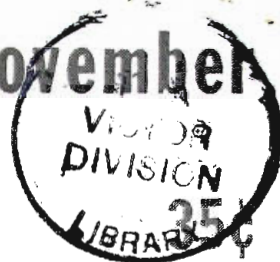


Television

THE BUSINESS MAGAZINE OF THE INDUSTRY

November 1946



"LIGHTS OUT"

Approx. 30 min., Sun. p.m.

"It's usually considered in bad taste for a reviewer to use superlatives in describing a show. Sometimes, however, such a course of action cannot be helped, as in this first televised version of the w.k. "Lights Out" radio spine-tingler . . . the program was tops from start to finish and undoubtedly one of the best dramatic shows yet seen on a television screen . . ."

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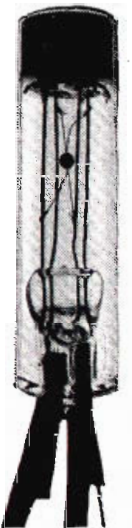
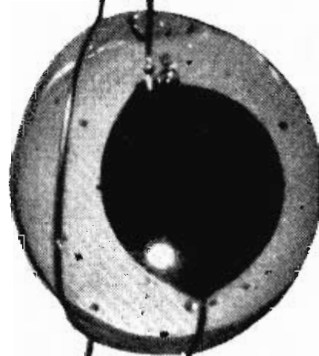
The Eye That Never Closes

You are looking at a thermistor — a speck of metallic oxide imbedded in a glass bead hardly larger than a pin-head and mounted in a vacuum. The thermistor was developed by Bell Telephone Laboratories to keep an eye on the amplification in long-distance telephone circuits.

When a thermistor is heated, its resistance to electric current changes rapidly. That is its secret. Connected in the output of repeater amplifiers, it heats up as power increases, cools as power decreases. This change in temperature alters the resistance, in turn alters the amplification, and so maintains the desired power level. Current through the wire at the left provides a little heat to compensate for local temperature changes.

Wartime need brought a new use for this device which can detect temperature changes of one-millionth of a degree. Bell Laboratories scientists produced a thermistor which could "see" the warmth of a man's body a quarter of a mile away.

Thermistors are made by Western Electric Company, manufacturing branch of the Bell System. Fundamental work on this tiny device still continues as part of the Laboratories program to keep giving America the finest telephone service in the world.



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Television

THE BUSINESS MAGAZINE OF THE INDUSTRY

Volume III, No. 9 November, 1946

c o n t e n t s



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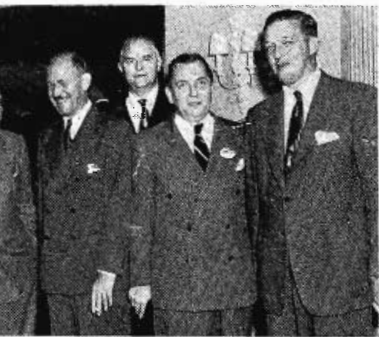
EDITORIAL

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telescope



The men behind the B. T. Babbitt, Inc. television show—L. to R. Walter Ware and Ralph T. Smith (Duane Jones Co.), Robert E. Brenner (B. T. Babbitt), Duane Jones, Norman Mendleson and L. J. Gumpert (B. T. Babbitt), Brent Groves (Duane Jones Co.)



The group responsible for the Atlantic sponsorship of the Penn football games over WPTZ, get together for the 6th consecutive season. Bob Stanton, C. L. Jordan (N. W. Ayer), J. R. Rollins (Atlantic), W. W. Orr and H. L. McClinton (Ayer).



Shaking hands after signing a contract calling for exchange of programs between WPTZ and WNBT. E. B. Loveman (Philco) at left, and John Royal (NBC), at right.

J. B. Elliot (RCA) demonstrates the assembly line to members of the FCC (L. to R.) P. Walker, C. R. Denny, W. W. Watts and Elliot (RCA), E. K. Jett, R. C. Wakefield and R. Hyde.



This Month

As receiver production goes, so goes the industry . . . and it looks as if production will hit between 20,000 and 25,000 before the end of the year. RCA will market 15,000 sets, DuMont about 6,000 and Viewtone about 3,000. U. S. Television and Telicon will be represented with much smaller output. Farnsworth, Philco and General Electric will not swing into real production before the first of the year.

Distribution pattern will probably follow that planned by RCA—bulk of receivers will go to New York area (Newark and Connecticut), with Philadelphia second, Chicago third and Schenectady-Albany area fourth. Los Angeles section will not get any until early 1947. Deciding factors in allotments are population and available program service.

A resume of the characteristics and prices of receivers: RCA 7-inch tube table model will sell for \$225, the 10-inch model will be \$350 with deliveries to start in November. Scheduled for December production is a \$750 model which will have a 10-inch tube, AM-FM & short-wave, plus a record changer. DuMont has established prices on its line, and inclusive of excise tax they are: 12-inch tube—\$795, also includes an AM receiver; 15-inch tube—\$1795 includes AM, FM and record changer; 20-inch tube—\$2495, includes AM, FM, short-wave and a record changer.

Farnsworth expects to make reasonable delivery in January of its 10-inch table model which will sell for about \$250. An AM receiver will be installed in the same cabinet at the customer's option for an additional \$30. General Electric is producing its 10-inch model with an AM receiver priced between four and five hundred dollars in limited quantities at present. This set with addition of FM and a record changer will be in the neighborhood of \$700.

Philco has thus far only made test runs in their plant. Expect real production by mid-winter. Telicon doesn't expect much production this year, and is working on models from a 10-inch to a 24x18 projection model. Prices range from \$425 to \$2640. Company is especially interested in developing push button control. Viewtone is concentrating production on its Adventurer model which has a 7-inch tube and AM radio priced at \$279.95. U. S. Television is concentrating on its large size projection model. They are finding a ready market in bars and restaurants.

Persons and Places

Paul Knight, program manager at WPTZ, has resigned. Executive-producer Ernie Walling is slated for the post . . . Marc Spinelli, director at WRGB, has also resigned from the station . . . Ronnie Oxford, WNBT television director, is going to NBC's Los Angeles office, ostensibly in a radio post. Would seem a pretty sure bet though that if NBC receives an official okay on their Los Angeles application Ronnie will move into a television spot . . . Kenneth Young is the new television director at Campbell-Ewald . . . At DuMont, John B. Murphy has been appointed Director of Mobile Operations of WABD . . . Big-wig change due at WCBW.

One of the most hilarious conversational breaks happened during the WCBW pick-up of the Rodeo. The announcer, Win Elliot, who has a staccato manner, was interviewing a drawing ex-cow-puncher. One of the questions Elliot suddenly shot at the rangy ex-range rider was, "What is the *UTILITARIAN* purpose of calf roping?" A long silence. Then the lanky Texan turned to his vocabulary-wise interviewer and in complete bewilderment drawled . . . "Ah beg yore pardon."

At WABD the announcer made a slip when ushering in the Ida Bailey Allan show. When introducing the well known kitchen authority, the announcer slipped and said "the well-known home Communist," instead of the well-known home economist.

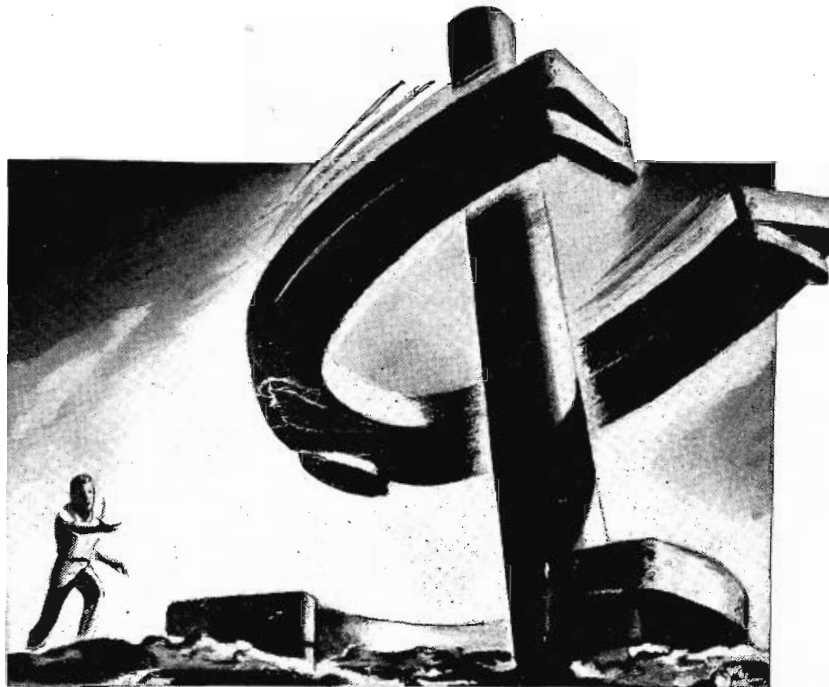
So hungry for equipment are the personnel of television stations that they are flying their own planes to Camden to effect faster delivery of newly-manufactured television pick-up equipment. Captain Bill Eddy, general manager of WBKB flew in with his plane, and Edwin Risk of the St. Louis Post Dispatch's television station arrived with the newspaper's Station KSD plane. Central airport, Camden was the pick-up point for the long-awaited equipment.

Ruthrauff & Ryan (Chicago) conducted a 2-day television symposium last month in the radio studios of the agency. Among the speakers scheduled to pass on valuable information to the clients and account executives were: Paul Raibourn, president of Paramount Pictures Television Productions; Ardien B. Rodner, supervisor of television for the Commonwealth Edison Company; Paul Mowrey of ABC; Norman C. Lindquist, Commonwealth Edison Company, and Fran Harris of Ruthrauff & Ryan.

During the TBA Conference a Farnsworth set was brought over to the office of the New York Times in the rain. After tinkering about to find the best aerial they ended up with the umbrella of a Times editor and secured wonderful reception.

Focal point of the New Postwar Products Exposition held in Detroit this month was the WWJ (Detroit News) demonstration of television. Among the equipment on display was DuMont and RCA control and camera units . . . and Rosie the television bear.

Another show in which television receivers and equipment outdrew all others in public attendance was at the Home Builder's Show in St. Paul, Minnesota. Joseph Beck, television director of WTCN arranged a booth to give the people of the twin cities of Minneapolis and St. Paul an idea of the way television will look. A mock-up of a receiver was employed to show motion pictures from the rear to give the effect of actual reception. Film used was material shot by the ABC television camera crew. WTCN was recently granted a television CP.



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Junking black and white no issue in color standards hearing . . . TV grants—by Dorothy Holloway

ALREADY the lines of battle are drawn in anticipation of FCC's upcoming hearing December 9—to decide whether CBS is merely chasing rainbows or can here and now produce a good, workable color television picture at a price Mr. John Q. Public wants to pay.

It's a tough assignment and, some FCC staffers will tell you off-the-record, more than CBS bargained for.

Meanwhile, RCA and DuMont are marshalling facts and figures to show their own tests in the color field and to lay before the FCC the many "unknowns" which, they claim, still block development of a reliable color television system . . . a system which will have the same flexibility as our present two-tone TV pictures.

David Smith, capable director of engineering for Philco, is, perhaps, more than any other, the man FCC will lean on for advice in December. He was virtually subpoenaed by the Commission and is, in fact, as much a part of the proceeding as Columbia itself. He will be called to testify in his dual role as Chairman of the Radio Technical Planning Board Panel on Television and also as Chairman of the special Radio Manufacturers' Association subcommittee studying ultra-high-frequency transmission.

He may even don another hat and take the stand later on as spokesman for his own company—which, along with RCA, Westinghouse and a few other large set-makers, is expected to have an opinion on the color question.

Meanwhile, some FCC staffers are bemoaning the fact that the public and a much bewildered press has been misled into believing that the December hearing will decide whether or not black-and-white television will be dropped for color.

In subsequent publicity they have tried to make it crystal clear that junking black-and-white is not even an issue here. Columbia's own standards—as proposed to FCC—do not contemplate displacement of black-and-white, now or later. There is no question but that monochrome television will be retained and retained in its present spectrum location. So much, FCC staffers add ruefully, have they tried to explain to a bemused and television-hungry public.

In any event, everyone will know more about both black-and-white and color television before the hearing is over.

FCC is expected to continue the December 9 proceeding only so long as is necessary to hand down an interim opinion. From where we sit now, it would appear a safe hunch to predict that the Commission, once convinced color has not advanced to the point where it can be safely commercialized, will issue an interim order to this effect. The hearing will then be recessed until a later date.

FCC will then resume the proceeding at any time when new evidence appears on television's behavior in the ultra-high regions of the spectrum.

TV Grants Multiply

A half dozen new television stations are now authorized as result of FCC approvals during the month. Two of the neophytes are CBS-affiliates, both of whom

registered enthusiasm for the "color" pictures of the future but quietly pursued their monochrome applications at FCC in the interests of "Television Now!"

These are the Dallas (Tex.) Times-Herald station, KRLD and WHAS, Louisville, Ky.—owned by the Louisville Courier-Journal and Louisville Times, and under the capable direction of Mark Ethridge, a former president of the National Association of Broadcasters.

During the month, Philadelphia picked up its third TV outlet when William McLean's dignified, most-read evening daily "The Evening Bulletin" was awarded video channel 10 for immediate operation.

The Bulletin, FCC was told, would spend over \$200,000 on its television plant and underwrite costs of operation up to \$15,000 a month. Philadelphia's other TV stations: WPTZ, the pioneer Philco station; and a recent grant to Walter Annenberg's Philadelphia Inquirer, which is erecting a several million-dollar Radio City to house its AM-FM-TV activities. (The Inquirer, incidentally, expects to spend up to \$35,000 a month programming its TV station.)

Television picked up new strength in the Midwest too. The Minnesota Broadcasting Co., licensee of WTCN, Minneapolis, now holds a lien on channel No. 4 and plans to build a \$136,500 station with studios and transmitter located in Minneapolis' handsome Foshay Tower. WTCN expects to program a full 28-hour week from the outset. It will be on the air from 2 to 4 and 8 to 10 p.m. seven days a week.

A second large department store—The William Block Co. of Indianapolis—also entered the TV fold this month. (The Outlet Co. of Providence, R. I., got its permit last December). Block, which has operated a retail store in Indianapolis since 1895, was given tele channel No. 3 for a \$230,000 station. The store will stress tele advertising for retailers, expects to return a profit the first year. The Block application shows \$49,920 earmarked for annual operating costs and \$78,000 in expected revenues, based on 60 percent commercial programming. Block has an FM application pending but has no standard broadcast affiliation.

One of the first TV operations of its kind was chalked up during the month when the Iowa State College of Agriculture and Mechanic Arts (WOI), Ames, Iowa, won a commercial TV permit for non-commercial operation. The College expects to lean heavily on student talent and engineering faculty for its operation. The station will cost in excess of \$185,000 but monthly costs of operation, using student personnel, have been pared down to a bare \$800 to \$1200.

In the experimental field, St. Louis University won FCC approval this month to put up a \$168,000 transmitter on its campus. Station will program one hour a week. The university's goal: "to develop a universal system equally efficient for black-and-white and for color television." It will test both monochrome and rainbow video.

As we went to press, FCC engineers had processed a half dozen more TV bids—among them the ambitious tele project of Col. Bertie McCormick's all-powerful

Chicago Tribune and application of Wesley Dumm's KSFO, San Francisco.

A Crosley Network?

Crosley Broadcasting Co., now one of giant Aviation Corporation's multiple holdings, bids fair to be one of the first TV network operations—although to date it has not a single permit.

Unless top policy changes radically in the next few weeks plans call for: Crosley stations in Columbus, Dayton and Cincinnati—and, FCC willing, purchase of KSTP, St. Paul, Minnesota, which already holds a permit for a TV station in St. Paul. With favorable FCC action on these applications, Crosley would theoretically have closely-knit Midwest network of four TV outlets.

Departures and Arrivals!

Joseph Borkin, chief economic advisor and attorney in the Anti-trust Division of the Department of Justice left government service this month to set up shop as a private economic consultant in Washington. Sigmund Timberg, Jr., new head of the Consent Decree Division of Justice will carry on Borkin's work on the Scophony case.

Latest addition to staff of NBC-WRC is George Sandefer, who will be assistant to Carleton Smith, WRC manager, in charge of television. Sandefer just returned from four months' indoctrination in tele at RCA and WNBT, New York. He is now holding hourly sessions four days a week passing on that knowledge to WRC staffers who will double in brass in NBC's television operation here.

Over at WMAL, the Evening Star station, Frank W. Harvey, formerly in charge of field operations for RCA television, is a new addition.

Gordon Hubbel, a program director at WMAL, will also handle some TV shows. He is already lined up as an instructor in TV programming at American University next spring.

Here and There in the News:

FCC has pushed back to 1947 requirement for full 28-hour a week programming of TV stations. TBA sought the reprieve . . . Mike Uline has signed over video rights of sports events in Uline Arena to DuMont's WTTG . . . Clark Griffith is still holding out against tele-shows of football or baseball games in his Griffith stadium. There'll come a day!

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Part Two covers programming. Among the subjects discussed are: Programs in General, Interviews, Informative Programs, Variety Programs, Drama, Musical Programs, Puppets, Remote Programs, News, Programs on Film, Visual Effects, Television Rights.

Part Three discusses the commercial aspect. Chapter headings are: Commercial Programs, Large Station Operation, Small Station Operation, Television Networks, Theater Television, Future Developments, Jobs in Television.

Part Four offers a short summary of television progress.



TOM HUTCHINSON, *The Author*

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PHILCO STATION OPERATIONS

By Mary Cannon

WPTZ

WPTZ, in spite of the limitations of their temporary studio, are stepping up their programming coverage to give Philadelphia viewers a well rounded video selection. In addition to live studio shows and film, Saturday and Sunday telecasts of the football games are also on their schedule. And big news was made last month with the joint announcement by John Royal and Ernest Loveman for two way relaying of programs between WNBT and WPTZ.

Back of this activity is a staff of thirty, who coordinate the programming set-up. Starting point is the weekly Friday morning meetings where everyone that has anything to do with programming gets together for an exchange of ideas. Generally Ernest Loveman, vice-president and general manager of Philco Television Broadcasting Corp. (subsidiary of Philco Corp.); Rolland Tooke, commercial manager; Paul Knight, program manager; Clarence Thoman, director of special events (including remotes); Ernie Walling, executive producer; and W. Craig Smith, art director, represent the production side. On the operations side, Frank J. Bingley, vice-president and chief television engineer of Philco Television Broadcasting Corp.; Ray Bowley, chief operations engineer, Dave Miller, studio engineer; Arthur M. Hopwood, Jr., transmitter engineer; and John Roth, remote engineer, sit in to give their ideas.

First topic for discussion are the program schedules drawn up for two weeks in advance by either Paul Knight or Clarence Thoman after a conference with the staff. Dry studio and camera rehearsals are checked to see if they jibe; film must be procured, delivery and previewing schedules arranged; convenient auditioning time set; time allotted for recording quickie announcements, etc.

After the schedules are checked and okayed, attention is then turned to the previous week's programs—both from the artistic and technical angle of what was wrong and what was right. For while WPTZ staffers say that programming is experimental, they do not use "experimental" as a generic term to cover carelessness or as a handy peg on which to hang slipshod production. They're out to learn from everything they do.

Good example of Philco's cooperative working arrangement is the procedure followed when a sustaining show is okayed and goes into the works. Executive producer Ernie Walling draws up a sketch of the sets and a prop list, and goes over it with stage manager Sam Stewart and art director W. Craig Smith. Dave Miller and George Borden of the technical side are present to okay lighting, mikes, camera placement in relation to lights, etc. Thus, right from the beginning, everyone is familiar with what the director wants—and the director knows what he can get.

In the WPTZ control room, the director sits at the control board and does his own switching and fading. Panel was designed by Philco for their own use.



Personnel Training

While they believe in ultimate specialization in each job category, best method of training anyone for a particular niche is to familiarize him with every phase of studio operations. By doing this each member of the staff has a realization of the other's problems and can dovetail his particular task into the composite teamwork that's necessary for smooth video programming. With most of the key men in their prewar staff back now, this group forms the nucleus of experienced hands. Newcomers generally start in doing the odds and ends—getting props, setting up scenery, etc. Particular aptitudes and talents are taken into consideration—for example, they feel it's helpful if a potential cameraman's hobby is photography or shooting home movies, for that should give him some knowledge of composition. Best spot for learning your way around is as a dolly pusher—and this is usually reserved for future cameramen. Equipped with earphones, the dollyman knows what the director is doing, what the cameraman's instructions are—in brief, he's right in

shows that the work must be done.

Producer Walling's theory of direction is quick pace and complete use of cameras. He believes the old idea that television must be slow moving because of the equipment involved in putting on a show is obsolete and false. While Ernie doesn't "work by the book," here are some of the more basic principles he has evolved:

- Get picture sequence in mind while first reading script. Edit script for studio.
- Start to plan camera shots during line rehearsals. Pre-planning obviously cuts down rehearsal time.
- Check the high spots in the script with camera angling in mind. Ask the actors to hit the spots which are going to be highlighted by the cameras.
- Figure out camera action during dry rehearsals.
- Go straight through the first camera rehearsal without stopping—give the cast a chance to warm up, to get used to the cameras and the lights. (And the time's not wasted for the director either—he gets the



ERNEST B. LOVEMAN
President and
General Manager



FRANK J. BINGLEY
Vice President and
Chief Television Engineer



RAYMOND J. BOWLEY
Chief Operations Engineer



ROLLAND V. TOOKE
Commercial Manager



PAUL KNIGHT
Program Manager



CLARENCE T.
Director of Spee

the middle of things. (This kind of training also makes him, when he graduates to cameraman, a good sub for the stage manager if the need arises.)

Television techniques are also taught to new talent and Ernie Walling's best trick along these lines is to put in a stand-in and take the actor into the control room to show him the picture he wants to get on the monitor. It's important that an actor knows what the director is trying to do; he must be conscious of the camera, where it will be, its scope, etc. And only by taking him behind the scenes can a director train his cast in developing a television technique.

Programming

WPTZ offers the usual programming fare of sustaining and sponsored studio shows, remotes, film and relay programs. Film is a small percentage of their programming, with most of their releases coming from different government agencies. However they have prepared a library of film subjects, of varying lengths to use when programs do not go off on the nose. Typical example is the Thursday night pick-up of the "Hour Glass" from WNBT. If show goes off before 8:55 a film is used to bridge the gap until 9:00; after 8:55 transcribed music is used.

On studio shows, audience participation type programs are mostly ad lib. It's on the scripted dramatic

whole picture of the problems to be solved and the rough spots to be smoothed out.)

- Stop them the second time through—but only on the big things. Actors are people too—and they can only absorb so much instruction at a time.
- Tackle the minor flaws next.
- Make your plans and stick to them. Constant "mind changing" will keep everyone in a constant state of flux. There are too many people involved who must carry out the director's instructions—and no one yet has invented a push button to change everyone's mind simultaneously.
- Use plenty of background music where the script can stand it.
- Pipe the music into the studio to put the cast into the right mood during certain scenes.

About four to one camera rehearsal is adequate with proper pre-rehearsal planning. As soon as actors and directors have more experience, rehearsals can be cut to two to one or lower.

WPTZ's plans call for a stock company, a musical troupe and a ballet ensemble as a nucleus for these types of productions. Keeping your own staff of talent on tap, training them to your way of doing things, making them video-wise will eliminate many of present-day programming headaches.

Script Marking

Borrowing from the methods used to make a musical score, Ernie has worked out his own system of camera cueing a dramatic script. With columns for cameras 1 and 2 alongside the script, a vertical line is drawn under the camera which is on the air down to the point in the script where a switch to another camera is made. A horizontal line is then used over to the next column to show the switch and the same vertical line principle is used until the next camera change. Symbols have also been worked out—such as the circle for a pan; a square for dollying; a C with an arrow pointing up or down for tilting; a wide H with a wavy line through the horizontal bar for dissolves. With these symbols superimposed over the line at the right spot in the script, camera action can be seen at a glance.

Remotes

In pre-war days, WPTZ did a lot of remote pickups—baseball, conventions, football, rodeos. Even dur-

WPTZ was the first to install a monitor for the announcer so that he could see what was going over the air and key his commentary to the picture the home viewer is seeing.

Up in the control booth, Clarence Thoman directs the cameramen. Program is sent by radio relay to Wyndmoor transmitter. On Franklin Field, WPTZ has constructed two transmitters and one receiving antenna, so that the director can receive the commercial segments on the viewing screen.

This fall's schedule also includes the Sunday afternoon pro games from Shibe Park—so the equipment is moved out and set up over there. Then the same thing starts all over again.

Sponsored Programs

WPTZ has recently set up a tentative rate card based on a thirteen-week contract. Charge is \$180 per half hour and \$300 per hour of studio air time. Rehearsal time is \$50 per hour to the nearest half hour. Art and construction work is charged on a man-hour basis. Film rates are set at \$140 per hour; \$80 per half



W. WALLING
Producer

W. CRAIG SMITH
Art Director

A. M. HOPWOOD
Transmitter Engineer

DAVID MILLER
Studio Engineer

JOHN ROTH
Remote Engineer

ing the war they continued, with their seventh fall season of telecasting of all Penn home football games, sponsored this season by the Atlantic Refining Company for the sixth consecutive year.

Clarence Thoman, special events director, believes that local color is important in any remote and WPTZ football telecasts show that he practices what he preaches. Sam Stewart, assigned as "stage manager" on remotes, sits next to the announcer and his assistant, and spots the color on the field—the fight which breaks out in the grandstand; the drunk who elects himself comedian for the day; the inevitable dog which trots out after a player. Having two-way communication with the director in the control booth, Sam can point these things out.

At Franklin Field, two cameras are set up in the upper stand at about the 50-yard line, separated by the announcer's booth. Director Thoman believes that cameras should be in approximately the same spot so that they are shooting from the same angle—in other words, have the camera action the same as if the viewer were sitting there turning his head from side to side to catch the play. While two cameras are adequate to do the job, no director ever feels he has enough. Among other things, he would like to have a camera mounted on a truck to roll up and down the side lines, catching such human interest shots as the coach tearing his hair out at a fumble, etc.

hour and \$50 per quarter hour.

Their experience in trying to put television on a commercial basis showed that it's not too difficult a matter to interest prospective clients in television until you hit the question of "Alright, but what will we do?" For this reason, Philco is setting aside in their budget an appropriation for commercial program experimentation so that potential sponsors can be shown a complete program, rather than given a written story outline or an on-paper idea.

A case in point is the Sears "Visiquiz" program, an audience-viewer participation show, in which the prizes are Sears merchandise. The idea was sold to the client and the agency. Auditions were arranged for an emcee and a girl assistant, with members of the agency, sponsor and WPTZ present to make the selection. Once that was over, the show went into production. Both had to be trained for video and rehearsals were held on the first few shows to put the idea over to them. Now, with the exception of the opening and closing, the show is ad lib and no rehearsals are necessary.

The Gimbel program, "All Eyes on Gimbels," is a scripted show, with the script written by Gimbels and dry rehearsals held before the show comes into the studio for camera rehearsal. During this show, the Gimbel man sits alongside the director in the control room as his assistant.



Philco's remote equipment is currently used at Franklin Field and Shibe Park every week-end for the pick-ups of the football games. Remotes rate high in future plans.

Relayed Programs

In 1941, Philco started radio relaying New York television programs to Philadelphia for rebroadcast by WPTZ. Then in 1944 Philco installed a radio relay station at Mt. Rose, N. J., halfway between the two cities, to improve the pick-up of its New York programs, and has picked up many of WNBT's programs since that time. Relay has worked very well and now, with some relatively minor improvements, a more powerful transmitter and a more sensitive receiver has resulted, and the system is very close to a transparent relay.

This is the relay which will be used to pick up the WNBT programs and probably programs from other stations in New York. In the meantime, however, on the Philadelphia to New York transmission the AT&T coax cable will be used for the initial pick-ups. Solution on a two-way radio relay can be easily achieved—one method being to build another station probably around Elizabeth, N. J. Electrical interference around New York makes radio relaying to this city more difficult than relaying from it.

So much for the technical angles of the two-way pickups. From the programming side, effects are far reaching in solving program variety and filling the 28 hours a week requirement due to go into effect. Another question to be answered is the rates for relay programs. Sponsored shows originating in New York will pay WPTZ for the use of their facilities and the additional coverage secured in the Philadelphia area. Same will be true of sponsored shows sent from Philly to New York. Both NBC and Philco are now trying to determine what these rates should be.

Naturally the best programs from each station will be selected for transmission. Standard Brands "Hour Glass," Bristol-Myers, the Gillette sponsored fights, baseball and other sports events are the choices so far.

There is also a possibility that WPTZ will pick up some of the CBS programming—particularly the Ford sponsored sports shows, as well as WABD, a few of whose programs have already been rebroadcast by WPTZ.

Facilities

In their temporary studio WPTZ has two iconoscope cameras with turret lenses mounted on modified Fear-

less dollies. Lighting consists of 150 watt projection spots on adjustable tracts—or 35 kw. on both ends of the studio. (Ceiling height here is 12'). In order to get away from flat lighting, which detracts so much from any television show, Paul Knight advocates using projection floods and spots for highlighting. There are two boxes to draw 10 kw. for spotlights and two 5 kw. fresno lights, in addition to 2 kw. spots on stands which can be adjusted in height and moved around as needed. Ceiling lights can be tilted. Usually they run about 55 kw. of light in all shows.

Philco's control room set-up is a model of simplicity. The director sits at the control board, with a clear view of the studio through a large transparent plastic window, and does his own switching and fading. This panel was designed by Philco for their own use, as they felt it was easier to teach a man with show business background how to push a few buttons than to teach a technician show business. Turn tables are next to the control board. Slides and titling equipment are available in the studio with fades and dissolves made by the program director.

The director has two-way communication with Sam Stewart, the stage manager, who acts as his representative on the floor. He cues talent for placing, makes sure titles are in place, etc. Sam can also advise the director if difficulties come up—such as a cable in the way of a camera moving, etc.—so that the director can plan to hold the shot on one camera until the next is in place.

Technical panel is separate from the director's board and there is a video operator for each camera, sound operator, relay transmitter man and supervisor of technical production.

Up at the master control desk at Wyndmoor, where the WPTZ transmitter is located, Al Mann coordinates the entire program. Two-way communication with the director in the control room permits him to give the signal for cutting from film to studio; from remote to studio; from relay to studio. Fades and dissolves from commercial back to announcer are also made on remotes.

Film equipment, which is at the Wyndmoor transmitter, consists of two 35 mm. projectors, one 16 mm. projector with sound, and a baloptican slide projector for transparencies and opaques. A Fairchild recorder is also at Wyndmoor and quickie announcements are recorded by Al Mann (ex radio announcer), prior to each telecast. This procedure is more convenient and saves the expense of hiring an announcer.

Portable suitcase equipment, including two cameras with four lenses, are used for remotes. Roof of the Philco mobile unit truck has been constructed to hold two cameramen and an announcer for the days when on-the-street pickups will be a regular feature of WPTZ.

Props and Paints Department

Hiring furniture for sets and set dressings is not too easy a matter in the city of Brotherly Love, so WPTZ is now building up their prop department. Main point in purchasing props is interchangeability—for everything should be selected from a multiple use viewpoint. Simple system of indexing has been devised, whereby each prop is numbered to correspond to the shelf where it belongs. Cross index system, both by shelf number and by name of article, makes for quick reference. After a show all props can be placed in hand carts and numbering system makes it easy to sort them out the next day.

(Continued on page 24)

Television outlook in LOS ANGELES

WITH Howard Hughes withdrawing from both the TV and FM pictures, Los Angeles contest is now a draw—with seven applicants for the seven available channels.

Hughes' move came as a surprise for FCC decision was expected momentarily on the eight day hearings held in Los Angeles last May. At that time Hughes stacked up as the biggest potential spender with the proposed yearly operating cost totaling \$1,307,724.

Left in the field are the two pioneer coast television stations Don Lee and Television Productions; the net interests, ABC and NBC; The Times-Mirror Company, local newspaper publishers; Earle C. Anthony, Inc., owner and operator of KFI, an NBC affiliate; and Dorothy S. Thackrey, publisher of the New York Post,

as well as owner of KLAC, KYA (San Francisco) and WLIB (New York).

If okays go through, this will give NBC its fifth video channel (CPs having already been granted in Washington, D. C., Chicago and Cleveland, plus the operating station WNBT in New York), and ABC its third go-ahead, with grants in Chicago and Detroit, and others pending in New York and San Francisco. Don Lee has been operating experimentally in Los Angeles since 1931 over W6XAO and is also on file for a station in San Francisco. Application of Television Productions, 100% Paramount subsidiary, is one in a series of applications by Paramount subsidiaries. Company has been programming over W6XYZ since 1942. The Times-Mirror and Earle C. Anthony television plans are limited to Los Angeles alone.

LOS ANGELES SCRATCH SHEET

	The Times-Mirror	Anthony	Don Lee	ABC	Thackrey	Television Productions	NBC
Construction Costs	\$3,768,500 ¹	\$195,008.32	\$45,000 ⁵	\$589,258	\$220,550	NOT GIVEN DUE TO PRESENT CONDITIONS	\$237,500
Equipment Costs	\$570,900	\$219,986.60 ¹	\$248,188	\$334,570	\$287,300	\$261,000 \$121,095 ON HAND	\$897,500
Operating Expense	\$1,000,000 ² 1st Yr. ³	\$421,269.60	\$172,084.78	\$821,308	\$335,041.56	\$896,000 ⁰	\$1,320,708
Revenue	—	—	—	\$655,200	—	—	—
Program % Sustaining % Commercial	100%	70% 30%		35% 65%	100%	100%	100%
Network Plans	—	Regional	—	Yes	—	Yes	Yes
Personnel # Technical # Program	{ 113	{ 38	{ 37	54 48	20 22	{ 100	{ 116
Programming % Studio % Film % Remote	55.3% 25.9% 18.8%	3.25% 37.2% 30.3%	30%-40% 20%-30% 40%	42% 17% 41%	42.8% 50% 7.2%	38% ⁶ 21% 41%	— —

¹ Includes erection of 10 story building.

² Includes equipment costs.

³ \$40,000 a month thereafter.

⁴ \$90,356.83 additional already invested in television.

⁵ Total expenditure and investment \$985,546.04.

⁶ Based on 40 hour weekly schedule.



WITH sports pick-ups easily accorded first place as the best means of selling television to the public, The Goodyear Tire & Rubber Company made their entry into television with the sponsorship of the Army football games. With Blanchard, Davis & Company still holding forth this year and promising to be the twin threats to any team's aspirations, telecasting of the games has high prestige value — a point on which Goodyear is capitalizing. Arranged through N. W. Ayer & Son, games are being carried over WNBT, from West Point, from the Yankee Stadium in New York, and from Franklin Field in Philadelphia.

Not having to worry over the format or the entertainment value of the show they were putting on, N. W. Ayer's television director, Don McClure and Dick Rose, television art director for the agency, turned their full attention to the commercials. Break-down of a football game offers such natural spots

FOOTBALL TAKE

By Sidney R. Lane

as before the game, at the quarters, during the half and after the game for the sponsor's message. But since normal tendency of the viewer is usually to break away from the set at these times, they felt that special care must be taken with the commercial to keep them there and to get the message across.

Commercial Treatment

First thing they decided on were short, punchy, visual commercials, with product identification theme used for before and after game spots; 45-second message at the quarters and the dramatized product commercial at the half.

Film commercials were deemed a

must, both from the nature of the product and the fact that film would be easier to work with. Bulk of the film was obtained from a film library—such as the general montage effects used for the opening and closing commercial. In some of the dramatized commercials, Goodyear films were edited down—such as the one used to demonstrate the testing of LifeGuard Safety Tubes. Naturally some had to be shot specifically for the show—the Goodyear trademark and the Goodyear flag, etc.

Working through a film library cuts cost, of course, and saves time, the agency feels—when shots which fit in with the theme can be obtained. However, it's a long, tedious job—as both Don McClure and Dick Rose can testify.

The same visual commercials are used each week for the opening, closing and quarter mark spots. Pre-game commercial, which runs for 45 seconds, shows the Goodyear Wingfoot trademark, animated.

cial is given as accompaniment.

Closing commercial shows the Goodyear flag, followed by a globe of the world with a Goodyear tire around it. Next cut is to an auto traveling along a highway, followed by a shot of an airplane, then back to the tire encircling the globe, and finally fading out on the Goodyear flag. Closing commercial runs 35 seconds and off-screen commentary ties in an invitation for next week's game—as Goodyear's guest.

Product Plugs

It's at the half time mark that a dramatized visual commercial on a specific product is given. To give the viewers all the excitement that a football game means—and to keep them looking at the screen instead of going in search of a drink—cameras pick up the local color on the field, the bands playing, the parades, etc. Then into the commercial. Goodyear tires, LifeGuard Safety Tubes and Neolite soles and heels are the three products being

INGS VIA RELAY!!

This is followed by a montage into the Goodyear flag, then a cross-dissolve to a score-board which announces the teams for the day's game. Another cross-dissolve to film cuts of marching cadets follows, winding up with a shot of the Goodyear flag. While this accomplishes product identification, the viewer gets visual information on the teams, sees the cadets marching and is prepped for the game to follow.

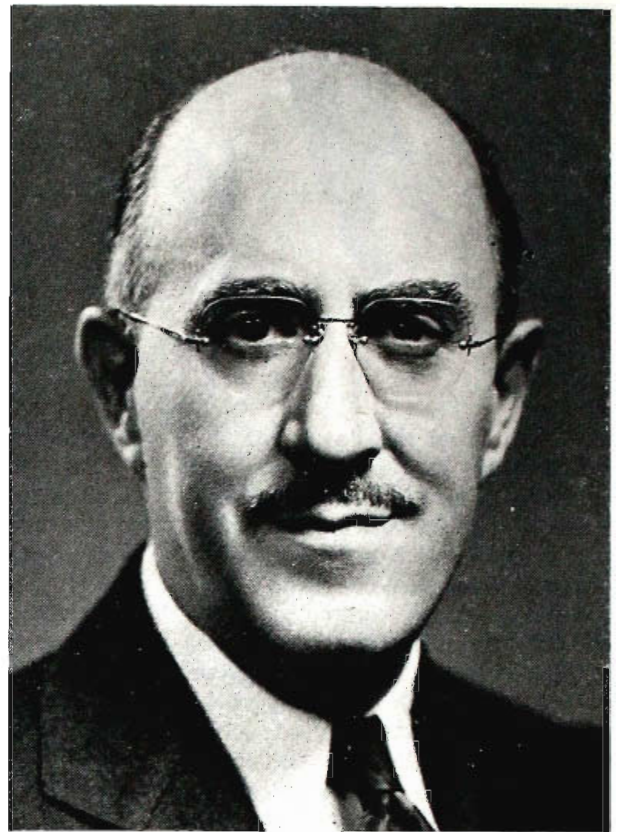
Quarter time commercial again ties in the color of the game with Goodyear. This is put across by flashing a clock, encircled with a Goodyear tire, to show the time out period, ticking away, and a 45-second straight-audio selling commer-

plugged—with two commercials each on the tires and LifeGuards and one on the Neolite soles and heels. This gives them five different visualizations.

Typical of the treatment which these commercials receive is the one of LifeGuard Safety Tubes. Dramatizing the emotional appeal of safeguarding the lives of your family and children, plug started off with the off-screen announcement . . . "Goodyear the greatest name in rubber . . ." then switched to a solitary helpless child, with the commentary implying that we must do all we can to protect them from the dangers of blow-outs. Next shot shows a speeding car heading for



An accolade must go to John K. Hough, director of advertising of the Goodyear Tire and Rubber Company for his realization of the importance of advertising on television now. The sponsorship of the West Point football games this season gave his company valuable experience and high promotional reward. But more important than that is the fact that it has given Goodyear an option on tomorrow's huge television audience.



trouble — then it happens — blow-out. But the driver didn't lose control . . . he is riding on Goodyear's Life Guard Safety Tubes which gives him plenty of time to bring the car to a safe and gradual stop. This is followed by a close-up which showed the inner construction of the LifeGuard. Sign-off showed the Goodyear flag.

Another commercial used at the half-time is one for Neolite Soles. Film dissolves from the Goodyear flag to a special torture chamber for testing soles. Close-ups of the sole show it surviving the rigors of hammering, rubbing, and water-soaking. Keyed with the words that children are especially hard on shoes, are shots of a girl playing Hop-Scotch, and a grinning boy kicking a football. Close-up of the boy kicking the ball is in slow-motion to add emphasis to the act. Next is a dissolve to the two children running home to mother, who talks of the consoling factor that growing children's feet have the protection of Neolite . . . and that the same quality is available in adults' shoes. Film then reveals mother placing shoes on the shoe-rack of her closet. This is done as a reverse shot through the closet

door which reveals the name Neolite on all the shoes on the rack. The fact that the same soles are available in stylish shoes is emphasized here. Commercial closes with a final closeup of the Goodyear flag flying briskly in the breeze.

Technical Problems

But not quite so easy as having the flag fly in the breeze, were the technical problems presented by relaying three of the games from the West Point stadium. Solution was finally worked out through a combination of coax cable and radio relay. Cameras in the stadium are connected by cable to the NBC portable television trucks set up behind the stadium. A coax cable connects the truck with the AT&T radio relay transmitter which beams the pictures to Crow's Nest. From there the signal is fed into another AT&T transmitter which sends it by radio relay to the WNBT studios, where it passes through the Master Control and then by coaxial cable to the Empire State Building for transmission to the viewer. Games at Yankee Stadium, climaxed with the traditional Army-Notre Dame game, are handled in the regular way.

The setup for telecasting from Baltimore was a milestone in the development of an east coast television network. The game was micro-waved from the Baltimore Stadium to station WBAL, and from there the signal was fed to the coaxial cable and transmitted south and north to Washington and New York.

Summing It Up . . .

So once again another big name advertiser has thrown aside the theory that there are still not enough sets to count and why bother with television now. With more sets operating in public places and with audiences estimated as high as 150 gathered around them for exciting sports events, this bulwark of the old school of thought is leaking badly.

But aside from the audience, Goodyear is another newcomer to television and has sewn up one of the most interesting sports spots of the fall season. The promotional possibilities and the prestige—plus the actual experience in television—will more than pay off when the score is tallied.

A. T. & T. network plans

Complete story on construction schedule, equipment development and rates outlined by L. G. Woodford, general manager, long lines department, American Telephone & Telegraph Company, at the TBA Conference.

IT HAS occurred to me that the two main subjects for discussion are:

First—What are the transmission facilities the Bell System is undertaking to provide for the television industry?

Second—When will these facilities be available between certain points?

Types of Facilities

The type of facility suitable for television transmission which has undergone the greatest development to date is the coaxial cable. We are making real progress in the construction of coaxial networks and in the development of apparatus employed in their operation.

Early in 1944, the American Telephone and Telegraph Company announced a five to six-year construction program involving 7,000 route miles of coaxial cable. That program is now being compressed into about three years, and additional routes have been added to the enlarged program, so that by about 1950 we expect to have some 12,000 route miles of this broad band cable in service.

As of October 1, about 2,700 miles of coaxial cable were in the ground, and construction is moving forward rapidly at a rate which will approach 3,000 miles next year. Right now, cable plow trains on the South-

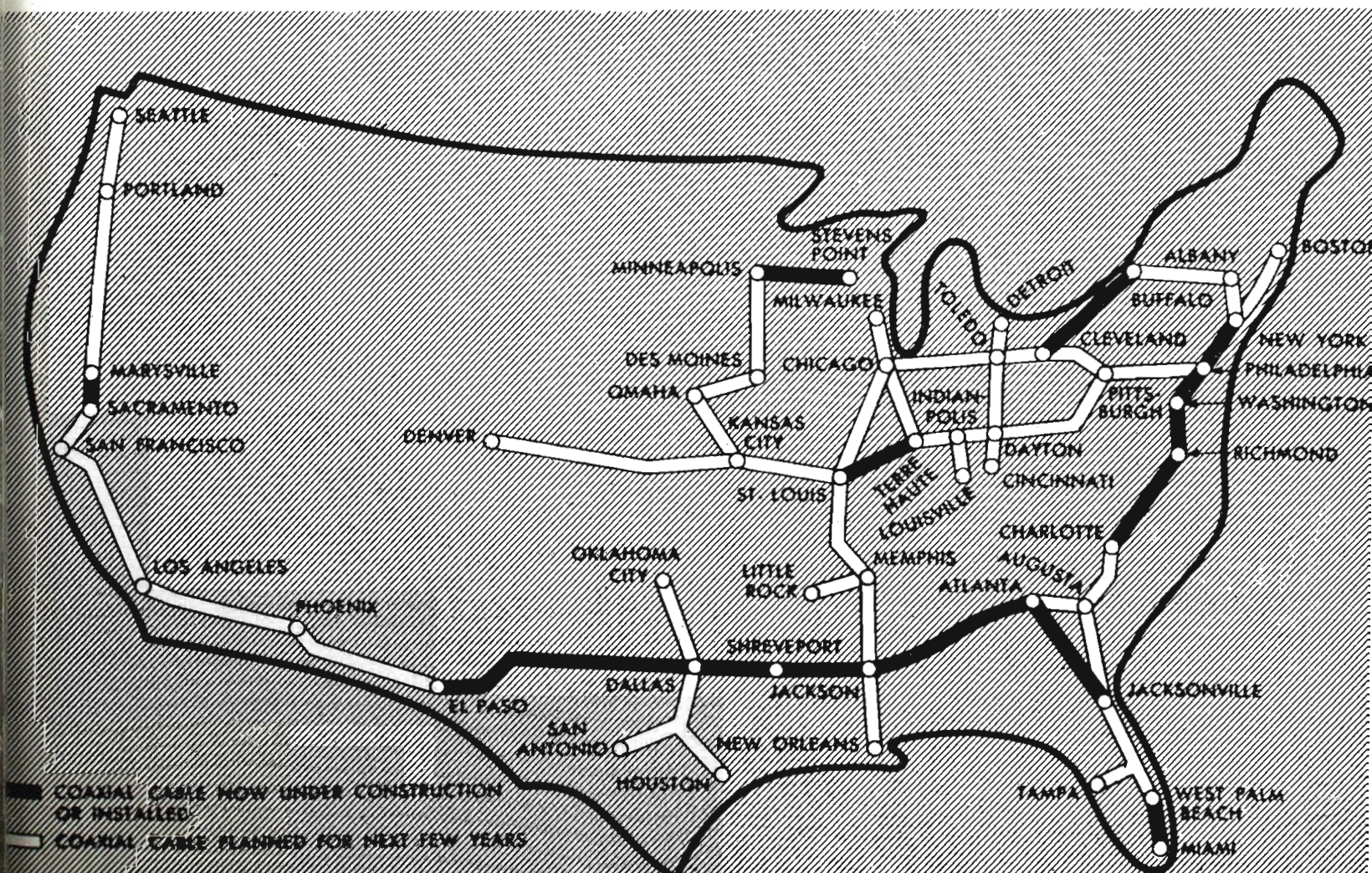
ern transcontinental route are laying cable between Jackson, Miss., and Shreveport, Louisiana, and are operating as far west as El Paso. Other trains are replacing cable between Buffalo and Cleveland.

Many of you, of course, are acquainted with coaxial cable, at least in a general way. But I should like to tell you about a few of its highly interesting aspects which may not have come to your attention.

Take, for example, the big job of laying the cable across the Southern transcontinental route. This route goes through cities and towns of all sizes and across terrain of all descriptions. The cable is tailor-made to fit the requirements of each type of terrain. Through cities it is placed in conduit; through areas subject to frequent electrical storms, it is enclosed in a special copper jacketing; through particularly rugged sections where rocks and boulders are encountered, and in crossing streams, a protective armor covering is used.

Larger Coaxial Tubes

The coaxial "tubes" first used in 1936 were about a quarter of an inch in diameter. Because of the wider frequency bands now contemplated, the diameter of the tubes now being put into the cables has been increased to three-eighths of an inch. These larger tubes permit us to station the auxiliary repeaters eight miles apart, instead of five and a half miles, and to put the main repeater stations as much as 150 miles apart, as compared to 90 miles in the case of the earlier cables. The repeaters, as you know, make up for the weakening of the signal in passing over the cable. Toward the end of an eight-mile section, the strength of the signal may be only a hundred-thousandth as great as it was at the beginning of the section. Most of the auxiliary repeaters are in small, unattended buildings which are visited only in case of trouble and for periodic routine tests.



Steps which have been taken to insure continuous and satisfactory operation are particularly interesting. You know perhaps that coaxial cables contain special pairs of wires, in addition to the actual coaxial tubes, which help us to do the maintenance job. Continuous information as to the operation of the equipment in the auxiliary repeater stations is sent automatically over these wires to the main repeater stations. A change in the signal strength at any repeater may indicate a weakening of that link in the chain. Such an occurrence is immediately made known to attendants, even though they may be miles away. This permits potentially weak apparatus to be replaced before a failure can occur.

As a further precaution to insure continuous service, each repeater has a double set of vacuum tubes, so that failure of a single vacuum tube will not cause an interruption.

Power for operating the repeaters is supplied from commercial sources through connections at the main repeater stations. Here again careful precautions are taken to prevent interruption of service. Large storage batteries and gasoline driven engines are provided for emergency use. Power for the auxiliary repeaters is transmitted from the main stations over the central conductors of the coaxial tubes themselves.

In television transmission, each frequency component in the broad band required must travel over the circuit at the exact speed of every other frequency in the band. We know that if some frequencies arrive at a distant point a millionth of a second later than the other frequencies, the picture will appear quite fuzzy. Our precision job in this respect has been to develop apparatus which makes extremely accurate adjustments in the time of travel as between frequencies. Those frequencies on the outer edge of the band have a tendency to move just a little more slowly than those nearer the center. This means that certain frequencies must be *slowed up* to permit other frequencies to *catch up*. For the sake of comparison, just imagine two trains in a coast-to-coast race, reaching the finish line less than a train length apart.

It has been our view that coaxial cables are fairly certain to play a prominent role in network television transmission. Their reliability, the fact that the Bell System is constructing a network of coaxial cables for telephone usage between the principal cities of the nation, and the expectation that further developments will make it possible to provide both telephone and television channels over the same coaxial conductors, all make the coaxial seem an attractive type of facility for television network use.

We are not placing our reliance solely on coaxial cable, however. The Bell Telephone Laboratories are also conducting extensive development work on radio relay systems. One such system is now being installed between New York and Boston and is expected to be available for experimental use next spring. Should radio relay systems prove advantageous for use either alone or in conjunction with coaxial cables, they will, of course, be utilized where indicated.

Local Facilities

Thus far we have been speaking only of facilities for inter-city network transmission. These would appear to be of first importance because of the economics of network broadcasting and because of the urge there will be to bring events of national interest to all important centers of population. But local facilities also are a necessity to the broadcaster, and the Bell Labora-

tories have made progress in developing arrangements for this purpose as well.

For studio-transmitter links—where a permanent, reliable, high-grade facility is required—coaxial cable already has been provided in a number of cases and we are now experimenting with a type of specially shielded balanced cable pair which we believe will be even better suited to this purpose in many situations.

For carrying programs from remote pick-up points to the broadcasters' control rooms, we have developed both radio and wire methods.

It has been found that ordinary telephone wires can be used for this purpose when special amplifying and equalizing equipment is provided, and the wires are cleared of all branching connections. This method has the great advantage that the wires already exist to most all points of interest.

Micro-wave radio links may be better adapted for local pick-up facilities where "line-of-sight" locations can be found for the transmitter and the receiver. In short, it appears to us that both wire and radio facilities will have fields of use for local pick-ups.

Time Table

Our plans for future construction are based primarily on our need for coaxial facilities for telephone service. Since these facilities will be provided to take care of growth over a reasonable period of years, we expect to have spare coaxials on almost all of these routes, which can be used for television transmission until more facilities become available. Such use for television, however, requires special terminal and line equipment and other arrangements over and above those required for telephone service.

We expect the embryonic network which now connects New York and Washington with two-way television facilities to be extended to Boston next year, using radio relay. We expect also to make available two additional one-way television circuits between New York and Washington next year. In 1947 we will push westward towards Pittsburgh, and hope to be able to connect such cities as Cleveland, Buffalo, Detroit, Chicago, and St. Louis by the end of 1948 or shortly thereafter. Other cities in this general area probably can be connected not much later than this.

In addition, we expect the Southern transcontinental route through Washington, Atlanta, Dallas, El Paso and on to Los Angeles to be completed by the end of 1947, as well as an extension along the Atlantic seaboard to Miami. This does not mean that a coast-to-coast television circuit will be available by that time, although the basic coaxial facilities will be installed and in operation for telephone service.

One aspect of the situation which we expect will be present for the next couple of years is that the number of television network facilities we can make available between these major cities generally will be limited to one in each direction. This means that several broadcasters may have to share the use of these networks.

New Repeater

As soon as we can catch up with the demand for telephone circuits or the development of new equipment can be completed—for example, a new type of repeater which will permit us to transmit telephone and television simultaneously on the same coaxial conductors—this sharing can be eliminated.

The new type of repeater just referred to, as now projected, will make it possible to transmit a band of

(Continued on page 24)



Left to right: Paul Raibourn, president of Television Productions; J. R. Poppele, vice-president, secretary and chief engineer of Bamberger Broadcasting System; Ralph B. Austrian, president of RKO Television—at the TBA Conference.

“TELEVISION—It’s Here” is the industry slogan. But “Television—It’s Here To Stay” will be decided by an eager public who have given every indication of buying receivers as soon as they are available. And if there was one central theme running through the entire agenda of the TBA conference, it was the oft-repeated statement that keeping television sold is the mutual responsibility of everyone connected with the industry. Pioneer telecasters and engineers have developed television during the long viewer-less and profitless years—it’s now the manufacturers’ responsibility to start the receivers rolling off the production lines. It is the joint responsibility of the manufacturer and the dealer to insure correct installation; of the telecaster to keep aware of reception in his area; of the programming departments and the agencies to remember always that “the show’s the thing.”

The sociological aspects of television were stressed by many of the speakers—and keynoted in TBA president Jack Poppele’s speech, “Television’s great challenge is one of moral responsibility . . . it must be clean and wholesome, completely tolerant, fair in all public issues.” Dr. Alfred N. Goldsmith verbally rapped a few knuckles when he called upon “all groups interested in television to support vigorously whatever program the majority may desire.”

Perhaps the most understanding appraisal of the industry’s immediate problems is the following statement by Ernest H. Vogel, vice-president in charge of sales for Farnsworth. Pushing aside the adage, “which comes first, the chicken or the egg,” he states that the responsibility of presenting television to the public is now the manufacturers’.

With the public ready to buy; distributors, dealers, etc., ready to stock the merchandise; broadcasting in-

terests impatiently awaiting circulation (receivers) which will enable them to augment their programs on a reasonably sound economic basis, and advertisers awaiting an audience to move in aggressively, he concludes, “The next step is now solely up to the receiver manufacturer.”

Ernest Vogel

With past restrictions out of the way and the solution to the materials problem almost certain to be achieved during 1947, industry’s challenge is to produce 750,000 to 1,000,000 receivers during the coming year. “In setting this objective, I have tempered the figures by my estimate of the ability of the industry to produce and am not limiting this projection to the desire and the ability of the public to purchase . . . With this circulation available, program costs would be evaluated from an entirely different viewpoint. This experience in 1947 would set the tempo in dozens of other cities and accelerate the speed with which service would be established in these other markets.”

Pointing out that present black-and-white standards have resulted from years of “calm deliberation by the most advanced technical minds in this field,” he stated that television today is offered in a higher state of technical perfection than any other vital public service at the time of its introduction.

As for the pessimists with their constant bringing up of future problems, best squelcher to that are the obvious facts that the advent of the automobile was not held back until millions of miles of highways were constructed, or radio kept in the laboratories until industry had all the answers to networking, high power transmission, cleared channels and so forth.

STATION OPERATIONS

UNDERLYING theme of the station managers' discussion was the preparation being done for commercial television and the programming and operational policy which is now in effect to attain that end.

WNBT

Noran Kersta, station manager of WNBT, which leads the field with the number of commercially sponsored shows, detailed the type of programming which NBC has put on to build their listening audience—small as it is. Highlights of this programming include the pick-up of all sports events—tennis matches, baseball, football and fights; the building of package shows for sponsorship; the Sunday night full length plays, either adapted from Broadway productions or original scripts; on the street pick-ups; the NBC Newsreel; the "Hour Glass," and film documentaries.

WRGB

G. Emerson Markham, WRGB's station manager, while maintaining that the station has an amateur standing, nevertheless stressed their interest in commercial television. Station policy has been to cooperate with advertisers, letting them become familiar with the new medium under informal operating conditions. "When C-Day comes for us, we propose to be ready for it and to provide promotional values as nearly as possible in line with costs," stated Mr. Markham.

With eight years operating experience and 2000 air shows, WRGB has streamlined their activities to get practical results in the least amount of time. Whole set-up has been carefully systematized and a well outlined and defined schedule worked out for the staff to follow. (See "WRGB Station Operations" in September TELEVISION for complete details.)

"As far as floor duties are concerned, staff members 'double in brass' . . . This promotes flexibility of operation, personal resourcefulness and all-round experience. There are limits to how far we can go with interchangeability, however . . . Where specialization is necessary we specialize."

Looking forward to network operation, and in fact with the WNBT pick-ups now regularly on their schedule, station has become time-conscious. Final rehearsal is a timing run, with programs predicated on five minute segments.

"To sum up—WRGB today is a lively concern with an eye to the future. We are prepared to take our place as a cooperative network affiliate," Mr. Markham concluded.

WABD

Robert Jamieson, assistant manager of WABD, stressed the importance of multi-studios if television programming is to be smooth. "Presently we are operating three days per week in studio with two additional days a week being programmed with motion picture film features and sporting events picked up by our mobile unit from local sporting arenas. In most cases, we have been able to maintain a 40-hour work week for our staff of 85.

"The two major divisions of WABD personnel can be classified as maintenance and operating . . . The maintenance crew is required to report for work each day at nine. This allows the morning for maintenance work since early afternoon rehearsals are required for program operation commitments. The operating per-

sonnel report for work at 12:30 p.m. and continue on through rehearsals and air time. The maintenance crew, however, leaves at 5:30. If trouble should be encountered during the evening, instructions are left which directs the maintenance crew to make repairs the next morning. Under this system, a 40 hour work week is easily adhered to."

W6XYZ

Klaus Landsberg, west coast tele director for Television Productions, (W6XYZ, Hollywood), prefaced his speech with the statement that Hollywood has all the advantages over other centers, both as to talent and as the scene of motion picture production. Television is a screen medium and W6XYZ, being a Paramount subsidiary, is able to draw on the parent company for sets, talent, etc.

Program experimentation has tended toward doing a series of shows—such as "Embarrassing Moments" or the current "Movietown Backstage." They feel that over a 20 week period they can really learn how to present a particular type of show in the best and most entertaining manner. Films have been left out of their program structure for the past four years because they felt they knew how to make pictures and they were more interested in learning how to make television entertaining.

Recent experience with remotes—notably the tennis matches and the sheriff's rodeo—convinced Landsberg that it's good policy to sandwich interviews with personalities in between the sport events to keep the viewers interested. He estimates that about 50% of programs will be special events.

W6XAO

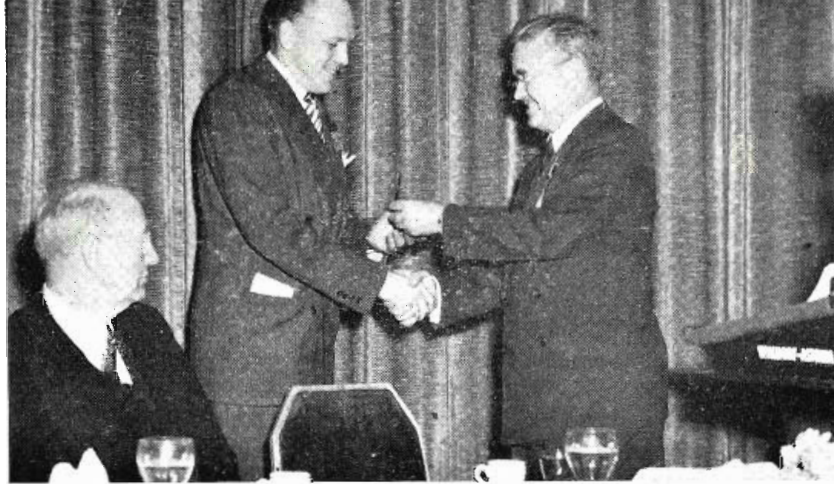
Harry Lubcke, television director of Don Lee's W6XAO, also stressed that their present day operations is one of preparing for commercialization. In 1940, company built the world's largest television plant, with both outdoor and indoor studios. Studio area was utilized recently by setting up a tennis court and putting on tennis matches at night—as they feel more people could view them in the evening hours. Mr. Lubcke believes that the living room will take an active part in education and that adults and children will continue to learn as well as be entertained through the medium of television.

Both Mr. Landsberg and Mr. Lubcke stressed the excellent topographical conditions around Los Angeles. Tests have shown that the signal may be picked up in San Diego, 115 miles away.

WBKB

Captain William Eddy, station manager of WBKB, detailed the thinking behind the sliding scale rate card which the station recently issued. (Printed in October TELEVISION). By ascertaining fixed labor and operating expenses, the expense curve could also be estimated for a specified future period. Under this system the advertiser receives a fair return during the period when development is being done; he pays only for actual receivers in use in the area, and receives the advantage of coming in early under the lower rates and having those same rates apply for the duration of his contract, with the advantage of a growing audience.

Benefits to the station include a system under which income and outgo remain close to the graph; the attainment of commercial operation in a predictable time; a chance to interest advertisers on a reasonable basis;



TBA Awards of Merit:

1. Donovan B. Stetter, advertising director of Standard Brands: for producing the best entertainment program—the "Hour Glass."
2. Dr. Oliver E. Buckley, president of Bell Telephone Laboratories: "for his supervision of the application of television to military uses and his work in the application of his broad communication knowledge of the transmission of television programs."
3. Keith S. McHugh, vice president of the American Telephone & Telegraph Company: "for his work in furthering a program of facilities to transmit nation-wide television on a commercial basis."
4. Klaus Landsberg, west coast television director of Television Productions: for the best public service program.
5. Noran E. Kersta, manager of NBC Television Department, is shown here receiving an award for John F. Royal, vice president of NBC Television. Royal was honored for producing the telecast of the Louis-Conn fight.
6. Paul Belanger, television director at WCBW: for the outstanding artistic program.
7. Dr. Paul K. Weimer, Dr. Harold B. Law and Dr. Albert Rose (left to right) of RCA Laboratories: for the outstanding technical contribution to television—the development of the image orthicon.

an opportunity to watch plan of operations through early commercialization and thus set a guide for future operation.

Spots are limited to three a day and must be accompanied by a public service message, such as time or weather report. Rehearsal ratios have been fixed with a penalty over 4 to 1 in order that as much pre-preparation be done by the sponsor as possible and thus eliminate unnecessary facilities tie-up. Result of this has been that WBKB's allotted time has been sold and the Chicago viewers will be getting better entertainment.

ABC

Paul Mowrey, national television director of ABC, emphasized the promotional possibilities which television offers. Stressing that ABC has sold television on the "forget an audience—here is your chance to learn" basis, Mowrey detailed the extras which certain advertisers had received from television experimentation. Filming of special events, while too costly a process for one-time shots, can be made to pay by dual use of the film. Accounts, such as U. S. Rubber, made use of this with their sponsorship of the Automotive Jubilee Parade, by showing prints all over the country to their dealers and distributors.

Stating that this stand-by period of television has been used to good advantage and that the 1946 video viewers will not be the guinea pigs early radio listeners were, Mowrey said: "... The kindergarten stage of television programming is over. We are now entering a more specialized period of experimentation. Those who enter video today need not proceed from scratch, but, on the contrary, may profit from what we have learned in the past." On the subject of film, Mowrey stated that ABC will film such special events as cannot be picked up live.

WPTZ

Rolland Tooke, station manager of WPTZ, outlined the Philco operation and summed up television's place in Philadelphia with the statement: "There's nothing wrong with television in Philadelphia, which 100,000 receivers wouldn't cure overnight."

WPTZ are supplementing their studio schedule with relay pick-ups from WNBT. Plans call for extension of their remote pick-ups, which presently include telecasting the Penn home football games from Franklin Field on Saturday afternoon and the pro games from Shibe Park on Sunday afternoon. The Penn games will be replaced with Saturday night sports games when the season closes. (For complete story of "WPTZ Station Operations," see page 7.)

ADVERTISING

WITH sales results the important factor in any advertising medium, perhaps the most encouraging report on television was that of David Arons of Gimbel's, Philadelphia. Basing their figures on the 752 set owners in the Philadelphia area, Gimbel has been able to trace a sales return as high as 3% (based on total set owners) for a single program.

Gimbel's has experimented with many types of programs, in an effort to determine the best way of presenting the commercial. Dramatic skits were dropped because they felt they were too unreal, too obscure in selling merchandise. The commercials are now slanted

towards "presenting real people in real studios doing real things with merchandise the first consideration." Interesting was Mr. Arons' report on subject material. Fashions "whose chief assets are color, pattern, materials and details were ruled out. They fall flat on television . . . only those things which could be demonstrated, interestingly and realistically were chosen. A clever vacuum cleaner is perfect for television." Many items such as black plastic, aluminum and copper kitchen gadgets could not be used. They become too hot to handle under studio lights. Many a garden demonstration required duplicate plants as stand-ins for those killed by the intense heat.

The demonstration that produced the 3% sales return was on postwar kitchen gadgets. Theme was the old and new way of doing kitchen chores. Can opener, rolling pin, mop, sweeper, food slicer, and egg beater were demonstrated, with the items shown in actual use. In the twenty-four hours following the program, eleven customers phoned and twelve came in for one to four of the items demonstrated. Gimbel's plans at present to continue their television series with straight, undramatized commercials featuring items that can be demonstrated effectively.

Film Approach

John Allen of Marschalk and Pratt, agency for the Standard Oil Company of New Jersey, summed up their film approach to television commercials:

"We believe the format of television commercials, motion picture or live, should follow basic advertising principles. We use a title to perform some of the functions of a headline . . . primarily to arouse interest.

"We try to open with scenes that present a problem or situation with which the viewer can easily identify himself. We offer a solution through the use of some Esso product or service.

"We back up our claims with visual proof of effectiveness whenever possible. We show where to buy . . . 'at your neighborhood Esso dealer.'

"These principles are basic and well known. They form the mold into which you pour your material. The ingredients that make up the material, however, may not be so widely known."

Charles Durban, assisting advertising director of the U. S. Rubber Company, analysed television from the advertiser's point of view. Mr. Durban stated their approach to films strictly from a promotion angle with television incidental.

"We do try to cut and edit with television in mind which doesn't do the film any harm for other purposes. While U. S. Rubber has used film extensively in television they do use live commercials as well.

"We think intelligently handled live commercials have as assured a place in television as film. Time is a most important factor.

"Live commercials give a corresponding advantage in time over films. Where the commercial is to be a one-time, one-station affair, the live commercial enjoys a cost advantage. Flexibility is a point. Tires might be the product we wanted to show in Washington, but at the same time it might be best to feature footwear in Philadelphia and raincoats in New York. Film could do this, of course, but only at the expense of a rather large film library and it would be pretty hard to justify its cost at the moment and for some time to come. The studio audience is sometimes important. This is particularly true in department stores and department stores are outlets for a great deal of our merchandise.

Another way to use the live commercial is to work it into the show itself, when such a move is logical. We do that now in "Television Quarterback" over NBC, starring Lou Little. Lou gave us the idea himself by ad libbing some remarks about our products, and now we try to do it just as acceptably but on a slightly better organized basis."

Tele Now

R. M. Gray, manager of the advertising-sales promotion department of the Standard Oil Company of New Jersey, gave four main reasons why Esso is spending important money in television now.

"The first I would call technical experience. We want to know how to produce good commercials, from a production standpoint. Commercials that will make the best possible use of a new medium which combines sight, sound and motion.

"The second reason is to gain knowledge of showmanship in this medium . . . to learn by doing . . . and to gain an appreciation of what people like.

"The third reason grows out of an obligation we believe most advertisers feel towards any new medium. Development is a teamwork job. It requires cooperation of advertiser and advertising medium to lead the medium out of experimental stages to the point where it can roll up its sleeves and go to work.

"The fourth objective is to gain knowledge of the best program times to suit our individual problems . . . and to be in the best possible position to establish priorities on those times."

Touching on films Mr. Gray stated: "I won't go into all the reasons for our selection of commercials on film. We tried many other techniques. We wanted motion. We wanted cars on the road. We wanted ESSO dealers in action at actual ESSO stations.

"We found that—on film—we got more of the things we wanted in a more interesting form. We found these commercials could be repeated several times, thus distributing the cost over several broadcasts."

Tracing the evolution of the Atlantic Refinery Company's commercials during the six years they have been telecasting the Penn football games over WPTZ, Don McClure of N. W. Ayer & Sons, said that the establishment of the puppet gas station attendant "Sparky Atlantic," and the use of film finally climaxed their search. Used first in 1945, Sparky drew a 10% response from set owners in the Philadelphia-Camden area. "We made four complete visual game sets which consisted of an opening—a 2 to 3 minute commercial at half-time—and another at the close of the game . . . Oral commercials were used at quarter times while the camera picked up the Atlantic field clock . . . We discovered two to three minutes is much too long a time for commercials during an action-packed football game. This year we have re-edited the Sparky commercials to run from one and one-half to two minutes."

Mr. McClure also pointed out that the commercials prepared for The Goodyear Tire & Rubber Company for the Army games are even shorter—with most of them running a minute. (For full details of this commercial treatment, see "Football Takes Wings via Relay" on page 12).

Importance of advertising agencies learning the scope and limitations of the medium were stressed by Ed Franklin of Newell Emmett. Among the most important fundamentals for the novice to familiarize himself with, were the following basic principles:

"Obtain the camera angle arc, and the width of the

stage made available at minimum and maximum shooting distance.

"Make test shots to determine the depth of field; memorize the limitations with regard to the showing of detail—note how much you can pick up and transmit at a given distance.

"Become familiar with the translation of the colors of the spectrum into values of black, white and gray. Charts, made up by the station, will simplify the choice of all colors used.

"Be simple. Give them action. Don't be bound by other media—you can do things in television that you have never done before."

Speaking on the live talent approach to a commercial, Kendall Foster of William Esty & Company, said their experience proved that five minutes of commercial out of a thirty minute show was too much. Ad libbing he feels is dangerous because it may result in error. On the Super Suds film, voice employed was live. However costs of \$1200 per minute of film he considers too high for present day experimentation.

• EDUCATION : :

THAT television is the most potentially powerful medium yet advanced as an educational aid for in-school training as well as at home viewing was reiterated by every one of the speakers at the educational panel.

Interesting angle on the question of sponsorship for school programs was given by Edward Stasheff of the New York Board of Education. "Those of us who believe in educational television have long pointed out that a restrained, institutional plug attached to an educational telecast is no more out of order than the credit line of the commercial corporation on the cover of a certain pamphlet, which is distributed widely in thousands of classrooms throughout the nation. Nor do we object to the film title card which credits a given automobile manufacturer for producing a film on the internal combustion engine . . . However there are many states where just such a practice is forbidden."

Before the powers with the purse strings can be persuaded though to install television receivers in classrooms, telecasters must supply programs—"programs sufficiently valuable, educationally and sufficiently well correlated with our curriculum to justify the expense of receiver installation." Films made especially for the school audience have the assurance of an annual showing—for this is a repeat business, with each new class ready for the same units studied by the previous class in the preceding term. "Television has one great advantage over standard classroom film—that is its flexibility and timeliness . . . Television, even when it uses film, can afford to bring its presentation up-to-date each time it broadcasts. Classroom film, printed in hundreds of copies, represents too great an investment to permit of annual reediting and the addition of new footage. Film prepared for television can and must be brought up-to-date each year, and the cost of providing fresh footage and new editing for the one print to be telecast in any given community will be comparatively minor."

Remote broadcasts will also be important, stated Mr.

Stasheff and as a further adjunct to education, actual participation in television by the students is recommended at the Junior High level. (Weekly quiz program along these lines is slated to start in November over WCBW, with 400 students and 40 teachers participating over a six month period.)

"We also ask that some thought be given to educa-

tional models . . . either in cheap plywood or metal cabinets, or sunk into receptacles in walls so that only the screen and tuning dials are visible—and these slightly recessed into the wall, so that a protective cover may be slid over them when the set is not in use. We ask too, along with cheap cabinets, an intra-tele system, with one master receiver and three monitors."

NETWORK FACILITIES

IN DISCUSSING the three basic classes of television relay service—studio-transmitter links, remote pick-up links, and inter-city relay links—F. J. Bingley, vice-president and chief television engineer of Philco Broadcasting Corporation, pointed out that radio relaying is applicable to all three classes.

"It is a natural for remote pick-ups, where rapid setups have to be made on very short notice and sometimes from relatively inaccessible locations . . . It is also very suitable for studio-transmitter links, particularly when the transmitter is in an inaccessible location. At WPTZ it has provided an inexpensive solution to the problem of transporting high quality picture signal from our downtown studio to our North Philadelphia transmitter without loss of quality.

"I foresee a great expansion in the use of radio facilities for all classes of relay service. At Philco, we have found that our New York to Philadelphia relay system operating through our Mount Rose station gives excellent quality with extremely low-cost operation . . . which is one of the great advantages radio relaying offers. In addition to this economy, quality can be much higher than on cable circuits, and this too is an important advantage for radio relaying."

As to which system is best, Mr. Bingley does not feel that any final choice will ever be made. "Each system has its own peculiar advantages and either system may well be used depending on its suitability for the purpose at hand."

While radio relaying can handle all three types of program requirements, cable circuits are not so suitable for remote pick-up work. "In comparing the two systems we may see that coaxial cable takes no other space but may be very expensive. It may, however, be necessary to use coaxial to get the signal out of large metropolitan areas where the airways will be relatively crowded. Such a scheme would leave the radio highways free for long intercity hauls for which they would be well suited because by this means they would achieve sufficient geographical separation to enable frequency assignments to be repeated across the country.

"With respect to studio-transmitter links, it may well be that in the larger cities cable circuits may be used where the transmitter is in a sufficiently accessible location. We can already see evidence of this in New York City itself. In other cases, as in Philadelphia, radio relaying is a better and less expensive method.

"Remote pick-ups as previously stated will probably be predominately radio. Flexibility is the important factor here. Semi-permanent installations may, of course, use cable facilities.

"In conclusion, it appears to me that television during the next few years is going to be a rapidly growing service. In view of this I believe that the sum total of all relaying facilities which are available will be needed to stimulate and maintain this growth."

PROGRAMMING

PROGRAMMING panel was given over to the reiteration of the obvious fact that "it's the show that counts," coupled with the equally obvious statement that what the audience sees on the receiver is the important thing—not what's happening in the studio. NBC's program director Warren Wade's opinion is that the home audience will enjoy not quite as pretentious programs as the movies and theatres offer—but whatever scale it's done on, it still must be good entertainment.

Aside from "the show's the thing" adage, careful and complete preparation prior to rehearsals was stressed. Clark Jones, WRGB producer, and Dick Goggin, ABC director, detailed the responsibilities and relationships necessary between station and guest producers. It's the guest producer's job to conceive or adapt the idea; cast show; plan sets, special effects, etc.; block out scripts; conduct dry rehearsals. Station producer's responsibility centers around working out rough set outline; treatment of sets; deciding general mechanics such as style and continuity of titles; types of music, sound effects, etc.; transitions; film, if any; special effects. In addition, he must make a floor plan

of show, showing alignment of sets, and camera positions; schedule camera rehearsal; prepare shooting script; conduct camera rehearsal and conduct the show on the air.

Studio Audiences

Question of studio audiences has a threefold answer—they're a nuisance to the operating personnel; most actors favor them for the stimulation which they provide; and some shows, such as comedy, variety and sports, actually need them. As a solution to satisfying all three, Helen Rhodes, production supervisor of WRGB, suggested: "A separate viewing room, where groups can be accommodated comfortably, can watch the program as it appears on a screen, and at the same time can watch the activity going on on a studio floor . . ." or, as an alternate, where audience reaction is wanted, ". . . The main studio floor should be such that a large audience can be accommodated in a balcony or amphitheatre arrangement immediately above it. Viewing tubes can be located within their sight and the room can be darkened enough to make it possible for them to watch both phases of the television broadcast."

MERCHANDISING...

MERCHANDISING television sets does not stop with the demonstration or sale in the store. Installation and follow-through on performance in the home was also stressed as a manufacturer's responsibility by Leonard F. Cramer, executive vice-president, and Ernest A. Marx, general manager of Allen B. DuMont Laboratories, and Dan Halpin, sales manager—television receivers, RCA Victor.

"Until installation becomes commonplace, I believe a factory serviceman should inspect and approve every installation and only after approval, countersign a warranty card. Even after this, the manufacturer should retain contact with the customer by periodic questionnaires covering not only the performance of the receiver but the desires and opinions of the customer programwise," Mr. Cramer pointed out.

Stating that special training schools have been set up by manufacturers to train their service representatives without charge, Mr. Marx elaborated on some of the problems connected with home installations.

"An important consideration is the matter of surveying the prospective customer's locality or place of residence to ascertain the feasibility of receiving satisfactory signals at that point . . . The manner in which this problem is to be attacked shall largely depend upon what difficulties are encountered. The most common will undoubtedly prove to be reflections (ghosts) and, in some cases, the locality will have to be carefully surveyed to ascertain whether directional antennas properly oriented, or reflectors may be indicated, or whether in some extreme cases wave traps may have to be installed, utilizing a favorable direct to reflected signal strength ratio.

"Low signal to noise ratio can be corrected by the installation of high-gain antennas positioned to discriminate against any local noise sources. Augmenting this, filters on the local noise sources could be used, or there's the possibility of applying special wide band R.F. amplifiers to raise the signal to noise ratio.

"Installation crews will necessarily have to have the very best and the most complete test equipment available, including a small portable television receiver for survey purposes. They will require a mobile truck unit in most cases with extension power cables, antenna kits, hand and power tools, hardware and other equipment. All this will be in addition to the equipment necessary at service headquarters."

As to costs on antenna installation, present charges range from \$25 to \$75 depending upon location. "Some manufacturers are guaranteeing their sets for a year against possible breakdown. Others are using the ninety-day RMA Guarantee for the electronic parts, and a year's guarantee for the cathode-ray tube. The ultimate decision as to which of these procedures will survive, is largely a matter of experience and competitive approach, and it is somewhat early to predict them," continued Mr. Marx.

Also stressed was the need for an energetic and intelligent sales program to convince the landlords that it will be profitable for them to install antenna distributing and amplifying systems for their tenants.

In Mr. Halpin's opinion, dealer's installation is the most important retail sales problem in television today.

"Before a dealer can sell a television set, he must give the customer a perfect demonstration. His *all*

channel antenna must be the best there is, because a set is only as good as the signal into it. The brackets holding the antenna mast should be rustproof iridite for safe mounting of the antenna mast. His transmission must be by polyethylene bright picture line, or its equivalent . . . No conscientious television manufacturer can ignore the importance of having his dealers' demonstration facilities installed or approved, in advance by his own technical organization. The matter of eventual consumer installations is of prime importance also not only to the customer but to the dealer, distributor and manufacturer, as well as the broadcaster."

Merchandising Your Station

"Promotion begins with the public—and that means both present and prospective set owners. The reason is basic enough—to build television audiences in mass (and the greater the mass, the better) for sponsors to buy." And while the philosophy is that of Charles P. Hammond, NBC's director of advertising and promotion, the principle should be industry wide. For obvious as it is, the most important factor is the public's interest in programs.

"All NBC television promotion to the public talks in terms of NBC television programs ON THE AIR . . . Such advertising helps the cause, generally. Of more direct benefit to NBC, as we see the purpose of our present audience promotion of outstanding NBC television shows, is that we are able to associate NBC and top televiewing in the minds of those who already have sets as well as in the minds of those who will own them. Thus we hope with promotion to lay the foundation now for what will one day become an NBC viewing habit.

"In our trade advertising we attempt to sell our station against the competition. Since at this time it is not possible to talk competitive circulation, we use as a talking point the fact that at WNBT the television advertiser has an opportunity to make use of the knowledge and experience of NBC production personnel in his own television efforts, and can save time and money by this means in getting his own experience which will be vital to him in the production of commercial television programs. We can point to the consistent quality of NBC program and production efforts to substantiate our claim. In this case, too, therefore, good shows have made it possible for us to do a good promotion job."

MRS. PUBLIC . . .

COMMENTING on the retailer's part in television, William H. Howard, vice-president and publicity director of Macy's, told the little woman's side of it. He met this little woman, whose buying power can make or break the biggest executive, in the uncrowded television section and got her reaction. She won't buy television simply by seeing a test pattern—and the invitation to "come back Thursday night"—to see a program, can't always be conveniently accepted.

Putting words in the mythical, typical customer's mouth, Mr. Howard delivered a message from her to the television powers that be: "Tell them I won't buy something I don't understand or can't see work. Ask them why they can't get together and spend a few dollars on short movie subjects which could be demon-

strated here all day long so that I could see television and have some reason to get up some enthusiasm for it. Tell them to fire their director of test patterns and replace him with a director of demonstration pictures.

"My taste is a good deal better than it used to be and a little classic design would be very welcome in this modern plastic world. I want the answer to another question that they have brought up. The television fellows have been carrying on a debate on the front pages of the newspapers I read, about color television versus black-and-white. I'm not a technician so I'm puzzled. I would like black-and-white television if I could ever see what it looks like. Just as I like black-and-white movies. And I would like color television, just as I like technicolor movies. Ask them for the answer to this: If I buy a black-and-white television set and then color television is perfected, must I throw away my black-and-white set and buy another color set—or will they manufacture some kind of gadget that will enable me to see color on my black-and-white set?"

A.T.&T. network plans

(continued from page 16)

frequencies about 7 megacycles in width. This compares with about 3 megacycles, which is the limit of the repeater now in use. The entire band could be used for television or it could be divided into say a 4-megacycle band for television and 3 for telephone.

Owing to the many technical factors involved, it now appears that this new development may not be completed for some time in the future. When it does become available for service, many changes will be required in the then existing plant. The most extensive of these is in the spacing of repeaters, which probably must be cut in half. This means doubling the number of repeaters and the number of buildings in which they are housed.

Local television facilities for use in picking up programs have been provided by the Bell companies to supply most of the service requests which have arisen to date. Since the war we have furnished more than twenty such facilities to various broadcasting stations. Both radio and wire arrangements have been used successfully. The development and manufacture of the necessary equipment is being pushed and next year we expect to be in a position to provide over one hundred of these pick-up facilities.

In considering rates, we have endeavored to take a long-range view of the television broadcasting industry—in other words, to assume that it will operate a good many hours per day and that there will be several permanent country-wide networks. Under such conditions, and with continuing development of our network facilities, we think our rates will be attractive to the broadcasters, because with the very large volume of our communications business we believe we have greater economics of production and operation than any others in this field.

However, at the start it seems likely that the broadcasters will not be able to operate networks very many hours per day and perhaps they will not be in the market for full-time network facilities.

With this in mind, and to give us experience in operation, we have made certain network facilities available to the broadcasters without charge. We expect to continue the New York-Washington experiment on this basis until such time as we establish inter-city rates for all of these facilities.

As stated previously, in view of the fact that on most of the important routes we will have only one facility available in each direction for television during the next couple of years, it seems likely that the use will have to be shared. Of course the necessity for joint use will disappear when adequate facilities become available. But for the immediate future an unusual situation is presented both as to the cooperation of the broadcasters in utilizing the facilities and in the establishment of charges for limited usage which will be fair and reasonable to all concerned.

We have already indicated, to some of you at least, that television network rates necessarily will be considerably higher than those for sound broadcast network service. This is mainly due to the fact that the transmitting facility required is one which otherwise could be used to provide a great many telephone circuits—a fact which is readily apparent when one considers the relative widths of the frequency bands required for television and telephone circuits. Nevertheless, as stated previously, we believe we can make rates for network service low enough to be attractive to the television industry.

WPTZ station operations

(continued from page 10)

Standard flats, specially designed for television by W. Craig Smith, art director, differ from stage scenery in that wood is used for the edge instead of flat. This gives greater rigidity—a needed attribute, for with the concrete floor of the studio, ordinary stage hardware can't be used and the flats must be weighed down with sand bags.

Sets are painted in various shades of gray unless a studio audience will be present—then color is used for the psychological effect. There's no problem on set coloring, for Smith made up a color chart, tested it to get response on the tube, and follows it now on all set design. Another important function of the art director is to give advice on costume colors—often the most garish looking costume to the studio eye, gives the most pleasing effect on home receivers.

As to the Future ...

With the oft-postponed 28 hours due to go into effect in 1947, WPTZ figures that with their present limited studio facilities, they can do six ½ hour commercial shows and two ½ hour sustaining shows designed for possible sponsorship—or a total of four hours live studio shows a week.

They are banking heavily on remotes—and have first refusal on practically every sporting event in the city. Outdoor and indoor sports—football from Franklin Field and Shibe Park; ice hockey, wrestling, boxing, the rodeo and circus from Philadelphia Arena; special events from Convention Hall; parades; conventions; on the street interviews; night club pick-ups (carefully skipping the musicians in deference to Petrillo, of course) are all on the cards—or as Paul Knight and Clarence Thoman put it, "We'll wear the tires off that mobile truck." Then there will be the pick-ups from WNBT and perhaps other New York stations, plus some film fare, to round out the schedule.

But perhaps the best forecast is Rolland Tooke's statement: "There's nothing wrong with television in Philadelphia that 100,000 receivers won't cure overnight."

Television magazine audience panel

The industry's only continuous audience survey

WHETHER education should be presented straight or sugar-coated; how long educational programs should be; what time of the day is best for educational programs; what the subject matter should be—are just a few of the questions which have been batted back and forth among programmers. Because of the important part that education must play in television and because the United States Rubber Company—Encyclopaedia Britannica experiment on straight educational programs is the most consistent attempt to arrive at an accepted educational formula, the survey this month was based on their “Serving Through Science” series.

Program Format

Program for the night of October 8th was on astronomy. Informal intimate note was set in the opening scene, with Dr. McClintock of Encyclopaedia Britannica seated in a study, with book in hand. His opening remarks welcomed the televiewers and very briefly mentioned the part that educational motion pictures are assuming in modern school systems. With the entrance of his research secretary and the announcer, conversation swung into a discussion of astronomy. Idea in back of this conversational introduction is based on the need to orientate knowledge into common interests and lives of people who are going to look at the picture and to arouse their curiosity on questions which they may or may not know. As an example, in the preface to the film on astronomy, discussion centered around the show the sky puts on every night, the proof science offers about the universe, etc. This film ran for 10½ minutes, then there was another discussion between the three, this time centering around the moon, with questions being asked about the shadow on the moon, etc.—followed by another 10½ minute film. This again was followed by a brief discussion on the wonders of astronomy—in everyday language, and also aimed at whetting the viewer's appetite for the following week's program.

Panel Breakdown

Number of questionnaires sent out.....	150
Number of returns.....	63
Sets not in use.....	33
Sets out of order.....	2
Sets in use.....	30
Viewers per set.....	3.4
Total Audience (39 men, 45 women, 19 children)...	103

Obviously the first concern of the panel was to find out whether people liked the show. We asked:

Did you like the U. S. Rubber show?

Yes.....	87%
No.....	13%

Comments to this question were: “Very interesting” . . . “Yes, for an educational program it was a good one” . . . “Yes, well informed narrator, very well explained” . . . “Resembles a quick course in science” . . . “Yes, but the topic itself was too dry.” A qualifying one was the panel member who, while answering the question in the affirmative, stated, “However, I do not feel that this type of program adds to one's relaxation and pleasure. This educational program should be shown much earlier in the evening.”

Those who did not like the program felt that “It was rather dull. It made us very sleepy” . . . “Not interested in that kind of show” . . . “Give us something to laugh about.” One panel member thought that “actors talk too much, conversation stilted and obviously staged.” Another suggested “a careful study of Popular Science Magazine for topics.” Three panel members suggested the program be on earlier so that the children could see it.

After finding out whether the viewers liked the show, equally important was to find out whether the program accomplished its objective—education. The results were most favorable. The following three questions were aimed for this purpose:

Did this show give you a better understanding of how eclipses take place?

Yes.....	83%
No.....	7%
No Answer.....	10%

Do you know what causes the “Dark of the Moon”?

Yes.....	70%
No.....	13%
No Answer.....	17%

Do you feel you have learned more about what causes the seasons on the earth?

Yes.....	80%
No Answer.....	10%
No.....	10%

In the next question we wanted to get some idea of the viewers' interest in educational programs rather than the specific program that was on that night.

Would you like to see educational features regularly on television?

Yes.....	83%
No.....	7%
Indifferent.....	10%

One of the points paramount in the minds of all programmers was just how long an educational program could be, just how much the public would take. Few programmers thought that viewers would go for a straight educational show as long as a half-hour. Therefore the answers were very surprising to this question:

About how long should they be?

½ hour.....	77%
15 minutes.....	7%
20 minutes.....	3%
No Answer.....	13%

Perhaps the soundest observation of all though was the comment by the panel member who in answer to the question, “What type of educational features would you like to see?”, stated, “Any kind as long as they are presented in an interesting manner that will hold your attention.” That's a big order for educators to fill, but the results of this panel seem to show that television is finding some of the answers to educational programs now.

long shots .. and close ups

a regular
monthly feature
on film production
by H. G. Christensen

IT HAS been said that history repeats itself . . . and that is pretty much what happened at the second T.B.A. Conference . . . a repeat of the first one, with some added attractions—the main one being an exhibit of equipment which showed far more progress in twenty-three months than most of the speakers did.

In my humble opinion the manufacturers of equipment, especially transmitting equipment, are far ahead of the average producer responsible for its use—that is, some of those responsible for programming . . . writers, directors and producers. The boys can't say they're not getting the tools to work with . . . all they gotta do is learn to use 'em.

The new large projection receivers with the large screens were somewhat disappointing. Their image was pretty sad . . . and when you consider their cost is far out of the reach of the average buyer, it looks as though John Q. Public is going to have to be satisfied with the smaller screens for some time to come. This of course will have some effect on production technique . . . close-ups and medium shots will continue to be the vogue in television.

The speakers said about the same thing they said at conference number one, twenty-three months ago . . . a good deal of which certainly belonged in the realm of the obvious. That is, obvious to anyone engaged in the field of radio, advertising, motion pictures, sales or merchandising, let alone television.

Fer 'ninstance, sage observations like this regarding commercials . . . "There are two kinds of motion pictures . . . still and action . . . we have found still pictures are deadly . . . action should always be used." I wonder how long it took to find that out . . . although Gillette hasn't found it out yet. Or . . . "We have found off screen voice the best because more can be told in less time than with dialogue." I've always been under the delusion that the purpose of television was to have

the picture tell the story. One panel speaker put it aptly when he said . . . "Radio writers write for the blind while television writers should write for the deaf." Another speaker expressed himself very clearly when he reminded those present that in "Television, unlike radio . . . words do not have to form a picture in the audience's mind . . . the picture is before you." As obvious as these things are, I suppose illustrated lectures will be more or less the pattern for commercials for some time to come.

Integrated Commercials

There was only one man on the television commercials panel . . . and if I were giving out awards, he'd get one . . . who brought up the subject of integrated commercials and explained in detail how his company uses them. Mr. A. D. Rodner of Commonwealth Edison of Chicago. He made a lot of sense . . . and here briefly is some of it.

They use three types of commercials . . . sometimes all in one show. Direct commercials . . . built-in commercials . . . and integrated commercials. Direct commercials, they have found out, are not effective for a real selling job . . . but good for reminder advertising. In their experience, if a direct commercial runs over 45 seconds, there is a great drop in viewer interest.

The built-in commercial is one where the plot leads into the commercial and at its finish leads back again into the plot. In other words, this calls for a smooth, natural transition from the story into the commercial which is related to the story but not part of it.

The integrated commercial which seems to be most effective is the most difficult of all to accomplish . . . because it must be woven throughout the entire plot and be a definite part of it. This is the technique used in commercial motion pictures for consumer and sales promotional use and is not new to the experienced motion picture director. However, it seems pretty hard to sell it to the television

trade. I hope the definitions I have given in describing these three types of commercials are in line with Mr. Rodner's because they're my own interpretation of his speech.

He has learned that this type of commercial is not offensive to the audience . . . as a matter of fact, the way he uses it . . . the audience virtually becomes part of the show . . . even though they're in their own living rooms. More of this type show should be used.

One panel speaker on commercials admonished . . . "Don't be bound by old media." At the same time he gave us some of the "Limitations of Television" by which we must be bound. I'd like to add, if one of that "old media" is motion pictures, they can and do a swell job of eliminating most of those "limitations."

He offered some good basic rules: . . . be simple . . . have a single-minded idea . . . choose your cast carefully . . . give 'em action. To my mind that means, don't try to sell more than one idea at a time, and if that isn't good sense, I don't know what is. Be sure you've got the shirt sold before trying to sell the tie, . . . or you may end up *not* selling either one.

Time Table

In talking to a number of agency men who are responsible for the production of television, I was quite surprised to find so much difference in opinion and, I might add, lack of knowledge regarding the time elements involved in the various phases of producing a motion picture. Some expect over-night miracles only to get ulcers; . . . others proceed on the idea that a producer with a contract in his pocket for a few "minute commercials" has got his hands full for some months to come.

Also, there is quite a difference of opinion as to what these gems of video should cost. Of course, what they *should* cost is one thing . . . what they're worth, or what the advertiser can afford to pay . . . is

(Continued on page 36)

Television Fallacies

That amiable philosopher, Joshua Billings, once intimated that many people wish about lots of things—but the trouble is that the things are not so! This sage dictum was probably never better supported than in the television field. Technical statements have been issued which are either incomplete, not supported by any sound evidence, or definitely incorrect. Further, in relation to the issue of television there have also been many statements addressed to the public and the radio industry which, unfortunately, are neither in accord with the factors, nor constructively helpful.

It is not astonishing that this should have happened, since television is a new and fairly complex art. These conditions frighten and disappoint people. Many in good faith interpret the impressions as being equivalent to pictures.

To take a few rather conspicuous examples of the fallacies that have been offered for consideration by the radio industry, as suggested guides to action or inaction in the television field, the following may be considered:

1. Television receivers are too costly to be acceptable to the public. It is pointed out that the television receiver generally costs well over \$200. The economics in connection with the industry are fairly obvious. In the first place, numerous polls of prospective television receiver purchasers have shown that most of them are quite willing to pay up to \$250 for a receiver. In practice, however, more people are really ready to pay somewhat more for an article than they think they are prepared to pay when questioned in advance.

Another economic factor in the cited statement is that the present-day dollar may probably be realized as equivalent to 50 cents as compared to the 1940 dollar. A present-day \$250 receiver is really no more than a \$125 1940 receiver. It is unreasonable to expect that the purchasing power of the dollar will

drop in all fields except television!

2. Television receivers containing color, although more costly than black-and-white receivers, will be accepted far more readily by the public. Engineers who have studied the problems have estimated that the color-television receiver will cost considerably more than black-and-white receivers. The optimists add five to fifteen per cent to the cost of a receiver when color is included. Other, less hopeful, engineers have estimated that color in a television receiver will add from 35% to 100% to the cost. Polls of the public have been conducted under conditions where direct comparison of well-arranged programs in black-and-white and also in color have not been offered. The same dramatic program, for example, has not been presented in two forms as it might in the motion-picture industry. In the light of these circumstances, as well as the considerations advanced in Section 1 above, no further comment is here made.

Installations

3. Television receivers are too hard to install. It is pointed out that television receivers require a special form of high directional antenna, properly placed on the roof of the dwelling place, and connected to the receiver by a transmission line of high quality. It is added that this is both expensive and difficult to handle in multi-apartment dwellings. How, for example, shall we install 50 to 100 television aerials independently on the same roof?

In the first place, it is clear that in the early years of television a moderate number of television aerials will be installed on one roof, even in the city where apartment houses abound. Further, skilled service engineers will carry out the installations at a moderate cost. Later on, it will doubtlessly prove economical for the landlord in these houses to erect a few television antennae on the top of the building to supply excellent television signals to all apartments in the building where the service is desired at a monthly rental acceptable to the television receiver owners.

Undoubtedly we shall learn more about television installations in the city and country as we go along, even though there are already many such successful installations in operation today. There is no justification for any special worry concerning this alleged problem.

Program Costs

4. Television program production is too costly to be bought by the advertiser. The argument in this case usually starts by some such reasoning as the following. The color movie "Gone With the Wind" cost \$4,500,000 to produce and ran something over two hours. Accordingly television programs of acceptable quality may cost about \$2,000,000 an hour! The poverty stricken advertisers of America cannot afford such vast sums. Consequently television programming is hopeless!

There is, of course, not the slightest shade of justification for any of these assumptions. Television programs may well be of great simplicity and yet fully satisfy the audience. We do not require silks and satins, jewels and banquets and like extravagances all day and every day. Quite the contrary, in fact. If we would insist on such a diet, we should soon learn to dislike it.

The fact is that television programs, produced by people of originality will not require anything like the elaborateness of even the simplest motion picture. Furthermore, the methods used in television studios—are 60 minutes of entertainment or production, as against three minutes of film per day in a typical motion-picture studio—will enable entire acceptable productions at cost much below those now deemed necessary in Hollywood.

Those who offer these particular fallacies to the public today have little conception of the many types of television programs, which will cost less. Remote pickup of current events where "immediacy" greatly appeals to the audience will have production costs well within reason.

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ADVERTISING

station activities

NETWORK charges are now undergoing considerable scrutiny with the recently signed WPTZ and WNBT contract for exchange of programs, and with WNBT transmitting to WRGB on a five night a week basis. While definite schedules will await greater set distribution, main interest is centering on advertising rates for the plus coverage which, while negligible now, is due to zoom within the next eight months. Also under consideration are charges for sustaining shows, as well as relay facilities. On the New York to Philadelphia telecasts, the Philco radio relay line is used and on the New York to Schenectady hop, the G-E-RCA constructed relay. (The A.T.&T. coaxial cable used for the Philadelphia to New York relays is still on a free experimental basis.)

commercials

Ford uses a combination of films, slides and cards in their commercials on the Parade of Sports. Theme of the whole series is to bring their ads to life. Opener is the Ford symbol—the crystal ball with the slogan "There's a Ford in your future," with the word Ford fading out and Ford models driving in the crystal ball.

On the football games, this is followed by one minute film with sound track designed to show all the features of the Ford. When the off-screen commentary mentions its acceleration, the car picks up speed; at the word brakes, it stops; packages are taken out of the trunk to show its roominess, etc. At the quarters and half, cards visualizing the current Ford animal ad is used. Entire commercial for the whole football game runs less than five minutes. In the play-by-play technique used during the game, Ford is also mentioned. On the pro games over WABD game commentary is given by Dennis James; commercial by Tom Carr, while on the Columbia games over WCBW, Mel Allen handles the game and Don Baker the commercial.

About forty minutes of the rodeo was relayed from Madison Square Garden over WCBW. Same Ford in your future film was used as an opener. Most effective commercial possible though was included right in the rodeo pick-up.

Opening sequences showed the calf roping contest, with the winner in line for silver spurs presented by Ford. To make the presentation a cowgirl drove a new Ford around the Garden, stepped out to give the award, and then drove off, again circling the floor of the arena. Knowing that this car was being

Network charges under discussion . . . high percentage of returns reported as results of telecasts.

driven as you watched, added to the punch of the commercial.

Camera action on the rodeo pick-up was excellent and fast action was caught perfectly. Commentary was good too—with Win Elliott giving the identifying information and Texas John Faulks giving the color dope in an inimitable, straight-from-the-range drawl.

Sign off used the slogan again, with an invitation to tune in on the next sports event over WCBW.

Reid's Ice Cream sponsors the weather commercial over WCBW. Opener is a hand stamping the Reid trademark seal, and then it swings into cartoons accompanied by a catchy singing jingle which gives the weather report. Commercial is injected again with the Reid's sign over an ice cream store, and a close up of a soda and sundae, accompanied by off-screen blurb. Temperature and forecast is given and sign off again uses the Reid seal. Agency is Doherty, Clifford and Shenfield.

Ipana "Shorty" program over WCBW uses the standard opening and closing film (described in October TELEVISION), plus a commercial integrated into a cartoon story. Recent tale of Shorty's romance took him to the point where he was carrying his girl's books home from school. Passing a drug store with an Ipana display—Shorty and Hester discovered they had something in common—they both used Ipana. Off-screen commentary takes up the plug—a la radio show—but the blurb was an unwelcome interruption to the continuity of the story. Agency is Doherty, Clifford and Shenfield.

U. S. Rubber Company sponsors the "Friday Night Quarterback" over WNBT. Lou Little

"Play the Game," sponsored by Alexander's Department Store through ABC and presented over WABD, uses Mathilda, the mannequin—upon whom all eyes are fixed—to handle the commercial. Each item Mathilda is wearing is described as to style, fabric and price. Charade format is used and the commercial is usually given about the half-way mark.



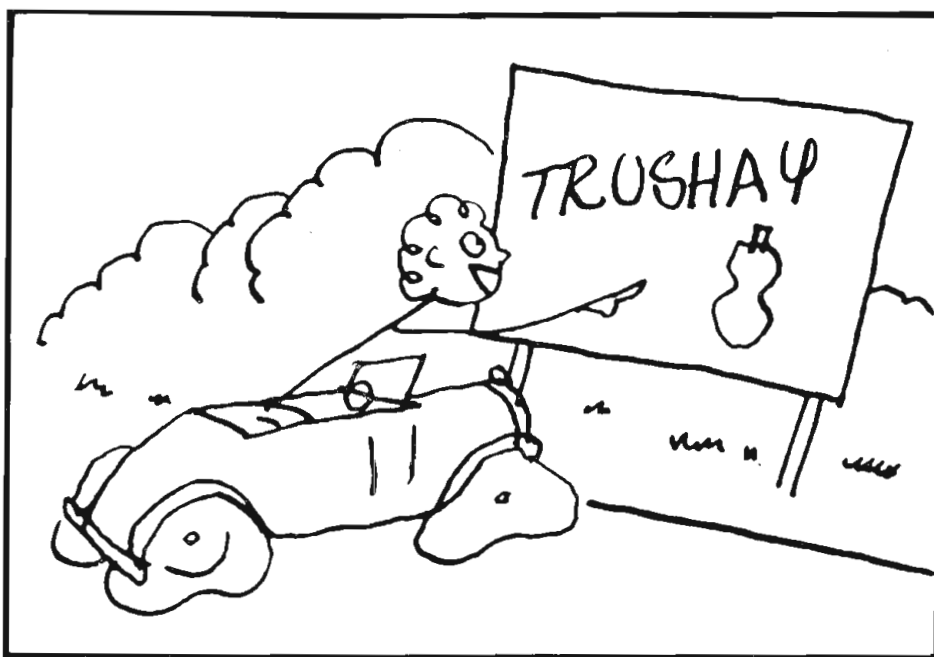
makes with the expert talk in sufficient quantity to please all football fans. With the aid of film cuts he diagnoses the outstanding games and plays of the past week-end. Guest makes his predictions of scores of Saturday's games, and then Little follows up with his own ideas about the outcome. Scores are clearly chalked up on a scoreboard with name of U. S. Rubber emblazoned at the top.

Plugs for U. S. Rubber products are well worked in, but not too much to distract from the news which is of such interest to the football fan. What with the blackboard chalk talks, film clips, yarn-ing, and score predictions, enough opportunity is afforded the participants to get across the plug by sandwiching it with the ample football material.

Wanamaker's presentation "Rigoletto" over WABD was a fairly acceptable cut version of the famous opera. Show was put on by the Piano and Organ Department of the store with only those instruments used for the musical accompaniment. Professional singers did a very credible job. The part of Rigoletto was sung by Eugene Morgan, Gilda by Mario Vero, the Duke's paramour was Stella Hughes, and the Duke was sung by Gabor Carelli.

Sets which were good were executed by Rudy Luceck. The production was under the direction of Louis A. Sposa. Full use of the camera's possibilities added to the visual enjoyment of the presentation. For those who enjoy good music this presentation was more than satisfactory. Adding visual to the fine sound should do much to build up an appreciation for the values of opera as a definite cultural contribution.

G-E Appliances have been using short service spots, dramatized or humorized, on a series of sponsored programs over WRGB for the past five months. Teeing off program was the serial "War Bride," with commercial given before and after the episode. Typical example of this treatment was the plug used for the G-E washing machine. Opening shot showed a husband laboring over the diapers in a wash tub, and ignoring the washer which he thought was too tough a problem to handle. His friend, eager for a golf game, showed him how to work it, explaining the features of the new washer, of course. A "sales talk"



Simple line film cartoons are used on Bristol-Myers "Geographically Yours" program which plugs Minit-Rub and Trushay. Off-screen narration tells a story, with cartoons used to fill in the gaps. Above tale centered around a car owned by a gal nobody loved because of her red hands, until the car drove right up to the Trushay billboard, and the gal took the hint. Agency is Young & Rubicam. Fifteen minute show is a Sunday night feature on WNBTV.

was visualized by good close-ups of the wringer in action and the clothes swirling inside the machine. After the soap opera episode, com-

Films for Television Specially Designed to PAY THEIR WAY . . .

Far-seeing advertisers, now extensive users of "radio", are finding that the most effective, the most economical way to break into television is by means of FILMS. Mr. H. G. Christensen, vice-president in charge of our Television Department, will be glad to show you how such films, as planned by Caravel*, can be made to pay their way—and show a profit.

* Back of Caravel is twenty-five years of "know how" in visualizing sales facts in an interesting and entertaining manner.

CARAVEL



FILMS INC.

Telephone CIRCLE 7-6112

730 FIFTH AVE., N. Y.



"The Magic Carpet," sponsored by Alexander Smith Carpet Co. and produced bi-monthly over WABD, puts the magic carpet idea across by having two brownie dolls come to life and transport the little girl to the land of her dreams. Brownies are Martie Miller and Donald Hastings, who have played principal roles in Broadway shows, and the little girl is Mary Ellen Terry, of the Ballet Russe de Monte Carlo. (Sixteen children have gone from "The Magic Carpet" to principal parts in Broadway shows.) Show, now in its third year, is produced by Bud Gamble. Agency is Anderson, Davis & Platte.

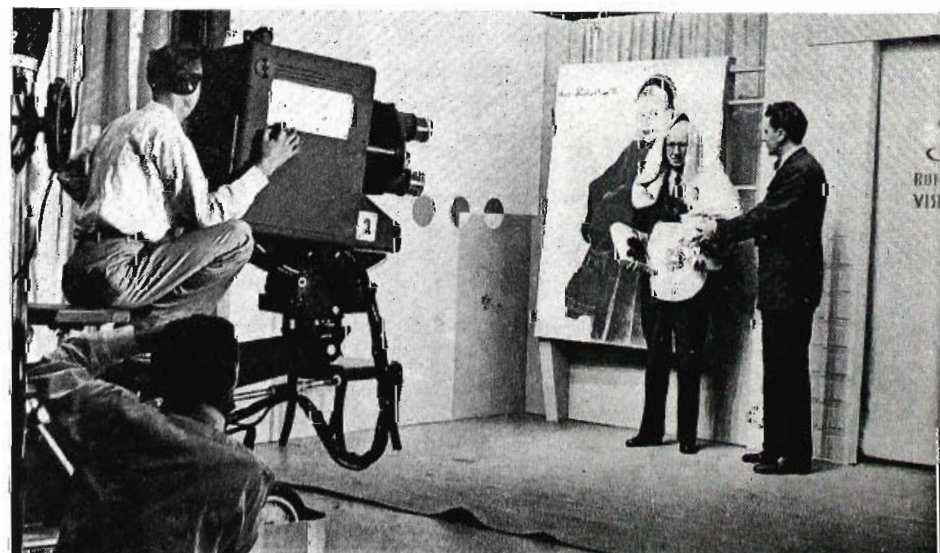
mercial was again picked up to show the husband finishing up the wash and feeling peppy enough to play a nine-hole golf game.

An integrated commercial treatment was given to the musical program "Songs of the Road." Setting was a railroad express platform and when the quartet finished singing, the agent called them over to look

at the new G-E refrigerator which he was crating. Main features of the refrigerator were pointed out, with close-ups of the humidity drawer, meat compartment, frozen food storage space, etc.

Slides and film have also been used on other programs, where these would be clearer than camera close-ups. Film bits are prepared in

Sears "Visiquiz" program, presented over WPTZ, gives the home viewers a chance to win along with the studio participant. Merchandise prizes are from Sears, and the Sears Roebuck name, on the backdrops, gives a visual plug.



advance and studio dialogue synchronized with the film actions.

G-E theory is to keep commercials fast moving and interesting and to tell the whole story in three or four minutes.

Alexander Smith's "The Magic Carpet," one of the oldest sponsored shows on television, has a 15-minute spot every two weeks over WABD. Format, a combination of live and film ties in the old magic carpet of fairy-tale fame with the travelogue film. Opening in the studio, Magic Carpet theme is set by having a little girl reading a story book about some far-off land.

Two Brownie dolls are in the chair and when the little girl goes to sleep, they come to life. Two dwarfs impersonate the Brownies, and place the girl on the "Magic Carpet." Technical effects are extremely well handled, with the cloud effect obtained by pouring milk into water, and the three on the carpet floating over the clouds. Dissolve is then made into film.

Commercial is handled by Clara Dudley, home decorator for Alexander Smith, who talks directly to the viewers and shows cards of room plans.

Show is produced by Bud Gamble. Agency is Anderson, Davis & Platte.

Atlantic Refining Company, now in its sixth year of sponsoring the Penn football games over WPTZ, is using the commercial film prepared for last year's coverage. At that time four game sets were compiled featuring "Sparky," a puppet gas station attendant, who greets the viewers before game time, at the half and after the game, and gives the lead in to direct commercial on the Atlantic products. N. W. Ayer, agency for the account, have re-edited the films, cutting them from about 3 minutes to 1½ minutes running time. Oral plug is given at the quarters.

Goodyear's sponsorship of the Army games also includes the Penn-Army and the Penn-Cornell games in their schedule. (For complete story on Goodyear commercials, see page 12.) These two games will be shown to WPTZ viewers under Atlantic sponsorship. Brought to New York via coax, and telecast over WNBT, visual and aural will be cued out and the Goodyear commercial substituted in its place. Deal was arranged by N. W. Ayer whereby WPTZ is also carrying the Army-Notre Dame game sponsored by Goodyear.

Gimbels weekly feature over WPTZ, "All Eyes on Gimbels," uses an integrated commercial format. That program is interestingly built and subtly angled is proved by the amazingly high returns directly traced to the television show. Program featuring Gimbels' collection of fall millinery was a good example of demonstration technique and straight fashion modeling. After the usual opening remarks by Mrs. Richardson, Gimbels' director of public relations who cues the viewers for what's to follow, camera picked up a model seated at a dressing table. Off-

screen narration very briefly stated that hats must be related to face types and pointed out the perfect oval features of the model. Two hats were tried on her to demonstrate the wrong lines for her face type. Particularly interesting was the "right" way, with a hat body placed on the model and a milliner draping it with a piece of material. Full use of video—in letting the pictures tell the story was made here with very little narration given. And there was the normal fascination in watching a "creation" created before your eyes.

In the second part of show, hats

were modeled to off-screen description. About five were discussed and shown to best advantage. Wind-up featured Mrs. Richardson trying a hat on one of the models, and concluding with an invitation to the viewers to visit Gimbels' millinery department. Ernie Walling directed the show for WPTZ.

RCA Victor's "The World in Your Home" uses educational films as the format for their program. Same commercial—showing a family group around the television screen—is used each week at the beginning and end of the program. Agency is J. Walter Thompson.

One Man's Reflections

(Continued from page 27)

Further advanced technical methods such as sound dubbing, electrical injection of power current and the like are usually quite unknown to those who issue said statements concerning television production costs. The fact is the ingenuity of the writer, the producer, the director, and the engineer will combine to confound those who regard television programming as economical out of the reach of advertisers.

Viewing Audience

5. The television audience, it is stated, will be too small to justify proper rates for the sale of station time. Accordingly the stations will not be financially solvent.

This within line of reason neglects all the pertinent factors. To be sure the present television audience is small, although on some occasions it has run into 100,000 and above. But it is certain that the television audience will run into the millions before many seasons have passed.

In addition, it is not only the viewing audience that counts, but also there is another factor. It is futile to address a program, with a commercial slant, to buyers who cannot purchase the advertised product. And it is quite definitely known that the television audience will, to a great extent, be an audience well able to pay for even the most expensive products that may be advertised in the television commercial.

Another factor neglected by those promulgating the mentioned fallacies is that the sales impact of television is so great, that if even a small audience is reached, a relatively large proportion of that audience will be purchasers and cause

the actual receipts to be disproportionately large.

6. The advertisers of America have only a limited amount to spend—and cannot afford to provide television entertainment to the public.

The number of television stations in the average city or town will likely be less for many years, than the number of broadcasting stations now operating in the same localities. Thus the television-advertisers' time does not need to be divided between smaller stations.

Again, any good businessman, with available funds will gladly spend \$100 on advertising his products or service, if he is sure that his net profit from sales resulting directly from advertising, will be, say, an added \$1,000.

The crux of the situation: How many added dollars are brought in for every advertising dollar that is spent. We can confidently anticipate that television will be an outstanding medium in this regard. For the first time the three greatest attractions have united entertainment and instruction, namely, sight, sound, and motion.

In any analysis of the future of television, whether on a human basis or otherwise, it is necessary to assume that our country will progress without major catastrophe brought about by governmental ineptitude, errors made by industrial management, or mistaken efforts by the leaders of labor and their followers. Many causes can upset even the best-laid plans.

But if our country progresses wisely and prosperously toward the future we will survive the prejudice of distrust. The future of television is as bright as that of America!

Bristol-Myers Minit-Rub and Trushay commercials continue to use the ideograph or simple line cartoon idea in the "Geographically Speaking" program over WNBT. Commercials tell a problem story, with either Trushay or Minit-Rub offering the solution to the problem. Idea is clever, with cartoons used to fill in the blanks on the announcer's off-screen commentary. Cartoons of the products are shown with commercial given before and after the film format. Agency is Young & Rubicam.



CARTOONS for
ADVERTISING
and TELEVISION

GAGS
SPOTS
TITLES
SLIDE FILMS
CONTINUITIES

HAROLD ABBEY
600 MADISON AVENUE
NEW YORK 22 • PL. 8-2658

State Department to make 156 new films . . . BBC-NBC-ABC mix-up . . . current releases . . . station news.

BEST indication of the use of film in television programming can be gleaned from the formal applications submitted to the FCC by prospective telecasters. In the New York hearings, where six companies applied for the four available channels, the Thackrey application led with 50% devoted to film, followed by the News Syndicate with 46.43%; Bremer with 32.14%; Debs with 12%; Bamberger with 10.1% and ABC with 8%. In Los Angeles, 7 of the 8 applicants stacked up as follows: Thackrey, 50%; Earle C. Anthony, 37.2%; Howard Hughes, 28.3%; Don Lee, 20 to 30%; the Times Mirror, 25.9%; Television Productions with 21%; ABC, 17%. (NBC showed no program plans.) All of these percentages are based on a 28-hour programming week, with the exception of Television Productions who predicated their figures on a 40-hour weekly schedule.

Quite a few of these film periods are scheduled specifically for the children's hour (cartoons), or for educational programs in daytime spots for beaming to in-school classes.

Current Releases

So much for the future. As for what's available today, many organizations are making an effort to secure the distribution of film depicting some side or other in a propaganda struggle. With care, a well-balanced program can be achieved which will present both sides of a question to the viewers. A recent release by the United Electrical, Radio and Machine Workers, an affiliate of the CIO is called "Deadline for Action." It is a 40-minute film with political and economic overtones. Use of these films naturally will call for a rebuttal to protect the station against accusations of favoritism.

The War Department's orientation film, "Teamwork" which is a record of the Negro soldier's participation in the war, and "Man-One Family," a British Information Service film, have also been recent releases of Awards Films.

With most of the present operating stations almost scraping the bottom of the barrel, as to feature films, news that 156 new films will be made by the State Department's

Office of International Information and Cultural Affairs is welcome. Film fare from government offices is favored by many of the operating stations on the grounds that the production is better technically than many old releases and the cost is merely the shipping charge.

Educational films are being made available in increasing quantities. The Encyclopaedia Britannica is a source from which the U.S. Rubber Company is drawing their current series, "Serving Through Science," over WABD. (For audience reaction to educational films see "TELEVISION Audience Panel" on page 25).

Libraries

Some stations are building their own library of stock shots and include a stockpile of amputated acts from feature films. These are usually sorted according to running time in order to fill in when programs do not go off on the nose. WPTZ, in their pick-up of the "Hour Glass" from WNBT, also have special films ready to use if the show goes off before 8:55. WCBW, for example, in their pick-up of the rodeo from Madison Square Garden had to skip the Gene Autry act (because of the Petrillo ban, of course). Blank was filled in with western film from the studio.

Good trick to freshen up old film is live commentary rather than the old sound track. Examples of this technique are the Alexander Smith "Magic Carpet" show (produced by Bud Gamble through Anderson, Davis & Platte) and the Bristol-Myers "Geographically Speaking" (through Young & Rubicam). In the "Magic Carpet," comments of the youngster as she supposedly flies over the scenes gives a fresh approach to the travelogue. In "Geographically Speaking," Mrs. Carveth Wells' commentary, which accompanies the travelogue films she shot herself, also gives an up-to-dateness to old film, when she ties in present-day happenings in that land.

Here and There

BBC, NBC, ABC mix-up—when John Royal was in Europe one of the things he arranged was for an exchange of film between NBC and BBC. While this was being consummated the New York office of

BBC and ABC were tying up the same kind of deal. Both networks now lay claim to film exchange rights and it remains for negotiation to determine over which waves (ABC or NBC) Britannia will rule.

WCBW showed "The Hannibal Victory," a film released by the U. S. Maritime Commission, a one-hour feature film which was made available for free television. They are planning to present feature films at least once a week. There was a lay-off during the summer, but now it is planned to increase the showing of celluloid. Two of the more interesting 15-minute shorts were "Cover to Cover" which was about books, and "Letter From Paris" which is a report on the state of the French capital.

NBC tied up the neatest film package of the month with its newsreel on the departure and arrival of the Queen Elizabeth. Films showing the giant liner leaving England were flown here, arrived at six a.m. and were shown that night, with the audio furnished by a radio hook-up from the liner at sea. Her dawn arrival in New York was also filmed and, together with a re-edited version of the first film, was shown over WNBT that night.

ABC continues expending big dough for film junkets. This time they sent two camera crews to record the American Legion Convention for which they have exclusive television rights. Film will be shown over ABC's five outlets (WABD, New York; WBKB, Chicago; WPTZ, Philadelphia; WTTG, Washington; and WRGB, Schenectady) and in addition will be turned over to the American Legion for later showing in its numerous posts through the country.

According to Paul Mowrey this film costs in excess of \$10,000. The figure seems quite high, but the station expects possible sponsorship to help partially defray the cost. The documentary will also return promotional dividends from the nation-wide Legion showing. Prints will be on 16 mm.

Shooting was done on 35 mm. film, and sound added later. Final length of film was 2,000 feet which represents about 1/5 of the total originally shot. ABC special event director Bud Pearse directed the coverage.

PROGRAMMING

WCBW-New York Board of Education to start weekly quiz series . . . reviews of current formats.

public service

WCBW's recently announced program, "All-New York Junior High School Quiz," produced in conjunction with the Board of Education, will be a weekly feature over the station from November 7th to May 1st. Tournament is divided into two ten weeks segments, with the semi-finalists in each, competing in the finals. Series is a culmination of the close cooperation between CBS and the Board of Education. Station prepared a "Faculty Advisers Manual" last June which contains specific information on visualizing quiz problems for distribution to the faculty advisers of the student teams which will participate. In addition, WCBW staffers have been holding weekly meetings to train the educators in video techniques.

Forty junior high schools in New York will participate in the programs, with ten-student teams selected from each school. Teams will prepare the quiz posers from the syllabus for the 7th to 9th junior

grades and visualize the problems for the opposition to guess. Such subjects as history, geography, code of behavior, literature, grammar, spelling, arithmetic, current affairs, art and music appreciation will be covered. Series was hailed by both CBS and the Board of Education as a concrete step in testing the value of television as an educational medium.

WBKB's latest public service feature tied in with the Community Fund Drive. Large screen receiver was installed in the windows of the Fair Department Store by the Fair and Cutter Cravat, and section roped off so that the passers-by could collect and watch the program. Set owners in the area were asked to have television parties and to invite their friends in for a gala opening show.

Opener featured night club and stage talent headed by Gracie Fields, interspersed with civic leaders speaking for the fund. Show was produced by Beulah Zachary, WBKB staffer. In addition to the teeing off program, announcements

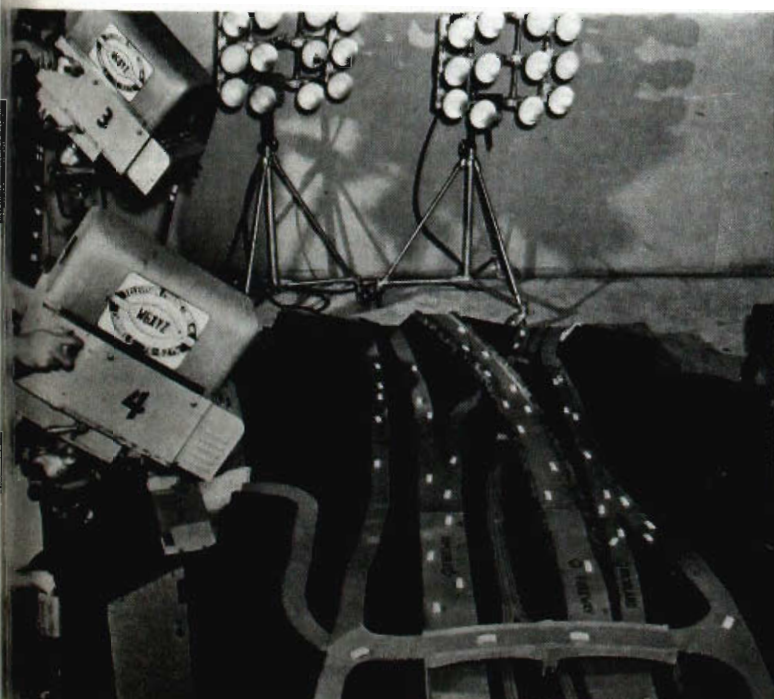
of the fund were substituted for commercials on the other programs throughout the week.

WBKB also launched the annual Boy Scouts drive with the presentation of "Boy Scout Revue." Dramatization theme was used to show such skills as woodcraft, first aid and signalling by having a youngster start out on the program as a cub and through learning the various crafts graduate to full fledged membership. Jack Gibney, WBKB sports editor, handled the show.

drama

WNBT brought Uta Hagen and Bramwell Fletcher to television in "The Curtain Rises," and proved that despite the difference in screen size the television receiver can project acting or over-acting with as much clarity as the cinema screen. In this particular play by Benjamin Kaye the characters had to act within their acting, since plot

"Your Town," regular weekly feature at W6XYZ, won the TBA prize for the best public service program for Klaus Landsberg, west coast television director for Television Productions. Scenes below were taken during a three way forum on "Do we or don't we want—The Hollywood Freeway?" Scale model in close-up at left was used for visualization.



evolved about members of the theatre, and central character (Uta Hagen) aspired to a theatrical career. This situation made everyone participating quite safe from reality . . . or criticism.

Plot evolved around the desire of a rich young woman to play a love scene with the matinee idol of Vienna. She hired a studio for that purpose, but was momentarily frustrated when Bramwell Fletcher (the matinee idol) refused and assigned his understudy the task of teaching this gauche, plain jane the business of acting. Special desire of the amour-seeking female was to learn to play love-scenes. When the understudy turned out to be sincere, gentlemanly and handsome the result was a foregone conclusion. But it took many love scenes, parodied, and otherwise, to arrive at the final expected fadeout.

Camera usage was fair, but there were many long intervals when the characters were revealed from the waist up. Too much over-long exposure of the upper regions makes a restive audience feel that they are watching semi-formed beings. As it was the drama did not have too much to stand on . . . it needed more footwork, camera and drama-wise.

WCBW's bi-monthly "Judge for Yourself" program combines a dramatic situation with audience participation. Adapted from past law suits usually involving some little known legal point, dialogue and situations are brought up to date and the case dramatized before three judges and a jury—all amateurs selected for participation. Adapted and written by Edward Stasheff, keynote is set with his opening address to the viewers explaining the program and pointing out that the judge who comes closest to the original decision handed down by the courts receives a bond. Cast includes a judge, attorneys for the plaintiff and defendants, and the witnesses who testify. Courtroom setting and procedure are used, with the people involved testifying, being cross examined, etc. Because of the unusual angles involved, viewer interest is held throughout. Brief summations of the case are given by each attorney, after which Mr. Stasheff comes back to invite the viewers to judge the case, and then calls on the three amateur judges to give their opinions. Courtroom judge then reads the original decision handed down by the courts. Idea is good, involv-

ing as it does the suspense appeal of the popular whodunits—but on a much higher level of good taste. Program was directed by Steve Marvin for CBS.

variety

WABD's presentation of "Under the Wing," was an American Theatre Wing package, produced by Bob Loewi. Idea of the show was to point up the courses which the ATW are offering to returning GIs with thespian leanings. Opening with film shots of marching soldiers, cut was made to a man sitting next to a radio. Off-screen commentary tied in the film clips with the ex-GI who was now looking for a job. Radio commercial told of the

discussed the program. The interested GI arrived to register and was conducted on a tour of the different classes. Fencing, dancing, dialectian and dramatic sessions were shown, with an attempt at comedy injected by the antics of the would-be student in each of the classes. Cut back to switchboard for directions on reaching each room was made between each act. This added nothing to the program and were added interruptions. Comedy routine would have been better if left out entirely for it got to the embarrassingly silly stage where the viewers were squirming.

Camera action marred the entire show however. As frequently happens at DuMont there is never enough headroom to allow for a person standing up, or a dancer



"Stump The Authors," ABC video version of their radio show, is a weekly feature over WBKB. Cast consists of three authors and an emcee editor, with author required to spin a four minute yarn about the object he withdraws from the box—frankfurters in this case. Reaction of studio audience is picked up.

courses offered to GIs by the ATW, at which point the young man perked up his ears and got ready to investigate for himself. Camera dollied into the radio, supposedly taking the viewers to the studio and next shot was the girl singing. This was obviously thrown in as a specialty act, although attempt was made to tie it in with the time lag while the vet was dressing to go over to ATW. Next shot was the switchboard at ATW, with the operator giving some of the details of the courses. Camera then panned over to two representatives who

leaping into the air. In group shots someone is usually cut in half. Often a camera doesn't pick up the person talking; a dancer's feet are missing. Today's programs may be experimental but "experimental" needn't be synonymous with carelessness.

WRGB presented "Personality Previews," a package show produced by Video Associates. Theme of the series is to present and build up talented but mostly unknown performers. Opening with a film clip showing the American scene

with the emphasis on the entertainment world, a pop-up cartoon idea was used as a teaser for the audience to guess the name of the performer. Eight to ten cartoons, depicting the background of the performer, a previous show he was in, etc., are used to introduce each segment. These cartoons are mounted on frames and pop up to give movement and to visualize the audio clues which the off-screen commentator gave. Name was given at the end and then a dissolve was made to the performer. Three spots were used in the half-hour show, with the opening and closing one devoted to entertainment and the middle one illustrating a graphic art, fashion, furnishings, etc.

Dancer Eva Desca was in the

dolled in for a close-up of the model house, idea being that a person was about to step out of the door. Quick change to a long shot showed the model, and the important features of it were discussed. This segment would lend itself well to commercial possibilities.

As is usual with shows brought up to WRGB, scripts, floor plans, technical requirements, prop lists, etc., were sent ahead of time. Show received three hours of camera rehearsal in the studio. Clark Jones produced it for WRGB.

participation

WCBW's "See What You Know," regularly scheduled audience participation show, suffers badly every



WCBW's bi-monthly "Judge for Yourself" program dramatizes law cases with a peculiar legal twist. Courtroom setting is used and three amateur judges are selected. Their decision is given at the end of the program, with person coming closest to the original verdict winning a prize. Because of the unusual cases selected for dramatization, audience interest is sustained throughout the show.

first spot and did two specialty numbers. "Lucky Looie," a satire on the black market and the fellows who slid away from war duties was performed without musical accompaniment. Narrator asked a series of questions and she danced out the answers. Second, "Guerilla in Spain," was danced to recordings.

Lorenzo Fuller sang and accompanied himself by means of a homemade musical contraption that Petrillo never heard of. Second spot, on prefabricated housing, got the same build up as the others, with the viewer led to believe that it was another personality. Camera

now and then from stunts that are more radio than video, from bad grouping of the contestants and poor camera shooting in picking up the action or the people involved. Watching three people sing a different song at the same time wasn't half as funny as it often is on the radio—and looking at them didn't make it any funnier. Only good visual stunt used in this particular program had the three contestants trim a hat on their heads from decoration and pin laden tray on their laps. And even here the pace dragged a bit.

While it's alright with us if tele-

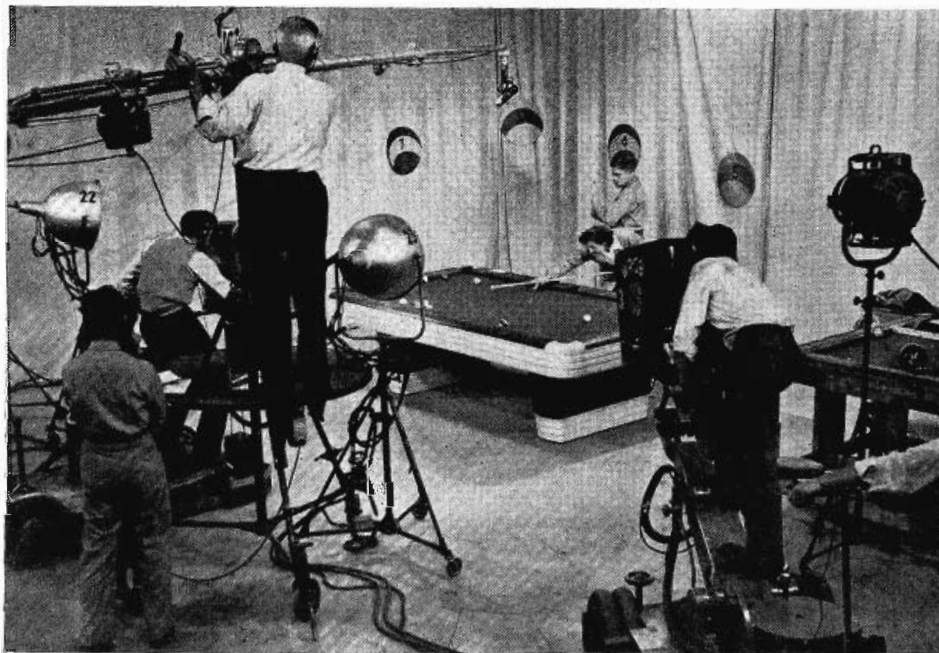
Major film company executive Completely sold on television

- Will give up present executive position to get into television now. Twenty years experience in all phases of motion picture industry — production, distribution, sales, newsreel, talent, etc. Have closely studied television industry for some years now. Fully acquainted with its many problems.
- Feel completely qualified for station managership or heading up of special events department.

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TELEVISION,
600 Madison Ave.,
New York 22



Members of the Philadelphia Fencing school demonstrated their techniques in "Sports in Review" over WPTZ. A regular weekly program, this sustainer features star athletes as guests, as well as gym classes from Philadelphia schools.



Ruth McGinnis, world's champion woman pocket billiard player, displayed the technique of trick shots in a series of demonstration games over WRGB.

casters wish to tell a little white lie to the viewers, they should remember not to trip themselves up. Repeatedly on the show, which is supposed to be unrehearsed each contestant gets up to act out a character for the others to guess—and without any instruction as to who they're supposed to be, go right into their stunt. Let's not endow video viewers with that radio IQ of a 12-year-old.

ABC presented the Fenton Agency's package, "Detect and Collect," over WABD, which featured the horse-laughing monkey-man Lew Lehr as MC. True to type Lew demonstrated on this audience participation show that "peoples is the craziest monkeys." Zany program illustrated Darwin in reverse, but despite the assault on the IQ everyone seemed to be having more fun than a barrel of simians.

Idea of the program was to make the audience participant guess what was concealed behind the curtain by offering contestant a series of clues. Rewards ranged from \$10 to \$5, \$2.50 and 5 cents depending on the speed with which the person celebrated in answering one of the four clues. Most obtuse clue was naturally the first which carried the ten buck reward, down to the most obvious which was usually the \$2.50 mark in the performance.

Behind that curtain, four items were unveiled in the half-hour show.

1. Kiddie Kars . . . Lehr and contestant raced.
2. "A tasty dish" . . . which turned out to be an attractive blonde. Soldier and sailor who participated in this stunt each won \$2.50 and were told to take the "dish" out and have a good time at no expense at the Latin Quarter . . . to which a wag added . . . "they won \$2.50 and a Latin quarter."
3. Steam cabinet . . . woman contestant saw her husband reduced in this cabinet. Door opened and out came a midget.
4. Wardrobe of old fashioned clothes . . . two women contestants raced to see who could put on most clothes in a short time. After piling on the most outlandish rigs they did a stately take-off on fashion models. This was funniest proof of the fact that monkeys are not the craziest people.

WRGB's "The Jury of Public Opinion," new bi-monthly series over the station, features the new G-E opinion meter which electrically registers the composite opinion of a group.

Jury of twelve is chosen, with an mc putting a question of national interest to the group. Each member holds a small dial instrument in his hand on which he registers his opinion. A six foot dial then records the mass pro and con reaction of the group, in degrees from zero to 100.

After this first test of opinion, the same question is submitted to a panel of our experts who discuss both sides of the subject. At the conclusion of this debate, the jury again registers their opinion—and a glance at the dial shows the televiewers whether the experts' discussion has changed any opinions.

EQUIPMENT

New features incorporated in postwar equipment
. . . current developments . . . recent patent grants.

STATING that programming will benefit from the adaptability of the new postwar streamlined equipment, James D. McLean, manager of sales, transmitter division, electronics department of G-E, listed the following general improvements incorporated in the new models:

- Studio cameras will be smaller, lighter and easier to handle because of circuit developments and camera tube improvements. Smaller camera tubes, the removal of power supplies, and the reduction of sweep circuit components all contribute to the new lightweight designs.

- Master control equipment will be extremely flexible and capable of handling programs from many sources. Field pick-ups, inter-city programs, films, slides and live talent can be cued, switched and more easily controlled with this new apparatus.

- The image orthicon has resulted in the development of new, highly sensitive cameras for field pick-up use.

- Television transmitter design has been simplified due to new vacuum tubes capable of generating considerable amounts of radio frequency energy at television frequencies. Tubes are available in limited quantities for at least 5000 watts output over all of the thirteen assigned television channels. New transmitters will employ fewer circuits, components and tubes than prewar units. They will be easy to install, adjust and operate.

- Vacuum tubes now available will allow the construction of transmitters with power outputs of 15 kw or more in the lower group of television broadcast channels. New developments in the manufacture of power amplifier tubes will eventually lead to the production of high powered transmitters—perhaps of the order of 50 kw for all of the television channels.

- Techniques resulting from the design of wartime radar antennas are contributing materially to the design of new television broadcasting antennas with higher power gains and broader band operation.

With FCC frequencies set for studio to transmitter and point-to-point relays for television broad-

casting and common carrier operation, designs can be completed for this type of equipment and microwave technique can be perfected. As to the future, sensitive camera tubes with better definition and higher resolution; smaller cameras; and improvement in theatre television service, as well as developmental work in the higher frequencies for both color and black-and-white transmission can be anticipated.

ture should save time on the assembly line, and will obviate variations resulting in the use of three separate parts.

Antenna

King Electronics presented what, according to the company, is a revolutionary type of Dipole antenna for television and FM reception. Efficiency is considerably higher than other conventional dipoles or reflectors, the company claims, be-



General Electric's new lightweight television camera has two sets of turret-mounted lenses, and is equipped with finger-tip controls. A silent electric hydraulic system, foot-operated, gives flexibility of elevation controls. Lenses are focused by twisting the rotating grip on the right handle, as illustrated.

Videocoupler

P. R. Mallory & Company, Inc. of Indianapolis announce the addition of another electronic component to their line, the Mallory Videocoupler. It is a three terminal network designed to couple the video amplifier to the picture tube in television receivers. Unique feature claimed for the product is combination of two peaking inductances and the load resistor in one assembly. This fea-

cause of the adjustable arm feature of the new product.

This feature makes it possible to harmonize the wave lengths of weak stations and eliminates ghosts on some stations in low areas. Adjustment is made through an UHF element which is calibrated from 1.0 to 21.5 in half-steps. The antenna comes complete with hardware, straps, and guy wires for ready installation.

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patents

Permanent Records

Alan M. Carmel, Forest Hills, N. Y., won No. 2,408,293 on a method of making permanent records of television signals for future reproduction (two claims allowed, application for patent Oct. 14, 1944, patent not assigned).

It is known that many more television signals than sound signals are required per unit of time. Sound signals long have been recorded on motion picture film, but the high frequency of television signals has been regarded generally

as a prohibitive drawback to their recording. This invention is based on the fact that while sound signals must have distinguishably varying intervals, video signals may be recorded at uniform intervals requiring only the minimum length permitted by microscopic and photographic methods. Thus, in this device, the record carrier is moved just fast enough for such minimum intervals.

The condensed television signals are conducted to the recording device by wires, and then are transformed into light signals by a cathode ray tube. During the recording operation, the 35-millimeter

film moves longitudinally across the light beam of the camera rapidly enough to record the signals in a row, one after another, at a speed of about 10 yards per second. Once the film has been developed, it shows rows of a transparency varied or modulated according to the intensity of the signals. And these recorded signals may be used for sending or broadcasting in the same manner as original signals. The width and the small height of the microscopic signals make it possible to divide the recording area into perhaps 20 rows of signals, half of them for television and the other half for sound.

Electron Scanning Beams

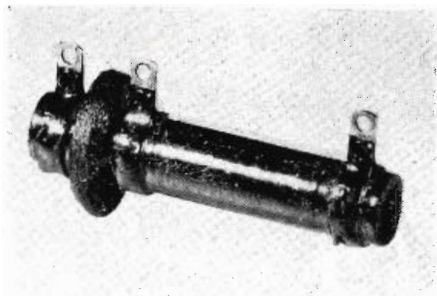
No. 2,407,485 was granted to Sanford F. Essig, Fort Wayne, Ind., on automatic control means designed to prevent the orthicon from becoming "paralyzed" (seven claims allowed, application for patent June 1, 1944, assigned to Farnsworth Television & Radio Corporation). Nos. 2,407,905 and 2,407,906 were awarded Albert Rose, East Orange, N. J., on means for preventing helical motion of the beam and for providing more uniform secondary amplification (20 claims allowed on the former, 10 on the latter; both patents applied for in 1942 and assigned to RCA).

In the Essig patent, the inventor points to one serious drawback of low velocity type tubes. When the mosaic screen is flooded with light, the electrons supplied to an individual photosensitive island from the electron scanning beam normally will not be sufficient to restore the electron charges to the island and to bring the mosaic potential back to normal. The effect is that the orthicon becomes paralyzed, and it may take several scans to restore the electron deficiency.

The Essig patent covers automatic means for controlling the intensity of the low velocity electron scanning beam. This is held to prevent paralysis because the number of electrons of the scanning beam will automatically be kept equal to or larger than the largest number of photoelectrons freed from any of the photosensitive islands.

Rose points out in 2,407,905 one difficulty in construction of low velocity tubes—the fact that for ideal operation, the electron beam must be directed longitudinally of the magnetic field to prevent imparting to the beam a radical component of velocity which produces a helical beam motion and consequent distortion and loss of resolution in the recreated television image.

In the patented tube, difficulties arising from this inaccuracy of electrode alignment are held to be minimized, and helical motion is neutralized by developing a mag-



The Mallory Videocoupler couples the video amplifier to the picture tube.

netic field acting upon the beam to produce a second radial or normal component of velocity opposite in direction and equal in amount to the original radial component of beam velocity.

In the second Rose patent, distortion produced by non-uniformity of secondary electron emitting surfaces is minimized and the processing of multiplier electrodes is made easier. Under this system, an electrostatic image is formed on a photo-sensitive mosaic target which is scanned in two mutually perpendicular directions by wholly magnetic means. The electrons of the beam are incident upon the target in accordance with the electrostatic charges, so that electrons not reaching the target are returned along substantially the same paths as the scanning beam to an electron multiplier.

Long Shots & Close Ups

(Continued from page 26)

another. There is a subject for separate discussion . . . but one thing is sure—they cost enough.

Anyhow, this gave me a subject for another article. One on the time factors for each phase of the various types of production. How long it does take for casting, designing, building, painting, decorating and dressing sets, rehearsals, shooting, cutting and editing, music and sound effects scoring, and all laboratory processing. It's the time and labor required to do these things that determine your costs . . . so a general knowledge of them should be helpful in deciding the efficiency of your producer and his organization.

As a student who paid his twenty-five bucks entrance fee to attend this TBA "College of Television Knowledge," I can't help but say that—as they sing in the musical hit "Carousel," . . . "it was a real nice clambake" . . . and a lot of nice people were there. Period.

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EDITORIAL

TBA's Future

WHAT with the absorption of the FM broadcasters by the National Association of Broadcasters it would seem that in the natural order of events TBA would eventually share a similar fate. But the chances are that this will not take place—particularly with the recent NAB convention not scheduling as much as one talk on television in its four-day agenda.

On the other hand TBA will have to become much stronger. True, they did win a major battle on frequency allocation, but there is much more to be done. TBA must be of more service to its members. Noticeable at the convention was a lack of enthusiasm on the part of many. This should not be. The industry needs TBA. It needs an organization which cannot only represent and fight for its interests, but an organization that can get and supply necessary information to its members. TBA has progressed along these lines up to the point of naming committees—Commercial Operations, Television Station Operations, Publicity & Promotion, Programming, Education and Membership. Naming committees is one thing, making them function is another. For example:

There is a vital need now for audience research. TELEVISION magazine through its continuous audience panels has done some work in this direction, but it has only scratched the surface. Manufacturers plan to get names and addresses of every purchaser of a television receiver. This information should be standardized and if possible be more complete as to income bracket, size of family and educational background. If this material were turned over to TBA for audience research purposes, TBA would be performing an invaluable service to the television broadcaster, advertiser and the public. There are many other projects which need immediate attention.

But there is a limit to the amount of work that can be contributed by industry members. Experience has shown time and time again that the bulk of the work in any organization can only be done by paid executives. Will Baltin, TBA's sole paid executive, has been doing a heroic job. TBA needs more Will Baltins. If present income won't allow this additional expense, dues should be doubled. If members are now willing to pay \$1000 a year, the added service they would receive should certainly make it worth their while to pay an additional \$1000. And as soon as TBA gives real service, every licensee and holder of a CP will want to join up. It is up to TBA to make them want to be members.