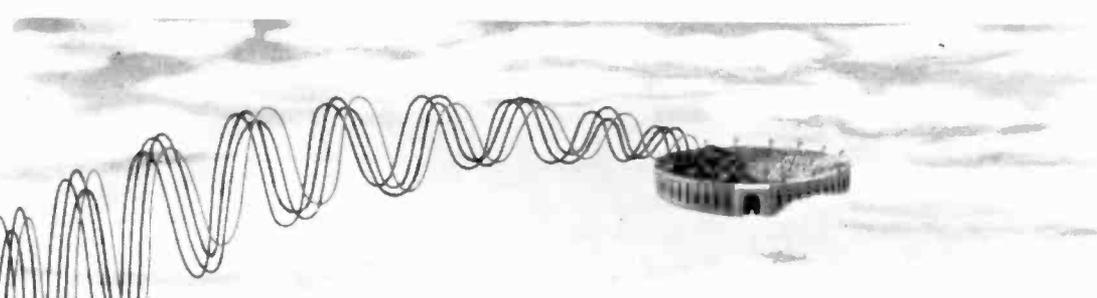
TELEVISION SPORTS PROGRAMMING

This is WNBT producer Ernest S. Colling, who, in addition to his regular studio assignments, handled the outside sports pickups judged best in the ATS awards. Colling joined NBC as television director in 1940. Took over for regular Special Events Director Burke Crotty (just returned to WNBT) when Crotty left WNBT in 1942 for Army service.

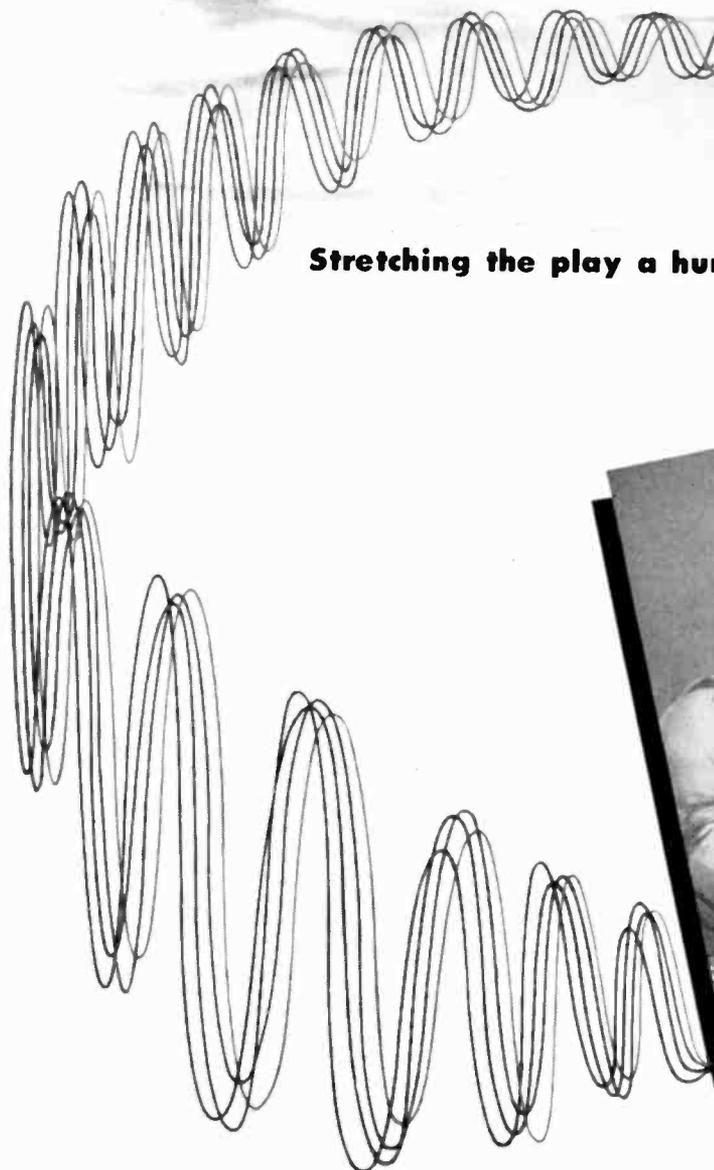


OUTSTANDING EDITING OF NEWS FILMS

This is Paul Alley, Director of WNBT Film Programs, who was given a special ATS award for his superb handling of WNBT news presentations. Long prominent in motion pictures, Alley joined WNBT a year ago to direct news presentation. Reviewers said his "Life of Franklin D. Roosevelt" compared in excellence to a March of Time presentation.



Stretching the play a hundred miles—by television!



So SWIFTLY do televised scenes rocket through space that, while part of a picture is appearing on your receiving set, the television camera is still "taking" the rest of it possibly many hundreds of miles away!

Each second, 30 complete pictures are thrown on the television screen . . . so your eyes see — not half-pictures — but large, clear images and motion without blurring.

Eventually, after the war, you'll have home television in both Farnsworth and

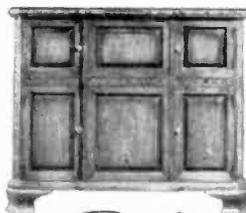
Capehart models, the marvelous *electronic television* developed over 19 years by Farnsworth engineers. It will come in cabinets of your choice, combined with radio, or with a phonograph-radio.

Today, Radar and military electronic weapons employ all the research and production facilities of the Farnsworth Television & Radio Corporation. But new Capeharts and new Farnsworth radios and phonograph-radios, at a wide range of prices, will come from our plants after Victory.

There will be improvements over your pre-war instruments. More faithful tone and reception — glorious, interference-free FM — simple, dependable record-changers — and the miracle of television.

You'll have a wide choice, from modestly priced Farnsworth sets to magnificent Capeharts in distinguished cabinets. And every one—whether Capehart or Farnsworth—will offer you the highest possible quality at its cost. Farnsworth Television & Radio Corporation, Fort Wayne 1, Indiana.

WAR BONDS FIGHT, TOO—BUY AN EXTRA ONE TODAY



THE CAPEHART

THE FARNSWORTH

Television · Radio · Phonographs

FARNSWORTH TELEVISION & RADIO CORPORATION

Television

WASHINGTON TELEVISION OUTLOOK

The battle of the Potomac is now going full blast. The rewards of victory will be television rights in the capital city of the United States, and these, judging by the number of applicants, are worth fighting for. Applications already far outnumber the channels that Washington is likely to receive under present FCC allocations.

There are many good reasons for the intense interest in obtaining licenses for television stations in Washington.

It would be very difficult to find a better lobbyist for one's television interests than a television station operating in the FCC's home territory.

And as the powerhouse of high government policy and focal point of world affairs, the city of classic marble facades and political personalities obviously will be an extremely important source for television programming. Already eight applicants are actively seeking air

space in the Washington territory.

No city, under present FCC assignment of 13 channels in the lower bands, is going to get more than seven, or a top of eight, television grants, no matter how important it is as a marketing area. Because of the close proximity of New York, Philadelphia, Baltimore and Washington, channels will have to be allocated so that there will be no overlapping of video signals.

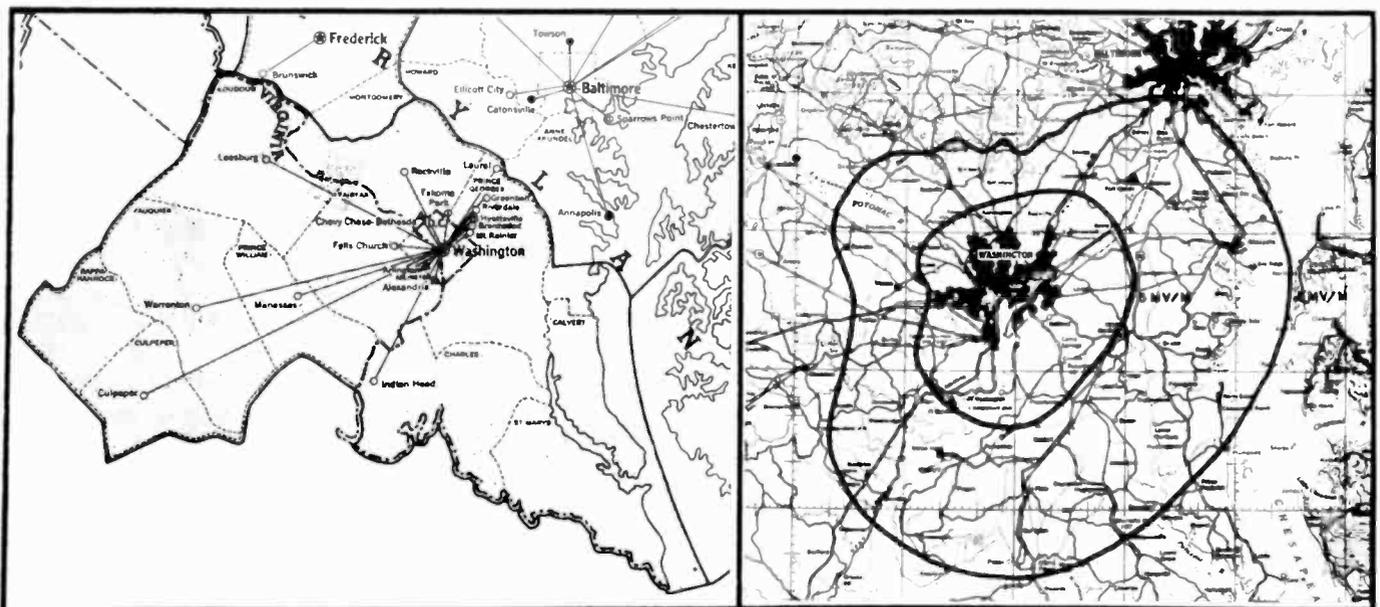
Baltimore and Washington are only 40 miles apart and will have to split the television channels for this area on a 50-50 basis. This means that neither city will have more than four television stations in the years immediately following the war.

War time mushrooming of governmental offices has made Washington in recent years one of the country's outstanding boom cities. The population of the District of Columbia, found by the 1943 census to be 800,000, is estimated to have jumped five percent since then. The volume

of wholesale trade in 1943 was roughly 350 million dollars while retail trade for the same year topped 400 million. For the same year, Sales Management Magazine estimated that the effective buying income of Washington residents was over 1½ billion dollars.

The only television broadcasting going on in Washington today is a small power experimental station, W3XWT, operated by the Allen DuMont Laboratories on the tenth floor of the Harrington Hotel at 11 and E Streets. With 200 watts aural power and 400 watts visual power, the station telecasts on present Channel One, formerly 50-56 mc. FCC's final allocation on June 27 dropped Channel One to 44-50 mc.

Field tests to get propagation data in and around Washington are being conducted by DuMont director of research, Dr. Thomas T. Goldsmith, on an experimental grant preliminary to going ahead with plans for a large commercial station for which DuMont



Hearst Newspapers, Inc.

Allen B. DuMont Labs.

A study of the contour map on the right will show that a 25 kw station will adequately cover the metropolitan Washington trading area illustrated on the map at the left.

has already applied.

Including this DuMont application, there are eight applications for commercial stations now pending before the FCC.

Bamberger Broadcasting Service

Bamberger, a subsidiary of R. H. Macy and Company, department store operators, and licensee of WOR in New York, is asking for a commercial permit with operation on Channel Four, 78-84 mc. Under FCC final allocation for June 27, Channel Four is 66-72 mc. and Channel Five is moved up to 76-82 mc.

RCA transmitting equipment with aural power of 3 kw and visual of 4 kw will be used. No location has yet been selected for transmitter or studio. According to the application, Bamberger will spend \$270,900 for the station facilities at a monthly operating cost of \$31,000 and an expected monthly revenue of only \$1,000 during the first year on the air. Coverage is expected to reach about 950,000 persons.

Jack Poppele, WOR chief engineer and president of the Television Broadcasting Association, is directing television activity. The company has also filed for commercial television and FM stations in New York City and Philadelphia.

Philco Radio & Television Corp.

Philco hopes to be operating in Washington by this fall. The company has applied for 78-84 band for a commercial station and has also filed three applications for experimental stations in the Washington, Philadelphia and New York areas. The request for a commercial station will probably be amended to the 76-82 band, the new television Channel Five under FCC's final allocation. The proposed station will use transmitter and equipment similar to those used by the company's Philadelphia station, WPTZ. Plans call for 10 kw video power. Coverage will take in Washington and adjacent areas within a 40 mile radius.

On the basis of cost experience at Philadelphia, Philco will spend roughly \$450,000 for the Washington station with a monthly operating cost of \$3,110.

The idea behind Philco's applications for three experimental stations is an overall plan to extend and improve its experiments in multiple-relaying of television programs. The applications call for equipment of peak 50 kw power on frequencies to be assigned by the FCC throughout spectrum range from 42 to 10,000 mc.

Philco has spent over \$400,000 on research to date and expects to spend an equal or greater amount in the future. W. W. Merkle, N. F. Smith and A. M. Hopwood, staff engineers are handling the experimentation under the direction of Philco's chief engineer, F. J. Bingley.

Allen B. DuMont Laboratories

As pointed out earlier, DuMont has applied for a commercial station in Washington to operate on the 50-56 band, and is already licensed to operate an experimental station. DuMont plans to locate at 11 and E Streets and provide television service to more than half a million persons. The station proposes to broadcast programs from WNBT by relays through Philadelphia from New York and from Washington over relays to New York.

Capital Broadcasting Company

Operators of standard station WWDC; this company is seeking a commercial permit for a television station with studios at the same location. The transmitter will be built on the East-West Highway near Rock Creek Forest, Md. RCA equipment with 4 kw visual and 3 kw aural power will be used. Channel Six has been applied for, but as these frequencies now belong to FM under FCC's final allocation—an amendment will be made.

Plans call for a total expenditure of \$144,000 for station facilities with coverage of 1,091,296 persons. Program plans and detailed cost estimates will be filed when FCC approves the engineering application. Grant R. Wrathall is engineering consultant.

National Broadcasting Company

Reinstatement is being sought by NBC in this application for a construction permit for a commercial

station for which call letters WNBW were assigned before the April, 1942, freeze. It is planned to locate the studio and transmitter at the Wardman Park Hotel in uptown Washington with an antenna 350 feet above ground. Power will be 2 kw aural and 4 kw visual on band 60-66 mc. NBC expects that more than a million persons will see and hear television shows on this station. C. E. Pfautz prepared the engineering data for the NBC application.

Scripps-Howard Radio, Inc.

This company is a subsidiary of the Scripps-Howard Press Association. It plans to build a station at Falls Church, Virginia, some 12 miles outside the district. It is asking for Channel One, the same one that DuMont is now using. RCA equipment is planned with 4 kw visual and 3 kw aural power sent out from an antenna 850 feet above sea level.

Station facilities will cost \$175,000 and monthly costs will run around \$20,000, according to the application. For the first year Scripps expects to lose about \$10,000 a month, but thinks it will break even during the second year. Cost estimates and engineering data were supplied by Ring and Clark, Washington engineering consultants.

Marcus Loew Booking Company

Further proof of the moving picture industry's interest in television is found in the fact that this wholly owned subsidiary of Loew's, Inc., is applying for a commercial permit on 162-168 mc, using GE equipment with 2 kw aural and 4 kw visual power. Total cost of the station is expected to be \$142,250. Plans are being made for an initial 48 hours a week of programming, with extensive use of 35 mm and 16 mm film. Loew, licensee of WHN and WHNF in New York City, is also applying for a commercial television outlet in that city. The company has no immediate plans for chain broadcasting. Jansky and Bailey, Washington engineers, are station consultants.

Washington Times-Herald

Another newspaper owner keenly aware of television's possibilities, Mrs. Patterson, publisher of the

(Continued on page 30)

CONDE NAST PUBLICATIONS experiment with television advertising

An analysis of one of the most important program experiments to date

The "experts" said it couldn't be done. 95 camera changes in 18 minutes was movie pace . . . present television just wasn't equipped for this . . . and even if it were possible the results would amount to mental gymnastics on the part of the audience . . . it would cause more eye strain and so on went the learned objections. But very wisely Conde Nast brushed aside all the generally accepted do's, don'ts, must's, and but's. They were not concerned with the present day television audience nor were they concerned to any extent with limitations of existing equipment. In one of the scenes in the program they planned to put across the idea of a man's hazy memory by deliberately putting the camera out of focus. Objections were raised that too often cameras went out of focus and any attempt to work it into the script would not be understood by the television audience. But they went ahead anyway.

Joffe

At this point the "they" in reference to Conde Nast should be qualified for it consisted largely of Constantine Joffe, one of Vogue Studio's top photographers with a background of movie production in France and Germany and some very definite ideas on programming. Joffe believes that while television will borrow from all existing media, there are certain salient factors that will make it unique, and this very uniqueness is the unknown quantity that demands experimentation.

Objectives

In their first video show they set as their objectives the building-up of the emotional element and the reduction of eye strain. While disturbing factors in the home have always been a problem for the radio producer, these same interrupting

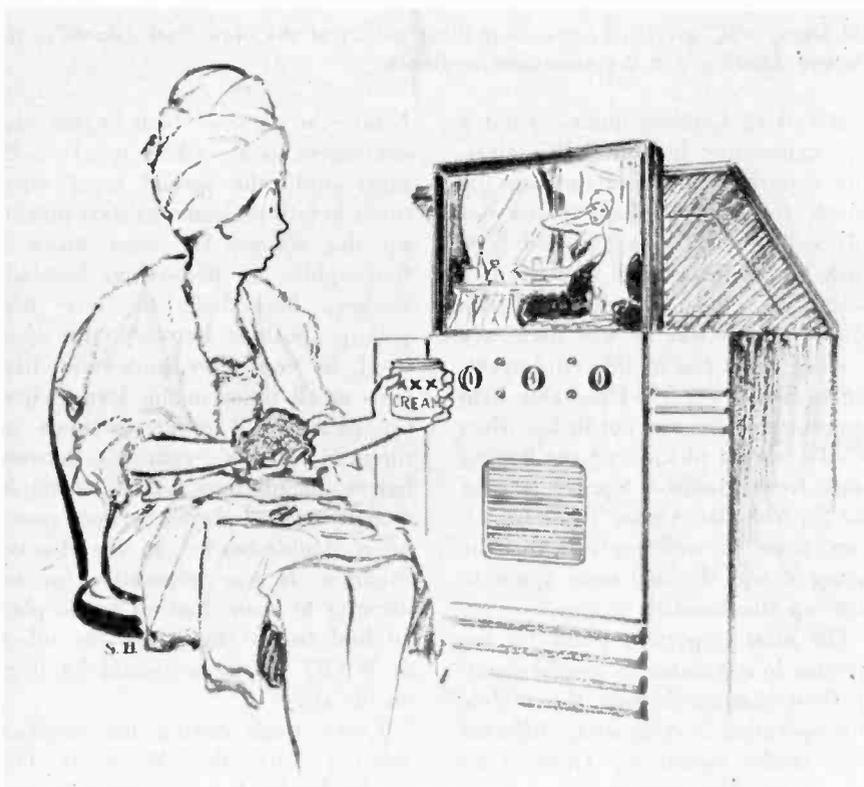
factors will be much more important in television because of the higher concentration necessary on the part of the viewer. It is possible in radio to mix a drink, walk into the next room for cigarettes and still not miss any of the show. Obviously, in television this is impossible, therefore Conde Nast felt that the emotional appeal would have to be stronger than in any other media if audience interest was to be sustained.

In the attempt to reduce eye strain they worked on the theory that in television because of the small size of the screen the movement of the eye is fixed. In the theatre there is usually some side action which helps divert the eye so that it isn't always in one fixed position. But in television there is no chance for the eye to shift to a different part of the set as there is in other media. Therefore, there is no chance for relaxation and

a definite eye strain results. To overcome this Conde Nast experimented with the idea that by using a large number of scene changes (as in the movies) the screen would be automatically edited for the viewer. The constant camera changes would have the same effect on the eye as side action on the stage and thus eliminate eye strain.

Results

They used to be exact, 95 changes in 18 minutes of shooting time. *And it worked!* Not only did the show have a pace which is yet to be duplicated but it *did* keep eye strain down to a minimum. Every present day television producer must take his hat off to Larry Algeo of GE who was responsible for this fastly paced, smooth running production in face of this unprecedented number of sequences. Hoyland Bettinger, GE's
(Continued on page 10)



TELEVISION THE BASEBALL GAME

by BURKE CROTTY

A description of this complete mobile operation by NBC television producer of field programs



Bill Stern, NBC sports director, describing action of the New York Giants at the Yankee Stadium for the television audience.

Televising baseball games is not a new experience for the NBC television department. Before the war the mobile transmitter often visited not only college ball parks around New York but Ebbetts Field and the two New York clubs as well. With the advent of the war it was necessary to close down the mobile equipment. But in September 1944 portable field equipment again was put in use when WNBT started picking up the boxing bouts from Madison Square Garden and St. Nicholas Arena. These broadcasts were so well-received that by spring it was decided once again to pick up the baseball games.

The most important point for the director to remember in special events or field pickups is that the mobile unit operation is completely different from studio operation. There is no rehearsing. The director must know

before the game or bout begins what contingencies are likely to arise. He must study the special event many times before the cameras start picking up the action. He must know it thoroughly, be it boxing, baseball, hockey, basketball, or any field pickup. Besides knowing the sport itself, he must also know what happens at all times in the arena where the pickup will occur—between innings, between rounds, between halves, or quarters. As an example, recently a band played between games of a double-header at the Yankee Stadium. It was imperative for the director to know that all music played had to be cleared in the offices of WNBT before we could let it go on the air.

Every week during the summer, starting with the Memorial Day double-header between the New York

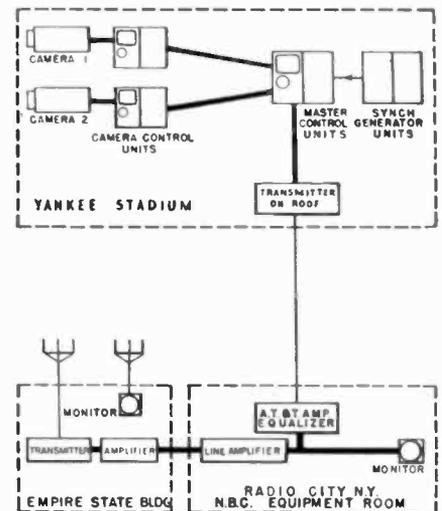
Yankees and the Detroit Tigers, NBC's television cameras are visiting Yankee Stadium and the Polo Grounds to bring viewers in the New York area on-the-spot telecasts of the ball games.

These television broadcasts are arranged through the cooperation of the managements of the New York Yankees and the New York Giants for the express purpose of providing visual entertainment via television for convalescent servicemen in hospitals throughout the New York area. There are currently nine major hospitals with 57 receivers equipped to receive New York television broadcasts.

Director's task

In baseball telecasting, the first essential is that the director, accompanied by the engineer, make an on-the-spot survey of the park. The director must have knowledge of the equipment to be used, exactly what he wants to pick up and from what location. Thus the engineer and director will select the most logical location for the cameras in order to bring to the viewers a picture that will most closely resemble what the viewer himself would see if he were at the ball park.

In making this survey, it should be



Remote circuit diagram.



Final lineup of the game at Yankee Stadium is given to Tom Manning, NBC commentator, by Mel Ott, manager of the New York Giants.

remembered that the single most important baseball picture is that of the pitcher, batter and catcher. Unfortunately, it is today physically impossible in either the Yankee Stadium or the Polo Grounds to get a location suitable for such a picture.

Remembering that this shot is the one most often used by the first camera, the director must then place the second camera, equipped with a long or "closeup" lens, in such a position as to bring the viewer a reasonable-sized image of the outfield. This second camera can at the same time be brought to the infield to give a closeup picture of fast infield action.

As we now stand, our two orthicons are both stationed in a box to the first base side of home plate and all action is covered from there. In the Polo Grounds the cameras are in the upper stands: at the Yankee Stadium, they are on the mezzanine floor.

Two camera set-up

Assuming normal conditions with the two-camera set up, the ideal use is to have the closeup camera on the pitcher and the wide angle lens on the batter. Both cameras then follow all hits. Thus if the wide-angle-lens camera is on the batter the cameraman will automatically follow every hit and the viewer is at least assured this picture. The closeup camera will also follow the hit. But because it is harder for this camera to pan, it might not always catch the outfield action. If it does, that is the picture we will take. Another method, rarely used, is to set the closeup camera at home plate using it for the infield and

the wide angle lens camera to pan quickly enough to catch action in the infield.

There are numerous problems involved for which the director must at all times be prepared. As one instance, if there is a man on first and no outs, a long fly can bring in a run. The wide angle lens camera will follow the ball to the outfield but will not have enough time also to come back to catch the play at the plate. Therefore, the closeup camera will go to home plate immediately or stay with the runner on third base. In this situation, too, the director and cameraman must be prepared for a double play. If so, it is advisable for one to train on home plate to catch a possible score and for the other camera to follow the swift infield action. The director can then switch from one to the other interchangeably.

Under present conditions at NBC, the director must foresee the possible failure of one of the two camera chains. Our operation at WNBT makes it necessary for us to move the portable field equipment from Madison Square Garden after midnight Friday night to the Yankee Stadium or the Polo Grounds before

the gates open the following day. The equipment cannot be moved before 9 o'clock Saturday morning which makes the task of installing it in the ball parks herculean.

In the event that only one camera is working, the director must get all the action with a lens of medium length to follow both long shots and infield action.

Ideally of course a baseball game should be covered by four cameras with the lens of the one camera in between the size of cameras one and two described above. If we had three cameras today we would split them and move the closeup camera farther along the first base line in order to give the viewer better shots of the many fast plays occurring at the first sack. The fourth would provide a variety of shots.

Post war promise

As we envision it, the post-war era will give us orthicons with a smaller plate size in order that we may use lenses like those utilized by the newsreels, with a turret arrangement for simple and fast changing of lenses. At the same time this arrangement will allow bigger and better closeups in the outfield.



NBC'S mobile crew in action at the Yankee Stadium. Cameras are located in a box on the mezzanine floor above home plate on the first base side.

In all instances the director must keep the cameraman continuously prepared for forthcoming action. The announcer can also be of assistance. For instance often the viewer will hear the announcer say "The logical play now is at home" or "look for a possible double play" both of which are tipoffs to the cameraman. Combination of the announcer's tipoff and the director's instructions are usually sufficient for the cameramen to catch every play. The director must be warned however, that the hardest thing for television cameras to catch is a player getting caught off base. In one of the first games NBC telecast before the war, the hidden ball play was pulled off on second base. Naturally none of our cameras caught the action. By the next day the flood of irate protests over our missing this particular bit of action was greater than any praise we received for covering the game. We timidly explained if a man on second base couldn't see the ball how could the viewers expect the director or cameraman to see it.

It is hardly necessary to stress the fact that the cameraman must know baseball. We have been training all NBC camera operators in the various aspects of the game and we have come to the point now where a very small percentage of plays is missed in any game.

On the technical side, one of our engineering problems is shading the picture on a bright day. This is a particularly difficult problem when home plate is deep in shadows late in the afternoon and the rest of the field is brightly lit. A slightly overcast day is by far the best in which to operate at either of the two New York ball parks. As a matter of fact, when we telecast the Eisenhower Day baseball game from the Polo Grounds, many viewers thought that our picture was best when it was raining hardest.

Three cameramen and the announcer are stationed in the box, with the cameramen alternating between two cameras and the announcer sitting between them. The director sits with the chief engineer and the video and audio engineer in the control room located underneath the stands. The picture is relayed from the cameras to the control room by coaxial cable. Here the picture can be shaded and

the sound regulated—sound of the announcer and of the crowds, as picked up by the parabolic reflector overhanging the box where the cameras are located.

On the roof we install our transmitter which operates on 288 megacycles. The picture is transmitted from the ball park roof to the roof of the RCA building. It goes through the equipment in the RCA building and is then transmitted by coaxial line to the Empire State transmitter. From there it is sent out on the air. Both the signal from the ball park and the on-the-air signal can be monitored in the NBC control room.

The orthicon cameras are much more highly sensitive than the regular iconoscopes used in studio programs, although exactly how much more cannot be measured. Under normal conditions, we use a 19-inch lens for the closeup camera and a 12-inch lens for the second camera, although we have intermediate lenses which can be used for different kinds of shots.

Announcers Technique

As in boxing, we have discovered that the announcer in baseball games must use an entirely different technique from that used in radio broadcasting. Since the televiewer can see the action, the announcer's role is more commentative than descriptive. Also, for reasons described above in tipping off the cameraman, the announcer must know all possible plays before they happen. He must know the game thoroughly because he cannot fool anyone who is actually watching the contest. He must also know from the director what pictures are being picked up so that he describes only that action which the camera is currently taking.

In all, thirteen men are involved in a field pickup from the ball parks. In addition to the director, assistant director, and announcer, there are two cameramen, one or two relief cameramen, one video shading engineer, one audio engineer, one master control engineer, one man on the transmitter and two technicians.

What comes out of a home television receiver tuned to the ball game is the joint effort of all thirteen men, for in these telecasts, like any others, the success hinges on the performance of all involved.

CONDE NAST

(continued from page 7)

former program manager who aided in the production, felt that without Larry Algeo the experiment could not possibly have been undertaken successfully.

On the basis of these objectives they chose "Pattern for a Dream," a story written by Conde Nast staffers which was produced at GE's WRGB in Schenectady. It was a half hour commercial for Vogue Patterns. The program opened in the mess room of the aircraft carrier where several officers come upon a Vogue Pattern book among a pile of magazines. They discover in it the picture of a girl whose face has been blacked out so that she could be the girl of each one's dreams. In his own mind, each of the men supplies her with the face of the woman of his own heart and a series of flashbacks reveal their reflections and memories.

The final sequence is a sophisticated ballet built around the dreams of the young officer in whose life there is no one woman. It is particularly in this scene that Vogue Patterns are featured although subtly and indirectly.

Many changes of scene were necessary to cover the story. This made the use of film practically imperative for the purposes of a smooth running production. 12 minutes of specially produced film were used. And it is here where Conde Nast encountered its greatest difficulty. GE equipment called for 35mm sound track and the only film they could obtain that could be used was 16mm color. This in turn had to be blown up to a 35mm composite print. It was headache from beginning to end and resulted in a loss of quality particularly in the sound. Everything seemed to go wrong and while it was the low spot in the program all felt that the combination of film and live talent will be a "must" when television gets under way.

An appraisal of Conde Nast's first programming attempt clearly indicates that the editorial and advertising approach of a magazine is a sound and important basis for video programming. And when this solid foundation is combined with a program conception as intelligent as Joffe's, it's not too difficult to appraise the important part publishers will have in television programming.

VIDEO WORKING SCRIPT

The task of the director in television as compared to any other entertainment medium is much more complex. Television directing demands continuous split-second action to an extent which has never been needed before.

Not only has the director a number of cameras to work simultaneously but at the same time there are video and audio technicians to check, at least two picture monitors to watch, constant communication with the stage director as well as close attention to the working script. The radio director who prides himself on mastering broadcast timing will have an entire new series of problems.

The film director will have to learn how to direct as much as an hour of continuous programming.

The working script is all important in television production because of this complexity of action. It is the director's blue print or shooting script. It is the result of hours of planning and rehearsal. The working script must be complete in every detail as it is the only guide the director has and for this very reason it must be kept in as simple and readable form as possible.

At the present time there is no standard working script. If complete confusion is to be avoided when

production really gets under way some sort of standard script must be worked out, otherwise technical directors at each station will be working with different scripts and agencies and independent producers will have their own variations. It just doesn't make for smooth production, for while all the scripts might be similar basically, its the small differences which will cause miscues, wrong camera action, etc.

Below are presented three scripts, all now in use, one by NBC, the other by CBS, and the third by Bud Gamble, program consultant Farnsworth Television and Radio Corp. and independent producer.

SAMPLE PAGE - NOT TO BE BROADCAST - OF TELEVISION VERSION OF:
TWO SOLDIERS - By WILLIAM FAULKNER - PRODUCED ON STATION WGBH, CBS, NEW YORK

AUDIO	TEXT	FLOOR & SOUND	VIDEO
	BOY: (cont.) one more night I just couldn't 'a' stood it. So I thought maybe I might take my shoes and drop them out the window and then I could climb out like I used to watch Putc do when he was just seventeen and Pap held that he was too young yet to be tomcattin' a round at night; and I could go to the barn and get my slingshot and knife. I thought I could do it... and then I did it! (He rises)		TAKE #1 PREVIEW CH. 3 (dark road) RELEAY #3 on 4
HARMONICA UNDER		CUE HARMONICA CUE BOY	FADE OUT #1 & RELEASE FADE IN CH. 3 PREVIEW #2 (signpost)
FADE TO NIGHT SOUNDS (Narration B2)	It wasn't cold. It was just dum confounded dark, and that highway was stretched out (DISS.) in front of me, with nobody usin' it... twice as far, like a man does when he lays down. (LESS.)	BOY TO B2 CUT HARMONICA FULL 2 CUE BOY	DISSOLVE (signpost) PREVIEW CH. 3 (dark town) DISSOLVE (to 3)
NIGHT SOUNDS OUT	Daybreak was just startin' when I walked		LIGHT UP SLOWLY

The CBS script on the left separates the audio and video instructions by putting them on each side of the script. Bud Gamble's script (lower left) tries to avoid this separation of cues by putting all cues and instructions on the left hand side as is customary in film production. High point in the Gamble script unfortunately does not show up in the illustration. Gamble uses red type for all dialogue in which action takes place. This automatically warns the director of pending action. The NBC script has a unique innovation in the drawing of lines to the exact spot where either audio or video action takes place. This method completely fuses sound and camera cues.

<p>FADE OUT Camera # 1 FADE IN Film</p> <p>After Film Video to Camera #1 Camera #2 Ready Close up Stage #2</p> <p>FADE IN Camera #2 Close up</p> <p>Hold #2 Ready #1 Long shot stage #1</p> <p>out to Camera #1 Ready #2 Med. Long stage #3</p> <p>FADE IN Camera #2</p> <p>CUE RING BELL</p>	<p>I wish we could go back to the days of the gay nineties.</p> <p>Mary</p> <p>(As they rise) Golly the war fun! I wish we didn't have to come back so soon. (Mary walks to window)</p> <p>Brent</p> <p>Well now that we know how to do it we can take a trip back into the past anytime. I think this calls for a celebration. He takes some money out of his pocket. Here Mary run down to the corner and get a quart of ice cream.</p> <p>Mary</p> <p>Oh, boy! Ice cream! She runs off to the left!</p> <p>Brent</p> <p>(calling after her) Chocolate and Vanilla and be careful! (He turns to Sally)</p> <p>Sally</p> <p>(Help me with the fishes, Sally leaves thru door stage left) Beartell rings! Brent runs and opens door!</p>
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(3 ON CLOSE UP OF CROWD FIRST SHOWING BACK OF FAKEE ANNOUNCER FOR C. V. OF FAKEE)

PAUSES

CROWD MOVES FIRST

3 TAKE COST

CUE: WE GO TO THE WORLD'S FAIR

FAKEE
(Ad Lib opening just a bit)

Just a moment Ladies and gentlemen. Let me have your attention for the smallest fraction of a second. Just the fraction of a second that may be important enough to change the trend of your entire lives. NOW I'M here as a representative of the S.P.N.A.B.M.W.V.

I know just what you want to ask Brother. What, you ask, in this alphabetical age is the S.P.N.A.B.M.W.V?

(MAN SHAKES HEAD)

IT'S THE Society for the Protection of man against the Blandishments of Matrimonially Maddened Women. A matrimonially maddened woman is a female who upon being introduced to the male, immediately buys a hope chest and starts stealing silverware from the leading hotels. We are trying to save man from marriage.

1 ON STREET

(MORE)

SLOT MACHINE TELEVISION FOR MASS AUDIENCES

An interesting idea on subscription television is proposed by J. B. van Urk, New York advertising man

To build up a mass television audience in the shortest possible time, Mr. van Urk proposes that television sets be rented for a very nominal sum or sold outright on virtually a cost basis. By either of these ways, he believes that an enormous television audience willing to pay for good programs could be quickly obtained.

If each of these myriad viewers paid twenty-five cents for the privilege of seeing in his home a smash Broadway hit or a championship fight, the aggregate amount collected would be very great. Great enough to leave a handsome profit to the operators of this system. And certainly no producer or right promoter or similar impresario could afford to refuse the percentage of this income that he would be offered as compensation for televising his show or fight.

Proposed Plans

The broadcast, according to Mr. van Urk's plan, could be piped in by telephone wire or electric power lines. In fact, there is a strong possibility that power companies, always alert to new sources of revenue, might be induced to install wires and sets and collect fees for their use by means of a meter arrangement just as they now collect for the use of electric light and power.

Still another method might be to use the American Telephone and Telegraph Company's nation-wide facilities. This method would be almost identical in operation with the recent A.T. & T. proposal for a two-way vehicular telephone service. Special events of great public interest, such as a world's championship heavyweight fight, would be picked up by regular mobile television units. The program would then be relayed to a central distribution point (control room) by means of telephone cables or short wave radio relay. From this point, the program could be sent out to the subscribers' homes by means of telephone cables. This would be technically practicable over

short distances as in urban areas. For longer distances, the program could be sent out over co-axial cables to other urban centers for further distribution over telephone wires. Existing telephone wires could be utilized to feed the program into the homes of subscribers, or wires could be specially installed for this purpose.

In the home, the program would be made visible to the audience by means of one or more small mass-produced television receivers. In operating these receivers, two methods of collecting the audience fee could be used.

Fees

Here's how the first of these methods would work, according to Mr. van Urk. Receivers would be equipped with slots for five, ten and twenty-five cent coins similar in operation to a telephone coin box. These slots would control only a certain section of the tune in range of the set dial. The ordinary free televised programs would be tuned in as far as the point of the slots. In order to tune in a special events "premium" broadcast, it would be necessary to insert a coin to release the dial.

This kind of set would be an enclosed job, made foolproof at the lowest possible construction cost and with a minimum of controls needed to operate it. Because of the fact that the programs would come in through a telephone or feed wire, there would be less parts than in a straight radio television receiver. In this regard, the important things would be volume control for sound and control of the intensity of light on the video.

The second way to operate the receivers would be to have them constructed so that by throwing a simple switch, the "premium" program could be received and the cost placed on the telephone bill as with long distance calls or telegrams, or, in the alternative, registered on a meter as in the case of electric power.

Special events receivers could be installed in railway stations, amuse-

ment centers, and similar public places, in arrangements similar to telephone booths by using "stall" two seaters. A coin in a slot would tune in the special events of the day. This system could also be applied to parks, schools, hotels, restaurants, and clubs, following the pattern of juke box installations.

If Joe Louis were fighting for the heavyweight championship, it is conceivable, if enough sets were made available, that five million persons would pay twenty-five cents each to see and hear this event. Thus an immediate gross revenue of \$1,250,000 would be collected in one night.

By the same token, several million persons could certainly be relied upon to pay five or ten cents to see a popular Broadway musical show. Special motion pictures could be programmed at certain hours for charges varying from five to twenty-five cents.

With the proper exploitation of all these sources of income, receipts would be so great, that it would not take long to amortize the original costs of setting up a special events television system and to make substantial profits.

FCC Position

Where does the FCC come in on all this? Only in the event of the use of air waves, which is not anticipated, would permission have to be granted by the FCC for charging fees for special events programs. Should the need for such permission arise, then it would be necessary to set up certain standards of programming to assure the televising of only top notch special events such as athletic championships, hit shows, world series ball games, and similar high quality exclusively purchased programs.

The idea of subscription television has many possibilities. While the basic idea is by no means new the coin box in the home is, and might give subscription television the angle needed to make it both practical and profitable. Muzak, Incorporated, has

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BUILDING A TELEVISION STATION ON A SHOE STRING

or the *Saga of William B. Still*

\$20,000* is all it cost Bill Still to erect New York's fourth television station, W2XJT, which began operation on an experimental basis July 1st, out in Jamaica, L. I.

\$150,000* is the figure quoted by transmitter manufacturers for a 5kw station which is similar in equipment to Still's except for the additional power.

\$130,000 is the difference and that's a lot of money in any mans language.

It is this disproportionate difference that is focusing industry attention on W2XJT which operates on Channel 13 (230-236 mc) with a 600 watt (peak) video and 150 watt audio transmitter.

Equipment

Although all the equipment is not completely installed in the studio as yet, plans call for two cameras, one film projector, one film pick-up camera, a master control board with three video monitors, studio lighting equipment, audio equipment, an intercommunication system, an antenna mounted on a 200-foot tower, spares and testing equipment. Excluding the tower, Still places the entire cost at \$17,000.

The original estimate for the tower was \$1,500. However, due to the tower's proximity to elevated lines and its location in a busy shopping area, a special construction job was necessary in order to conform with New York City regulations. This will boost the final tower cost to around \$4,200.

Prewar Basis for Postwar Estimate

Getting back to the \$130,000 difference between Still's figures and those of the transmitter manufacturers, a look at the DuMont pre-war costs for a 5kw station which is very much in line with GE's estimates (Television, June) should be of interest. Naturally, these figures will vary according to the locality and prob-

lems in transmission which each would present. Here are the figures:

Two cameras with push dollies and studio control desk	\$23,000
One film projector	4,000
One film pickup camera	3,000
Studio lights	5,000
Audio equipment	5,000
Master control board	35,000
Video and audio transmitter with control console	36,000
Antenna	3,000
Spares and testing equipment	13,000
Soundproofing, electrical wiring and structural alterations for studio, transmitter and control rooms	25,000
Installation cost	7,000
TOTAL	\$159,000

But this figure cannot be taken as final. Material costs and the labor market, as well as demand for the equipment, will all play a determining role in the final cost price.

Comparison

W2XJT is the result of one man's highly technical skill and unremitting labor over a two year period. Whether the \$20,000 figure will stand up after a year's operation remains to be seen.

Still will have to show that his equipment can stand up and perform as well as transmitters manufactured for \$150,000. The \$20,000 figure does not include labor costs. Considering that Bill Still has worked more than two years on the project, it would be fair to estimate an additional \$20,000 for labor. Then too, the difference in cost between a 600 w and 5kw station would probably add another 20% to the final price. Other important points which must be brought out if a fair comparison is to be made is the type of camera lens used, the design of the synchronizing signal generator, type of lighting equipment, studio equipment, whether the film projector is 16 or 35mm and what kind. And finally it remains to be seen whether W2XJT can meet the signal wave form specifications of the RMA.

There are many intangibles which are not counted in the \$20,000 cost but without which W2XJT could hardly have emerged out of the dream state.

First is Bill Still himself. Possessing unusual technical skill and ability, he has personally constructed and designed more than 90% of the equipment in his station. Cameras, transmitter, intercommunication system, control board and sound equipment were completely remodeled.

Station Application

In February 1943 Bill Still applied for a television station with the FCC. He has worked day and night since personally supervising and working on every phase of construction. His only help has been the periodic assistance of a few engineering friends and the aid of several high school boys.

This is quite an accomplishment, but then you have to take into consideration the fact that Still started puttering around with radio and building crystal sets at the age of ten. By the time he was 15 he had constructed his own transmitting equipment and earned his ham license. His formal education stopped with high school and immediately afterwards he started working in the electronic field for a few of the transmitter manufacturers. Four years later he opened his own radio shop. With the advent of the war he secured some small contracts for his little shop on Navy walkie-talkies and a special projectile speed measuring device.

Trading Area

W2XJT is located in Jamaica, a residential district in Queens, (one of New York's five boroughs), which has a population of 150,000. The section is rated as the third retail trading area in New York City, with an estimated shopping population of 2½ million drawn from Queens residents and outlying truck farmers. Gertz and Montgomery Ward are the

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* Round figure estimates

"Dey'll Never Get It Off De Ground"

by Bugs Bunny

Bugs Bunny and his creator, Bob Clampett of Warner Bros. Cartoon Studio, discuss some of the high-points of cartoons in television.



"Howdy folks! Dis is Bugs Bunny speakin'.

What's all dis chatter about throwin' movin' pitchers around tru de air elec-chronically?

But seriously now, folks, dis television ting — if you ask me

"Dey'll never get it offa de ground." Why — just de other day I wuz sittin' around, over at de Warner Bros. Cartoon Studio, gassin' about television wit me friend — Director Bob Clampett. For a coupla years he's messin' around nites wit new cartoon techniques, and 'dis here television stuff.

"Listen, B.C.," I'm sayin', "You're oofy-magoofy — or Looney-Tuney or sumpin', t' spend all dis time messin' wit a ting of de fewcher. What d'ya wanna do — have a noivuss break-up, or sumpin? Why,

"Bugsy, ol' boy," sez Bob, "Dis television ting is gonna be big. Lots bigger dan you or I."

"Bobsy, ol' boy," sez I, "Dey'll never get it off de ground." Den Bob slips me de \$64 question —

"And how about Macaroni and his wireless telepathy?" sez he.

"A fluke," sez I. "A Sunday punch if I ever saw one. But just supposin' dis elec-chronic business really is de McCoy," sez I. "Where do I come in? What about cartoons over television?"

"Now we're gettin' somewhere," sez Clampett. "Draw up a chair and lend me your ears. Foist off—lemme say — animated cartoons over television gives a sharpness and clarity superior to any other technique because of its line quality — and sharp, simple tone images.

And, foidermore," continues Clampett, "de cartoons' faster tempo, and direct approach — makes it able to tell a story or punch over an advertising point much more briskly dan —"

"Quick like a wabbit?" I inter-polates.

"Quicker. yet. And, besides —," continues Clampett wid'out even takin' de pause dat refreshes, "de animated cartoon is poifect for puttin' over everyting from kids serials to 25 second commercials. From —"

"O.K. — O.K. —" I interrupts. "Who do ya tink ya are, anyhow — Dr. Tree De Forest — or sumpin? Givin' off wit' all da facts and figures —"

"No, Bugs — I'm no expert."

"O.K. — O.K. — Mr. Smarty-pants," I'm tellin' him. "So let's say dis television proves t'be de real malarky — and let's say cartoons come over like a million bucks — den comes de defoogalty!"

"What's de rub, Rabbit?" asks Robert.

"Just dis, bright-eyes. Cartoons'll not only look like a million bucks — dey're liable to cost a —"

"Million bucks?"

"Well, not exactly — but it won't be hay. Pen and ink monkeys don't work for peanuts anymore, y'know. And Wabbits may wove cawwots' — but when pay day rolls around — we're all just like mother and daughter."

"Y'mean, —ah — workin' for de Yankee dollah?"

"Precisely."

"So?" asks Clampett.

"So — what boddors me is dis," sez I. "Who's gonna pay de freight on cartoons at de present price per foot?"

"A civil question," admits Clampett, "which desoives a civil answer."

"Y'see, Bugs, we, in de production end of cartoons, have realized dat television during it's formative years — will be faced wit dis cost problem you speak of. We've given it a lotta thought and we already have a few of de answers.

"Foist off — you must remember — a film made t'be shown on a gigantic theatre screen is one ting — an' one made t'be shown on even de

largest television screen is anodder. In a 7 minute animated cartoon — every pen line is a cost. Therefore — SIMPLIFICATION is de answer.

"Say, fr' instance," continues Clampett, "Disney leaves de' buttons off of Mickey Mouses' pants —"

"Sorta risky, ain't it?" I asks.

"Can't you ever be serious, Mr. Wabbit. What I'm attempting to point out is this. On the small television screen — the absence or presence of such a small detail would never be noticed. And yet, one button, when carried through a series of thousands of consecutive drawings — can cost a pretty penny — and a few Yankee dollahs t' boot."

"Therefore, — on television — simplification of detail in both character and background is better — not only *commercially* — but *artistically*."

"I still don't think Mickey's gonna like it — goin' around wit' no buttons on —"

"Besides, Bugs," continues Clampett, "De cartoon will make its costs justifiable on de spot announcements and station breaks by virtue of dere' many repetitions. We've stumbled on to a lotta other time and cost savers — but, de real ideas'll come when de Hollywood cartoon makers really start grindin' out films for television.

Out here in de Land of Oz we have de greatest grouping of animation experts in de world today. When dese animators, writers, and technicians get dere teeth in tele-cartoons — you'll see de quick development of a sensational new style of cartoon — tailored to television. Both artistically — and monetarily."

"Bravo! Mr. Clampett," sez I.

"Thank you, Bugs," sez Bob.

"I'm glad you're beginning to see it my way."

"But, if you ask me, Bob," sez I nonchalantly takin' a bite outa my carrot. "Dey'll never get it offa de ground!! or will day?????"



ONE MAN'S REFLECTIONS

A Regular Feature by DR. ALFRED N. GOLDSMITH

Flood Tide

It has been said that there is a tide, in the affairs of men, which taken at the flood leads on to fortune. If neglected, regret, disappointment, and ruin face those who will not see.

The advent of each new industry poses serious problems to those older industries which deliver a product or service somewhat similar to that of the new industry. A great radio pioneer and leader has well said that the "spectre of obsolescence" hangs darkly over each industry.

Possibilities

When any industry faces a possible parallel service or product from a new industry, there are several courses which it may elect to take. The first may be termed the "ostrich method." On this basis, the older industry buries its head in the sand, so to speak. It denies the usefulness or value of the new industry by open or covert methods. It depreciates the new industry and endeavors to block first its advent and then its progress. And it is determinedly opposed to taking any part in the new industry or having any interest in that industry. The thought of being one of the leaders of the new industry is instantly discarded.

A second possible course of action for the older industry is the "wait-and-see method." According to this course of action—or inaction—the older industry assumes an attitude of cautious neutrality somewhat tinged with hostility. It watches the course of events in the new industry more or less closely. It takes no active part in the development of the new industry nor does it lend any assistance to that industry. It is not alarmed at the prospect of being "frozen out" of the new industry at a later date. It takes the stand that it would rather pay many millions of dollars from its ample treasury for a position in

a developed industry than relatively few thousands of dollars for a good position in the new industry from the very start.

A third possible course for the older industry is the "constructive-participation method". According to this course, the capabilities and advantages of the newer products or services are systematically studied and they are compared with the old. The best field of application of the new is determined logically, analytically, and in accordance with good business sense. Active work is initiated to adopt or adapt as much as possible of the new methods to the older industry and, at the same time, to take a position of adequate importance in the new industry.

The first, or "ostrich method" is an easy one, frequently chosen by conservative and wealthy industries with a long record of success behind them. It is a particularly attractive method to older executives who, in a position of financial affluence, see little reason for toil, trouble, and a certain risk in entering a new industry.

The result of the first course of action is usually an unfortunate one. Just what happens depends upon the relative merits of the new and old—but in general the result of the "ostrich method" is an unhappy one.

The second or "wait-and-see method" appeals to the more cautious and less enterprising type of corporate executive. It avoids risks but it minimizes returns.

And the assumption that a satisfactory position can be taken in a new industry at any desired time, and for any available amount of money, is sometimes fallacious. Actually, the second method is hardly less risky and little more constructive than the first.

The third or "constructive participation method" is thoroughly in the American tradition of enterprise and initiative. It appeals to far-sighted and energetic men. And, given a new

industry of real promise, it leads them to further fame and fortune as well as a major contribution to public welfare.

The television industry is a case in point. Here we have an important new service to the public, purveying visual and audible entertainment material to an audience which will eventually comprise the major portion of the population of the United States. This new service is a subject of natural interest to the motion picture industry, which provides a somewhat parallel service (though not in the home). The wisdom of the attitude toward television which the motion-picture industry may assume will determine the future relationships of these industries and the benefits which the motion-picture group may derive from television.

Phonograph Industry Example

Not so many years ago there was built up a vast organization in the phonograph and record field. Its prestige was unequaled, and its financial returns most impressive. It apparently held a permanent and paramount position in the field of musical entertainment for the people of the United States. Radio broadcasting, at that time a rather puny infant, came into being.

The older organization believed it was entirely secure in its position, particularly since it was convinced that it controlled, perhaps for all time, the greatest opera, concert, and solo talent in the world. This talent, it insisted, would not be made available to radio broadcasting on any terms but would be restricted to phonograph recording. All that radio would ever be able to offer was some third rate honky tonk vocalist or small town dance band.

Phonograph equipment in cabinets sold by the older company at one time bore a plate carrying a warning to the purchaser that no radio equipment was included by the manufacturer in the phonograph cabinet in question, and that, if any radio equipment were later added, the original manufacturer assumed no responsibility for its performance!

At about the same time, a demonstration of an electric phonograph was given to officials of the same company who viewed the device as trivial and undesirable. It was dismissed

(Continued on page 30)

AMERICAN TELEVISION SOCIETY AWARDS

The Outstanding Production—WBNT FOR “MEN IN WHITE”

The Pulitzer prize winner by Sidney Kingsley was the 45-minute prize-winning dramatization, produced by Edward Sobol, NBC television director.

Because of the time element the adaptation was built around a combination of only the first four scenes.

Sobol soon found that producing the hospital scenes had its peculiar problems. The preponderance of white in a hospital—white clothes on internes and nurses, sheets, and bedding caused a flare-up which NBC licked by dyeing all the white material blue.

Consistent Effort in Television Commercials—RUTHRAUFF & RYAN, Inc.

Effective video commercials have been the keynote of Ruthrauff & Ryan's two years of experimentations for Lever Bros. products on the DuMont station.

In the ninety half-hour programs produced, practically every type of show and commercial technique has been tried. Credit must go to Lee Cooley, Ruthrauff and Ryan video director for not only selling Lever Bros. on the soundness of experimenting in television advertising now but also for his intelligent approach to video commercials.

The Outstanding News Program—“CBS Newscast” with EVERETT R. HOLLES

(For information see “Editing the News for Television” by Mr. Holles in the April, 1945, issue of *Television*.)

The Outstanding Contribution in Children's Programming—WRGB (GE)

Surveys show that about 26% of the WRGB audience are under 18 years of age. WRGB decided that this 26% of the audience should not be neglected. One of the results was the Children's Book Week program.

This show was divided into three parts. It started with a film of youngsters reading and selecting books in the Schenectady Public Library. From there the action switched to a replica of the bookshop of John Newberry, author of the first children's book more than 200 years ago. The final scene was a dramatization of Jack and the Beanstalk.

Development of Television Commercially—WABD (DUMONT)

“A” for effort and “A” for results. That is the score for the DuMont Station in so far as encouragement of television activity among advertising agencies. Twenty-five national advertisers have experimented at WABD. DuMont has recently inaugurated a program service department under the direction of Lou Sposa to help train agency personnel on phases of television production. Sam Cuff is station manager.

WPTZ (PHILCO), For Developing Football Television Technique

For the past five years, Philco Radio & Television Corp., with the cooperation of the Atlantic Refining Co., has been televising the football games from the University of Pennsylvania's Franklin Field in Philadelphia.

(For a detailed account of WPTZ'S football coverage, see “Shooting on the Gridiron” in December, 1944 issue of *Television*.)

Consistent Technical Excellence in Television Production— KLAUS LANDSBERG, W6XYZ

The Paramount objective at this stage is in perfecting the technical end of program production. Rear projection, special effects, lighting, camera work are main considerations.

Klaus Landsberg was the ideal man for the job. Before joining Television Productions some five years ago, Landsberg had worked for Farnsworth and RCA. Before that he had extensive television experience in Europe.

Preparing the Mid-West for Commercial Television—WBKB

The Balaban & Katz Station deserves an “A” for effort. For two years they have encouraged an open door policy for advertisers and their agencies. Although such advertisers as Marshall Field, Admiral Radio, Commonwealth Edison and Red Heart Dog Food have produced programs on WBKB, only one Chicago agency, Henri, Hurst & McDonald, has taken advantage of the facilities offered by the station.

FOR Commercial Development on the West Coast—W6XAO (DON LEE)

The Thomas Lee Station is in the same boat as Balaban & Katz. They have been offering their facilities for quite some time but unfortunately, there have been very few takers. In spite of this indifferent attitude by advertisers on the Coast, W6XAO is making headway. As soon as they can get new equipment they will probably have more advertisers than they can handle.

Harry R. Lubke is director of television and Jack Stewart is program director.

Preparing American Broadcasting Co. for Television—PAUL MOWREY

Paul Mowrey, enterprising video director, is paving the way for the time when the network has its own video facilities. Joining American late last fall after producing television and radio programs for CBS, Mowrey lined up the first ABC television show, "Ladies Be Seated," which was presented on the GE station last February.

Firmly believing that many radio shows can and do make excellent video fare, the network adapted some of the top radio programs (*Television*, June, 1945). These shows include "Quiz Kids"; "Letter To Your Serviceman"; "Kiernan's Corner"; "Ladies Be Seated"; "On Stage Everybody"; "Nancy Craig"; "Breakfast Club"; and "Ethel and Albert".

The Most Consistent Sports Programming—WNBT (NBC)

NBC's coverage of sports during the past year included baseball, boxing and wrestling bouts originating at Madison Square Garden, St. Nicholas Arena, the Yankee Stadium and the Polo Grounds.

(For information on technique and operation, see "NBC at Madison Square Garden," *Television*, April 1945 and "Televising the Baseball Games" in the current issue).

The Best Educational Program—"Opinions on Trial" WCBW (CBS)

Conducted in legitimate court-room fashion, "Opinions on Trial" serves as a forum where important current issues are argued by lawyers and their witnesses. The television audience is enlisted to act as jury.

Topics discussed are both serious and humorous. They include such subjects as "Modern Hats Make Women More Desirable"; "The Female of the Species is More Deadly Than the Male"; "The United Nations Should Take an Active Part in Reforming the Governments of Liberated Countries" and "Chiang Kai-Shek Should Reorganize his Government to Include Chinese Communists."

Interesting is CBS's training policy of having their staff directors take turns in producing the show each week.

For the Best Institutional Television Commercial—

"Conquest Over Darkness"—WRGB (GE)

Program portrayed the progress of electricity. The show opened with a movie sequence telling of man's eternal search for tools to better his way of life and to do more work with less effort.

The story of Tom Davenport and the electrical motor which he invented is told by switching cameras back and forth from narrator sitting in an armchair at home to various scenes in Davenport's life.

The program ended with a film showing thousands of jobs electric motors are doing today. The only plug was made at the very end when the narrator mentioned that General Electric builds electric motors.

The original story was written and produced by Larry Algeo, WRGB video director. Local talent was used on the live portions of the production. The studio staff built a model of Davenport's motor, the first ever to be patented, from drawings and pictures now at the Smithsonian Institute.

"THE WAR AS IT HAPPENS"—PAUL ALLEY—WBNT

This news show packs more of a wallop than most newsreel productions. This is largely due to Paul Alley's live narrations while the pictures are being televised. NBC has been fortunate in obtaining the co-operation of the Army Signal Corps and the Navy and Marine Corps combat photographers. Although some 20,000 feet of film are released to the network each week only from one to two thousand feet are used. Newsreel producers will do themselves some good by watching an Alley show.

ATS Service Award—DAN D. HALPIN

In appreciation of his leadership over the past year, this award was presented to the retiring ATS President.

ADVERTISING

WALTHAM TELEVISES TIME

With Bulova and Gruen buying up television time signals, Waltham Watch Company has decided to climb on the television "time wagon." Through its agency, N. W. Ayer, one-minute periods were contracted for. The idea was to combine sales story with time signal.

As each commercial was to be repeated several times every Friday night during NBC boxing matches and as the same commercials will probably be used on other video stations, it was decided that film was the best medium. Commercials were produced on 35 mm film under the direction of Henry Clay Gipson of Springer Pictures, in cooperation with Don McClure, N. W. Ayer television director.

Commercial Story

The first subject illustrated was a simple little story—boy waits for girl—girl arrives late—her excuse—no watch. They look at watches in jewelry store window—they enter store and he buys her a watch.

A second commercial was made at the same time. The theme of this one was centered on the importance of time in the modern world. Shots of planes, air mail, and busy people checking their watches put the story across.

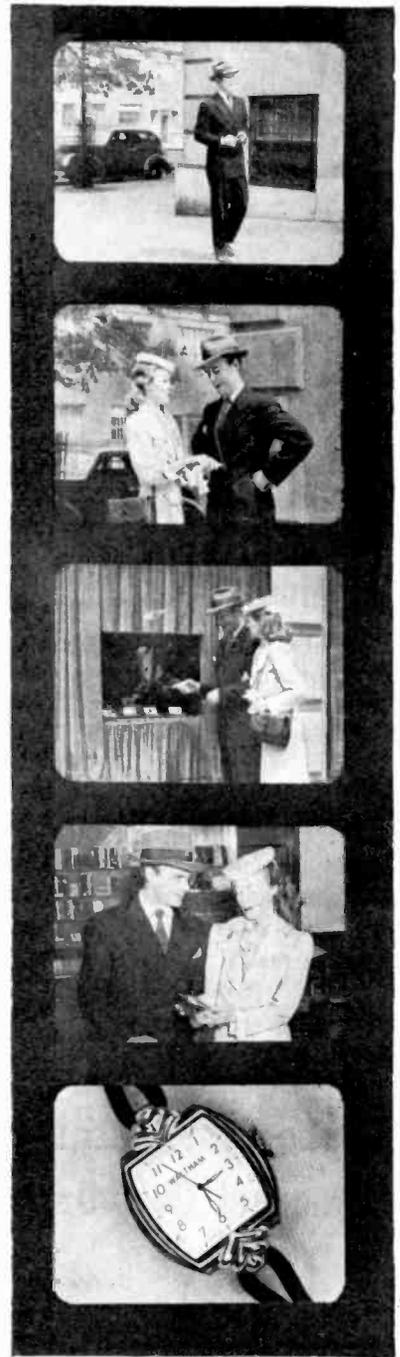
The film part of each commercial took 45 seconds and the remaining

15 seconds were used to show the actual time. Since it was impractical to televise direct full screen a Waltham watch three quarters of an inch high, a greatly enlarged photograph was used minus the hands. Then through a technique often used in film animation, actual scale models of the hands were set in place on the photograph and run from behind by clock movement. A fixed focus lense projected the image directly on the iconoscope tube in WNBT's film projection studio. This device will be used for all the commercials. The watch design is easily changed by substituting photos of different models.

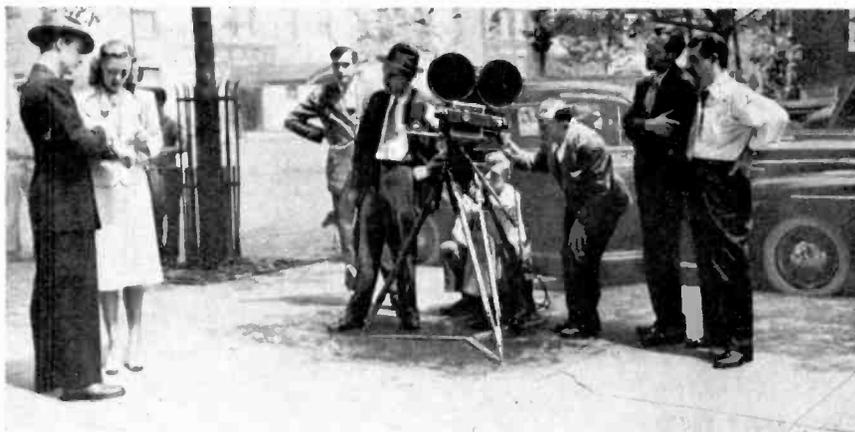
Preparation

Some idea of the amount of work which goes into producing a video film commercial can be obtained from the following list of personnel involved in producing these two 1-minute film spots. For the agency: the account executive, television director, motion picture man, copy writer, art director, and talent buyer. For the film producer: director, script writer, animator, camera man and assistant, film editor, projectionist, and lighting staff. If direct sound is used, add three sound men.

In spite of this seemingly top-heavy staff the two films were produced for less than \$500. Credit for evolving an efficient, economic production method for television film must go to Don McClure of N. W.



Boy Meets Girl Story.



Shooting on location. (l. to r.) Henry Clay Gipson of Springer Pictures, directing; Irving Browning at the camera; and Dave Rose and Don McClure of N. W. Ayer.

Ayer and Henry Gipson of Springer Pictures. They optimistically believe that even this low cost can be cut when television gets under way.

It would seem that Waltham Watch certainly has something to be excited about. For the small sum of money they have expended they have two one-minute advertising films which can be used on television stations throughout the country and by new stations as they start operation, and can also be used for sales promotion work. The Waltham people are sold on television and will continue to experiment with various types of commercials through N. W. Ayer.



John G. Myers department store of Albany, New York, uses ballet dancers to model sports clothes on half-hour musical program on WRBG.

LEVER BROS.

Reported to be spending more than \$24,000 annually in video experimentation for Spry, Rinso and Life-Buoy. Lever Brothers is number one television advertiser.

Through their agency, Ruthrauff and Ryan, they have probably acquired more knowledge and experience in commercial television programming than any other advertiser or agency. They approach television programming with the definite objective of learning what will make good television shows and how television can be utilized as an advertising medium. Last month, alone, Lee Cooley in charge of television for Ruthrauff & Ryan, experimented with four different programs for Lever Brothers. They included an audience participation show, a fashion program, an audition show and a Hollywood variety program. Top show was the fashion program.

Models were shown at work and play rather than in the usual dull fashion parade. The program opened on a map of an idealized vacation land on which appeared miniature sketches of eight scenes used in the show. The camera dissolved from a close-up of the miniature to a full set with Conover cover girls modelling the costumes in attractive "live" settings. The program is reported to have cost a cool \$1500.

FOOD INSTITUTE PROGRAM

Interesting is the experiment of the American Institute of Food and Home Products. At the start the show was strictly educational, explaining food shortages and demonstrating substitutes. After testing the show for a month, Ernest Walker, producer of the series, felt that the program did not have enough of an entertainment punch. To put more sock into

the show, the Institute revised its format and offered 10 minutes of variety entertainment and 5 minutes of news about food. They plan to continue their experiments until they have found how this type of program can best be presented.

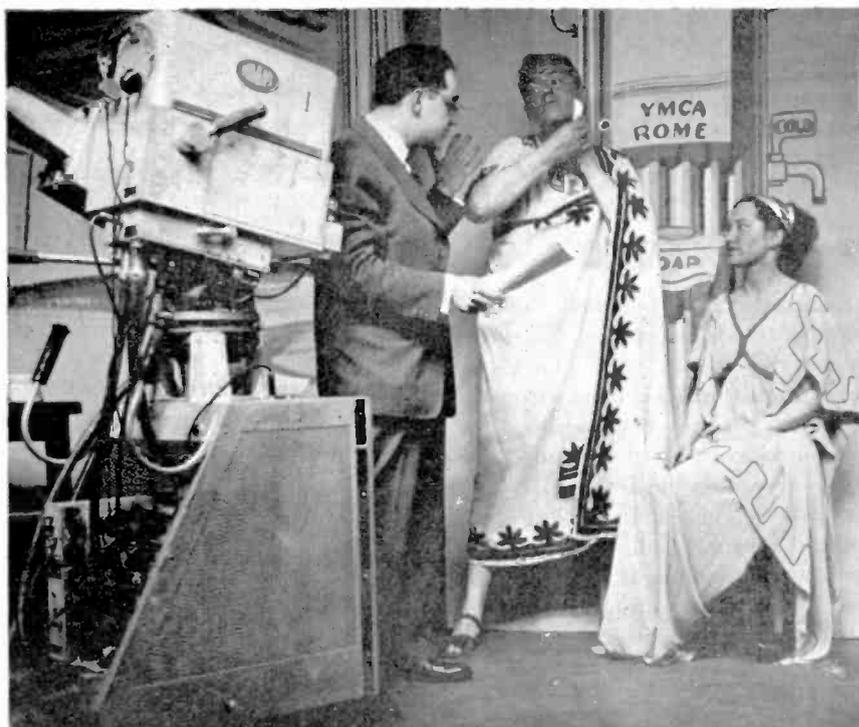
JOHN MYERS DEPT. STORE

The increasing television interest of department stores throughout the country is indicated by John G. Myers of Albany, N. Y., who last month presented a unique fashion program on WRGB (GE). Trying to make the fashion show interesting and entertaining to the men and children, as well as the ladies, Myers featured a half-hour musical production with local ballet dancers modeling bathing togs, sports and evening clothes.

FIRESTONE

The Firestone Tire and Rubber Co. has renewed for 52 weeks the "Voice of Firestone Televues" on NBC's television station WNBT.

Firestone has been presenting 15-minute programs, including travelogues, sports and educational shorts, once a week since September 1943. The agency is Sweeney & James Co., Cleveland.



Scene from Pal Blade's comedy program, "The History of Shaving," on WABD. Carl Mark, produced the show for Al Paul Lefton, Pal Blade agency.

PAN AMERICAN WORLD AIRWAYS

presents

WINGS OF DEMOCRACY

Pan American continues to present "Wings of Democracy," combination studio live talent and film program. The show consists mainly of travel films. Commercials are a series of stills showing postwar planes, two of which are pictured on right. J. Walter Thompson is the agency.

STANDARD OIL CO.

As far back as 1939, Esso Marketers, a subsidiary of Standard Oil Co. of New Jersey, has periodically tried out special events and news programs over NBC's, WNBT. Last month Esso sponsored the NBC filming of the triumphant return to the United States of Gen. Dwight D. Eisenhower. Robert M. Gray, manager of advertising and sales promotion for Standard Oil, told *Television* that the company is well pleased with video possibilities and that the "recent effort was certainly worthwhile." According to Mr. Gray, the company will "continue to experiment with television, exploring every phase of the medium in order to learn as much as possible."

BEN PULITZER CREATIONS

Realizing the potential selling power of television, even at this stage, Pulitzer Creations, New York, in early August will begin experimenting with a series of programs for men's neckwear for the second time within a year on the DuMont station. The weekly half-hour variety program, "Curtain Call," is a package show produced at an estimated cost of \$200 per program by the newly organized video production agency, LSG Television Productions, New York.

In order to promote the show and to draw the public's attention toward television, Pulitzer will tie in the



Twenty-four hour service to any point in the Hemisphere, via postwar Flying Clippers.



The best way to see the world can be yours, postwar via Pan American Flying Clippers.

video program with New York newspaper advertising.

The program will be in the form of an audition show. Representatives from local night clubs will act as judges of the contestants. Cast prizes and night club engagements will be awarded the winners.

CBS GOES COMMERCIAL

To collaborate in creating new techniques of commercial television.

To pre-test the effectiveness of these techniques under carefully controlled conditions of audience reception.

To field test their effectiveness under conditions of actual broadcasting.

These are the three objectives of CBS's new policy as outlined by Joseph H. Ream, CBS vice-president, in opening its facilities to advertisers and their agencies.

"Until expanded set ownership provides measurable television, CBS will make no charge for time on the air, reports, analysis, and other services." There will be a charge of \$150.00 per hour for major studio use to help cover production costs. The \$150.00 includes appropriate rehearsal time—depending on the production to be televised.

George Moskovics was brought over from the network's radio sales department and has been appointed commercial television manager.



Three scenes from Lever Bros.' audience participation program, "I Challenge You," produced by Lee Cooley of Ruthrauff & Ryan. Format consists of contests such as quickest dresser, fastest beer drinker, fastest balloon blower . . . all pictured here.





The American network's audience participation program "Ladies Be Seated," sponsored by Chef Boy-Ar-Dee for four weeks on WRGB. Emcee Johnny Olson is shown introducing Beulah Karney, commentator and home economist.

ENCYCLOPEDIA BRITANNICA

Perhaps one of the most interesting experiments to look forward to will be this august publishing company's video venture. The program series will be a mutual operation between the Columbia School of the Air and the Encyclopedia Britannica and their agency, N. W. Ayer.

First objective is to adapt their standard classroom films to television.

MONTHLY LIST OF ADVERTISERS

WABD (DuMONT), NEW YORK:

The American Institute of Food and Home Products, New York, "The Inside Facts About Food," educational program, direct; Botany Worsted Mills, Passaic, N. J., animated weather reports through Lever Bros. Co., Cambridge, Mass.; Alfred J. Silberstein, Inc., N. Y., an audience participation program, fashion show and dramatic show, for Lifebuoy, Spry and Rinso through Ruthrauff & Ryan, Inc., N. Y.; Liberty Music Shop, test pattern

music, direct; R. H. Macy & Co., N. Y., "Teleshopping at Macy's," films and live commercials through RKO Television Corp., N. Y.; Sanforizing Division of Cluett Peabody & Co., N. Y., "Fashions Coming and Becoming," fashion programs through Young & Rubicam, Inc., N. Y.; U. S. Rubber Co., N. Y., "The Magazine of the Air," live studio science programs and films through Campbell-Ewald Co., N. Y.; Alexander Smith & Sons Carpet Co., Yonkers, N. Y., "The Magic Carpet," live studio programs with films through Anderson, David & Platte, Inc., N. Y.

WNBT (NBC)

Botany Worsted Mills, Passaic, N. J., animated 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 and travel films through J. Walter Thomp-

son Co., N. Y.; RCA Victor Division of RCA, N. Y., "The World in Your Home," film program through J. Walter Thompson Co., N. Y.; Waltham Watch Co., Waltham, Mass., film and time through N. W. Ayer & Son, Inc., N. Y.

WRGB (GE), SCHENECTADY:

Vogue Patterns, Conde Nast Publications, Inc., N. Y., "Pattern for a Dream," dramatic program based on magazine portrait, direct; John G. Mayer Co., Albany, N. Y., "Fashion Ballet" direct.

WBKB (B & K), CHICAGO:

Admiral Radio Corp., Chicago, "Young Chicago," audition programs, direct; Commonwealth Edison Co., Chicago, "Telequizzicals," "Welcome to the Walkers," and "Cooking by the Dial," direct; Marshall Field & Co., "Wednesday Matinee," variety program, direct.

AMERICAN BROADCASTING CO., NEW YORK:

Chef Boy-Ar-Dee Quality Foods, Milton, Pa., "Ladies Be Seated," audience participation show through McJunkin, Chicago.

WASHINGTON

PRODUCTION

Now that the FCC has cleared the decks for action with its final television allocations the spotlight is on the WPB. Of top importance is the strong possibility that the "freeze" will be lifted completely by October 1. In the meantime look for gradual lifting of the "freeze" for construction under \$25,000.

In spite of this move, the next six months will probably not see much in the way of production of equipment. There should be some small power transmitters produced by the end of the year but it's very doubtful whether any 50 "watters" can be manufactured. There will probably be a considerable number of small AM radio sets. It is possible that as many as one million units will be manufactured by the first of the year.

With the larger companies still receiving new projects which are particularly demanding engineering labor supply the situation definitely favors the smaller companies to swing into peace time production first.

COMPLETE TELEVISION ALLOCATIONS

Channel No. 1	44-50
" No. 2	54-60
" No. 3	60-66
" No. 4	66-72
" No. 5	76-82
" No. 6	82-88
" No. 7	174-180
" No. 8	180-186
fixed & mobile No. 9	186-192
" " " No. 10	192-198
" " " No. 11	198-204
" " " No. 12	204-210
" " " No. 13	210-216

Experimental color television 480-920
Television relay stations 1245-1325

The frequencies between 480 and 920 mc are also available for relay stations until they are needed for television broadcasting.

The adaptation of these frequencies by the FCC will not require

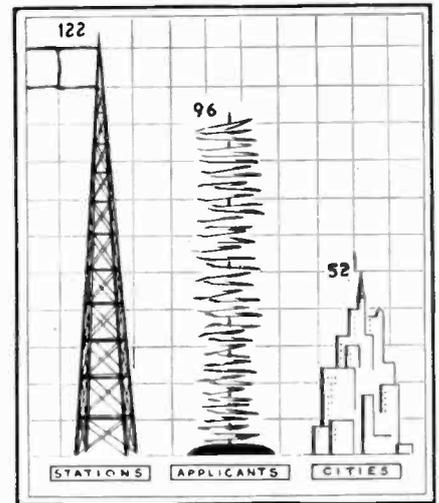
pending television allocations to conform to the new allocations except with respect to any changes in equipment that are proposed.

Chairman Porter stated that "everything possible will be done to eliminate unnecessary procedural steps so that when WPB gives the green light these new industries may go forward without delay." In regard to new applicants, Chairman Porter pointed out:

"Television applications for particular channels should be prepared in accordance with the method now prescribed in the television standards, providing for interpolation by using the several charts incorporated therein. A chart for 300 Mc is now available from the Commission upon request. Applications now pending for commercial television stations may be modified for particular channels in accordance with this method. While television applications should specify particular channels and coverage, the Commission in passing on applications may not be able to assign the channel requested.

"No changes are contemplated at this time in the 50 and 500 microvolt per meter contours specified as the limit of service areas for FM and television stations, respectively. This matter will, of course, be reviewed in the standards now under preparation, together with any possible changes in the methods of allocating and assigning facilities."

At least sixty days will be required by the Commission for the filing and processing of new applications prior to taking any action on the cases retained in the pending files. However, the Commission staff will in the meantime get to work on the application which are in the pending files. They will call for whatever further information may be required and try to bring them right up to date so that they will be ready for channel allocation.



FCC APPLICATIONS

KSTP, Inc.

*Stanley E. Hubbard, President
Hotel St. Paul
St. Paul, Minn.*

While broadcasters continue to swell the ranks of television station applicants, the operator of KSTP last month filed application with the FCC for a permit to construct a commercial television station operating on Channel 1, 50-56 mc. (to be amended under reallocations). Mr. Hubbard plans to use RCA equipment with maximum power of 3 kw and 4 kw visual. More than \$250,000 will be spent for station facilities.

According to Mr. Hubbard's application, the station will program 14 hours a week to 1,015,064 people. No details on programming are given other than that the station will make use of rebroadcasts and chain programs when they are available.

The proposed transmitter will be located on North Snelling Avenue, 4½ miles northwest of St. Paul. B. Ross Hilker, KSTP technical supervisor will direct engineering.

EARLE C. ANTHONY, Inc.

*141 North Vermont Avenue
Los Angeles, Calif.*

Already having submitted an application for the construction of a commercial television station in the Los Angeles area, Earle C. Anthony, licensee of standard broadcasting station KFI in San Francisco, recently filed an application requesting a permit to erect an experimental

television station, operating on Channel 3 (60-66 mc.) with 4 kw (peak) power and using RCA transmitting equipment. The transmitter will be located on Mt. Wilson.

The research program will be headed by Curtis W. Mason and Headlee L. Blatterman, chief engineers of KFI since 1926. More than \$75,000 has been set aside for the experimental station. The annual operating cost is estimated at \$25,000.

20th-CENTURY FOX FILM CORP.

*444 W. 56th Street
New York, New York.*

This film corporation which already has an application for an experimental television station in Boston, has expanded its video interests by applying for a commercial television station in the New York area to operate on Channel 5 (76-82 mc.) General Electric transmitting equipment with power of 20 kw aural and 40 kw visual is planned.

20th-Century plans to spend \$417,500 for the station, with monthly operating expenses estimated at \$25,000. It is estimated that more than 12 million listeners will be served.

The transmitter site will be located at Prospect Avenue near Eagle Rock Avenue in West Orange, New Jersey. E. I. Sponable, director of research and H. E. Bragg, assistant research director, are in charge of engineering.

ALLEN B. DUMONT LABORATORIES, Inc.

*2 Main Avenue
Passaic, New Jersey*

High frequency television will not be neglected by DuMont. Recently this company submitted the first in a series of applications for experimental video stations operating on frequencies between 480 and 920 mc. for the purpose of design and eventual manufacture of receivers for higher frequency television.

DuMont seeks permission to operate an experimental television relay station in the New York area. (On June 16, DuMont got a special temporary authorization from the Commission to go ahead with equipment tests on bands between 496-508 mc.)

Thomas T. Goldsmith, Jr., DuMont director of research, with Richard L. Campbell and William H.

Sayer, are conducting the experiments.

PHILCO RADIO & TELEVISION CORP.

*Tioga and C Streets
Philadelphia, Pa.*

Philco last month filed applications for construction permits to erect three experimental television relay stations (see Washington Television Outlook story).

FILENE'S TELEVISION, Inc.

Boston, Mass.

Filene's application for a construction permit to erect a new commercial television station operating on Channel 7 (102-108 mc) has been amended to read Channel 10 (192-198 mc) as proposed in reallocation.

CINCINNATI BROADCASTING CO.

Cincinnati, Ohio.

The construction permit requested by Cincinnati Broadcasting to erect a new commercial television station operating on Channel 7 (102-108 mc) has been changed to Channel 10 (192-198 mc) as proposed in reallocations.

CENTRAL OHIO BROADCASTING CO.

Columbus, Ohio.

Central Ohio's application for a construction permit to erect a commercial television station operating on Channel 8 (162-168 mc) has been amended to read Channel 9 (186-192 mc) as proposed in reallocations.

METROPOLITAN TELEVISION, Inc.

*749 Lexington Avenue
New York, N. Y.*

Metropolitan Television's application for a commercial television station operating on Channel 8 (162-168 mc) has been changed to Channel 9 (186-192 mc) as proposed in the reallocations. They also requested permission to make changes in equipment and antenna.

TELEVISION PRODUCTIONS, Inc.

*5451 Marathon Street
Los Angeles, Calif.*

Television Productions, operators of video station W6XYZ, Hollywood,

has requested a license to erect a commercial television station operating on Channel 4 (66-72 mc), with power of 4 kw visual and 1 kw aural.

HEARST RADIO, Inc.

*E. M. Stoer, vice-president
123 W. Michigan Street
Milwaukee, Wisconsin*

Already having filed an application with the FCC for a commercial television station in Baltimore, Hearst Radio recently submitted another application requesting permission to construct a commercial station operating on Channel 4 (78-84 mc), with RCA transmitting equipment of 3 kw and 4 kw power. The transmitter will be located on top of the Mariner Building at the northwest corner of Wisconsin Avenue and Sixth Street in Milwaukee.

Hearst will spend about \$229,500 for studio facilities and transmitter. The operating expenses during the first few months are estimated at \$12,000 a month.

Chain programs will be broadcast when available, no other programming details were given. Milton W. Woodward of the Commercial Radio Equipment Co. of Washington is the engineering consultant.

CLASSIFIED SECTION

Due to the many inquiries we have received for trained personnel and for positions in television, a classified department will be inaugurated with the September issue. Rates: Minimum \$1.00 — 10c per word. Count 3 words for box number. Payable in advance.

PROGRAMMING



Air Force hero Major Richard Bong and wife before the W6XYZ television cameras with Richard Lang Television Production's emcee.

W6XYZ (Television Productions)

Puppet experimentation continued to play an important part in W6XYZ programming. The latest endeavor is a complete adaptation of Cinderella. There isn't a television program that doesn't teach its director something new each time. For example, Television Productions found that an application of a dull coat of paint eliminated the lighting flare ups which had always been a disturbing factor.

WABD (DuMont)

New sustaining program to bow in at WABD is "Author! Author!" The series which is based on interviews with prominent authors is conducted by John Hewlett. The first program featured Kathleen Winsor, author of *Forever Amber*.

Interesting to watch will be television's first multiple sponsorship program which begins on the DuMont station September 1. The show, "Kings Corner," will feature John Reed King, veteran radio emcee, conducting interviews with well known celebrities and personalities. Several sponsors have already signed for the program.

W6XAO (Don Lee)

Several hundred persons expressed their opinions in a post-card poll conducted by the Don Lee station to determine audience reaction to an experimental commercial program, "Lorraine," which was presented in cooperation of the Johansen Bros. Shoe Co., St. Louis.

The questions asked were: "Did the 'Lorraine' film hold your interest? Did the advertising arouse your interest in the product? Any comments or criticism?"

More than 50% of the responses received indicated approval of the



Kathleen Winsor, attractive author of *Forever Amber*, is interviewed by emcee John Hewlett in DuMont's new sustaining program "Author! Author!"

five-minute production, which combined the commercial message with a drama, filmed especially for the experiment.

Seizing the opportunity to express their likes and dislikes about the commercial, the audience voiced such opinions as "plugs well timed"; "sugar coating on pill too sweet, rather take advertising straight"; "plot excellent, acting good"; "rather get commercial straight as on radio"; "if not overdone, this type of advertising should always be interesting"; "advertising should be information

on the subject, manufacture, material and design — entertainment is separate, should be clear of advertising"; "the commercial value of the film was too obvious but mention of Johansen shoes as sponsor was ok"; "clear close-ups to show style and appearance of the shoes were lacking."

WBKB (Balaban & Katz)

To illustrate spot-news on a new test program over WBKB, enlargements of up-to-the-minute news-photos were employed to illustrate the announcer's commentary. The program, "Look at the News", is furnished stills by Acme Newspictures, Inc.

Developed by David W. Dole, television director of Henri, Hurst & McDonald, Chicago, the program included 11 x 14-inch mat prints displayed in a small stage setting. Pictures were synchronized with the commentator's script.

First telecast of "Look at the News" was a five minute life story of General Courtney H. Hodges, commander of the American First Army. Future programs, however, will be expanded to quarter-hour telecasts with stills from Acme's telephotos supplying the visual accompaniment.

Focusing the camera at dogs, WBKB presented "Canine Careers", a telecast featuring ribbon winning dogs. Tie-in was with the Skioke Val-



Leslie Charteris, author and co-head of Bond-Charteris Television Productions, directs during filming of B-C mystery show on W6XAO.



Don McNeil's "Breakfast Club" proved a natural for television. The ad lib pattern, however, will have to have more of a format for television. The program, on behalf of the war loan drive, was presented on WABD by the American network.

ley Kennel Club's Seventh Annual All-Breed Dog Show. Two nationally known dog experts, Capt. Will Judy, editor and publisher of *Dog World* and David Terrill, Chicago canine authority, acted as judges.

This particular program would be a natural for sponsorship by a dog food manufacturer.

AMERICAN

Still working on the assumption that a good radio show will make a good television show, the American last month tried out another of its network radio programs. Latest to be adapted for television on the GE station, WRGB, is the husband and wife comedy daytimer, "Ethel and Albert," played by Peggy Lynch and Allen Bunce. The program shows every indication of being successful and probably will be the forerunner of the daily television strip.

Interesting angle is that Peggy Lynch, writer of the series, stars in both the radio and television productions. The half-hour program is directed by Helen Rhodes of G.E. and staged by Harvey Marlowe of the American.

Another American radio program adapted for television last month was "The Woman of Tomorrow", with Nancy Craig, conductor of a women's

feature program on the network. The four-week series was directed by Harvey Marlowe.

WPTZ (Philco)

At the conclusion of Atlantic Refining's football series on WPTZ this fall, the Philco station will have facilities for presenting live programs. With plans calling for a new

studio setup as soon as possible, the WPTZ staff is lining up a number of live programs.

Typical of the film fare that WPTZ has been offering the Philadelphia television audience, is the following list of films shown during a recent week of telecasting: "National Forest Highlights" (Forest Service, U. S. Dept. of Agriculture); "Victory Over Germany"; "Mr. President";



Ruthrauff & Ryan create a realistic beach setting in about five feet of space for the \$1500 fashion program on DuMont. Flash-backs from a large vacation map to the setting proved very effective.

"Return to Guam" (U. S. Coast Guard); "Harvest Melody" (feature film) with Rosemary Lane and Johnny Downs; "Circus Capers" (cartoon); "The Last Frontier" (Chapters 6 and 7); "Deep Diving" (U. S. Navy); "Cyclone Ranger" (feature film) starring Bill Cody.

WRGB (General Electric)

Believing that local dramatic organizations will be an excellent source for small station programming, WRGB is consistently encouraging television activities by such local groups as the Schenectady Civic Players, Union College School of Drama, Amsterdam Players, Russell Sage College, New York State College for Teachers (Albany), and the Alba-Del Light Opera Group (Albany).

WOR (Bamberger)

Evidence that practice makes perfect is amply proved by the great advancement in television programming of the WOR Brownstone Theatre Players, under the direction of Bob Emory. Some of the more recent productions include the "Green Skull", "The Spider's Web", "Absinthe", and "The Bells".



Henri, Hurst & McDonald's news program, "Look at the News" on WBKB. Upper left, David W. Dole, television-radio director of the agency, discusses pictures to be used with Helen Carson, WBKB program director, and commentator Don Faust. Faust's commentary is illustrated by pictures displayed on a vertical curtain in a miniature stage placed on a desk beside him (upper right). A puppet, "Johnny Acme," (lower left) makes the necessary picture changes. Televiewers watching the news program at home.



Reproduction of an ice cream parlor on WNBT probably had a lot of the kiddie televiewers crying for ice cream cones. The show is one in a series of children's programs presented on the NBC station every Saturday afternoon.



CBS's progressive teen-age program dealing with adolescent problems. Top scene pictures the unhappy home life of a young girl; two 16-year olds (right) discuss the situation and finally, Edward Stasheff (below) analyzes the girl's problems and her home environment.



WCBW

(Columbia Broadcasting Company)

CBS concentrated on educational programs last month. An interesting program presented in cooperation with the United Parents Association of New York was one dealing with adolescent problems. The problems of the "teen agers" were dramatized and discussed by an expert on family relations, Dr. Edward Stasasheff.

Continuing their series on "Reports to the Layman" on new developments in medicine, science, and related fields, CBS presented "The Doctor Looks". Dr. Don W. Gutakunst, medical director of the National Foundation of Infantile Paralysis, was the guest speaker.

Both these programs showed that education can be made interesting over television.

WNBT

(National Broadcasting Company)

Continuing to experiment with dramatic shows WNBT has come a long way in presenting finished professional productions. First in a series of new classical adaptations was Moliere's "Bourgeois Gentleman". The production was adapted and produced by Dr. Herbert Graf, NBC operatic producer, and stage director for the Metropolitan Opera Company. A ballet was featured with choreography by Antonio Cobos.

Other dramatic productions were "Copperhead," a play about the Civil War Period, and "Actors in the Making" based on a true story of a country girl with theatre aspirations who came to New York to study at the American Academy of Dramatic Arts. Talent was recruited from the Academy.

Two playlets were also offered, one "A Veteran Comes Back", and the other, "Mission Completed". Both were documentaries with a war bond message.

**Keep up
with television
by reading
TELEVISION**

TELEVISION IN REVIEW

CBS

The television industry can look forward to another CBS bombshell on high frequency and color television.

Tip-off on CBS's plans came from a speech by Peter Goldmark, the network's chief engineer, before the New York section of the IRE. A forecast of things to come from CBS was made by Dr. Goldmark when he described development work now going on in color television. A new transmitter operating at 485 megacycles and capable of a 525 line full color picture using a 10 megacycle band width will probably be the first CBSalvo to hit the industry.

Dr. Goldmark outlined CBS's experimentation on receivers. Of particular interest was the description of a receiver which will incorporate a 7-inch tube and through a special plastic lens produce an image comparable to that of a 10 or 12 inch direct viewing tube. They are also working on projection receivers and are now experimenting with the Schmitt system as well as regular lens optics. Goldmark claims that synchronization of the color disc in the receiving set has been greatly improved and that the noise level of this mechanically operated part has been reduced to practically zero.

CBS believes that the ghost and shadow problem is not any greater at 480 megacycles than at 50 megacycles. Dr. Goldmark described a directional antenna which contains a rotating mechanism which can be directed to the station tuned in as a possible solution to this problem.

MILWAUKEE JOURNAL GOES ALL OUT FOR NETWORK TELEVISION

"No one would be justified in purchasing a television receiver for the type of program service a station could produce locally." That's the opinion of the Walter Damm station.

They believe "while motion picture film may provide some degree of outside programming, the obvious answer to a completely adequate

program service is a network affiliation, plus film, plus locally produced shows."

Milwaukee Journal Station WTMJ, an affiliate of the National Broadcasting Company, asked the network its television plans. They were informed that NBC doesn't contemplate the opening of a television service in Chicago until late in 1946 or early 1947 (assuming equipment availability beginning September 1, 1945). Without this service as the mainstay of a television program schedule, The Journal feels it could not deliver the type of service to receiver owners which Milwaukee will expect of it. While Milwaukee will probably be the first link in any midwest NBC network, NBC itself may not start network operation for a year or two after its Chicago station goes on the air.

Midwest Network Possibilities

Realizing that Milwaukee will expect a television service from The Journal at the earliest possible date, the company has conferred with several communication experts about the possibility of linking WTMJ with NBC in Chicago, prior to the time that NBC is ready to form its midwest network, and also with such other stations in Chicago as may be producing regular television programs. These conversations have led to the conclusion that this will be possible by the fall of 1946.

With the full realization that the augmentation of a program service from outside sources with acceptable local productions would mean an intensive training schedule of not only its staff, but advertisers and agencies, The Journal this week instituted a three-point program. This program is based upon the use of such pre-war equipment as is available, including cameras, synchronizing generators, monitors, etc. No actual transmissions will be put on the air until the program is completed and a representative schedule can be inaugurated, meeting the company's promises of a program sched-

ule which will justify the investment in a receiving set. The three-point program is as follows:

First, a thorough acquainting of all members of the present radio staff, from the "boss" down to the office boy, with television technique. The staff will actually work with studio and associated equipment in producing programs and running demonstrations. Already each member of the technical staff has indicated his intention to take advantage of this training course. Wherever practicable it is the intention of the company to give all present staff members the opportunity to operate in the television field and make available to them such training as will make it possible for them to accomplish this purpose. The entire training program will be under the direction and supervision of L. W. Herzog, Assistant General Manager of the Company's radio activities and Phillip B. Laeser, FM-Television Engineering Supervisor. Both of these men have spent considerable time studying television operations in Chicago, New York, Philadelphia and Schenectady.

The second step in the company's program, to be inaugurated as soon as a sufficient number of its staff is thoroughly acquainted with the operation of the equipment, contemplates turning the facilities over to advertisers and agencies for experimental purposes. It is envisioned that each of the department stores, and such other advertisers and agencies who feel that ultimately they will wish to avail themselves of this new advertising medium, will be allocated time for this purpose.

The third step in the program calls for keeping the public fully and completely informed as to the progress being made. It is expected that the public will be invited to Milwaukee's Radio City to view the results of several training programs and the efforts of the station staff and advertisers and agencies. In connection with this, The Journal plans to invite those people who will use the new medium for public service broadcasts, to become acquainted with it, so that they, too, may be planning how to get the most out of television when it arrives. Representatives of schools, government, public health, charitable and

similar organizations serving the public will be at the head of the list. In its relations with the public, it is the intention of the company to constantly reiterate its announced policy that it will not begin the actual transmission of television programs until such time as it is able to offer the public a service which in its estimation will justify the expenditure for a receiver.

The Journal Company is well prepared to go ahead with this extensive plan. Back in August 1942 when the company built its radio city building, complete provisions were made for a television station. A studio, 58 feet by 80 feet and 25 feet high was incorporated in the building as well as the necessary air conditioning equipment and rooms for control, production, monitoring, talent, etc. Milwaukee is fortunate to have a progressive broadcasting group with the television conception of the Journal Company.

DuMONT POLICY

Unless WNEW, WOR, and the American network start sharing costs with DuMont they will just have to shop around for some other facilities to do their programming experimentation. On July 1, DuMont jacked up the price of programming for the broadcasters from \$50 to \$1250 an hour or any fraction thereof.

The reason behind the DuMont move is considered fair. What with television broadcasting all give and no take, DuMont has been taking it on the chin for sometime. They are willing to see the shekels go out as far as advertisers and their agencies are concerned, for its sound missionary work; but to let potential competitors on the same gravy wagon is a horse of a different color. It isn't that DuMont isn't willing to cooperate. It is just that they feel that broadcasters who use their facilities should share actual costs rather than the present \$50 an hour token charge. It is doubtful whether WOR or WNEW will go for this "share the wealth" plan and while American doesn't particularly like the cost angle they do see the fairness behind DuMont's policy, and wanting to build up their television position they will probably play along with DuMont.

FLOOD TIDE (Cont'd from page 15)

with the curt comment that "it did not even sound like a phonograph"! It was, indeed, a fact that even this early electric phonograph far surpassed in quality the mechanical phonographs which were then sold by the older company.

As a natural result of these historical circumstances, it was not long before the phonograph company was bought by an enterprising radio organization and survived only as a division of a company in the newer field. And yet there would have been much logic in the older company becoming a leader in the new and promising radio broadcasting industry.

Considering all the circumstances, it is certain that television broadcasting is here to stay; that it will become a great service of public entertainment and instruction on a nationwide scale; that it will bring success and prosperity to those who engage in that field in a long-term and enterprising fashion; and that the opportunities which it now offers will not indefinitely be available. In their own interest, as well as that of the public, allied industries will do well to consider these factors and to abandon any possible attitude of disinterest, or opposition, or delay which may perhaps have presented some attractions to them. Television offers great opportunities and rewards. Skilled and far-visioned executives in allied industries will reap a goodly portion of these rewards through constructive and timely action.

STILL SAGA (continued from page 13)

two largest department stores, flanked by a large number of chains. Recently R. H. Macy & Co. announced the purchase of land for the postwar construction of a department store.

According to Still the station will probably cover the same area reached by the other New York City stations—although the signal strength will be strongest in Queens. Still hopes for a coverage within a radius of 35 miles.

The Challenge

Certainly there are few Bill Stills in the country who possess the ability to do the complete job he was capable of doing. There is also a certainty that pre-war costs will undergo an

overhauling to meet post-war conditions. Bill Still will have to show that he can build a transmitter which will give the same results as existing transmitters with less equipment and a lower labor cost. If he does this the industry will arise and acclaim him.

But \$20,000? Triple it! Quadruple it! And you still have a mighty challenge to the television industry.

WASHINGTON OUTLOOK

(continued from page 6)

Washington Times-Herald, has applied for a commercial grant on 162-168 mc. Her application does not specify equipment, power or transmitter site for the proposed station. She plans to spend around \$250,000 for station facilities and operate the station at a cost of \$25,000 a month. There will be programs five hours a week to begin with, giving program service to Washington and adjacent areas within a 30 mile radius.

And if eight applications for four channels aren't enough of a headache for the FCC, plans call for the Washington Evening Star, licensee of WMAL, the American Broadcasting station in Washington, to file for a commercial station within the next few weeks. And now we have Eugene Meyer, publisher of the Washington Post and licensee of WINX, announcing that the Post will enter the television field in Washington. Added to these two there is a very strong possibility that the Cowles Broadcasting Company's recently acquired WOL will also put in a television application.

SLOT MACHINE

(continued from page 12)

been extremely successful in subscription music, mainly, however, in public places. The Benton interests have already applied to the FCC for a subscription radio network. In England, the government-controlled BBC is run on a license fee per receiver basis which amounts to a subscription plan. Whether the American public will go for a subscription system after being used to free radio is an unknown factor. Also it remains to be seen whether the costs and economics of a subscription method of television can be successfully worked out.

TECHNICAL DIGEST

Patents

A system of television in color and an improved method of manufacturing the fluorescent screen on which a television image appears are among recent patents in the field of television to be granted by the United States Patent Office in Richmond.

Color

George L. Beers, Haddonfield, N. J., received No. 2,378,746 on June 19 on the color system (patent applied for June 28, 1941; five claims awarded; assigned to Radio Corporation of America). The mechanism works on the basis of two sets of color filters mounted on rotatable discs. A color wheel at the receiver operates in perfect synchronization with a master wheel at the transmitter, so that at the instant the scene at the transmitter is imaged through a red filter, the corresponding red filter at the receiver tube whirls into position.

The apparatus depends for its success upon the motor-driven synchronization device. This is coupled to a phase-controlling system whereby every third vertical synchronizing pulse is transmitted with a group of 500 KC pulses replacing a group of the rectangular double frequency pulses of the standard synchronizing signal. At the receiver the 500 KC pulses are supplied to a tuned circuit to produce a control pulse which is fed to a clutch control circuit together with a pulse produced by the receiver color wheel.

The control circuit causes a clutch to slip until the color wheels are in the desired phase relation. The clutch may be locked in any of six positions. The apparatus is designed to transmit a three-color image at 40 frames per second.

Cathode Ray Tube Screen

John S. Vansant, Huntingdon Valley, Pa., received No. 2,378,875 on June 19 on a method of forming a precision screen on a cathode ray tube (patent applied for March 30,

1942; five claims awarded; assigned to Philco Radio & Television Corporation).

This method is aimed at replacing one practice whereby the entire face of the tube is covered with fluorescent material and a mask is applied externally to cover that portion of the tube on which the picture does not appear. This practice is criticized for reducing the size of the picture, for often leaving a ragged edge about the picture, and for picking up light from the tube and from the room which causes a bright border about the picture. In addition, the external mask is held to increase parallax and to afford unsatisfactory side views.

The patented tube works without an external mask. Built into the circular transparent face is a rectangular fluorescent screen which is excited by the conventional electron gun. This screen is applied prior to the joining of the two-part tube envelope, by dropping a mask into place and wetting it with distilled water to make it stick in place. After drying, a potassium silicate binder is applied to the inner face surface and a fluorescent such as zinc sulphide is settled on the mask. Since the border around the screen is transparent glass, the observer sees no picture beyond the edge of the screen. It is held that no light border appears within the tube, and that picture contrast is high.

Television Circuit

Robert E. Graham, New York City, won No. 2,378,547 on June 19 on a television circuit aimed at removing spurious electrical variations from the output currents of electron camera tubes (patent applied for Dec. 31, 1942; 19 claims awarded; assigned to Bell Telephone Laboratories, Inc).

The circuit applies to storage type tubes, such as the Iconoscope, which normally contain some distorting variations caused by secondary electrons emitted from the scanned elemental area being attracted to more positive elemental areas. This results as dark spot or "cloud" in the final picture. It is held that the circuit

automatically removes or compensates from these variations, principally through the employment of an auxiliary electron camera or pickup tube which produces signals corresponding only to the low frequency components (up to several times the line frequency) of the complete picture signal produced by the main electron camera tube.

This auxiliary is preferably a dissector tube which produces a signal substantially free from low frequency spurious signals. All output currents of the two tubes are combined to eliminate the low frequency spurious variations. Both cameras are focused on the same object, but the auxiliary has a long slit scanning aperture instead of the usual square one. Through an interconnection, some of the output energy of the main tube is by-passed, the high frequency components are filtered out, and the low frequency components are amplified in a circuit of two differential amplifiers to balance out the "cloud" variations.

Film Transmitter

Hanns-Heinz Wolff, Berlin, on May 22 was granted No. 2,376,645 for a transmitting apparatus for televising a cinema film (application Aug. 5, 1938, patented in Germany Aug. 12, 1937, 8 claims). A scanning disc containing a number of apertures equal to the number of lines of a total scanning in interlaced groups of lines, operates in conjunction with a shutter which blocks certain groups of lines and permits others to be scanned.

Color

Georges Valensi of Paris on May 15 received patent No. 2,375,966 on a system of television in colors (application Jan. 14, 1939, patented in France Jan. 17, 1938, 15 claims). Scanning means are provided for exploring successively elemental areas of the subject being televised. A first electric signal is produced corresponding to the brightness of one area at each given instant, and automatic means analyze the color of this area and produce a second coded electrical signal corresponding to this color. These first and second signals are transmitted to a distant station, and there modulated to recompose the image

EDITORIAL

THE HOLLYWOOD TOUCH

In their inimitable style the movie makers have started off on the wrong foot in television programing. W6XYZ, Paramount subsidiary, has proudly announced a tie-up with NEA to experiment with comics on television.

That the newspaper comics are an important part of American life cannot be denied. BUT it is our feeling, that with the limited hours now available for experimentation, any extensive work in the use of comics is a shirking of responsibility.

Undoubtedly, Hollywood will play a dominant part in television programming. Let us hope that they approach it on a higher plane than they have with films in the past.

It is up to the progressive element to take over and put Hollywood in its rightful place as an educational and cultural center as well as a film factory. Evidently, the film moguls have yet to learn that educational matter, presented properly, can be entertaining.

AGENCY APPROACH

One of the most intelligent agency attitudes toward television is the following presented by the Grey Advertising Agency, New York in their house organ. As it echoes the sentiment of the editors and many of the progressive agencies who are now experimenting in television we quote it in full.

Where Does Television Belong in Your 1946 Ad Budget?

"Within the next few months, your first 1946 ad budget will be up for consideration.

That first 1946 ad budget will probably present more difficulties than any on which you have ever worn down pencils. To top off all of the uncertainties and imponderables (including the possible sudden end of the Jap conflict) is the little matter of television.

During these war years, television has seemed a rather remote advertising medium. It was something stimulating to discuss and experiment with. But it figured only insignificantly or not at all in the ad budget. But within twelve months, television will emerge as a tangible advertising medium. It will no longer be a "postwar project."

How much should you allow in your first 1946 ad budget for television? That's a quiz all by itself. But let's see whether we can help you arrive at an answer to it.

First: Where Will Television be by Summer, 1946?

The first point to be determined is the television audience that will exist by Summer, 1946. Our guess estimate is that by Summer, 1946, instead of the present nine television stations, there will be a minimum of twenty stations in actual operation. We guess also that there will be no less than 200,000 receivers in homes by Summer, 1946. These figures are *not* based on any *current* plans: they

are based simply on our absolute conviction that reconversion in this industry will move much faster than anyone now believes or admits. From then on, television stations and receiving sets will multiply at an extraordinary rate. Perhaps no other major industry has expanded its production facilities so enormously during the war. Even if only half of this potential is turned to civilian production by Summer, 1946, the industry will be able to turn out several hundred per cent more sets and equipment than it did in 1940!

We contemplate, then, a *maximum* television audience by Summer, 1946, of some 800,000 people—assuming that, with family and friends, each of the 200,000 television sets will have an average of four viewers for major programs. By Fall, 1946, that audience may very well total 1,200,000 and by the end of 1946 it may reach 2,000,000.

Don't conclude that this will be a "class" audience. It will be a typical cross-section of our population. But it *will* be a "fan" audience; deeply interested, highly responsive. Moreover, the advertising competition for this audience will not be as intense as that for most other advertising audiences.

Second: Promotional "Excitement":

We at Grey have been emphasizing for years that consumer advertising for all but perhaps our largest advertisers has a two-fold purpose: 1—To impress the consumer. 2—To impress and excite the trade so as to win the trade's promotional support. With the major percentage of our national advertisers, objective two is actually at least important as objective one.

Our feeling on this point, based on years of experience, is that the trade can often be excited by what might be called the novel or dramatic use of national advertising. Some of our most successful national advertisers have ingeniously utilized this principle—they were the *first* to use radio, the *first* to use sky writing, the *first* to use dirigible advertising, etc. They counted on the *sheer drama* of the new medium to compensate for its statistical weakness. They knew that this drama would appeal to the retailer and that the promotional support obtained from the retailer as a consequence would double and triple returns from the national advertising investment.

The trade will find television advertising exciting. Television advertising, for a time, will be news. News makes promotion. The better retailers—those who really promote and whose promotional cooperation means something—will be very much inclined to tie up promotionally with television campaigns run by national advertisers.

Third: And Now — What's the Answer?

It is our conviction that advertisers who evaluate national advertising not only for its consumer effect but also for its trade effect will be smart to do the following: 1—consider the advantages of getting in on television's ground floor. 2—accompany television plans with a budget for a complete promotional program that will both enthrall the retailer over the television advertising, and, equally important, give the retailer all of the promotional material he should have to translate that enthusiasm into active promotional participation."

**Multiple-Relay
Tele Network
Links Cities**

Basis for Coast-to-Coast Chain Seen in Washington-Philadelphia Demonstration

WASHINGTON, April 23.—The multiple-relay television network linking two major cities had its first test between Washington and Philadelphia last week, and is expected to connect New York and Washington within a few days.

Another Step Taken Toward Day of Television Networks

New York, April 20.—Another step has been taken toward the day of television networks. The first multiple-relay television network connects Washington and Philadelphia and, with a circuit established, also links New York and Washington.

Television Links Capital and Phila.

clearly as on a movie screen. Three speakers tell about the future of television as a medium for education and entertainment. Then, for the benefit of the members of the audience...

First Multiple-Relay Video Network Dedicated by Philco

Porter Heralds Washington-Philadelphia Link As Forerunner of Nationwide Television

Tele Network Practical

Proven Scientifically Possible Through Wireless Relays Set Up By Philco Between Washington And Phila.

Philco Inaugurates Television Connecting Washington and Philadelphia

SEEN AS FORERUNNER OF NATIONWIDE TELEVISION Provides Scientific Demonstration of Television by a Multiple-Relay System of Transmitters — Coast-to-Coast

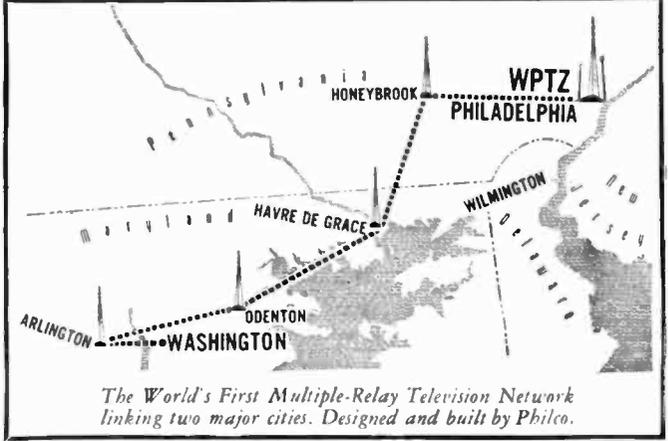
Porter On Philco Television Says Relay "Historic Event"

Following address by Paul A. Porter, Chairman of the FCC, on the occasion of the inauguration of the first television multiple-relay linking Washington, D. C. and Philadelphia by Philco WPTZ, Philadelphia and broadcast over tele stations in the Washington area.

Another Step Is Taken To Advance Television

New York, April 20.—(AP)—Another step has been taken toward the day of television networks. The first multiple-relay television network connects Washington and Philadelphia and, with a circuit established, also links New York and Washington.

Another Philco TELEVISION!



The World's First Multiple-Relay Television Network linking two major cities. Designed and built by Philco.

"A historic milestone in our progress toward a nationwide system of television!"

That was one interpretation of how much it meant to all America... on the evening when Philco linked Washington and Philadelphia with the first multiple television network between the Nation's Capital and the city where the Nation was born.

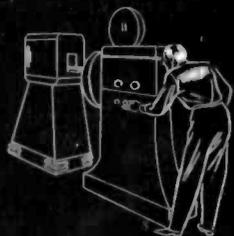
American newspapers recognized the significance of this Philco "first" by giving columns of carefully rationed space to the story of the inauguration of Washington-to-Philadelphia telecasting.

Today... with the defeat of Japan still the major objective of the American people... the development of transcontinental television networks is still in the future. But Philco, by opening this micro-wave link between

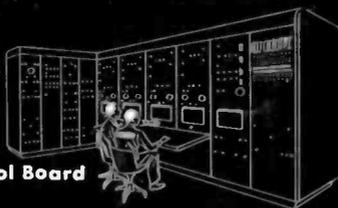
Washington and Philadelphia has once more shown the way!

This link, designed and built by Philco engineers, is the first multiple-relay television network between two major cities. It gives scientific proof for the first time that the technical basis for coast-to-coast television has been developed.

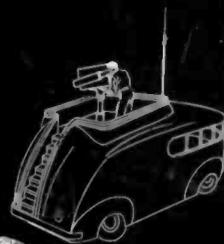
PHILCO
Pioneers in Television Research



DuMont Projector and Film Pickup Camera



Master Control Board



DuMont-equipped Television Truck



Producer's Control Desk

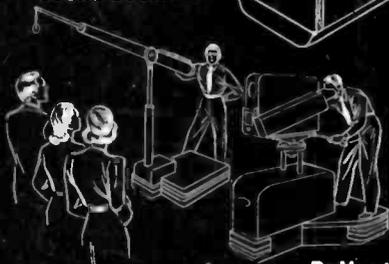


DuMONT TRANSMITTER CONTROL CONSOLE and DuMONT VIDEO-AUDIO TRANSMITTER

Only the DuMont Transmitter Console offers *all* these features:

1. 12" cathode-ray tube for observing picture quality.
2. Control buttons for individual transmitter stages.
3. Necessary meters for constant checks on operation.
4. Cathode-ray oscillographs for observing signals and individual stage operation.
5. Patch-in rack for checking individual stages and signal off the air.
6. Automatic and manual safety switches for emergencies.
7. Synchronized electric clock for time recording.
8. Automatic time recorder.
9. Intercommunication system microphone and loudspeaker.
10. Facilities for logbook and other records.

DuMont Sound Boom



DuMont Iconoscope Camera

DuMONT—FOR THE TOOLS OF TELEVISION

Simplified precision control is the design keynote of all DuMont Television Broadcasting Equipment. Typical of this bull's-eye concentration on basic essentials is the DuMont Transmitter Control Console. All meters and controls of the Video-Audio Transmitter are combined with the station monitor (formerly a separate unit) to achieve a new standard in safety, easy visibility and centralized operation. Operators can be quickly trained to attend it.

DuMont has equipped *more* television stations than any other company. Week-in, week-out, these

stations are demonstrating the high pickup and transmitting quality and efficiency, the extreme flexibility, rugged dependability and low operating cost of DuMont-engineered equipment.

DuMont has pioneered the profit pattern for peacetime commercial television...is setting the pace in television broadcasting equipment design. Climb aboard the television bandwagon today by using the DuMont Equipment Reservation Plan to insure early delivery of equipment and training of personnel. *Ride with the leader!*

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DUMONT



Precision Electronics and Television

ALLEN B. DUMONT LABORATORIES, INC., GENERAL OFFICES AND PLANT, 2 MAIN AVENUE, PASSAIC, N. J. TELEVISION STUDIOS AND STATION WABD, 515 MADISON AVENUE, NEW YORK 22, NEW YORK