SEPTEMBER-OCTOBER • 1946

FIFTY CENTS \$3 PER YEAR, \$5 FOR 2 YRS.

LCLCV1SCT JOURNAL OF TELEVISION



Invitation to TBA's 2nd Annual Conference, Waldorf-Astoria, Oct. 10-11, Extended by TBA's Officers: J. R. Poppele, Pres. (Upper L.); F. J. Bingley, V. P. (Upper R.); Will Baltin, Sec.-Treas. (Lower L.); and Ralph Austrian, Conference Chairman (Lower R).



TBA VANGUARD **EDITION** (CONVENTION ISSUE)



ON First with the Finest in Television

The Detroit News, founder-owner of WWJ—America's first commercial radio station—will pioneer again, this time giving Detroit its first television station. The new facilities will be built by Du Mont, builder of more television stations than any other company.

When distinguished pioneers in radio broadcasting call upon Du Mont, pioneer and pacemaker in the magnificent new art of television, the selection is a sterling honor and a signal recognition of Du Mont's outstanding achievements and capabilities.

Du Mont will provide a 5 kw video transmitter, 2.5 kw audio transmitter, master control equipment, film projection and pick-up chain, etc. Du Mont will erect a specially designed antenna atop the Penobscot Building, Detroit's highest office structure. All Du Mont's experience ranging from development of the first commercially practical cathode-ray tube to building and programming the world's largest and most completely equipped television studios, is at the disposal of this client. This experience can also be yours.

IF YOU HAVE NOT READ "THE ECONOMICS OF DU MONT TELEVISION," WRITE FOR A COPY

Olygight 1946, Allen B. Du Mont Laboratories, Inc.

Oliginal Precision Electronics and Television.

ALLEN B. DU MONT LABORATORIES, INC. • GENERAL TELEVISION SALES OFFICES AND STATION WABD 515 MADISON AVE., NEW YORK 22, N.Y. • DU MONT'S JOHN WANAMAKER STUDIOS, WANAMAKER PLACE, NEW YORK 3, N.Y. • PLANTS AND HOME OFFICES, PASSAIC, N.J.



TELEVISION Milestones



and now...

INTRA-VIDEO by TELICON

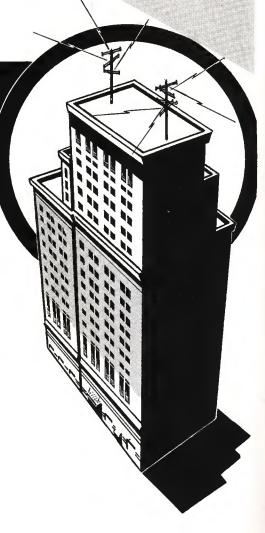
THE LINK THAT WAS MISSING IN TELEVISION

INTRA-VIDEO Antenna-distribution Systems installed in apartment houses, where probably the bulk of potential customers for television receivers reside, insure ghost-free, trouble-free, interference-free reception.

INTRA-VIDEO Systems serve for any individual building as a distribution station for all the transmitters in the area.

INTRA-VIDEO cleans up the signal, rids it, to the greatest possible extent, of external interference, amplifies it where it is weak, and obviates antenna inter-action between a number of different receivers in the same building. Any make of television receiver can, without any alteration, be fed by the INTRA-VIDEO System.

By making possible, through INTRA-VIDEO, enjoyable television reception in apartment houses, Telicon engineers have overcome one of the most serious obstacles impeding the introduction of commercial television in the larger cities, and have thus made a contribution of no mean importance to the potential owners of television receivers, to manufacturers of television receivers and to the television art in general.



WHEN COLOR TELEVISION COMES, IT WILL NEED INTRA-VIDEO EVEN MORE THAN PRESENT-DAY BLACK AND WHITE TELEVISION. THE INTRA-VIDEO INSTALLATIONS THEN IN EXISTENCE WILL REQUIRE NO CHANGES, MERELY THE ADDITION OF ANTENNAS AND BOOSTERS FOR THE SHORTER WAVE-LENGTHS.

ORDERS FOR INTRA-VIDEO INSTALLATIONS ARE NOW BEING ACCEPTED



851 Madison Avenue, New York 21, New York



RCA airborne television will bring you thrilling news events that could not otherwise be "covered"-while they are happening.

You'll see <u>news</u> in <u>the making-through Television</u>

Imagine! A helicopter is "covering" the story of a man marooned on a burning building. Sitting at your home television receiver, you will get the same eye-witness view as though you were riding along in the nose of the plane!

To develop equipment compact enough to fit into a plane was a major problem. But RCA-NBC scientists and engineers in co-operation with the U. S. Navy did it—and airborne television became a wartime reality.

This portable equipment has many peacetime uses—and may lead to de-

velopment of a "walkie-lookie" with which a radio or news reporter might cover a story by television as readily as a news photographer does now with a camera.

Such progress-making research goes into each and every RCA product—and is your assurance that anything bearing the RCA or RCA Victor emblem is one of the finest instruments of its kind that science has achieved.

Radio Corporation of America, RCA Building, Radio City, New York 20...Listen to The RCA Victor Show, Sundays, 2:00 P.M., Eastern Daylight Time, over the NBC Network.



A television "eye" in the nose of a plane! Besides covering news events by plane, automobile or boat, such revolutionary equipment developed by RCA and NBC, can make accurate geographical surveys from planes flown by remote control. Moreover, similar television equipment can observe hazardous manufacturing processes from a safe distance.



RADIO CORPORATION of AMERICA

This team sets the



1877: Grand-daddy of all microphones was Alexander Graham Bell's box telephone, into which Thomas A. Watson shouted and sang in the first intercity demonstrations of the infant art of telephony.



1920: Telephone scientists developed the first successful commercial mike—the double carbon button air-damped type. Used first in public address systems, it later became the early symbol of broadcasting.



1921: The condensor microphone, designed by Bell Laboratories for sound measurement in 1916, entered the public address and broadcasting fields. It provided a wide frequency range and reduced distortion.



pace in Microphone Development



1931: Bell Telephone Laboratories developed the Western Electric moving coil or dynamic microphone. The first of its kind, it was rugged, noiseless, compact, and needed no polarizing energy. Many are still in use.



1935: The first non-directional mike — the famous Western Electric 8-Ball, designed by Bell Laboratories. Small, spherical, it provided top quality single mike pick-up of speech or music from every direction.



1936: Directional with slide-on baffle, nondirectional without it, the Western Electric Salt Shaker gave highest quality pick-up at new low cost. Widely used in studios and remotes as well as in high quality sound distribution.



1946: No larger in diameter than a quarter, the 640 Double-A condenser mike (shown with associated amplifier) is ideal for single mike high fidelity pick-ups. It was originally designed as a laboratory test instrument.

What is a microphone? Fundamentally it's a device which converts sound into electrical energy—just what Bell's original telephone did for the first time away back in the seventies.

Today's Western Electric mikes—the Salt Shaker, Cardioid and 640 Double-A—are a far cry from the first crude, close-talking telephone transmitter. But they're its direct descendants.

Year after year, Bell Telephone scientists—through continuing research—have developed finer and finer telephones and microphones.

Year after year, Western Electric has manufactured these instruments, building quality into each one.

Together these teammates have been responsible for almost every important advance in microphone development.

Whether you want a single mike, a complete broadcasting station, or radio telephone equipment for use on land, at sea or in the air, here's the point to remember:

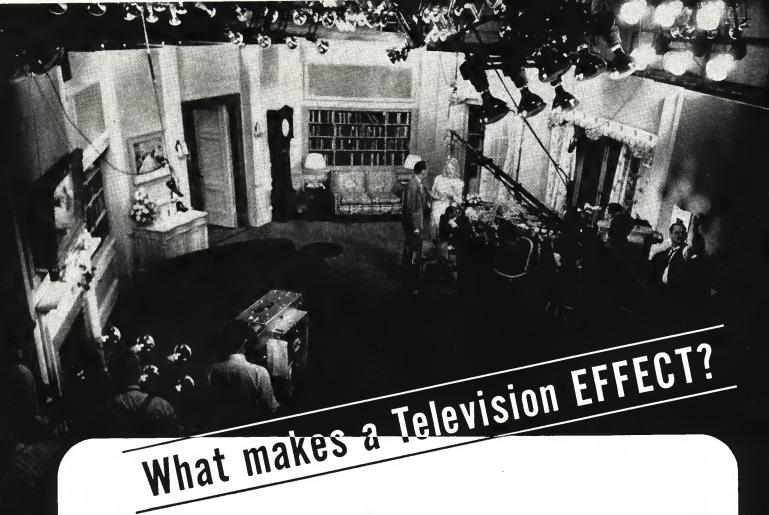
If Bell Telephone Laboratories designed it and Western Electric made it, you can be sure there's nothing finer.

BELL TELEPHONE LABORATORIES

World's largest organization devoted exclusively to research and development in all phases of electrical communications.

Western Electric

Manufacturing unit of the Bell System and the nation's largest producer of communications equipment.



• Double image scanning . . . film sequence insertion . . . small scale sets . . . process shots . . . lighting tricks . . . microphone arrangements — these are elements from which special television effects are made.

The long experience of NBC crews, the dexterity of control board technicians, the imagination of producers and directors—these are the skills which build exciting illusions when a video script calls for special effects.*

WHAT MAKES WNBT TODAY'S BEST BUY IN THE TELEVISION MEDIUM?

In every aspect of show after show on WNBT, NBC demonstrates the result of television's perfect working combination: an expert staff with years of continuous practical experience behind them, facilities that are the finest in television.

Whatever your requirements—whether you produce your own show with NBC experts . . . whether your ideas are developed and

produced by NBC . . . or whether you sponsor programs built and broadcast by NBC—WNBT offers unique advantages and economies built by continuous, practical broadcasting—the longest in television.

***... From the technical viewpoint; Blithe Spirit' was transferred to the fluorescent screen like a finished product with polish, fluency, and compactness... the technique depended here on highly mobile camera units for a fluid vision. The trick shots demanded by the story with its materialized ghosts were also neatly processed with typical Hollywood expertness... This is television as it should be."—VARIETY

NBC TELEVISION

WNBT NEW YORK

NATIONAL BROADCASTING COMPANY

A SERVICE OF RADIO CORPORATION OF AMERICA

Vol. 3. No. 5 . . .

Sept.-Oct., 1946

The TBA Conference and Exhibition, scheduled for the Waldorf-Astoria, October 10 & 11, has all eyes focused on New York and the display of tele receivers which man-Recent FCC grant of a video CP to WJAC, Johnstown, Pa., assures television to small communities and may be an incentive to other broadcasters, previously scare off by big money talk, to seek station licenses for hinterland markets. . . . Major radio sponsors are getting in on the ground floor in television, notably: Ford, Bristol-Myers, Reid's Ice Cream, Sears Roebuck, etc.

IRWIN A. SHANE

Publisher

JUDY DUPUY

Editor

MORRIS COOPER.....Business Mgr. and Circulation Director GEO J. WEBSTER......Advertising Repr.

EDITORIAL ADVISORY BOARD

DAVID ARONS, Publicity Director, Gimbel Brothers, Philadelphia. RALPH AUSTRIAN, President, RKO-Tele-vision Corporation, New York City.

vision Corporation, New York City.
WILL BALTIN, Secretary-Treasurer, Television Broadcasters Assoc., New York City
HOYLAND BETTINGER, Former Manager,
Station WRGB, Schenectady, N. Y.
PROF, EDWARD C. COLE, Yale University,
Department of Drama, New Haven, Conn.
CAPT, WILLIAM C. EDDY, USN, (Ret.),
Station WBKB, Chicago
LEE DE FOREST, Research Director, De
Forest Laboratories, Los Angeles, Cal.
DAN D. HALPIN. RCA-Victor Division, Radio

DAN D. HALPIN, RCA-Victor Division, Radio Corporation of America, Camden, N. J.

RICHARD HUBBELL, Television Consultant,
Station WLW, Cincinnati, Ohio
FRED R. LACK, Vice-President, Western
Electric Company, New York City
KLAUS LANDSBERG, General Manager,
Television Station WOXYZ, Hollywood, Calif.

PAUL B. MOWREY, Director of Television, American Broadcasting Co.

American Broadcasting Co.

PAUL RAIBOURN, President, Television Productions, Inc., New York City

GEORGE SHUPERT, President, American Television Society, New York City

BERNARD B. SMITH, Attorney-at-Law, 551 Fifth Avenue, New York City DAVID B. SMITH, Research Director, Philco Corporation, Philadelphia, Pa.

Entered as second class matter, Oct. 13, 1944. Reentered as second class matter October 12, 1945, at the post office at New York, N. Y., under the Act of March 3, 1879. Subscription Rate, \$3 Per Year (in the U. S. and territories, and Pan-American Countries; \$3.50 in Canada; \$4.00 elsewhere, payable in U. S. Currency). Advertising Rates Upon Request. Published bi-monthly by Television Publications, 11 West Forty-Second Street, New York 18, N. Y. Entire Contents Copyrighted, 1946. No Part May Be Reproduced Without Permission.



JOURNAL OF VIDEO PRODUCTION, ADVERTISING & OPERATION

Published at 11 W. 42nd St., New York City. Telephone: LOngacre 5-1683

OPERATION AND MANAGEMENT:

Tele Coverage Assured for These Market Areas	12
TBA's Second Annual Conference Prepares to Convene Oct. 10	15
TBA's Conference Chairman Sends His Greetings	16
What's What About Equipment: An Eight Page Round-Up	
1. Field Equipment	17
2. Studio Equipment	
3. Transmitter Equipment	20
4. Relay Equipment	20
5. Miscellaneous Equipment	
6. UHF Color Tele	
2: ADVERTISING AND MERCHANDISING:	
What's What on Receivers: A Six Page Round-Up	
1. Low Priced Receivers	
2. Higher Priced Tele Receivers	
3. Other Tele Sets	
4. Home Installations	
5. Station Signals for Set Testing	
6. Tele Audience	28
3. PROGRAMMING AND PRODUCTION:	
Sports Winning Out in Sponsored Tele Field	29
Visualizing the News, by Chester F. X. Burger	
How to Obtain Effective Studio Lighting, by Carlton Winckler	
"Television Show Business": The Short Drama, by Judy Dupuy	34
Reviews of Teleshows	
4. GENERAL FEATURES:	*
Letters to The Televiser	6

Footnotes to the News..... Who's Who in Advertising Agencies.....

"Depth of Focus," by The Editors.....

LETTERS TO THE TELEVISER

Gladly . . .

SIRS:

In a donation sent the Red Cross, I have seen copies of The Televiser. If you would be willing to give us any return copies or back numbers of this publication, I would be glad to distribute them amongst the hospitals and similar institutions we regularly serve.

NELLIE OPPENHEIM, Director American Red Cross New York 16, N. Y.

From Lee Cooley . . .

SIRS

Don't you think it would be much wiser to let television evolve in the same manner the theatre, motion pictures and radio evolved, than to attempt to legislate the new art into being full-blown and mature? No one is unmindful of the apparent potency of television and the necessity for extreme caution in following the dictates of good taste. That is not only common sense, but good business.

LEE COOLEY, Director of Television Ruthrauff & Ryan, Inc. New York 16, N. Y.

From WBKB . . .

SIRS:

You are of course correct in your editorial on lack of showmanship in television. Unquestionably the present brand of television programming is in the main just short of pure amateurism.

The immediate reactions of the directors and others on our staff to your proposals are interesting in that they represent typical reactions of people who would bear the brunt of such proposals as THE TELEVISER proposed in its editorial. Here are some WBKB staff comments:

"Televiser is right; a lot of programs are bum. However, I think the place for the reviewing board just now is in each station's own staff, surrounded by adequate audience survey facilities. Further, I doubt if any penalties will ever be necessary other than the inevitable loss of audience from the poor program when competition comes into play."

"Reviewers are notorious for the misplacement of credit or blame. I have read reviews in which the cameraman gets the blame for lack of movement. That is plainly the director's fault. Reviewers are often correct in saying that a show has no audience appeal. Technically, television is set to go . . . the static is all in the programming department. But why not give us a chance to develop the technique? Why rant because we don't get Academy Award results? When there are enough trained people to get the industry out of its production diapers, then you can expect—and get happier—results. Training

pants have a purpose . . . give us the privilege of using them!"

"In the present stage of the industry, while we are still forced to use non-professional talent, such drastic measures as suspension or revoking the station's license would hardly be just. To take a longer view if passing such a ruling would force the powers (you know whom) to change their policy—that too would be a victory in our favor. I'm in favor of anything that would bring progress!"

REINALD WERRENRATH, JR.

REINALD WERRENRATH, JE Balaban & Katz Television Chicago, Ill.

Publicity Pictures...

SIRS:

I think the cover on the July-August issue of THE TELEVISER should be circulated to all newspapers, particularly the New York Herald-Tribune and the New York World Telegram, which have published some of the most unnatural pictures of television reception that I have seen. This is particularly true of the pictures the World Telegram published on the Louis-Conn fight, which evidently were designed to make people think television had a terrible long way to go.

had a terrible long way to go.

CHAS. F. R. JOHNSON, JR.

Ho-Ho-Kus, N. J.

(EDITOR'S NOTE: The off-the-monitor pictures of the Louis-Conn fight published by the New York World Telegram, were photographed and released by NBC. Due to the difficulty of photographing an electronic picture, which is constantly varying, the resulting photograph is not a true reproduction of the television picture but is only an indication of television reception. The July-August cover of THE TELEVISER was made from a photograph taken by Press Association at Yankee Stadium with an insert of the NBC Image Orthicon camera.)

SIRS:

Much has been said about showmanship in connection with television programming. How about a little showmanship in connection with television publicity pictures? Thumb through the current television magazines and you will find that nearly every "production still," as we call them in the motion picture business, has in the foreground a camera which is all fuzzy and out of focus. Why?

We all know there is a camera or two lurking somewhere in the background. Look at that microphone boom and banks of lights cluttering up the scene. Many stills are shot from an elevated control room, shooting down, resulting in some of the weirdest distortion of lines that are supposed to be vertical that I have ever seen. These sets seem ready to collapse in about three different directions at once.

Let's be smart. Let's clean up our stills and be professional. The flood of stills that Hollywood sends forth each year plays up the sets and the actors and actresses—not a lot of production gear. People aren't interested in that.

If you want to show your camera and trade mark, well, why not buy an ad? I am sure the magazines would approve of that. RALPH B. AUSTRIAN, President

RKO Television Corporation New York 18, N. Y.

(EDITOR'S NOTE: We agree that telecasters should release better publicity pictures, but we believe that the trade, particularly TELEVISER'S readers, is interested in seeing camera setups. However, cameras should not be shown out-of-focus as they so frequently are. All publicity stills need not include cameras but a certain proportion should.)

Receiver Installation . . .

SIRS

Television manufacturers can make good sets for the home; but poor installation jobs will ruin all the good engineering and factory work that went into the receivers. Television, therefore, needs skilled installation men.

We recently installed a large number of Viewtone receivers, with excellent results reported by our customers.

Furthermore, it's been our experience that one of the greatest needs in television is the proper instruction of the buyer on how to operate the receiver, to carefully teach one member of the family how the set should be adjusted for best results.

AL AND GEORGE BOLES

Belt Radio Service Labs. Brooklyn 20, N. Y.

Thanks . . .

SIRS:

THE TELEVISER really hits the bell. It covers many aspects of television with equal concentration. Judy Dupuy's reviews are the first intelligently analytical reviews I have read anywhere. They are constructive and precise. By the way, I think your editorials are touching a subject which certainly needs thrashing out for the development and benefit of television.

PAULINE KONER
"The Choreotones"
New York City

SIRS:

I want you to know that I thoroughly enjoyed the latest issue of THE TELEVISER, and thought that the spread on *Blithe Spirit* was extremely well laid out. While I naturally would like this because it's an NBC show, I do think that programming material of this nature has a place in all television publications, as many of us do not get a chance to visit around, or (at present) even to see productions of other studios.

ROBERT J. WADE, Art Director Station WNBT New York 20, N. Y.

THE TELEVISER

FARNSWORTH TELEVISION



TELEVISION? Air waves that bring
you music and voices now bring
electronic pictures to go with the
music! Television is no longer
in rehearsal. It is here, now, in many

In those cities where television programs are broadcast, a limited number of Farnsworth table model television sets will soon be available. Like the Farnsworth portable radio, table model, and phonograph-radio, the new television receiver combines modest price with the quality you expect from the home of television. Prices: Farnsworth radios and phonograph-radios, \$25 to \$350

A color-action photograph from "Song of Norway," Broadway musical hit now in its second year, based on the life and music of Edvard Grieg.



Capehart and Farnsworth television will bring the greatest stage shows to your home - in sparkling, detailed black-and-white action pictures.

cities. On the Capehart and the
Farnsworth television will reproduce
in clear, sparkling black
and white the musical comedy,
the opera, the play, the ballet, the news

of the hour, as it happens.

CAPEHART TELEVISION



Only by comparison with the human voice, or with the original musical instrument, can the clarity and purity of tone of the new Capehart be appreciated. That standard of excellence will be inherent, also, in the new Capehart television receivers. Just as Capehart now brings you the finest instruments for musical reproduction, so will Capehart bring you the finest instruments for your visual entertainment. Phonograph-radio prices: The Panamuse by Capehart, \$300 to \$700. The Capehart, \$925 to \$1500

FARNSWORTH TELEVISION & RADIO CORPORATION, FORT WAYNE 1, INDIANA

FOOTNOTES to the NEWS . .

Viewing Distance

The correct viewing distance for television is eight times the size of the screen. Thus, if a screen is 6" x 4½", a person should be seated about four feet from the receiver in order to see comfortably. With a popular-priced set having an 8" by 6" screen or with a projection receiver having a 22" x 15½" screen, people can sit and see comfortably from five-and-a-half feet (a comfortable viewing distance for a group) from the first receiver, or from across the room from the projection screen.

A lighted room is preferable to a dark room for viewing television. The darkened room causes the eyes to concentrate on the screen and causes eye fatigue more quickly. (See Receiver Story Page 24)

Tele Trade Topics

- Most West Coast ad agencies plan to set up their own television departments, according to a survey made by ABC. One major agency, however, plans to let the movies produce its programs rather than use its own or station productions.
- Paramount's theater television, originally scheduled for August, is now postponed until "all problems are worked out," according to a company spokesman. Furthermore, Paramount is keeping mum on tele until the Scophony affair is cleared up.
- WRGB-GE is pondering a rate card—going network in October.
- The ignition system of 1948 automobiles will be "muffled" to eliminate annoying visible (snow) static on telescreens and "sputterings" in radio receivers, according to the Automobile Manufacturers Assoc. which has been studying the problem.
- Open to the public: Electronic Exhibitors, Oct. 14 to 19, Grand Central Palace, New York City. Harry G. Cisin and V. M. Eitingon, managers.
- Radio Manufacturers Assoc. demanding complete decontrol on tele and radio receiver prices. Will file full information supporting their stand in October.
- Doublecheck your new tele receiver: See that it is of new design manufactured with specially engineered parts and not a gimmicked-up prewar design made with radio parts. Radio resistors burn out quickly—they cannot take the high wattage of tele sets.
- ABC and BBC exchanging films of

sports and special events for video.

London Tele Sets

Londoners can now buy a table model tele set with a 10-inch viewing tube (85/8" x 63/8" screen), priced slightly over \$200 plus purchase tax, making a total cost of about \$250 retail. The table model, tele reception only, is made by The Gramophone Co., Ltd.

Also, a console combining television with a three-wave-band radio receiver, is being manufactured by A. C. Cossor, Ltd. Set has a 15-inch direct viewing tube (12" x 10" screen). Retail price, approximately \$500, inclusive of purchase tax.

Rectangular Tubes

Rauland Corp. of Chicago and Telicon Corp. of New York are exploring the practicability of a rectangular receiving tube rather than the present circular-faced ones of which only a portion is usable for the rectangular picture screen.

EVEN AS YOU AND I

Recently, a Viewtone tele receiver was installed in the home of Mayor William O'Dwyer of New York City. The company, anxious that it give the best possible picture reception, sent its top engineer to make the installation.

Reports indicated that New York's first family was enthusiastic about television. A week later, however, a member of the household phoned the manufacturer that "the set wasn't working." The puzzled engineer was dispatched post haste to investigate.

The difficulty? The receiver plug had worked loose from the wall socket!

Tele for Main Street

It is being bruited about among video bigwigs that tele relaying is establishing the groundwork for hundreds of independent video stations requiring small capital outlay. These stations are expected to spring up all over the country by 1948-49, serving as net work relay-broadcasting outlets and as local community stations.

Edward M. Noll of Hatboro, Pa., has expounded this idea in a nine-page booklet titled *Television for Small Cities*, Towns and Rural Districts.

RCA-Victor's touring television unit which just completed a successful Iowa State Fair showing, is scheduled to be demonstrated at the first Inter-American Radio Congress, Mexico City, Sept. 30.

WBKB's Rate Card

WBKB has adopted a sliding scale rate card, effective Sept. 1, based on the number of television receivers in the Chicago area. Devised by mathematically-minded William C. Eddy, director of the B&K video station, time costs for live programs are: \$100 an hour, based on 0-1,000 sets (there are 450 in the area now), \$50 a half-hour, \$40 a quarter-hour. 1,001-5,000 sets: \$200, \$120, \$80 respectively. Slide-rule scale for 35,000 sets: \$800, \$525, and \$320. Rates include two hours' rehearsal time, with full station facilities. Film program charges are prorated accordingly.

Present WNBT-NBC's rate is \$850 for an hour studio program: \$100 transmission charge and \$750 studio facilities charge, with five hours of rehearsal time.

CBS Live Color

Live pickups of CBS UHF color television are being demonstrated. Camera being used was built by Peter Goldmark and associates, pending late delivery of promised equipment by Westinghouse.

CBS expects to have five or more UHF color receivers installed around New York for testing and public viewing.

CBS plans to demonstrate UHF color at the NAB convention in Chicago, Oct. 21.

Cost of replacing large-screen tubes in DuMont's direct-view telesets: 15-inch picture tube, \$130; 20-inch tube, \$180. Tubes are guaranteed for 1,000 hours or one year, whichever expires first.

WCBW-CBS has a firm policy regarding 20-second station break announcements. Service spots only—time signals or weather reports—will be considered.

UHF Television Links

The FCC has provided specific allocations for television pickup and television studio-transmitter links, to be licensed only to licensees of television stations.

Television pickup relay links—for transmission of programs such as ball games, parades, news events from remote points—are assigned to band 1295-1425 mc. STL (studio-transmitter links)—transmission of programs from studios to broadcast transmitters on mountain top or other inaccessible locations—to band 6800-7050 mc and 12500-13000 mc.

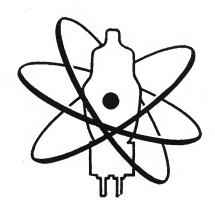
(See Equipment Story, Pages 18 & 20)

FIRST ANNUAL NATIONAL ELECTRONIC RADIO-TELEVISION EXPOSITION

October 14 through 19, 1946

Television,
Broadcasting,
and General
Communications
Equipment

Industrial Electronics



Peacetime
Applications
of
Wartime
Developments

Special Sessions for the Trade

Don't Miss This Important Event!

GRAND CENTRAL PALACE

NEW YORK CITY

www.americanradiohistory.com

Multiple Stations

Multiple commercial television station

licenses are now held by:

NBC — with its presently-operating
WNBT in New York City, and with CPs
in Washington, D. C., Cleveland, and Chicago.

ABC-with CPs in Detroit and Chi-

cago.
DuMont—with presently-operating
WABD in New York City and W3XWT
(WTTG) in Washington, D. C. (See "Tele Coverage," Page 12)

Sponsors

The Borden Company is currently paying the bills for James Beard, the I Love to Eat video cook, for 13 weeks on WNBT-NBC's Friday night For You and Yours. . . . The Alexander Stores, Inc., with two dep't stores in the Bronx, is testing the television medium in cooperation with ABC, sponsoring the expertaudience Play the Game quiz for ten weeks over WABD-DuMont.

Reid's Ice Cream has signed for 60second weather forecasts three times weekly over WCBW-CBS. Sixty different animated films to cover possible weather reports have to be shot, according to Doherty, Clifford & Shenfield, ad agency. . . . Sears Roebuck & Co. is sponsoring an audience-home quiz, with duplicate give-away prizes, on WPTZ-Philco. . . .

Shows and Stuff

- WCBW again tries a tele serial. The Great Scott, a Lee Wallace improvisation package, written by Robert Mayberry.
- A little realism please! Ida Bailey Allen cooking in an off-the-shoulders, bosom-bunched evening gown on ABC's WABD-DuMont series.
- Producer Howard Reilly's Hour Glass (WNBT, Thurs.) is out of the amateur class and has taken on the verve and flash of vaudeville. Another six months growth and the Standard Brands hour may become the "Palace" of television, with acts vieing to play the video show.
- Title tangle has changed WCBW's You Be the Judge to Judge for Yourself.
- The documentary newsreel, NBC Telescope, on WNBT features an outstanding news event of the week. Film program is edited and produced by Edwin S. Mill, with Larry Semon, narrator.
- ABC's Stump the Authors now on WBKB Thursday nights in addition to network's films of special events and sports pickups.

WCBS-TV are the new call letters for WCBW, the CBS tele station in N. Y. People

E. W. Engstrom, Vice President in charge of Research, RCA Laboratories, toured Europe as a member of the Scandinavian Research and Industry Commission . . . William (Bill) Still of Jamaica Radio & Television is building video equipment for the Franklin Square, L. I., National Bank. He recently received a renewal of his experimental tele station, W2XTI, on Channel 13.

Don Giesy, formerly tele editor of Tide, is settling into new publicity berth at ABC television. . . . Lester O'Keefe, formerly director of the dramatic portion of Standard Brands' tele show, Hour Glass, on WNBT-NBC, resigned from J. Walter Thompson ad agency to free

Joseph M. Koehler, former indoor editor of The Billboard, is now editor of the new trade paper, Sponsor, out October 20. Norman R. Glenn is publisher. . . . Goodwill ambassador John Royal has been touring Europe as front man for NBC tele, setting up world-wide film representatives to cover news for the network. He's back at Radio City.

Herbert Bayard Swoope, Jr., back at CBS tele, assistant to Robert Bendick, news and special events director. . . . Robert F. Jamieson, assistant general manager of WABD-DuMont, teaching television at NYU this Fall.

Paula Kay Petty joined Noel Wesley Assoc., to handle television package production. Miss Petty is a Television Workshop trainee. . . . New names at Television Productions, Inc. (W6XYZ: Richard DeMille and Leland Gerald Muller, former motion picture production men.

Jose diDonato, tele head at Doherty, Clifford & Shenfield, busy handling the Bristol-Myers new teleshows at WCBW-

Paul Eshelman, former production control manager of the Allen B. DuMont Laboratories, is now executive assistant to Leonard F. Cramer, v.p. and director of DuMont Television.

Bob Emery, head of the newly-created sustaining shows department of DuMont Television, will supply packages to any DuMont station as required. . . . Bob Loewi and Ted Estabrook have been filming special events for video showing. Loewi returns to WABD with a variety series for Pultizer ties. . . . Director John Gaunt, getting tele-wise at WNBT, slated for NBC's Washington, D. C. video station. . . . Bernie London, is assistant to Bob Edge, WCBW sports chief, to do research on sports.

INS-DuMont News

Seeing the video possibilities of telecasting the news via ticker tape—a continuous line of words moving across the receiver screen—DuMont's Cramer and Cuff suggested the idea to International News Service which assigned its engineers to work on the project. First tests were run in August.

No passing of money or charges were submitted by INS for development work, which involves specially designed teletype machines. DuMont at present is paying only a nominal charge for the news service (five days a week, 3 to 5 p.m.) —a service which will be available to tele stations in other cities with DuMont stations being given first refusal.

At INS, a staff of four handle the tele news desk. Copy is transmitted to the WABD studio, the ticker tape being fed through a balopticon which projects the moving words onto the mosaic of an associated camera. A second camera picks up the test pattern, the two camera pictures being superimposed so that the line of news travels across the face of the test pattern, with an average of six words visable at a time.

AFRA is meeting with Equity and Screen Actors' Guild to study the television field to set up minimum wage scales.

Watt-Hour Dollars

Chicago's Electric Association is one of television's greatest boosters—and rightly so. The average television receiver will consume approximately 270 watts per hour against a radio set's 65 watts. In dollars and cents, 50,000 tele receivers in consumers homes (expected by 1948 in the Windy City) being used five hours a day at two cents per kilowatt-hour represents an extra income of \$369,000 per year for the electrical companies.

Commercial Tele Boxscore

Recent FCC grants bring the total of commercial television stations in the United States to 34.

24.....

Latest grant to WJAC, Inc., Johnstown, Pa. (pop. 67,000); Channel 13.

Commercial stations on the air (including DuMont's recently granted WTTG, Washington, D. C.): 7.

CPs granted in 1946: 30 (The Mil-

waukee Journal and the Worcester Telegram Publishing Co. both returned their licenses to the FCC, the companies preferring to experiment with tele in the higher or color frequencies.)

Applications in hearings: 21 (this includes the Los Angeles and New York applicants). Applications pending: 28. (See "Tele Markets," Page 12)

TELE COVERAGE ASSURED FOR THESE MARKET AREAS

WITH black-and-white commercial television "around the corner," or at least making the turn, and with national sponsors—Standard Brands, Ford, General Motors, Bristol-Myers, U. S. Rubber—sponsoring top television shows, interest in commercial television becomes centered in market coverage. Getting stations on the air is the first requirement of the industry and the 1946-47 picture promises television service in major market areas. The FCC grants to date assure this service in 20 key cities of the nation.

In addition to the present seven operating commercial television stations (including DuMont's WTTG, Washington, D. C.), it has been announced that five new stations (four commercial and one experimental) are expected to be on the air by January 1, 1947. This will give television service in eight major markets: Chicago, Detroit, Minneapolis-St. Paul, New York, Philadelphia, St. Louis, Schenectady-Albany (N. Y.), and Washington, D. C. Farnsworth Radio and Television Co. plans to be on the air regularly with its experimental tele station at Fort Wayne, Ind., by late 1946, and the company has announced its intention to apply for a commercial license.

The Hollywood-Los Angeles area is receiving intermittent television service from experimental stations of Television Productions, Inc., and Don Lee. If these stations receive their commercial licenses, this would make 13 commercial tele stations broadcasting by January 1947.

Also to be considered in the immediate black-and-white picture, is the American Broadcasting Company's New York application. ABC has arranged for its transmitter on the General Electric Building in New York, and if granted a CP, plans to rush completion of the station so as to be on the air by January 1947.

Present Licensed Stations

Including the 1946 grants, there are 33 FCC licensed commercial tele stations, some of which are in operation and all of which are expected to be in operation by the end of 1947. Location of these commercial tele stations and their licensees are:

CALIFORNIA

SAN FRANCISCO—The Chronicle Publish-

ing Co. CP granted. Channel 11 (198-204 mc). Power: 18.24 kw visual; 19.2 kw aural. George T. Cameron, President; Nion R. Tucker, Vice President.

DISTRICT OF COLUMBIA

Washington — WNBW-National Broadcasting Co. (radio station WRC), 724 14th Street, N.W. CP granted. Channel 4 (66-72 mc). Power: 13.3 kw visual; 10 kw aural. Expects to be on the air by Dec. 1.

Washington — WTTG-Allen B. Du-Mont Labs., Inc., Harrington Hotel. CP granted. Channel 5 (76-82 mc). Power: 6.25 kw visual; 2.5 kw aural. Experimental station now operating and is being renovated.

WASHINGTON — WTVW-The Evening Star Broadcasting Co. (radio station WMAL), 724 14th St., N.W. CP granted. Channel 7 (174-180 mc). Power: 14.25 kw visual; 15.2 kw aural.

Washington — WWBR-Bamberger Broadcasting Service (WOR, New York). CP granted. Channel 9 (186-192 mc). Power: 30.25 kw visual; 24.5 kw aural.

ILLINOIS

CHICAGO—WBKB-Balaban & Katz, 190 N. State Street. Licensed Oct. 6, 1942. Channel 4 (66-72 mc). A subsidiary of Paramount Pictures Corp.

CHICAGO—WTZR-Zenith Radio Corp., 6001 Dickens Ave. Channel 2 (54-60 mc). Power: 4.5 kw visual and aural. Now conducting experimental telecasts.

CHICAGO — National Broadcasting Co. (radio station WMAQ), Merchandise Mart. CP granted. Channel 5 (76-82 mc). Power: 21.8 kw visual and aural.

CHICAGO — American Broadcasting Co. CP granted. Channel 7 (174-180 mc). Power: 30 kw visual; 15 kw aural.

MARYLAND

BALTIMORE—A. S. Abell Co. (Baltimore Sun). CP granted. Channel 2 (54-60 mc). Power: 17.1 kw visual and aural. BALTIMORE—Hearst Radio, Inc. (radio station WBAL), Lexington Bldg. CP granted. Channel 11 (198-204 mc). Power: 14.4 kw visual; 7.3 kw aural. BALTIMORE—Radio-Television of Balto, Inc., Ben & Herman Cohen, O'Sullivan Bldg., Baltimore & Light Sts. CP granted. Channel 13 (210-216 mc).

Power: 31.65 kw visual: 20 kw aural.

MASSACHUSETTS

Boston—Westinghouse Radio Stations, Inc. (radio stations WBZ), Hotel Bradford, CP granted. Channel 4 (66-72 mc). Power: 10 kw visual; 7.5 kw aural.

Waltham — Raytheon Mfg. Co. CP granted. Channel 2 (54-60 mc). Power: 146.08 kw visual; 50.70 aural.

MICHIGAN

DETROIT — American Broadcasting Co. CP issued to King-Trendle Broadcasting Co., transferred on sale to American Broadcasting Co. Channel 5 (76-82 mc). Power: 16 kw visual and aural. Expects to be on the air by January 1947.

DETROIT — The Evening News Ass'n (radio station WWJ), 630 W. Lafayette Street. CP granted. Channel 4 (66-72 mc). Power: 17.1 kw visual; 7.7 kw aural. Expects to be on the air by November 15.

MINNESOTA

St. Paul-Minneapolis — KSTP, Inc. (radio station KSTP), Hotel Saint Paul. CP granted. Channel 5 (76-82 mc). Power: 13.68 kw visual; 6.48 kw aural. Stanley Hubbard, General Manager. Hopes to be on the air by January 1, 1947.

MISSOURI

ST. Louis—The Pulitzer Publishing Co. (St. Louis Post-Dispatch and radio station KSD), 111 Olive Street. CP granted. Channel 5 (76-82 mc). Power: 18.5 kw visual; aural to be determined. Rushing plans for new tele station.

NEW MEXICO

ALBUQUERQUE—Albuquerque Broadcasting Co. (radio station KOB), 418 West Gold Avenue. CP granted. Channel 2 (54-60 mc). Power: 15 kw visual; 8 kw aural. Granted request to use call letters KOB-TV.

NEW YORK

BUFFALO—WBEN, Inc. (radio station WBEN), Hotel Statler. CP granted. Channel 4 (66-72 mc.). Power: 14.4 kw visual; 7.2 kw aural.

NEW YORK—WABD-DuMont, Allen B. DuMont Laboratories, 515 Madison Avenue. Licensed June 28, 1942. Channel 5 (76-82 mc).

NEW YORK — WCBW-CBS, Columbia Broadcasting System, 15 Vanderbilt Avenue. Licensed July 1, 1941. Channel 2 (54-60 mc).

NEW YORK - WNBT-NBC, National

Broadcasting Co., 30 Rockefeller Plaza. Licensed July 1, 1941. Channel 4 (66-72 mc).

SCHENECTADY — WRGB-GE, General Electric Co., 60 Washington Street. Licensed March 1, 1942. Channel 4 (66-72 mc).

OHIO

CLEVELAND—National Broadcasting Co. (radio station WTAM), 815 Superior Ave., N.E. CP granted. Channel 4 (66-72 mc). Power: 19 kw visual: 19.5 kw aural.

CLEVELAND—Scripps-Howard Radio, Inc. CP granted. Channel 5 (76-82 mc). Power: 40 kw visual; 37.4 kw aural. Jack R. Howard, President; James C. Hannahan, General Manager; Joseph B. Epperson, Supervisor of Technical Operations.

OREGON

PORTLAND — Oregonian Publishing Co. (radio station KGW), 1011 S.W. 6th Ave. CP granted. Channel 6 (82-88 mc). Power: 10 kw visual; 11.2 kw aural.

PENNSYLVANIA

PHILADELPHIA — WPTZ-Philco, Philco Television Broadcasting Corp., Tioga & C Streets. Licensed September, 1941. Channel 3 (60-66 mc).

PHILADELPHIA—Philadelphia Inquirer, a division of Triangle Publications (radio station WFIL). CP granted. Channel 6 (82-88 mc). Power: 18.1 kw visual; 9.3 kw aural. President of Inquirer, W. H. Annenberg; Vice President and Secretary, Joseph First.

RHODE ISLAND

PROVIDENCE—Outlet Co. (radio station WJAR). CP granted. Channel 11 (198-204 mc). Power: 50 kw visual and aural.

TEXAS

FORT WORTH — Carter Publications (radio station WBAP), Medical Arts Bldg. CP granted. Channel 5 (76-82 mc). Power: 30.4 kw visual and aural.

UTAH

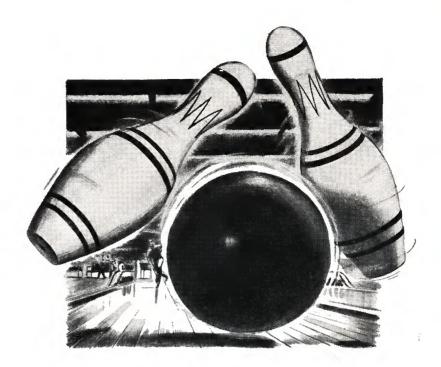
SALT LAKE CITY—Intermountain Broadcasting Corp. (radio station KDYL). CP granted. Channel 2 (54-60 mc). Power: 13.2 kw visual; 7 kw aural.

VIRGINIA

RICHMOND — Havens & Martin (radio station WMBG). CP granted. Channel 3 (60-66 mc). Power: 12.16 kw visual; 6.4 aural.

Additional licenses to pending applicants would bring commercial black-and-white television to approximately 36 major urban areas.

SEPTEMBER-OCTOBER, 1946



CONTROL!

Only MOTION PICTURES give you Control

—Showmanship Control vital on

TELEVISION programs

Only Film can guarantee: perfect lighting-abso-

lute focus-flawless dialogue.

Only Film can make possible: repeat performances

of uniform quality-identical selling

messages-selective marketing.

Only Film eliminates: costly rehearsals—telephone line charges—time zone differentials.

Now available for sponsorship \ldots exclusive



Series. In 13, 26 or 52 week installments.

Write for details and arrange for private screening. Send for booklet:

"Film—The Backbone of Television Programming."

RKO TELEVISION CORPORATION

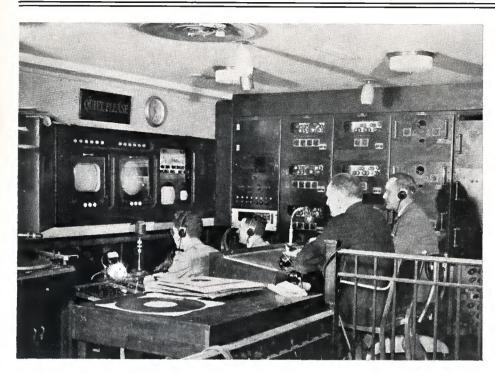
Dept. TR2,1270 Avenue of the Americas, N.Y. 20, N.Y.

A Radio-Keith-Orpheum Corporation Subsidiary

In Television . . . Film removes the question mark!

*Copyright U. S. Pat. Off.

I: OPERATION AND MANAGEMENT



When in New York City, TBA guests should plan to visit the three operating television stations: WABD-DuMont, WCBW-CBS, and WNBT-NBC. (Photo courtesy WNBT-NBC)

TBA's Second Annual Conference Prepares To Convene Oct. 10

OT only displays of long-awaited, newly-designed television receivers and station equipment, but two days of panels and general discussions under the leadership of the industry's outstanding men and women, will highlight the Second Annual Conference and Exhibition of the Television Broadcasters Association, to be held at the Waldorf-Astoria, New York City, on October 10 and 11. Representing both video station operators and equipment manufacturers, the Conference keynotes the industry's pledge to give the public black-and-white commercial television now.

Ralph B. Austrian, general chairman, has announced that virtually all the 15,000 square feet of exhibit space set aside at the Waldorf-Astoria has been sold, a month previous to the Conference. The Jade and Basildon rooms, as well as the Astor Gallery, have been engaged for the exhibits alone. One of the rooms will be devoted to transmitter-station equipment only, another to receivers, and the third to miscellaneous displays.

The first complete showing of postwar television receivers and transmitters, in-

corporating many new designs as a result of wartime developments, will be housed under one roof for convenient and easy inspection.

Transmitters, antenna design, camera chains, control consoles, and studio equipment will be exhibited. Manufacturers who have reserved space in the transmitting equipment section include DuMont, Federal Telephone and Radio, General Electric, and RCA—the major transmitter manufacturers.

Related television service organizations, among whom are A. T. & T., Belmont Division of Raytheon Manufacturing Company, Crosley, Bryan Davis Publishing Company, and NBC will display in additional space in the Basildon Room.

The new television receivers will not only be exhibited but will be shown in operation. Conferees will be able to see programs, received on displayed sets at the hotel, from either local or network origination. It is also planned to originate tele programs right from the Conference floor.

A Telicon roof-to-receiver, "intravideo" antenna system is being installed for the convenience of receiver manufacturers. RCA plans to have its own antenna system for the operation of its sets.

The new tele receivers will be displayed in home settings, tastefully furnished and decorated. It is expected that all the newest types of receiving sets, ranging from table models with small screens to deluxe, large-screen, projection units, and television-radio-phonograph combinations will be shown. Brand name receivers on display will include: DuMont, Farnsworth, General Electric, Philco, RCA-Victor, Sonora, and Telicon.

Panel Discussions

All aspects of television are on the program agenda, including four panels, on Programming (concentrating on live talent, use of films, remote shows, and advertising sponsors and commercials); two panels on Station Management; two on Receiver Sales; and one each on Television Education and Press Promotion. Every phase of television broadcasting has been included in the schedule of panel and discussion meetings.

Topics to be discussed during general sessions and panel meetings include:

"What a Client Wants from Television Commercials," "Preparing a Television Commercial," "Live Talent vs. Film Commercials," "The Need for Accurate Television Set Distribution Data," "Status of Television Operation Today," "Station Management," "Legal Problems in Television," "The Need for Demonstration Broadcast Service During Daytime Hours," "Where to Find Your Personnel," "Talent's Place in the Television Picture," "Job Opportunities in Television."

Other topics will be: "The Impact of Television on News Reporting," "Television in Primary, Secondary and College Education," "Television's Place in the University Curricula," "Education

Through How-to-Do-It Programs," "Production Forecasts and Market Potentials in Telivison Receivers," "Servicing the Television Receiver," "Antenna Problems and Their Answers," and "Television and the Atom Bomb Tests at Bikini."

Committee chairmen for the two-day Conference are: Awards—Paul Raibourn, president, Television Productions, Inc.; Speakers—J. R. Poppele, president of TBA and vice president of Bamberger Broadcasting Service; Budget—Douglas Day of Buchanan advertising agency; Displays—Richard Hooper of RCA-Victor; Engineering—F. J. Bingley, chief television engineer, Philco Products, Inc.

Also, Panel Meetings—Philip G. Caldwell, electronics division, General Elec-

tric; Program and Banquet — George Shupert, Television Productions, Inc.; Registration—D. K. DeNeuf, Raytheon Mfg. Co.; Television Programs—Noran E. Kersta, manager, NBC Television Department; Publicity and Promotion—Will Baltin, secretary-treasurer, Television Broadcasters Assoc.

It is expected that 2,000 industry representatives, including radio and television broadcasting executives, advertising agency people, and department store and manufacturing officials, will be present. This year the registration fee, covering all activities including two luncheons, is \$25. Partial attendance registration will be adjusted accordingly.

TBA's CONFERENCE CHAIRMAN SENDS HIS GREETINGS

By RALPH B. AUSTRIAN
General Chairman

Second Television Conference & Exhibition,
Television Broadcasters Association, Inc.

CTOBER 10, 1946 marks the opening of the two-day Television Conference and Exhibition of the Television Broadcasters Association, Inc., at the Waldorf-Astoria, New York City. It is also the day when the curtain will rise on television as a truly commercial service.

To those now engaged in television operations or who are about to enter the industry, the Conference and Exhibition will be of vital importance. It will demonstrate conclusively that TELEVISION IS HERE! Under one roof will be exhibited the very latest television receivers—all sizes and designs—small table models, direct viewing sets, projection models, radiotelevision combinations, radiotelevision phonograph combinations, television, AM and FM sets, and other units.

Here, too, the industry will see a large display of transmitting equipment, studio supplies, cameras and camera chains, iconoscopes, orthicons, image orthicons, antenna equipment, coaxial cables and other television broadcasting accoutements.

Furthermore, the industry as a whole will witness an array of television programs originating at the Con-

ference and Exhibition and being aired locally, as well as in Philadelphia, Washington and Schenectady. Other programs originating at outside studios will be televised to the Conference and seen on the new post-war receiving sets.

Activity will never cease during the two days of the big event. Talks by leaders of the industry on the latest developments in the art will feature the general sessions. Two luncheons, a banquet, cocktail party and other events will be included.

Any one interested in the future of television should not fail to participate

in the Conference. This is not a privately underwritten undertaking. This is not a profit-making venture. THIS IS YOUR SHOW! This is a progress report and exhibition of equipment undertaken by and for the industry.

The First Conference of the Television Broadcasters Association, Inc., attracted over 1,100 registrants. No equipment was shown at that time. The top capacity for the October showing this year is to be about 2,000 persons and when that registration figure has been achieved, reservations will be closed.

Visitors from every section of the nation—and abroad—are expected to attend and participate in the important program. Those planning to register are urged to do so immediately, since the advance registration is even now far beyond the fondest expectations of the Association.

Television is moving into the Big Leagues—the inaugural is something you will not want to miss!

RESERVA	TION FORM—SEND IT TODAY!
Ralph B. Austrian TBA Conference	Name:
Television Broadcasters 500 Fifth Ave., N. Y. C.	Title:
JG ALL	Firm:
MARCH TO THE PARTY OF THE PARTY	Street:
TELEVICION - ITS HERE!	

Check must accompany registration, payable to Television Broadcasters Assoc., Inc.

State: .

WHAT'S WHAT ABOUT EQUIPMENT!

-An Eight Page Round-up of Television Equipment Offerings of Manufacturers

77ITH the FCC's speed-up screening of video applicants and the Commission's granting of CPs for commercial television, licensees are faced with the problem of getting their tele stations on the air. The financial stake and immediate bankroll involved in building and equipping a station, even an interim operation until Civilian Production Administration restrictions are lowered, are causing management, chief engineers and program heads to pause and scan operational and performance features of equipment all along the line, from camera chains and field units to transmitters and antennas.

Displays at TBA Conference

In other words, prospective television broadcasters are shopping for their equipment even though many of them have tentative orders for complete installations on the books of several manufacturers. The indications are that telecasters will buy units suitable to their individual needs rather than in package deals. Newly designed transmitter and studio equipment, incorporating wartime developments, will be exhibited by electronic manufacturers at the Second Annual Conference and Exhibition of the Television Broadcasters Association to be held in New York City on October 10 and 11.

Basic Installation Plans

Major manufacturers, concerned over uncertain delivery dates and other production retarding factors, are presently proposing basic installations that will give initial television service to which can be added more units as conditions permit, according to the station's overall operational plan. A basic installation may include portable field pickup equipment and a film studio, or it may also include a live talent studio. Of course, major television stations plan multi-studios eventually, and if studio space is available, may equip them immediately or they may be forced to function with limited facilities temporarily.

Many telecasters, particularly in smaller market areas, may want to start operations on a small scale and increase station facilities with the growth of local television audiences. This expansion can be accomplished economically since most manufacturers are constructing equipment in units to which additions can be readily made. RCA, DuMont and General Electric are offering unit plans whereby the broadcaster may start with a minimum amount of equipment and expand his facilities as the need arises without duplication or obsolescence of equipment. General Electric is calling its basic plan a "block-building plan."

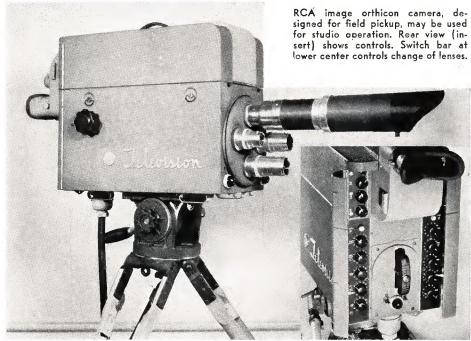
1. Field Equipment

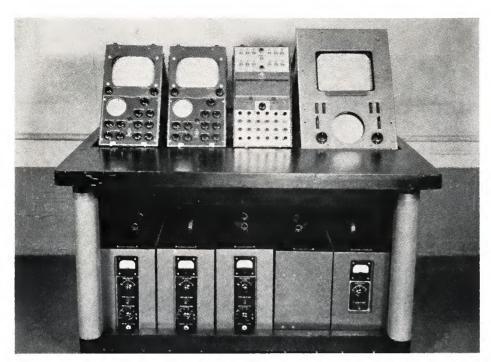
Under present industry conditions, it is advisable for stations to obtain field pickup units as initial equipment for two reasons: The equipment, complete in itself with cameras and monitors, can be used to train personnel prior to the installation and completion of the studio; and, secondly, field equipment enables a station to cover many local events and pick up sports programs which are both economical and audience builders.

DuMont and RCA remote pickup equipment is available. Farnsworth field units will be available in about six months; General Electric's is now under development and will be available around June 1947.

DUMONT—Company's dual channel remote equipment includes two image orthicon cameras (with electronic view finders, iris control, extra lens brackets and 1,000 feet of coaxial cable per camera), lightweight monitor units (with 4-channel line amplifier switches and designed for both manual and automatic lap dissolve, with four speeds of dissolves), and a small compact synchronizing generator, designed for easy service. The iris control, a unique DuMont camera feature, allows instantaneous adjustment of the lens opening to cut down light, and the electronic view finder permits remote operation, the cameraman being able to see the exact picture going out on the air. The cameras, however, are not equipped with turret lens but have extra lens brackets, permitting manual change of lens in three seconds.

The four-channel field monitors make it possible to use as many as seven cameras by using two monitors and patching them together. All monitor controls are marked so equipment can be set up for optimum pickup, and control positions noted for





RCA portable video equipment, showing camera monitors, line monitor (far right), power supply.

check up on equipment at telecasting time and also as a record for future pickups. The compact portable field equipment is packaged for \$28,000.

DuMont will have available remote directional transmitters of the portable, suitcase type.

RCA—Production emphasis is being placed on the new RCA image orthicon camera and associated monitoring and relay equipment to provide broadcasters with the essentials to start training personnel and acquire experience so that program service may be launched as soon as new broadcast transmitters become available. The camera can be used for either studio or field pickups. Together with its tripod, it weighs only 100 pounds complete, and the various units—camera, electronic view finder, tripod, suitcase-type power supply—can be carried separately.

On the front of the camera is a four-position lens turret, operated by a simple mechanism at the back, permitting the operator to change lenses and refocus in $1\frac{1}{2}$ seconds. A telephoto lens can be quickly attached to one of the turret openings for long shots, and is quickly and easily detached when no longer needed.

One of the lens positions may be used for mounting a small film projector with a continuous strip of 16 mm film, containing 36 different pictures to provide illustrative material or titles. This permits insertion of "commercials," test charts, station call letters, and still pictures in

remote pickup programs. An on-the-air "talley" light inside the view finder hood informs the operator when the camera is supplying signals, and red signal lamps on both ends of the camera indicate to the announcer and all concerned which camera is on the air.

Auxiliary Field Equipment

Auxialiary equipment consists of a camera control unit with monitoring screen and power supply for each camera to be used, a master control and switching unit with power supply for use when more than one camera is operating, permitting push-button selection (no dissolves) of the desired pickup at any time, and a synchronizing generator.

A flexible audio switching system gives complete freedom to the program director and the camera control operator to talk individually or collectively to the cameramen. Cameramen are provided with two head phones, hearing over one the program sound, and receiving orders over the other (order wire). By this means, a cameraman can synchronize his picture pickup with the voice of the announcer, particularly in covering sports.

Radio Link Equipment

Field pickups may be transmitted to studios by means of matched telephone lines or by radio link equipment. Radio links may also be used to transmit television signals from a studio to a remotely located broadcast transmitter.

RCA—The RCA new microwave radio

link equipment, consisting of a compact, portable transmitter, which may be mounted on a tripod, and a matching receiver, each equipped with a parabolic reflector and a special hook-shaped wave guide, provides a highly directional wideband relay link for beaming pictures either from the scene of an event to the studio, or from the studio to the broadcast transmitter. Reflectors of two sizes-4-foot and 6-foot diameters - will be available. This relay equipment, relatively light in weight, can be disassembled into easily portable units. The transmitter or receiver is housed in a waterproof, cylindrical case at the back of the reflector, and can be quickly removed and replaced with a spare unit if required. The transmitter control is a compact suitcase-type unit with a carrying handle.

Bell System—Its engineers are exploring the use of beamed microwaves in connection with studio-transmitter and local pick-up link transmitters. The new equipment, developed by Bell Telephone Laboratories, was tested in New York this past summer in cooperation with NBC at the Louis-Conn fight. The images were successfully transmitted from Yankee Stadium to the A. T. & T. Company's Long Lines Building in lower Manhattan. (NBC cooperated in the microwave trials, but for the actual telecast used specially equipped wires connecting the fight pick-up and the NBC transmitter.)

Trials of the microwave studio transmitter link, conducted in cooperation with California broadcasters, have been carried out between Hollywood and the top of Mt. Wilson, 17 miles away, where a number of television broadcasters plan to locate their transmitting stations.



RCA microwave relap equipment in production.

Under the proposed hook-up, the Southern California Telephone Company would furnish wire channels between the television studios and its Hollywood centra office. Shielded-lens antennas on the roof of the central office would direct the microwaves to the telephone company's own receiving station atop Mt. Wilson at a point nearly 6,000 feet above sea level, from whence the images would go by specially-equipped telephone wires to the nearby transmitters at the various television broadcasters.

The telephone company is erecting a building on the mountain-top to house the receiving apparatus and additional equipment for radiotelephone services. On that end of the microwave link, all equipment, including the horn-shaped antennas, will be inside the building. The microwaves will be received through specially-designed windows facing Hollywood.

At the outset, two channels probably will be provided for the Hollywood-Mt. Wilson link. These could be used to transmit two television programs simultaneously, or provide a stand-by channel when only one program is being televised.

2. Studio Equipment

DUMONT, Farnsworth and General Electric are offering studio cameras but RCA is not making any studio cameras at this time stating, "We can't design studio cameras unless a new pickup tube is designed."

DUMONT—The DuMont Laboratories, pioneers in the development of cathode ray tubes, is eliminating the iconoscope tube for studio cameras and is focusing attention on a more sensitive tube of the "signal orthicon" variety, possessing the sensitivity of an orthicon plus the quality of the iconoscope. It is expected that these camera tubes will be ready for delivery by the end of February or March.

In the interim period, DuMont is advocating the use of image orthicon field cameras for studio use. In accordance with the company's policy, dual channel camera chains and associated monitors and control equipment, mounted in unit consoles, form the basic studio gear. Provision is made for four-channel switching so that a station can start with two studio cameras, increasing the units to three and four as the station grows, or the film channel can be terminated on one control switch and the fourth used for remote pickups.

The camera monitors, with built-in test equipment, have 12-inch picture monitors and 5-inch "scopes" or wave-form monitors. Time studies were made so that technicians can reach every control easily in the newly-designed control consoles. In small studios, the studio camera control desks may be used as the master control. Complete two-camera chain studio gear is package-priced at \$28,500.

FARNSWORTH—The camera, and camera dolly, designed by Farnsworth makes use of the iconoscope tube and incorporates improved operating features. The camera is focused electronically and controlled remotely by the cameraman seated on the dolly with the view-finder "scope" at eye level (see sketch). The cameraman has perfect control over booming and panning, controlling the rate of the boom or pan. The boom arm rises to eight feet and the camera can be panned in an 180° arc. The camera is lightweight and compact and the two-man camera dolly incorporates a center-of-gravity feature.

GENERAL ELECTRIC—The company's first television camera will be "fixed" studio equipment, using the iconoscope tube. The new camera is much lighter than its prewar brother, weighing about 75 pounds, and is designed with a four lens turret carrying two matched sets of lenses (5-inch and 10-inch focal lengths) —one of each used for picking up the scene and the other for focusing and framing the picture in association with an optical view finder which is controlled by a handle in the rear of the camera. The camera is panned in an 180° arc. The one-man dolly is equipped to be boomed (about 18 inches) by hydraulic lift. Standard two-man Fearless dollies are also provided. Delivery on cameras is scheduled to start in December 1946. The price of a studio camera chain, including camera, lenses, one-man dolly, camera console, channel rack equipment and camera cable, is approximately \$11,600.

Program Consoles

Program consoles are usually included in the studio control room equipment



General Electric studio camera with turret lens.

package, Manufacturing designs offer various operating features.

GENERAL ELECTRIC — The program console, in normal operation occupied by the program director, technical director and audio technician, is designed to handle as many as six camera channels and contains mixing amplifiers for switching, fading and dissolving. Cameras, film projector, channel monitor, and equipment room cue lights are controlled at this console, which is priced at \$5,800.

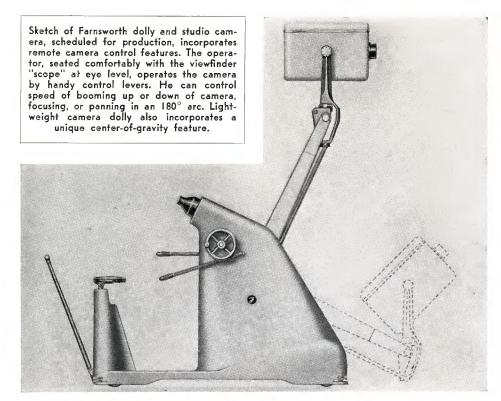
Film Channels

DuMont, General Electric, and RCA film cameras are equipped with iconoscope tubes. Farnsworth, which uses its dissector tube, has reported innovations in film projecting, details of which will be released shortly. The DuMont dual film channels (two camera chains) is priced at \$27,000. This does not include projectors but does include sync generators. Approximate date of availability—March 1947.

Film Projectors

DUMONT—The manufacturer has designed a 16mm projector to meet 35mm operating standards, called the Strobelight, with a pulsed light shutter, which will be available in October. Equipped with stand, sync phasing, and designed to handle both sound and silent film, the projector is priced at \$4,000.

GENERAL ELECTRIC—The company is offering both a standard 35mm sound film projector (International Projector Corp. "Simplex") and a 16mm film projector (Bell & Howell "Filmore") modified for television use and employing a



high intensity, stroboscopic light source which eliminates the standard mechanical shutter system. Power supply, control circuit, and condensing lens are included and occupy about the same volume as the conventional light source. Remote starting and stopping from any studio control room or projection room is provided with the 35mm film projectors.

Master Control

When more than one program source is available a master control desk is required. Installations must provide comprehensive monitoring facilities and be equipped to act as a switching and cueing monitor for local and network program purposes. DuMont, for instance, offers master control equipment, including patch panels, picture and wave-form monitors, remote and network pickups as well as multiple studio channels—for a package price of \$21,000. General Electric, Farnsworth, and RCA as well as other manufacturers of television station equipment offer similar equipment.

3. Transmitter Equipment

THE biggest bottleneck managements are facing in getting television stations on the air is transmitter deliveries. Manufacturers are committed to fill priority orders and station operators can hope for these delivery dates:

RCA—The first postwar television transmitters, featuring important wartime developments in circuits and components, are scheduled for Fall delivery. The company has on hand several prewar design transmitters which are being installed for new stations, particularly WNBW in Washington. The new transmitter, of which the first units are now on test, combines video and audio transmitters in a single unit. Power output is 5kw (peak) on video and 2.5kw on audio. It will operate on any of the present channels.

GENERAL ELECTRIC—Contemplated plans call for delivery of transmitters to start in January 1947. The transmitter is extremely simple and straightforward in design, using low level modulation system. The aural section uses the new GE phasitron circuit. Transmitters of different power ratings will be available and will differ only in tube complement in the final stages. Also, transmitters for the first six channels will differ only in tube complement and electronic circuit operation from transmitters for the seven channels between 174 and 216 mg. The GE transmitter is priced at \$63,800.

DUMONT—The DuMont Laboratories has designed two transmitters, the first for low band Channels 1 to 6, and the second for Channels 7 to 13. The transmitter for Channels 1 to 6 is rated at 5kw video and 2.5kw audio. It includes

a control console with picture monitor, switching facilities, wave-form monitor, frequency modulation, etc. The transmitter, priced at \$59,400, is slated for delivery in February 1947. The transmitter for Channels 7-13, rated at 3.5kw video and 3kw audio, also including control console, is priced at \$64,350 with a promised delivery date of March 1947.

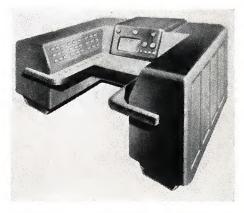
Antennas

Engineering studies are required for every broadcasting antenna to establish requirements and to determine the antenna type. Manufacturers offer various types and modifications of antenna designs. DuMont has a 6-bay super turnstile. The RCA turnstile antenna, suitable for television or FM, produces a highgain with broad frequencies, RCA provides a "Diplexer" unit which allows both audio and video signals to be radiated from this same structure. Where desired, a "Triplexer" unit can be furnished, which makes it possible to radiate the television signal (video and audio) and the regular signal of an FM broadcast station.

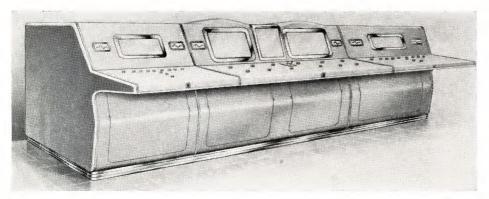
The new GE television antenna has many advantages over prewar designs—higher overall gains, better band pass characteristics, lighter construction and lower wind load. The same antenna can be utilized for the transmission of both aural and visual signals.

4. Relay Equipment

TELEVISION networking can be provided by means of microwave radio relay stations, coaxial cable, and Westinghouse's proposed Stratovision or airborne television. RCA does not contemplate operating relay stations since it believes that relays ultimately will be classified as common carriers, transmitting not only



DuMont's master control console with monitor.



Farnsworth console is designed for full vision: for operator to see monitors and to see over console into studio. 15-inch monitors are on a slight angle, retractable for maintenance.

television but other forms of communication as well and thus will become part of established communication systems. At present General Electric and Philco have relay stations in operation.

GENERAL ELECTRIC—Since the new assignment of frequencies which made obsolete GE's Helderberg Mountain relay station (WRGB and NBC's WNBT being on the same channel), GE has recently started picking up the WNBT signal on a temporary relay station located at Hillsdale. However, GE plans immediate development of a microwave radio relay network linking New York with Schenectady, with three relay stations, as a carrier for television, FM, facsimile, and business machine circuits. This is the originally proposed IBM-GE relay network.

Subject to FCC approval, Globe Wireless has an option to buy the network facilities once they have been perfected, and it is the intention of Globe to extend the network westward towards Chicago. The New York-Schenectady link includes three relay stations, starting with a terminal station in New York through which programs from any television station could be patched. GE has already finished construction of a new 130-ft. steel tower which will house antennas, transmitting and receiving apparatus for the Helderberg Mountain relay point (12 miles from WRGB, Schenectady).

RAYTHEON—The Raytheon New York-to-Boston microwave relay network now on an experimental basis, operates in the 4000 megacycle region with a 15 kilocycle channel. According to J. Ernest Smith, manager of the Microwave Communications Dept't, "It may be possible, through this medium, to serve communities not adequately provided with tele-

phone, telegraph, radio, facsimile, or television coverage."

BELL SYSTEM—Construction of the Bell System's microwave radio relay system between New York and Boston, with its very broad bands of transmission, is expected to provide telephone as well as television channels. The equipment is being built, and construction of buildings and roads at intermediate relay station, situated on hilltops along the way are under construction. Tests and demonstrations between Bell Telephone Laboratories' locations in Manhattan and Murray Hill, New York City, show good results.

Coaxial Cable

BELL SYSTEM—The New York-Washington leg of the Bell System's nation-wide coaxial cable network has been in service since April 1946. Two-way television service has been carried regularly.

Cable now being laid along the Dallas-Los Angeles route contain the new and larger-sized coaxial "pipes," requiring fewer auxiliary repeater (amplifying) stations (eight miles apart instead of five and a half).

Work is under way on the Bell System's Southern Transcontinental route, with cable plow trains operating as far west as El Paso. This part of the network is being pushed because of the immediate need along that route for additional telephone circuits. Most of the cable in the network will contain eight coaxial units. With present types of repeaters, this cable can carry 1,800 telephone conversations simultaneously, or a smaller number of telephone conversations plus television programs.

Stratovision

The Westinghouse-Glen L. Martin

Stratovision system simply puts the station antenna and transmitter in an airplane flying in lazy circles 30,000 feet above the earth out of sight of human eyes. The shortwaves sent out from this airborne antenna would blanket the earth's surface, coverng an area approximately 422 miles across or equal to about the combined area of New York, Pennsylvania, and New Jersey. Low-powered ground transmitters would beam television and FM broadcasts to the plane.

As now conceived, the plan would employ four television and five FM transmitters on each plane. "A coast-to-coast network of relaying television and FM programs from plane to plane between New York and Hollywood would simply require eight such stratosphere planes above strategic areas spanning the continent," a company spokesman claims. Under flight tests since late 1945, Stratovision has delivered a usable signal over a distance of 240 air-line miles from an altitude of 25,000 feet using 250 watts of power.

Although tests are far from complete, findings to date are verifying the early and optimistic estimates of Stratovision possibilities, according to the Westinghouse spokesman. He said, "Experiments show that the system is completely workable in any of the several television and FM frequency allocations by the FCC. Operation improves, however, in the higher frequencies and this means that the system will hasten the day of practical color television."

5. Miscellaneous Equipment

LIGHTS, tubes, microphones, and testing equipment are necessary components in the operating of a television station. Few eletronic manufacturers have designed lights specifically for television studios. General Electric, the exception,

EXPERT SERVICE WORK durable installations

V I D E O

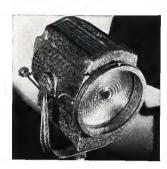
717 Second Ave., N. Y. 18

Phone: LE 2-6670

has pioneered and developed a water-cooled mercury-vapor light. The new GE television lights are 1-kw water-cooled mercury-vapor dual purpose spot and flood lights operated on indirect current. These lights are priced at \$750.

DuMont has designed a trough floor light with birdseye incandescent lights, used as auxiliary lighting equipment. It is priced at \$115 per unit. Present operating studios, with the exception of GE's WRGB, are utilizing incandescent lights. These include Kliegl, Mole-Richardson, Century, and other stage and motion picture lights.

STUDIO LIGHTS



2,000-watt Century Fresnelite has rapid screw feed for focusing flood to spot.



2,000-watt Lekolite: Sharp definition of beam; for accent lighting or follow spot.



Elliptical flood unit under development by Century; for general flat base lighting.

Century Lighting Co. is offering various types of light for television. Eliptical flood units, under development, are suggested for general lighting. For large areas, 5,000 watts Fresnelite on flood focus can be used for flat modeling. For accent lighting, the 2,000 watts Beam Light Projector or the 2,000 watts Fresnelite are recommended. For lighting backgrounds and cycloramas, Century has No. 391 Striplight, a standard 6-foot length with 150 watt projector lamps on six-inch centers. For accent lighting, where a sharp cut-off is desired, the 2,000 watt Lekolite is designed with shutters that can shape any simple geometrical figure. All Century units, except the striplight, can be mounted on caster stands, on over head pipe batten or light bridge.

Tubes, Other Equipment

Hundreds of tubes, including camera tubes, monitor tubes, wave-form scopes and other cathode ray and specially designed tubes are utilized for various functions in circuits at television stations and transmitters. Practically all electronic equipment manufacturers offer a line of tubes. These include DuMont, Farnsworth, General Electric, RCA, Sylvania, Hytron Radio & Electric Corp., Eitel-McCullough, and North American Philips.

Testing equipment and miscellaneous items are also manufactured by DuMont, Farnsworth, General Electric, Philco, and RCA. In addition, the following companies manufacture specific items utilized in the manufacture of, operation of, or testing of television equipment:

Daven Company—volume level indicators, transmission measuring set, and tone compensating attenuator.

Chicago Transformer Division of Essex Wire Corporation—transformers for television receivers and transmitters.

P. R. Mallory & Co.—Mallory-Ware inductuner and five special television capacitors.

Sylvania Electric Products — synchroscope for determining amplitude, duration and shape of short video pulses.

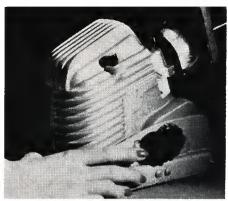
Triplett Electrical Instrument Co.—testing equipment.

Lehigh Structural Steel Co.—structural steel tower supports for AM, FM, and television antennas.

United States Television Mfg. Corp.—iconoscope yokes.

Gadgets

Among the unique innovations which make up television's bag of tricks is Bill



Capt. Bill Eddy's kaleidoscope was demonstrated in 1944 at the TBA conference in New York.



Kaleidoscopic flower dance: Using a double dissolve, dancer in studio and projected pattern.

Eddy's projection kaleidoscope which produces fascinating colorful patterns of exotic moving shapes, abstract and geometrically perfect. These ever changing patterns move in synchronism with music and thus make an ideal video counterpart of transcribed or live studio music being broadcast. The kaleidoscope is also effective when used as a backdrop for fashion shows or as an animated lei to frame a dancer.

Tele Recorder

DuMont has developed a tele recorder which records the television show on film from the receiver monitor. Such film records can be used for: 1) advertisers and clients; 2) film records for the station; 3) possibilities of an instructional job to demonstrate processes or procedures to training crews; 4) repeat telecasts. DuMont has been working with the Du Pont company in developing special film for the tele recorder.

The Rauland Corp. of Chicago and Eastman Kodak have both been working on tele recording devices; the one for theater television, the other for film records similar to the DuMont purposes. Raulands has been working with WBKB, Chicago, and with General Electric,

Schenectady. Eastman Kodak has been conducting experiments with General Electric and RCA.

Film Stock

Television will make great use of film to record special events, such as parades, fires, etc., for later telecasting. Du Pont and Eastman have been experimenting with and developing film for television use. Ansco'is currently developing film for video use.

Du Pont's Telefilm Kinescope Recording film, stock newly developed in association with DuMont Laboratories, is an orthochromatic negative film incorporating a sensitizer especially matched to the light output of the television white cathode ray tube screen. Its resolving power is sufficient to permit use of the 16mm size for recording of television images. It may be developed as a negative or reversed. Du Pont's Telefilm Reversal Negative film, recently demonstrated over WNBT-NBC, is a medium-speed panchromatic reversal film designed for taking stock where the pictures are to be telecast. It has been specially formulated to minimize halation and yet retain the high light transmission of clear base. Available in 16mm size. Du Pont also has a variety of motion picture film which is suitable for television.

6. UHF Color Tele

FEDERAL Telephone and Radio Corp., Bendix Radio and Westinghouse are manufacturing, or plan to manufacture, UHF color television equipment.

Federal Laboratories of Federal Tele-

TED ESHBAUGH STUDIOS, Inc. 35 W. 45th ST., N. Y. C. CHickering 4-3930

Producers of
Television Productions, Motion
Pictures, and Animated Cartoons

ANIMATED MOTION PICTURES FOR TELEVISION

Fletcher-Smith Studios, Inc. 1585 BROADWAY, N. Y. 19, N. Y. CI 6-5280

Radio-Television Electronics

Practical and Theoretical Course leads to opportunities in Industry, Broadcasting or own Business. Day and Eve. Sessions. Enroll now for new classes. Qualified Veterans Eligible.

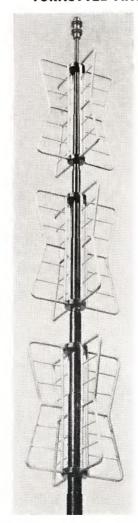
RADIO-TELEVISION INSTITUTE
480 Lexington Ave., N. Y. 17 (46th St.)
PLaza 3-4585 Licensed by N. Y. State

phone and Radio Corp. designed and manufactured the color television transmitter for the Columbia Broadcasting System and is licensed by CBS to manufacture color pickup equipment. Federal has other color tele transmitters under construction, and is also prepared to supply transmitting equipment for high-definition black-and-white, the design principles of which have considerably progressed due to the extensive research and development on the color transmitter.

Bendix Radio, a Division of Bendix Aviation Corporation, and Westinghouse are licensed under CBS patents to manufacture UHF color television transmitters and associated equipment.

Westinghouse presently has under development in its Industrial Electronics Division the following items of equipment for color television: Studio control units, transmitter units and antennas. The company, however, reports that it is not in a position to announce specifications, prices or other details.

TURNSTYLE ANTENNA



RCA turnstile antenna. !t is suitable for television or FM. This antenna provides highgain with broad frequency characteristics. RCA provides a "Diplexer" unit which allows both audio and video signals to be radiated from this same structure.

TRAINING EQUIPMENT

Why wait until you receive your "on order" equipment, or until your C. P. comes through, when you can start training your future television staff NOW by utilizing Telehuhn low-cost training equipment?

Your radio actors, writers, directors, and producers may be trained for television without delay with our easy-to-use, realistic studio cameras, director's consoles and boom-mikes—all specially designed for training purposes.

It's the same equipment used by the Television Workshop of New York to train more than 200 "apprentices" this year and to reduce costly rehearsal time for its commercial and sustaining television shows in New York, Philadelphia, and Schenectady. Equipment includes:

Dummy CAMERAS

Dummy CONTROL CONSOLE

Dummy BOOM MIKES

Simulated to look like real studio equipment down to the last detail, Telehune Training Cameras dolly, pan, till like actual cameras. A ground-glass lens frames the picture. To indicate which camera is "on-the-air," a signal light may be flashed by the director back at the control console. For a pictorial record of your dress rehearsals, a 16 mm. camera may be inserted in the camera housing. Ideal for training use!

Director's consoles come equipped with as many as four channel "monitors" (for 4 cameras), and an "on-the-air" monitor. To indicate which camera is supposedly on the air, the director simply presses a button and lights flash on the control panel and on the desired camera!

For Full Details, Write to

TELE-HUHN

95-21 - 109 Street Richmond Hill, N. Y.

(All Equipment Offered Through Special Arrangement with The Television Workshop, Training Division,
New York City)

2: ADVERTISING AND MERCHANDISING



What's What On Receivers — A 6-Page Round-up

ARAMOUNT question in television today is not ultra high frequency color vs. lower band black-and-white; it is: When will television receivers be available? When will the public be able to buy sets? The commercial telecasters are as concerned with the answer to that question as the manufacturers. To the latter it means receiving set sales; to the former it means an audience—circulation and sponsors.

National manufacturers, who last year glibly promised thousands of low-priced television receivers being available practically overnight, now—in view of the continued shortages of component parts and cabinets—have assumed a closed-mouth policy: "We'll announce our television receiver line when the sets are in the hands of distributors." They refuse to release their estimated assembly line output for the immediate market, many of them reporting that their television receiver designs are still on drawing boards.

50,000 Sets This Year

A survey of manufacturers and a probing into their production schedules, however, reveal that a total of 50,000 tele-

vision receivers will be delivered to dealers and will be in homes of the public during the closing months of 1946. This figure—a down-to-earth, realistic estimate—includes the total set output of *all* companies, both high-priced and lower-priced receivers.

According to the same manufacturing sources, it is estimated that, under present production conditions, the 1947 television receiver output will be about 200,000 sets. Full television receiver production is not contemplated by national manufacturers until 1948, since many companies are concentrating now on turning out radio receivers.

Manufacturers have stated—and this includes RCA, Farnsworth, General Electric, DuMont, Belmont, Emerson and Philco—that their receiver output will be distributed among areas where television stations are operating. Television sets, therefore, will be available to the buying public in New York, Chicago, Albany-Schenectady, Philadelphia, Los Angeles, and Washington, D. C. Receivers will be allocated to Detroit, St. Paul, and St. Louis when stations in those areas start operating (forecast for early 1947). Logi-

Modern living rooms take on a new design with television. (Photo courtesy of DuMont.)

cally, companies will make sets available in non-commercial broadcasting markets for testing purposes in advance of commercial operation.

Receivers, now beginning to trickle into the markets, are promised dealer delivery by October and in more appreciable numbers by November and December. By the Spring of 1947, production lines should be well under way.

Cost of Tele Receivers

What kinds of television receivers are going to be available? And what will they cost?

Some low-cost sets, mostly table models, will be available to the public this Fall and Winter but manufacturers are concentrating on higher-priced console sets which include television, radio and phonograph. As one manufacturer put it: "As long as there are shortages of component parts and particularly of cabinets, it is foolish to put out cheaper models. A consumer can be assured of better dollar value in material, design and workmanship in the higher-priced sets."

Companies that plan lower-priced tele receivers for the immediate market to retail under \$200 or in the \$250 to \$300 bracket include: Belmont, Emerson, Farnsworth, RCA-Victor, Sonora, and Viewtone. Manufacturers concentrating on higher-bracket receiving sets include: DuMont, General Electric, Telicon, and United State Television. Manufacturers who contemplate early production of sets in 1946 or early in 1947 but who have not indicated price ranges, are: Admiral, Crosley, Garod, Philco, Stromberg-Carlson, and Westinghouse. Companies not contemplating production in 1946 include Andrea and Fada. Many tele set models will be on display at the TBA Conference and Exhibition at the Waldorf Astoria Hotel in New York City, October 10

1. Low Priced Receivers

In the low-priced bracket, the table models are designed for television sight-and-sound reception only. The few console sets in this price range, planned

for the 1946 market, incorporate radio and, in one case, phonograph service.

Television receiving sets to be offered by the various manufacturers, and their probable dates of delivery include:

BELMONT—The Chicago corporation, a division of Raytheon Manufacturing Co., has announced its direct-view table model with a 7-inch picture tube (6" x 41/2" screen) to retail for approximately \$150. The set, designed for tele reception only, employs two tuning bands which cover the 13 channels assigned to video. It is expected that delivery will start in the Fall. This is the only tele receiver Belmont plans to manufacture at this time.

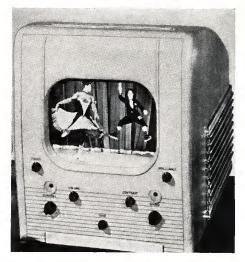
EMERSON—This company's first postwar popular-priced television receivers include a small table model with a 7-inch tube (6" x 4½" screen) and a chair-side console with a 10-inch picture tube (8" x 6" screen). The table model, designed for television reception only, will retail at approximately \$150. The chair-side model which combines both radio and television, will retail at approximately \$250. Both models are direct view and are designed for full 13 channel band reception. The company expects to have both models in the New York market by October.

FARNSWORTH—The Fort Wayne, Ind., company is in production with, and expects to deliver shortly, a direct-view

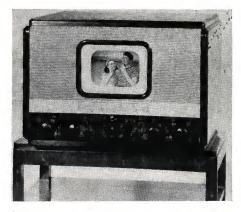
table model television receiver, using a 10-inch semi-flat faced viewing tube which gives an 85/8" x 61/4" screen. The table model is expected to be priced in the \$250 to \$300 bracket. It is equipped for television reception only but the cabinet is so designed that a small AM chassis can easily be installed. Other direct-view models—console and phonograph-combination tele receivers—are planned for later production. Farnsworth is now completing development of a console model which will project a high-definition picture on a 22" x 16" translucent screen.

RCA-Victor—The company has promised delivery of a limited number of direct-view table model television receivers in September to selected dealers. RCA is limiting its television franchise to dealers qualified to do a television receiver servicing and installation job. Its 1946 production will be concentrated on turning out table models-two of them, a 7-inch viewing tube (6" x 41/2" screen) and a 10-inch tube (8" x 6" screen), full 13-band channel tuning, television reception only. The company's 1947 schedule includes direct-view consoles, combination, and projection receivers. All sets include new circuits, improved cabinet design, and other unique features (they are not re-designed prewar receivers). Television receivers will retail from about \$200 to under \$1,000.

SONORA—Two table models are being manufactured for 1946-47 delivery; one



Farnsworth's table model tele receiver gives an $8\frac{5}{8}$ " x $6\frac{1}{4}$ " picture. Approx. price, \$250.



Belmont table model receiver has a 6" x $4\frac{1}{2}$ " screen, television only. Approx. price, \$150.

to retail for approximately \$150 (7-inch viewing tube), and the other for \$250 (10-inch viewing tube). These are scheduled for 1946 delivery. In addition the company will have a console model and a projection receiver.

VIEWTONE—This New York company, a new organization in receiving set manufacturing, is already in production. Its low-cost tele receivers are installed in homes and both favorable and unfavorable reports have been received on the sets' performances. The company is currently delivering two models—a table model and a console-both with 7-inch direct viewing (6" x 41/2" screens)—and equipped with only a six-channel tuning band. The table model, television reception only, retails at \$169.95, while the console including television, AM broadcast band radio, and automatic record changer, is priced at \$325, OPA price approved. Only a few of the console models have been manufactured.

ON THE LINE ...



The Camden assembly line checking 10-inch direct viewing tubes for RCA's television table model receivers now in production. Set has 13-channel tuning, television only.

2. Higher Priced Tele Receivers

CONSOLE receiving sets, including television, radio and phonograph, are being manufactured for immediate and near future deliveries by the following companies:

DuMont—Production of telesets will start in September, with deliveries in all markets in time for pre-Christmas sales. Its telesets come in three console directview models and in seven style cabinets, ranging in price from \$600, \$1,500 to \$2,400. These consoles are complete combination units-including television, standard AM, FM and short wave radio, and automatic record player-changer, except the \$600 model which does not include a phonograph. The 12-inch viewing tube (smallest model) gives a 10" x 71/2" screen; the 15-inch tube console has a 13" x 91/4" screen; and the 20-inch direct viewing tube has an 18" x 131/2" screen. The 20-inch cathode tube is arranged to disappear into the console when the set is not in use. The viewing tubes are guaranteed for 1,000 hours of operation or for one year, whichever is the longest. All telesets, equipped with an inductuner, afford unlimited high quality reception of the entire television and FM bands from 44 to 216 megacycles.

FARNSWORTH—In addition to its popularly-priced table model television receiver, priced at approximately \$250 to \$300, the company expects to make 1947 deliveries of direct-view and projecting-type consoles. These receivers, also, will be equipped for 13-channel tuning.

GAROD — The Garod console which will include television (10-inch directview tube), FM and standard AM radio, and phonograph, is "currently being developed and will be available in the late Fall or early Winter."

GENERAL ELECTRIC — The company has announced a console for immediate production to be made available to the public in late 1946. The console, combining television and standard AM radio, will retail for approximately \$350. It is equipped with a 10-inch picture tube giving an 8" x 6" screen and for 13 channel tuning. G.E. plans to manufacture at least four television receiver models next year, including a table model, two direct-view consoles (one a combination set with television, FM and standard AM radio, and a record player, priced at approximately \$475; the other the \$350 set), and a projection set. The projection console, including radio, television and phonograph, will have a video screen measuring 24" x 18".

RCA-VICTOR—The company, pioneer in television research, plans to exhibit its television line of receivers in September and October. Its 1946 production will be concentrated on the low-priced table models (7-inch and 10-inch viewing tubes) for black-and-white television. In addition to the table models, the company plans 1947 delivery of consoles for television and radio reception, combination consoles including television-radio and phonograph, and projection sets also with television, radio and automatic recordchanger. All receivers will be designed for 13-channel tuning and will be sold with manufacturer-dealer guarantees. The full RCA-Victor line will probably range from \$200 to under \$1,000.

SONORA—In the higher-priced brackets, the company will manufacture a console television receiver, to retail for approximately \$350. A projection receiver model is now being engineered. Approximate price is not available.

TELICON—This New York corporation plans to manufacture console models, although it may include a table model (television only) to round out its line. The consoles will be complete home entertainment units containing television, standard broadcast AM and FM radio, and phonograph, all housed in compact cabinets designed to fit into the average dwelling. The consoles, equipped for 13-channel tuning, include a popularpriced set with a 10-inch viewing tube to sell for approximately \$350, a 15-inch direct-viewing receiver, and a projection set giving a 24" x 18" picture. The consoles are planned for production, starting

UNITED STATES TELEVISION - The New York manufacturing corporation, new in the business of making television receivers, is concentrating on higherpriced, direct-view and projection consoles. These receiving sets, expected to be available in limited quantities this Fall (cabinet shortages are the big hurdle, the company reports), will be priced to sell for \$745 for a direct-view 10-inch tube (8" x 6" screen), \$1,495 for the projection set with a 15" x 12" picture screen, and \$1,995 for the projection model with 211/4" x 16" picture screen. The consoles, all equipped with 13-band tuning, will include television, FM and standard AM radio, and record playing. The company plans a low-priced receiver for late 1947 production.



This DuMont console combines television (13 channels), FM and AM radio. Priced at \$600.

3. Other Tele Sets

OTHER manufacturers, planning television receivers include:

ADMIRAL—The Chicago company has indicated that it will distribute a line of console receivers, including television. No further data was available at press time.

Andrea—The company, which distributed a few prewar television receivers this past Spring, expects to manufacture newly-designed television receivers late this year, including table models, consoles and projection sets. According to Mr. Frank V. Goodman, General Sales Manager, the company "will not be able to produce these models before the latter part of the year or early in 1947, due to the materials situation, particularly if fine furniture for cabinets is involved. We hope to have several sample models available for the TBA conference."

Crosley—Details of the company's receiver plans were not available.

FADA—Fada Radio and Electric Company reported that: "Our engineering and design is going forward but nothing definite is contemplated for 1946 on the production of television receivers."

GAROD—The Garod console which will include television (10-inch direct-viewing tube), FM and standard AM radio, and phonograph is "currently being developed and will be available in the late Fall or early Winter."

PHILCO—In view of repeated production drawbacks, the company had adopted the "no talking at this time" policy. However, it was learned, newly designed television receivers are being delivered to Philadelphia dealers, even though quantity production of tele sets are way down on the company's schedule, the company concentrating on the manufacturing of radio receivers. Sample models of Philco's console tele receivers are being tested in the viewing room at WPTZ, Philco's television station in Philadelphia. Philco, according to reliable information, plans to star its new salesman, Bing Crosby, in a series of films shorts featuring television, to be shown to dealers and also to be telecast, at least, over WPTZ.

STEWART WARNER—The corporation has designs for direct-view table models and console television receivers on the drawing board which are planned for

early 1947 production. No price brackets have been established.

STROMBERG-CARLSON—The company plans to manufacture television receivers, both table models and consoles, which should appear on the market before the end of the year. Engineering is being completed on the first postwar Stromberg-Carlson television receivers—a ten-inch direct-viewing type chassis available in both a table model and a console. "These models, designed to operate on all thirteen channels, should be in porduction soon," the company reported. Projection-type receivers will be introduced following the release of the direct-view models.

Wells-Gardner — The Chicago receiver company reported that "it does not plan to enter the television field until some time after 1947."

WESTINGHOUSE—The company stated, in reply to Televiser's questionnaire: "It is impossible to supply information requested, pending further developments of our television sets." Westinghouse, however, does plan to produce receivers for delivery late this Fall or early 1947.

ZENITH—E. F. McDonald, Jr., president of the company which is operating an experimental lower-band black-and-white station and which holds a CP for a commercial station, has stated publicly that "Zenith will not be making television receivers in the present channels because such sets would become obsolete in a year."

UFH Color Receivers

UHF and Color Television Receivers—None of the companies licensed under CBS's color television patents returned information on the manufacturing of these receivers. Bendix Radio Division of Bendix Aviation Corp., Westinghouse Electric Corp., and Federal Telecommunication Laboratories are licensed to manufacture color television receivers for home use as well as transmitter equipment based on CBS's ultra-high frequency color television inventions. General Electric is building color receivers for CBS—with only one or two sets having been delivered to date.

BOB LOEWI

Television Productions
Films for Television

11 W. Forty-Second St., N. Y. C.

4. Home Installations

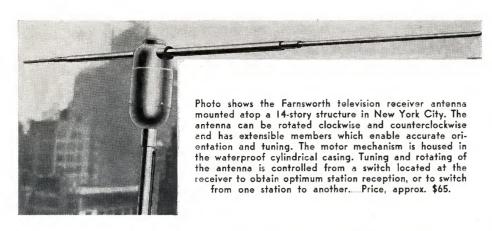
THE problem of television receiver installation and servicing is a serious one, especially in multi-station urban areas. The television receiver, unlike the radio set, requires more than just plugging in the set for satisfactory picture reception. The receiver in the home must be properly adjusted, and an antenna, usually a simple dipole, installed and oriented. In some cases, however, special antennas may be necessary. The antenna and installation charges are in addition to the cost of the receiving set.

Manufacturers are aware of the installation and service problem involved to assure satisfactory picture reception and satisfied customers. Some companies have established a policy of servicing and installing their own receivers, others have made arrangements with service organizations, or with dealers to supply qualified service men to assure proper installation of tele sets. DuMont, for instance, will distribute its sets through authorized dealers who will have qualified service men to install its telesets. (DuMont is giving training courses.) RCA is setting up a system to control the installation of its receivers by giving franchises to authorized and fully qualified dealers with service organizations, in order to assure set performance and customer satisfaction. Viewtone, after some sad experience of merchandising its low-cost receivers through outlets without service departments, with purchasers getting their sets installed as best they could, is now distributing through independent dealers who are equipped to install and service television sets. Viewtone sells its receivers to dealers on a 90-day guarantee (mechanical faults) and the dealer in turn sells the set with a six-month service clause (four visits to home during that time) as part of the installation-antenna charge.

Television Antennas

There are some 17 different types of antennas, designed for home television reception. The antenna used must be suitable to the reception problems involved in each installation. The location of the antenna, distance from the tele station transmitter, and station's transmitter power output determine the type of antenna to be used.

In order to receive all stations operating in an area, the RCA all-channel an-



tenna may be the answer instead of using a highly directional antenna. The RCA all-channel antenna is designed to receive all stations efficiently. However, in fringe service areas where the best antenna available is required to pull in the video signals, a folded dipole may be the answer.

A most satisfactory antenna for multistation cities has been developed by Farnsworth. It is a receiver dipole which can be rotated, clockwise and counterclockwise, and has extensible members to enable accurate orientation and tuning. It is rotated for best station reception from a switch which can be located at the receiver. The antenna is priced at approximately \$65, without installation.

New Antennas

The United States Television Corp. has developed a broad-band antenna, called the Kolster broad-band antenna. It is a folded dipole type which the company recommends for use with their receivers.

A new antenna, capable of receiving on all commercial television and FM channels, has been perfected by the Andrew Company of Chicago. The unit, called Di-Fan, has two sets of five elements extended in different directions.

For apartment houses, hotels, schools, and other large buildings, Telicon Corporation has developed an "intra-video" system. A separate antenna, designed to suit the condition of each location, is installed on the roof of the building and oriented for optimum reception. One such antenna for each station serving the area is required. These antenna may be combined into a single "Christmas tree" arrangement. The antennas coupled with a distribution system (cables, amplifiers, outlets) to each apartment or room comprises the "intra-video" system. It is estimated that "intra-video" will cost approximately \$50 per apartment to install, or in a large multi-dwelling about \$1,500.

5. Station Signals for Set Testing

A LEADING manufacturer has pointed out that in order for telvision receivers to be sold, television stations must be on the air, at least with a test pattern, from 9:00 a.m. through 5:00 p.m., so that home installation can be completed during a service man's normal working hours. This means the stations must be transmitting test pattern signals or programs five days a week, daytime.

The receiving antenna must be oriented with station signals to assure satisfactory picture reception from all stations, thereby being assured of a satisfied set owner. National manufacturers, jealous of their product's prestige and brand names, feel that the cooperation of the broadcasting stations in this matter is essential. WNBT-NBC is telecasting its test pattern from 10:00 a.m. to program time (7:50 p.m.) four days a week. DuMont is scheduling a daytime test pattern transmission from 3:00 to 5:00 p.m. five days a week and, when possible, from 1:00 to 5:00 p.m., Mons. and Fris.

It is to the benefit of the telecasting station as well as to the manufacturer that tele receivers be properly installed and antennas properly oriented for optimum reception of each station serving the area. If the station is not on the air at the time of the receiver installation, or during one of the servicing re-visits, the set owner will not be able to receive that stations programs satisfactorily.

6. Tele Audience

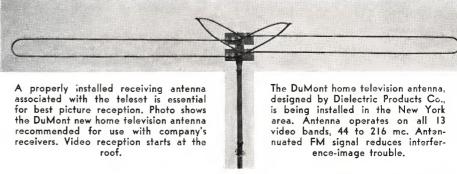
PURCHASE of both low-priced and higher-priced television receivers, now available for delivery or for which orders are being accepted, indicates public acceptance of black-and-white television. Also, recent surveys point up people's interest in television and their intention to buy a tele set now.

"Sales of DuMont telesets to authorized dealers in the New York area amount to more than \$2,000,000. This backlog of orders was built up in two weeks, following the public showing of the DuMont consoles (priced from \$600 to \$2,400)," according to an announcement by S. B. LeVaur, Sales Manager of DuMont's Receiver Division.

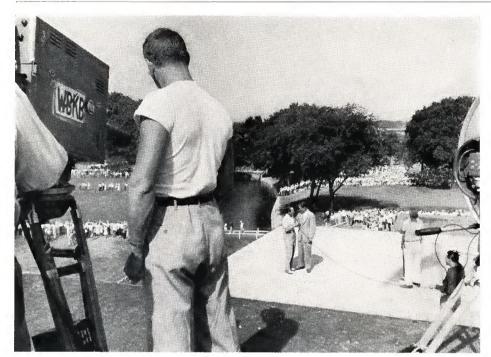
Viewtone, with its 6" x 43/4" screen, direct-view, low-priced sets (plus an average \$30 installation charge) has been piling up dealer orders. The company has about a thousand table models (its output so far) and a few consoles installed in homes.

Sylvania Electric Products, Inc., recently released figures on the urban market for television, based on a survey made of home radio listeners in early 1946. 26.6% of the urban families interviewed said they definitely planned to buy a television receiver, and 18.5% were considering television but had not definitely made up their minds. In other words, 45.1% or possibly 9,603,000 families are considering the purchase of a home tele set. These possible prospects, the survey shows, are pretty evenly distributed in different income groups.

As proof that television is in demand, (Continued on Page 39)



3: PROGRAMMING AND PRODUCTION



Sports Winning Out in Sponsored Tele Field

HEY'RE looking at sports! With the NBC telecast of the Louis-Conn fight hailed by press and public-an estimated 140,000 persons watched the ballyhooed bout sitting comfortably at television-receiver "ringside" seats, scattered in New York, Philadelphia, Schenectady-Albany, and Washington, D. C.—present black-and-white television emerged the victor with full commercial stature. Sponsors, who hitherto have been reluctant to venture dollar exploration on the air-picture medium, are now climbing on the sports bandwagon: 1) To get into commercial training for big league video advertising, and 2) To stake options on choice television time segments.

Sports Sponsors

Ford Motor Company, The Goodyear Tire & Rubber Co., B. F. Goodrich Co., Bristol-Myers Corp., United States Rubber Co., Atlantic Refining Corp., Standard Brands, and Berkray Corp. were quick to join Gillette Safety Razor Company, sponsor of the Louis-Conn fight, in sponsoring television sports. Many other companies are actively considering the use

of the visual-radio advertising medium and the list of video sponsors is growing over night. Everybody wants to get on the bandwagon.

Fights for Gillette

Gillette, no newcomer to television, has a contract, shared with NBC, for exclusive rights to all fights at Madison Square Garden and all outdoor events in the New York area, promoted by Mike Jacobs and the 20th Century Sporting Club. The three organizations have been cooperating in bringing boxing matches to tele audiences since Sept. 29, 1944.

Gillette, who will again sponsor the radio coverage of the World Series over the Mutual radio network, is seeking permission to televise the baseball classic. All of Gillette's radio contracts include a television rights refusal clause, according to the Maxon advertising agency which handles the safety razor account.

Ford Goes for Sports

Newcomer to television, the Ford Motor Company whose advertising appeal is directed to young people and who wants to secure a foothold in sports, is WBKB borrowed RCA's image orthicon camera to televise the Tam O'Shanter golf tournament.

currently sponsoring Columbia U. home football games over WCBW, the CBS black-and-white television station in New York City. In addition, Ford has also contracted for television rights of all Madison Garden events, except the fights. This includes basketball, hockey, the rodeo, etc.

Ford has allocated a "considerable" budget for video commercials (which will include slides, film and live action), according to George Moskovics, WCBW sales, in order for both the station and the agency (J. Walter Thompson) to learn new techniques in handling effective sports commercials.

Another sponsor breaking into televised football, is the Goodyear Tire & Rubber Co., which has taken on the West Point games—four of them being telecast over WNBT-NBC from the Academy and two from New York City. Open dates will be filled by pickups of NYU or Fordham games to which NBC has television rights. Goodyear commercials, prepared by N. W. Ayer's ad agency tele department, consists of opening and closing identification, one main one-minute commercial (on film), and oral plugs.

7th Year in Tele Sports

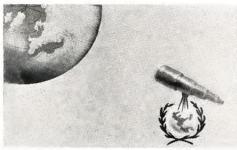
Atlantic Refining Co. starts its seventh consecutive year in television, sponsoring the Univ. of Pennsylvania football games over WPTZ, Philadelphia. This year the Philco station has the contract rights with Penn—Atlantic buying the games from WPTZ. Previously, Atlantic made the deal directly with the University as they do for all their radio broadcast games.

United States Rubber Company is no stranger to television, having sponsored NBC's Friday Night Quarterback, with Lou Little, last year and is again sponsoring the studio interview-commentary show on WNBT, starting Sept. 27. U. S. Rubber, through American Broadcasting Company, took on the televising of the Tam O'Shanter Golf Tournament in Chicago, with WBKB doing the field pickup. Films of the event were shown over Eastern video stations under U. S. Rubber signature in cooperation with ABC. Other

(Continued on Page 39)

Art work, illustrated on this page, was used to visualize news stories at WCBW. By means of black pullouts, the underlying

drawings (illustrated below) become visable, giving dramatic impact to the social issue in the news. (Illustrations by Georg Olden)



"Washington dispatches reveal that our delegation to the United Nations Atomic Energy Commission will propose that . . .



... the full light of view and inspection by the U.N. govern all atomic activities, everywhere in the world—and at all times.



Any screen preventing inspection makes international control impossible. The screen of veto power might prevent inspection."

VISUALIZING THE NEWS

(Mr. Berger, with CBS since 1941, developed visual forms of journalism for the Army's orientation program, produced Army's first television program over W6XAO, Hollywood.)

other than showing the handsome face of a newscaster reading bulletins, or a commentator pointing to a few simple maps? Or, must television rely upon newsreels?

If televised news is to achieve widespread home acceptance, it must be as complete as a radio summary; it must be as up-to-the-minute as the latest bulletins directly off the press wires; and, above all, it must use the television screen to provide pictorially a clearer understanding of the news covered. At all times, it is the timeliness of the story that should determine its inclusion in the news program (just as in radio), rather than its pictorial aspects which is the deciding factor of a story's coverage by newsreel. Television's job then is to visualize the news by means of animated sketches and drawings, supplemented by still photos and film, thus covering all timely news stories.

By CHESTER F. X. BURGER Visualizer, CBS Television, New York City

When news stories cannot be illustrated suitably by photographic material, visualization by means of graphs, cartoons and drawings, is given to the more complex and more abstract economic, political and social issues. The problem of giving visual interpretation to this type of news story is the job of the visualizer—a news staff member who will become more important as television gets into full swing—and the art department which executes the visualizer's suggestions.

Preparing the News Programs

Long months of experimentation and trial were consumed before WCBW, the CBS television station in New York, succeeded in developing its present successful techniques of animated visualization. During the war years it developed and relied upon animated maps. Now the station makes use of various devices to animate graphs, cartoons and drawings.

At CBS television, preparation of the newscast begins by analyzing the important news of the day, breaking down each separate story into its factual components. Certain of these items will suggest immediately a practical form of treatment. It requires little imagination to see that a map would illustrate Afghanistan's plea for admission to the United Nations, for few viewers can be expected to know the location of this distant land. "Where?" can be answered only by a map.

The contents of a particular newscast will also be affected by availability of latest news pictures. CBS uses the world-wide picture gathering facilities of photo services. It has accumulated a library of thousands of photos for program use. News pictures are considered for inclusion not only for their news value but for their pictorial interest as well. At the present time, still pictures constitute a basic component of the program, despite their tendency to slow its pace. They portray actuality soon after the event when motion pictures are unavailable.

Further a staff of newsreel cameramen

ANIMATING THE NEWS VIA "BALOP" SLIDE . . .

Artwork for balopticon projection must be sketched sequentially from right to left. It is fed into the "balop" and is reversed, being projected in correct viewing sequence.

START HERE



Your dollar bill is looking to Congress for renewal of OPA, strong enough to be effective." The manufacturer says:
'Unregulated business and rising profit mean increasing plenty.'...

The farmer says: 'I'm up against this inflation. Everything I buy is high-priced and going higher.'...

Wholesaler says HE wants to hold the line on prices. He claims: 'I'm helpless. It's the producer.' . . . "Your dollar bill meets a retailer, pledged to OPA prices. Increases? Points to wholesaler... regularly provides complete coverage of spot news in metropolitan New York, such as parades, fires, disasters, sports events, etc. News film, shot locally by WCBW cameramen, is next discussed for inclusion, and frequently because of its movement, is included as a pace-setter for the remainder of the program.

The remaining news stories, having been broken down into components, are then considered. Efforts are made to visualize each element separately, whether by photo or art work. Each method offers particular advantages for handling certain types of news stories.

The WCBW methods have enabled us to create animated motion on the screen which corresponds instantly to the aural text of the news commentator. This enables us to develop visual ideas one step at a time, as the commentator explains each. For instance, a story on OPA was significantly and simply illustrated by two drawings, easy to visualize from the sample script below:

VIDEO

Shows graph with straight line across center marked "Consumer Purchasing Power."

As commentator talks, twin arrows begin to move from the left. One marked "Prices" rises from the middle, while simultaneously one marked "\$ Value" falls accordingly.

AUDIO

. . . Consumer purchasing power has been kept fairly level under OPA's existing authority to maintain price ceilings.

But the President pointed out that prices would climb and the value of the dollar would fall and keep falling, if the measure he vetoed went into effect.

This technique enables us to create many moving effects, not only with arrows, but with drawings as well. It allows us to highlight sections of a map, to introduce new elements, some of which are shown in the accompanying illustrations.

Use of "Balop" Slide

The "balopticon slide" is effective in portrayal of a series of sequential and dependent events, when one event or element leads visually and chronologically into another. An ideal item for such treatment was the discussion on the cause of rising prices, *illustrated on opposite page*.

A variation of this method is used when the news story under discussion consists of several different elements or parts which should be shown successively, rather than simultaneously. Yet, they must be linked visually because they are parts of the same story and not different stories. This technique was used to illustrate a proposed New York City tax.

The main item of the tax story, or its underlying theme, was portrayed on a card (NYC-TAX) which continued to be visible on the screen during the entire news story as it was developed, element by element, within this frame.

Problem of Symbolism

Here, it must be emphasized that in visualizing the news, the main problem becomes one of finding symbolism which correctly reflects the news item under illustration. This is by no means an easy task.

When we are quoting a speech by OPA Administrator Paul Porter that OPA is protecting the American consumer, how can we show it visually? Shall we show Porter's picture? This might satisfy the viewer's curiosity as to his appearance, and establish direct and immediate contact between the audience and the person in the news. But its value, in this case, would be as "background information" only. It would not add to an understanding of the news item.

Should we create a drawing showing OPA as a fort, surrounding and protecting the housewife? But this might convey the visual impression that she is imprisoned. Should we show the OPA as a dam holding back a torrent of inflation? There are literally dozens of possibilities, but each must be considered in terms of whether or not it represents accurately the sense of the news.

Visual Journalism

Each visualization must be reduced to the simplest possible form, without extraneous elements, so that the final pictorial representation can be grasped quickly. It would not do to show complicated economic issues on a single piece of art work.

It must be born in mind, however, that television news must be written in a manner different from radio news programs. Words with a strong visual implication and suggestion are used.

Television news is basically different in concept than either the radio news program or the movie newsreel, and satisfactory visualization is its keystone. Under the supervision of News Director Leo Hurwitz, WCBW-CBS has evolved many visual techniques which have contributed to the new journalistic form. Although the basic pattern has been found, much work, experimentation and trial remain before the presentation of video news attains its finished format.



FILMS FOR TELEVISION

An expansive list of films which are used in the non-theatrical field is gradually being made available to television stations.

35MM & 16MM PRINTS

of the highest laboratory quality are kept in perfect condition for televising at any time.



FOR THE HOME

Bring first class comedies, dramas, novelties, and many educational subjects to the television screen.

A FILM FOR EVERY PROGRAM

Your advertisers will also find great tie-in values in our subjects.

SEND NOW FOR:

Film lists and complete data on available subjects to:

Television Department





Photograph of a television ballet shows excellent highlighting of dancers for dramatic effect and camera pickup, achieved through well-placed spotlights. (Photo courtesy of BBC.)

HOW TO OBTAIN EFFECTIVE STUDIO LIGHTING

By Carlton Winckler
Theatrical Lighting Consultant

ELEVISION lighting is a field with its own problems and its own requirements. It must be approached as a new field instead of trying to adapt old practices to its present and future needs. While it does make use of certain principles of both motion picture and theatre lighting, its requirements differ widely from both.

In lighting a motion picture, entirely different set-ups of lights are made for every camera position, each requiring considerable time to arrange. Obviously this is not practical for television. In the theatre, lighting is only two dimensional whereas television requires (and usually does not get) three dimensional effects. But stage lighting does cover large areas and is carefully planned to accent many positions around the acting areas. For television the camera positions for a scene must be carefully studied, then each position must be provided with suitable general light, modeling light and accent light in such a manner that the whole scene as viewed in a long shot has all of these qualities properly blended together to present a pleasing, well-balanced picture.

Beside this arrangement, which is obviously the method of the motion picture

Carlton Winckler, long associated with the theater, has produced stage shows for Paramount Publix circuit, is lighting director for Broadway shows, the circus, Billy Rose, and lighting consultant to CBS television.

blended with the planning and pre-setting of the theatre, television lighting must be planned so that the shadow masses, while they must be deep enough to register, cannot bear the contrast to the light areas that is possible in the movies or theatre lest they cause "flare" or "blooming." Conversely, television contrast in the bright areas between general light, modeling and accent light must be much greater than movies or theatre. Where contrasts in bright areas in the theatre register satisfactorily in such ranges as 100% vs. 110% upwards, and movies register 100% vs. 125% upwards, the television camera demands 100% vs. 300% light contrast.

Basic Lighting Principles

Extended experiment has convinced me that the moving of lighting equipment on a scene during the televising of some part of that scene, either by remote control devices, or manually, is highly unsatisfactory and impractical. Regardless of care exercised, the results are bound to have a degree of hit or miss quality. All lights to be used should be carefully adjusted beforehand or during rehearsals, so that all concerned know in advance what the results will be. With this plan a reasonable amount of time is required to set up the lights before rehearsal time, but an equal or greater amount of time

is saved during the rehearsal period by not having to rehearse complicated movements by members of the electrical crew—and obviously, no abnormal electrical crew is required.

At this point, in any discussion of lighting, we always meet up with the television showman's prize objections-unknown future sensitivity of camera tubes and the cost of a flexible lighting installation. While we must agree about the unknown future sensitivity of television camera tubes and even point out that every existing pick-up arrangement seems to differ in sensitivity from every other one, this argument doesn't really hold water. Television lighting designers require just as much training, and their training requires just as much time and practice as any staff director. Once the principles and practices of lighting are developed and understood, it matters not whether the lights used give 1000 or 100 foot candles. Any really practical lighting equipment installation can easily be reduced in brilliance either by using lower wattage bulbs or by removing some of the units and using them to equip additional stage space.

Foot Candles vs. Wattage

The major difference between a "flat" and a "flexible" lighting system is that the former is usually all flood lights and the latter is about equally divided between "flood" or general light units and "spot" or controlled beam units. Accent or modeling cannot be done with flood lights, but must have light that can be controlled and directed into given areas. Experiment has proven that when modeling and accent lights are used, the level of the general front or "flat" light may be reduced considerably without lowering the brilliance of the final picture.

A recent series of tests carried out during actual broadcast by a major station yielded the following: The "flat" front light previously used for all telecasts had been 1000 foot candles. When modeling lighting from the sides reading 1200 to 1800 F.C. and back accent lighting of 2000 to 2500 F.C. were added, the general front light was dropped 250 to 300 F.C. The resulting picture appeared even brighter than before besides having considerable third-dimensional quality and definite visual appeal. This was accomplished with very little increase in the current consumed. This means that it is not necessary to have more lighting equipment to obtain good results but just

several different types of equipment arranged in some form of a square around the set, rather than in a line in front of it.

Many types of spot beam devices are available and can be adapted to television use, bearing in mind that the important thing is the high foot candle reading at the spot to be accented, or modeled, and not the wattage of the lamp used. Some 2000 watt units give 500 foot candles at 10 feet, others give 1800 foot candles under the same condition, yet cost no more. For satisfactory service in television, controlled beam units should not read less than 1000 F.C. at 8 feet distance from the unit when focused down to a spot four feet in diameter.

And now cost. Practical and efficient light units cost no more than impractical and inefficient ones. For the amount invested in "enough lights to take pictures" the average studio could have an extremely flexible lighting installation that could be adapted to its needs for a long time to come. A recent survey on one job showed that light units in use costing \$85.00 each could be replaced with a specially designed unit giving three times more light, with the same current consumption, for only \$37.00. Often, too, the very equipment now installed in a studio can be revamped and rearranged to do a better job.

The Lighting Designer

A recent article in THE TELEVISER pointed out that the often well modeled and accented picture is no accident. Many experiments have proven beyond a doubt that good lighting can give a much more effective picture every time—not accidentally, but as the result of careful planning plus a little knowledge of lighting principles and a sense of showmanship.

Lighting television shows is a full time job for a lighting designer. He must study the action and the shooting plan, and work with the art director, the program director, the engineers and the electrical crew as a unit. After he has carefully set the light units to assure enough flat light over the entire scene to eliminate flare, and has created atmosphere with beams through windows and doors, accented the important playing areas and objects, carefully modeled the actors—he must observe and record the results. The results must be intensively studied so that improvements may be made and mistakes avoided in future set-ups.



A Television Workshop cast in a recent WRGB presentation.

Telecasters! Learn How Easily The TELEVISION WORKSHOP Can End Your Program Worries

After three full years of producing television programs for Tele Stations, Networks, Advertising Agencies, Department stores and other commercial sponsors . . . after two years of sending out touring stock companies to faraway television stations . . . and after nearly a year of intensive apprenticeship training programs said to be unequaled anywhere in the United States, The Television Workshop of New York can help bring your program worries to a quick end.

Whether you want a single program, a series, or a week of different daily programs, the Television Workshop—with its vast repertory of television programs—can readily furnish you with television entertainment hard to beat . . . and at low cost!

If you have plans for a television station, write us for information about our complete services . . . weekly itinerant stock companies (with the cost shared by many stations) . . . training of your production personnel (writers, directors, producers) . . . supplying thoroughly trained, experienced personnel at a moment's notice anywhere in the United States.

Founded in 1943 for the sole purpose of television program production, the Television Workshop consists of four divisions: (1) TRAINING; (2) TALENT & PERSONNEL; (3) PRODUCTION; (4) TOURING. Each division is eager to serve you, to help reduce program costs, to banish program worries. May we serve you?



11 W. 42nd Street, New York 18, N. Y.

"TELEVISION SHOW BUSINESS"

By JUDY DuPUY (Editor, The Televiser)

THE TELEVISER is grateful for permission to reprint excerpts from Judy Dupuy's book, Television Show Business, published by the General Electric Company, Schenectady 5, New York.

The Short Drama

ELEVISION is destined to give a new impetus to the short-form drama—the one-act play, sketch and skit. Radio makes great use of the half-hour narrative. But the "short" in motion pictures usually gets "B" treatment, and even in the theater the one-act play rarely receives top billing. In television, however, the playwright and the producer will find an expressive medium of sight, action, and sound for presenting one-act dramas to a mass audience.

Few short dramas have been written especially for television—most of those telecast have been adaptation of plays and books. More frequently, they have been camera reports of stage material. Of the more than 70 one-act plays telecast at WRGB (Schenectady, N.Y.) during the past five years, only seven were television originals.

Producing Television Dramas

From the experience gained and the work done in producing and televising one-act plays, original sketches and adaptations at WRGB, the General Electric station, certain observations can be made and conclusions drawn.

1. Source material:

One-act plays written for the theater can be directed from the original manuscript with slight rewriting for television. However, many stage plays will undoubtedly be rewritten and adapted to take advantage of television's scope of action and pictorial possibilities.

Radio sketches will probably be used for television. More ingenuity and inventiveness will be required to adapt the radio play to television than to adapt the stage play. The producer will have to employ every facility of slide and film sequence to bridge the many scene changes of the usual radio play for a smooth flowing camera story.

Original dramas will become televi-

sion's main source of story material. Specially written stories, which are planned to utilize all the pictorial effects of the medium to develop scene sequence, should have a greater dramatic impact and should hold interest more easily. By knowing the medium through which the story is to be projected, the skilled playwright or script writer automatically uses the devices at hand to present and develop his characters and story to intrigue his audience.

Short stories and magazine fiction will undoubtedly be adapted for television.

2. Planning the drama:

Television lends itself to unique picture sequences. Trick camera shots and special pictorial effects obtained by slides, film, drawings, and mixing of camera pictures, are possible with flexible multichannel control room equipment, by utilizing several cameras. The producer should take advantage of these effects.

Establishing the mood and setting of the play in the opening shot heightens interest. This can be accomplished by the use of slides, film on symbolic effects, with music or voice-over, lateral dissolves*, and montage* shots.

The producer should decide upon pictorial effects for titles, cast credits, and scene or intermission transition. Titles and credits may be announced by individual slides which are hand-sketched and lettered, or drawing can be made and filmed and the film sequence televised. Film sequences which set the mood or locale of the show can be used with the title slides, and can also be used for transitional effects.

The producer should consider if special film sequences should be shot for scenes difficult or impossible to reproduce in the limits of the studio. Film sequences can be shot on 16 mm. silent film with sound synchronized during performance, or accompanying sound can be recorded.

*See glossary box

The producer should consider the use of stock* shots for pictorial story effects.

3. Planning camera shots:

The play's action should be planned and directed to allow for a maximum of close-up* shots. The home audience wants to see performers and wants to see what they are doing. The close-up is one of television's ace cards and should be used wisely. Close-ups require planned camera movements so that cameras do not get tangled.

Camera shots must be planned to cover every bit of business and to advance the sequence continuity. The camera shots should be plotted during preliminary and run-through rehearsals, and should be edited and established during camera rehearsals. Remember, there are no retakes possible in the instantaneous shooting of television shows.

4. Rehearsal time:

Adequate preparation and rehearsal time must include casting, line reading, rehearsals to set character and action, runthrough rehearsals in the studio without cameras, and rehearsals with full camera and technical staffs. Complex dramas with technical effects will require more preliminary and studio rehearsal time than straight-forward action dramas. The time the producer spends planning camera shots and direction will save rehearsal time, resulting in a better production.

It is estimated from available records that the following time segments are adequate for dramatic productions:

Glossary of Television Terms

CLOSE-UP—A head and shoulder camera view of a subject.

LATERAL DISSOLVE—Involves a camera setup and control technique. One subject is held in the left field of one camera; a second subject in the right field of a second camera. One camera is dissolved over the other on the air.

MONTAGE—A series of three or more pictures achieved by dissolving one camera picture over another.

STOCK SHOTS—Film shots of people, objects or places taken from newsreels or motion pictures. Stock shots are used for pictorial value or story emphasis in televising studio programs.



Dramatic show, "The Eighth Step," presented by N. Y. touring group at WRGB.

Show	Advance Preparation	Without Camera	Camera Rehearsal
½ hr.	(Brought to studio by out- side group)	3 hrs.	2 hrs.
$\frac{1}{2}$ hr.	10 hrs.	5 hrs.	2 hrs.
1 hr.	(Brought to studio by out- side group)	5 hrs.	3 hrs.
1 1	20 hrs.		-
I nr.	ZU nrs.	10 hrs.	3 hrs.

5. Stage sets and playing areas:

Stage sets should be designed to reflect the mood of the play and, for most dramatic plays, should be realistic.

Playing areas in the stage set or sets should be planned for camera coverage to allow close-up, medium and long shots of performers and business.

Television sets should be designed to force performers into close-playing positions. In Noel Coward's Funed Oak, the Victorian living room was cut down in size for the television production, to force the stage-directed cast into close-playing areas which can be covered by television cameras.

6. Acting technique:

Actors must become familiar with the intimate, close-playing technique of television. The broad gestures and voice projection of the stage must be toned down to the intimacy of the living room. The microphone (which hangs overhead and is moved about by a boom man) picks up "normal" speech tones. The microphone level is set usually for the "middle" voice of the cast, and is varied up and down for the other members.

7. Costumes and make-up:

Costumes and make-up must ultimately

receive a great deal of attention by television producers, make-up artists, and costume designers. Costumes that melt into the background (same gray scale value as background) kill story interest. Costumes that stand out very sharply like a white dress in a group picture against a dark background steal eye-interest from the story action.

Make-up should make girls attractive looking on the home receiver. Most men acting in plays should use make-up, especially to strengthen a jaw or to get a better skin tone sympathetic to the television camera.

8. Repeat performances:

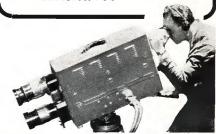
The WRGB set owners, who surveys show plan their television viewing, have enjoyed repeat performances of dramatic telecasts. Reports indicate that some of the audience for repeat telecasts are new and some saw the show on its original presentation. The audience seeing the show for the second time has enjoyed the repeat performance.

Experienced television performers invariably give a better performance than stars and feature players of the stage, radio or motion pictures. However, versatile actors of the stage, radio and motion pictures can usually be directed for television camera performance in a minimum of rehearsal time.

Road companies may become television regulars, playing independent station circuits from coast-to-coast. The necessity of long rehearsal time, and the cost of cast and stage sets may make television road companies an economical necessity.

ONE OF OUR MOST IMPORTANT AN-NOUNCEMENTS IN 19 YEARS OF PROVEN LEADERSHIP IN TRAINING PROFESSIONAL RADIO MEN!

Here it is! YOUR FIRST PRACTICAL STEP TOWARD A GOOD PAYING CAREER IN TELEVISION...



CREI Introduces a streamlined Home Study course in practical



AVAILABLE NOW — FOR THE FIRST TIME! Here's Your Chance to "Get in on the Ground Floor" of TELEVISION Opportunities.

Don't say, "I never had a chance!" Prepare NOW for the good paying jobs awaiting trained television engineers and technicians. Be in a position to command a "key" job in the growing TELEVISION Industry by preparing now with the type of thorough, practical TELEVISION Engineering training that the industry requires. The new CREI TELEVISION Engineering course is (1) A complete well-coordinated course of study that covers the entire field of practical TELEVISION Engineering (2) Presented in CREI'S professional, and proven Home Study form (3) Prepared by CREI'S experienced staff, based on actual experience in our own TELEVISION Studios and Laboratories, plus years of close contact with leaders in Television development. Here's your opportunity to be prepared for Telvision well ahead of competition, if you start NOW!

Capital Radio Engineering Institute Dept. T-9, 16th and Park Rd., N.W., Washington 10, D. C.

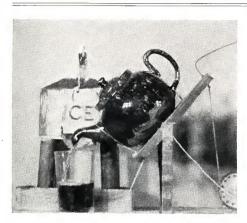
TELEVISION PARTY

MAIL COUPON FOR COM-PLETE FREE DETAILS AND OUTLINE OF COURSE

I you have had professional or amateur radio experience and want to prepare for opportunities in TELEVISION, let us prove to you we have the training you need to qualify. To help us intelligently answer your inquiry—PLEASE STATE BRIEFLY YOUR BACKGROUND OF EXPERIENCE, EDUCATION AND PRESENT POSITION.

	DIO ENGINEERI Rd., N.W., Wa	
describing the in Practical taching a b	Please send me c le new CREI hon Television Engine prief résumé of d present positio	ne study course ering. I am at- my experience,
Name		
Street		
City	Zone	State
Occupation		
☐ I am entit G. I. Bill	led to training ur	nder the

Member of National Home Study Council—National Council of Technical Schools—and Television Broadcasters Association.



The "rube goldberg" pot pours iced tea.

"Face to Face"

Style: Half-hour caricature quiz series, with Bob Dunn and emcee Eddie Dunn

Producer: Paul De Fur (agency)
Director: Ernest Colling (station)

Sponsor: Standard Brands for Tender Leaf Tea

Agency: J. Walter Thompson

Station: WNBT-NBC, N. Y.; 8 p.m., Sundays Reviewed: July 21, Aug. 11, and Sept. 1

This fast-paced chatter-and-cartoon session could be highly diverting but a sense of pressure-against-time and a note of falseness was created by emcee Dunn's bright-and-gay handling and by cartoonist Dunn's hearty efforts to be comic and his too-constant mentions of Tender Leaf Tea. The boys worked too hard to be funny. The cartoon game, Dunn's drawing caricatures of unseen guests, could be fun—viewers enjoying the challenge to the cartoonist's skill. Team also failed to collect on guests when brought face-to-face with drawings.

The iced tea commercials were zany and effective and should sell tea, especially the "rube goldberg" and inventive devices which tip a tea pot filling tall tumblers. The cartoon sessions, however, were overcrowded with iced tea drinking and with commercial mentions—opening mention; the trick commercial; giving packages of tea to participants (three); and a closing gag commercial involving a cartoon angle. Also "Sugar," the walk-on cutie who usually participates with the Dunn team in the commercials, distraced interest by her self-conscious giggle and lack of poise.

Production Details

¶ Camera coverage of emcee and cartoonist Dunn was well handled, utilizing many close-ups. Viewers could see Dunn sketching the caricatures from phone-description of participants.

¶ Three guest-participants, located in an NBC viewing room where they could watch the televised program, were rushed to the studio to come "face to face" with their caricaltyses.

¶ Program was hurried to crowd in comic relief, participants and commercial. Elimination of at least half the commercials would result in a better-paced show.

¶ Gag and trick commercials really worked, except a Ponce-de-Leon fountain gag that missed completely.

¶ Microphone coverage could be improved. At times one or the other Dunn was off-mike, making it difficult to hear what was being said. Aural perspective in tele must be achieved by some means creating an across-the-room feeling and at the same time picking up the voices.

"Geographically Speaking"

Style: 15-minute travelogue film series, with Mrs. Carveth Wells

Producer: Wesley McKee (agency)

Director: Roger Muir (station)
Sponsor: Bristol-Myers for Mint-Rub and

Trushay

Agency: Young & Rubicam

Station: WNBT-NBC, N. Y.; 8:15 p.m., Sun-

Reviewed: July 14 and 21, Aug. 12, Sept. 1

Travelogue series featuring films made by Mrs. Carveth Wells, with Mrs. Wells's voice on the sound track, takes viewers to Singapore, Australia, India, Mexico, etc. While not particularly suitable for television—too many long shots which cannot be seen on the receiver screen—each program contained some intriguing odd bit of information. Problem is to get viewers to watch the full film program.

Commercials for both Minit-Rub and Trushay, while a trifle long, were sufficiently novel—film cartoons—to amuse and sell painlessly. Announcer's voice backed the cartoon stories and was well paced.

Production Details

¶ Either one or the other product was featured by a before and after showing of the commercial cartoon film.

¶ Cartoon film commercial consisted of a series of situation line drawings (about a dozen) which related the story, for instance, of Annie, her red hands and romance through Trushav.

¶ Film clip of Mrs. Wells with camera in a jungle scene introduced the travelogue.

"DuMont Telesets"

Style: Spot commercial (75 seconds)

Producer: John Pinto

Technical Director: Frank Bunetta

Sponsor: DuMont Laboratories, Inc.

Agency: Buchanan

Station: WABD-DuMont, 8:30 p.m., Tuesdays

Reviewed: Aug. 6

Spot commercial, selling DuMont telesets, consisted of photographic slides of the receivers with live announcer's voice backing title cards and slides. Spot opened too fast, without giving viewers time to coordinate what they were seeing on the screen with what they were hearing. Principal fault was with the photographs of receivers which were too dark for viewers to see telesets clearly.

Spot announcements, with recorded voice backing slides, are being telecast daily. Plans include making one-minute films.



Ed and Pegeen at home on television.

"The Fitzgeralds"

Style: Half-hour informal visit with The Fitzgeralds

Producer: Harvey Marlowe (ABC)

Technical Director: Frank Bunetta Sponsor: Gertz Dep't. Store (Jamaica, N. Y.) Agency: American Broadcasting Company

Set: Bob Bright

Station: WABD-DuMont, N. Y., 8 p.m., Tues. Reviewed: July 9 and 16 (For the Record)

Radio's informal Mr. and Mrs. show, The Fitzgeralds, has all the makings of a cooperative commercial but not as produced off-the-cuff. Program needs more than a last-minute slaptogether theme, built around a guest, and Pegeen Fitzgerald requires more camera and stage experience. She must learn to be at ease chatting with her husband Ed and with their guests. Viewers, as evidenced by Wanamaker shoppers, kept wanting to see Pegeen in close-up. Producer Marlowe, however, concentrated on Ed who stole the show to the extent of constantly sending Pegeen off set to the sound of a banging door which was not only disconcerting but illogical and ill-bred.

Handling of Col. Stoopnagle, guest, was well coordinated with the zany telephone conversation between him and Ed only to camera-discover them side by side. However, dragging in the comic secretary took up time but added nothing to the show.

Pegeen, always too ready to plug the sponsor's product, did a top visual selling job, modeling a man's white shirt, available at Gertz's, while pointing up its values and demonstrating how the ladies can wear them. However, Pegeen's breaking into the parlor game to plug products was in bad taste.

Format is good if polished up. Even informal shows must have a written script for production coordination.

Production Details

¶ Show, a series of four tested for video cameras, was well handled by producer Marlowe, working with last-minute details.

Setting, a living room, by Bob Bright was excellent. It had a lived-in atmosphere.

¶ Gertz's selection of merchandise to be shown was easy to handle and could be well displayed on camera.

"CBS Television News"

Style: 15-minute series, with newscaster Milo Bolton and animated news coverage

Producer: Wesley McKee (agency) Director: Henry Cassirer (station)

Sponsor: Gulf Oil

Agency: Young & Rubicam

Station: WCBW-CBS, N. Y.; 8:15 p.m.,

Thursdays

Reviewed: July 18, August 15, Sept. 5.

Little change has occurred in CBS's telenews format under the Gulf sponsorship. Added interest is the visual handling of commercials which utilize visualization devices developed

by WCBW news department.

Milo Bolton makes a better than adequate newscaster, having ease of manner and personal charm. However, Bolton, although not guilty to the same extent as most commentators, reads from script, and his frequent looking down is distracting. It conveys an unfamiliarity with events, giving news a second-person report flavor which detracts from the immediacy of

Production Details

¶ Press news stories with headline importance were included in the news coverage as well as local film footage, shot by WCBW cameramen.

¶ News stories were visualized by means of film, photographs, animated maps, graphs, and other pictorial methods.

¶ In the interview spot, Bolton handled himself well, greeting, introducing, and chatting with the person-in-the-news-making viewers feel that they had met and knew the guest.

¶ Commercial was well presented, being not overlong. Gulf oil and services were stressed in the programs caught. Closing spot introduced, by photograph, a local Gulf dealer, and signed off with the Gulf orange disk and Gulf's slogan, "For the life of your car, go Gulf."

"Serving Through Science"

Style: Half-hour series, with live-studio introduction (announcer or announcer and guest) Producer: Charles J. Durban Technical Director: Frank Bunetta Sponsor: United States Rubber Company Station: WABD-Du-Mont, N. Y.; 9 p.m. Tues. Reviewed: July 16, Aug. 6, and Sept. 3

While not spectacular, the half-hour semiscientific and educational film series offers solid entertainment to viewers. Films selected are noteworthy, informative, and edited for television presentation. Negative item is the announcer whose severe manner is an invitation to turn off receivers.

Films, obtained from the Department of Agriculture, the Museum of Natural History, and other such sources, depicted 4-H Club activities, Freezing Foods, Nature Studies, etc.

A series of six program with Encyclopaedia Britannica film, Dr. Miller McClintock, guestnarrator, started on August 27.

Commercial was limited to opening and closing slide credit, "United States Rubber Company presents," and to brief company mention by the announcer.

Production Details

Production of studio portion could be vastly improved. Announcer held in close up, solemnly read his copy, introducing either film or guest. A little warmth and hospitality would do much to have viewers sit back comfortably to watch the show. Cutting from a close-up of the announcer to a close-up of the guest scientist, Dr. Robert Cushman Murphy, was disconcerting. Both men were never shown together. Greeting world travelers and scientists who are to introduce their films adds to the general enjoyment of viewing such films.

¶ Film titles, credits and captions were in some instances too wide and were partially lost on the teleset screen.

"Your Esso Television Reporter"

Style: 10-minute newsreel series Producer: John R. Allen (agency) Editor-commentator: Paul Alley (station) Sponsor: Esso Marketers for Esso gasoline Agency: Marschalk & Pratt Station: WNBT-NBC, N. Y.; 7:50 p.m.; Mon. & Thurs.

Reviewed: Aug. 5, Aug. 12, Sept. 2

Esso will always have a ready audience for NBC's well-integrated newsreel, which includes at least one and frequently two film reports of spot news shot the day of the broadcast. On Aug. 5, for instance, film included picture coverage of the Coast Guard's demonstration of a sea rescue by helicopter, Mayor O'Dwyer at Carnegie Hall for shooting movie scenes, art students at Provincetown, sailing class at Larchmont, and 5-day bicycle meet across France.

Esso commercial, also on film, opened with a car driving up to an Esso station, carrying out company's slogan, "Happy motoring starts at the Esso sign." Closing commercial included a montage of vacation sports, and featured Esso services, such as road maps, etc.

Production Details

 Newsreels usually include five or six clips of pictorial coverage. Film is made by NBC cameraman and edited by Paul Alley.

¶ An average of 3 to 1 and a better than 2 to 1 ratio of film footage to used film is maintained. For instance, about 150 feet of film was shot covering Carnegie Hall movie making and 79 feet were included in the news-

¶ Clips from abroad are obtained from Actualite Français with which NBC has a working arrangement.

¶ Well-edited newsreel is enhanced by descriptive comment, read effectively by Paul Alley.

¶ Film is shot on 35mm and televised in positive-or in negative when time is pressing.

¶ Commercial closing on an Esso sign on the back of a truck as it faded down a road, read better on paper than it appeared on the screen. A new film was made, eliminating the truck.

> A Complete Film Service For Television Stations and Sponsors

Television Film Industries Corp. 340 Third Ave. (at 25th St.) N.Y. 10, N.Y. Phone LExington 2-6780-1-2-3 "Woman's World"

Style: Half-hour drama with integrated commercial.

Director: Tom Moore, Jr. (WOR) Producer: Edith Kelly (WRGB) Technical Director: Dorothy Martin Sponsor: Lehn & Fink, for Tussy Beauty Prepa-

Agency: Grey Advertising Agency

Settings: Jim Fisk

Station: WRGB-GE, Schenectady, N. Y. Reviewed: July 12, 7:30 p.m. (For the Record)

Giving a beauty demonstration a dramatic setting basically has the double appeal of intriguing women viewers while selling them. The WOR half-hour for Tussy, while loosely evolved, suffered more from production than in basic concept. Prime fault was the lack of close-ups. Viewers never really saw the worka-day mother before her transformation and even when her daughter's escort was supposed to react to the glamorized lady, it was shown on long shot, carrying no conviction to viewers.

The demonstration itself-which took place in a bedroom set-was the best part of the show. Jean Lightner, a Tussy demonstrator from Binghamton, N. Y., skillfully showed the products and their application. Camera work here was effective, getting close-up of jars and the rejuvenated lady.

NEWS CAMERA COVERAGE

Anything · Anywhere · Anytime 35mm - 16mm - Sound - Silent EMERSON YORKE STUDIO 35 W. 45 St., New York City Phones: BRyant 9-9080 - 9-9091

complete service ... including show-building and production — for agencies and television stations . . .

lee wallace

TELESHOWS

current teleshows on:

WNBT

WCBW

222 East 40th Street MU 4-3529

Sports Winning Out

(Continued from Page 29)

ABC film coverage of special events which the rubber company underwrote for television include The Automotive Golden Jubilee activities in Detroit and the Minneapolis Aquatennial, and more recently the Cleveland Air Races. U. S. Rubber is given first refusal on most ABC filmed special events. After the video showing, the company inserts a sales story (on film) promoting the product used in the special event—golf balls, for instance, with the Tam O'Shanter footage. The re-edited film is sent to dealers and distributors who have expressed keen enthusiasm in the combine promotion-newsreel film.

Food and Drugs

Standard Brands, not overly sportsminded, participated in the NBC-WNBT television coverage of the Professional Tennis Matches at Forest Hills, N. Y. this summer, for Chase and Sanborn Coffee. Oral and slide commercials were inserted.

Bristol-Myers, although not going in for remote sports pick-ups, has signed a half-hour 52-week contract with CBS which includes a fifteen-minute studiofilm show, Sports Almanac, for Vitalis. Program features Bob Edge, WCBW sports editor, as narrator-commentator of the film clip program which highlights shots from sports films and newsreels down through the years—each program being devoted to a special sport. The commercial is on film and is directed strictly at men, with the hope of interesting women on the sidelines. The sports program shares the WCBW Sunday night half-hour (8:30 to 9) with Cartoons by Hoff for Ipana. Doherty, Clifford & Shenfield ad agency handles the account, supervising the film commercials, and studio productions. Half-hour package, it is understood, is wrapped up for less than \$2,000 per program. (Bristol-Myers, through Young & Rubican, is concurrently sponsoring Geographically Speaking film travelogue on WNBT-NBC, Sundays, 8:15 to 8:30 p.m.).

Other Sports Sponsors

The Berkray Corp. of Troy, N. Y., manufacturer of men's sport clothes, tested television with ABC's film coverage of the Hopeful Stakes at Saratoga on August 31. Newsreel film was telecast over WABD-DuMont in New York City and WRGB-GE in Schenectady, N. Y. The advertising agency, Henry Bach Assoc., reports that its client is considering further use of television.

More recent video enthusiast is B. F. Goodrich Company which is currently checking up on available sports events for possible sponsorship through its ad agency, BBD&O. Indications are the company will contract for either the wrestling or boxing matches from the Rainbo Arena, Chicago, Ill., to be televised over WBKB, the Balaban and Katz station. ABC has the television rights.

Agencies and stations report active interest by many prospective clients for television sports and special events. Outdoor pickups make an attractive and, in the long run, economical package. They eliminate worrisome problems of studio rehearsals, talent costs, and script writer aches, leaving the ad agency free to concentrate on commercial copy. Furthermore, sports attract an enthusiastic audi-

What's What On Receivers

(Continued from Page 28)

A. B. Rodner, Jr., of the Commonwealth Edison Company of Chicago, cited a recent survey made by the utility company which reported 575 people of 2,000 interviewed as listing television receivers among the electrical appliances they would buy first, when available.

Telecasters, advertising agencies, and sponsors are interested in the number of television homes-in television "circulation." From prewar and current studies, made by operating video stations, the average home audience per set has been shown to be six—usually a family of four and two guest-viewers. The conservative estimate by manufacturers of 50,000 receivers to be in the hands of dealers and the public by the end of 1946 assures a total television audience of 300,000 this year; by the end of 1947 an additional audience of 1,200,000 (200,000 set output). These immediate "circulation" figures-while not impressive-do not include prewar sets in use (about 7,000) nor is the additional factor that two viewers (neighbors) per set are a rotating audience, making the immediate potential numbers of people reached greater than 300,000 and 1,500,000. This audience will be concentrated in operating television station areas, with some tele stations linked with regional networks.

Professional and Trade Announcements

1-Inch Professional and Trade Announcements \$15 per insertion. Larger space and yearly rates upon request. THE TELEVISER, 11 W. 42nd St., N. Y. 18, N. Y.

Available for Television Feature Films & Shorts Send for Lists

Hoffberg Productions, Inc. 620 Ninth Ave., N. Y. C.

TELEVISION RIGHTS! FILM EQUITIES CORP.

1600 BROADWAY **New York City**

Write for Information on JULIEN BRYAN PRODUCTIONS Available for Television

International Film Foundation 1600 Broadway, Suite 1000, N. Y.

Commercial Radio Equipment Co.

Radio Engineering Consultants AM-FM-TV

International Bldg., Washington, D. C. Kansas City, Mo., 603 Porter Bldg. West Coast: Hollywood, Cal.

Grether Radio Electronics Corporation

Specialists in
Installation • Field Engineering
Julius L. Grether — Wm. P. Grether
118 Brooke Ave., Norfolk, 10, Va.

INTERNATIONAL 16mm. CORPORATION

Producers of 8mm. and 16mm. Films
35mm. & 16mm. Prints On
Music Appreciation
165 West 46th Street New York 19, N. Y.
BRyant 9-4755

CONSULTING RADIO ENGINEERS

EARLE BLDG., WASHINGTON, D. C. NATIONAL 6513

CARDS TITLE

ACADEMY DISPLAY SERVICE

136 W. Broadway, N. Y. C. BArclay 7-2287

"DEPTH OF FOCUS"

VIEWS OF TELEVISION BY THE EDITORS

The TBA Conference . . .

BY NOW we needn't remind our readers of what we consider the most important event of the year—the TBA's 2nd Annual Conference and Exhibition—which opens for two days on October 10 at the Waldorf-Astoria in New York City.

If you haven't made your reservation to attend this important Conference, we suggest you do so today. There's a

coupon for this purpose on Page 16.

The success of this all-important get-together will contribute in large measure to the immediate success of television itself.

A big, enthusiastic attendance will give notice to all concerned—the FCC, manufacturers and suppliers of television equipment, radio and television managements, advertisers, and most of all, the public itself—that the television industry really means business!

If there ever was a time when television needs the support of all its friends, and if there ever was a time when television's friends can show their support and be counted upon, this is it!

And while you're in New York, you might also visit the Electronics Exposition at the Grand Central Palace which opens October 14 for five days.

Caveat Emptor? . . .

IN THE rush to get television receivers into the hands of eager purchasers, a few manufacturers are probably committing the error of producing home receivers that do not measure up to minimum standards of good engineering design and workmanship.

There already have been reports of recently marketed receivers virtually disintegrating after brief usage, probably

due to faulty materials and poor craftsmanship.

If this condition brought about by a few "marginal" producers continues to exist, what steps can the rest of the industry take to counteract the bad impression these first sets are already making?

The best antidote, of course, would be the immediate availability for distribution of television receivers in mass quan-

tities.

Perhaps, an industry-wide advertising campaign may become necessary to convince Mr. and Mrs. America that every reputable manufacturer of a television receiver stands squarely behind his product, ready to guarantee the life and service of each receiver sold.

Television Careers . . . * *

MANY young persons contemplating television will be heartened at the knowledge and sight of other young people already finding their places in television. Or perhaps that thought should be stated conversely, and more ac-

curately, thus: "Television is beginning to find places for many young people who are proving their ability and creativeness as producers and television showmen."

Top on the list is Harvey Marlowe, who rose from free-lance director and actor for WOR, to executive producer for ABC. Also at ABC is the no less distinguished Paul Mowrey, who rose from CBS tele commercial manager to video chief at ABC. Also prominent on the list of successful young television men is Lee Wallace who shot up from free-lance actor to independent television producer, whose well-known "improvisations" were so well received by CBS and hailed by the trade press as a step forward in reducing actor's rehearsal time and reducing production costs. Only recently NBC purchased a Lee Wallace musical package.

Each station already has its share of young persons, whose burning faith in television is beginning to pay off in dollarsand-cents and not only in trade magazine notices, as heretofore.

Our advice, however, to those hundreds of young people who are beginning to look to television as a possible career is to look realities in the face and to realize that television is not yet ready for most of them, and perhaps will not be for a year or more. What then? Our unsolicited advice: Stay in whatever job you are, or obtain a job in an allied field (like radio, motion pictures, the stage, or advertising) and keep abreast of all television developments by avidly reading the trade press, newly published books, and by taking helpful courses. When the time comes, you'll be ready.

Dept. Store Television . . .

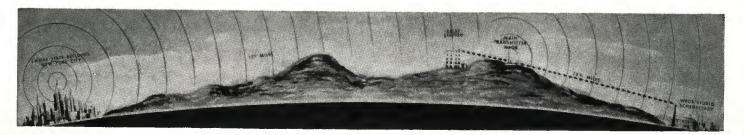
THE day will no doubt come when department stores are courted more assiduously as the purchasers of intra-store television equipment. Until now most manufacturers of television equipment have been content with only side-glances. With the exception of one company, almost nothing has been done to cultivate this vast medium potential.

No manufacturer has given much thought to designing special equipment, special cameras and receiver units, to fit the specialized needs and limited budgets of department stores. No well thought out advertising and program plan has been presented to the stores.

American Theater Wing . . .

THE American Theater Wing, which was organized to provide servicemen with entertainment during the war, is to be commended for sponsoring an 8-week series of television lectures for returning GI's this past summer.

Any organization that helps further a more thorough understanding of television, helps advance television's growth as a commercial broadcasting medium.



Can You BEAT These Broadcasters for Purchasing Power?...

—Among Them Are Stations Who Will Spend Millions for Television Equipment — All Televiser SUBSCRIBERS

VATE	
	D 4 1 0
NALE	Portland, Oregon
KRON	Omaha Neb
IZDOTA	Omana, 14cb.
KDKA	Pittsburgh, Pa.
KDTH	Dubusus Is
VDIU	Dubuque, 1a.
KDYI.	Salt Lake City, Utah
IZECA	TT 11 1 C.1
KECA	Hollywood, Cal.
KELO	Siony Falle S D
IXLLO	
KEX	Portland, Ore.
VUAD	Fairbanka Alaska
VLVV	randanks, Maska
KFBI	Wichita, Kansas
IZEI	I A-colos Col
Kr1	Los Angeles, Cal.
KFNF	Shenandoah, Iowa
TEXAL CO.	Portland, Oregon Omaha, Neb. Pittsburgh, Pa. Dubuque, Ia. Salt Lake City, Utah Hollywood, Cal. Sioux Falls, S. D. Portland, Ore. Fairbanks, Alaska Wichita, Kansas Los Angeles, Cal. Shenandoah, Iowa San Diego, Cal. Longview, Tex. St. Louis, Mo. Hollywood, Cal.
KFMB	San Diego, Cal.
KERO	Longview Tev
KIKO	Longview, Ica.
KFUO	St. Louis, Mo.
LECTRO	TT-11 1 C-1
Kr w D	nonywood, Car.
KEXM	San Bernardino Cal.
150 4	C 1 W// 1
KGA	Spokane, wasn.
KHO	Spokane Wash
1711Q	opokane, wash.
KGB	San Diego, Cal.
KCEP	Long Beach Cal
AGER	Duig Deacii, Cai.
KGFI	Los Angeles, Cal.
VCLII	Billings Montage
VQUT""	gs, montana
KGKO	Ft. Worth, Tex.
VCNC	Amarilla Tan
VQIAC	Amarmo, rex.
KGW	Portland, Ore.
IZIT	Idaha Esti Idaha
NID	Idano Fan, Idano
KIDO	Boise, Idaho
KIDO	Seattle Wash
KIKO	Scattle, wash.
KLO	Ogden, Utan
KIZ.	Denver, Colo.
TZACA	Shanan Joseph Towns
KMA	Snenandoan, Iowa
KMBC	Kansas City, Mo.
KMED	Medford Ore
KWIED	Tree 1
KMOX	Webster Grove, Mo.
KMPC	Los Angeles, Cal.
173.437D	Donvior Colo
NIVI I N	Deliver, Coro.
KNX	Los Angeles, Cal.
KOA	Denver, Colo.
KOII	Omaha Nah
KOIL	Omana, Neb.
KOL	Seattle, Wash.
KOMO	Seattle Wash
KOMO	Ocatic, Washi
KONO	San Antonio, Texas
KOTA	Rapid City, S. D.
KOV	Dhamir Ariz
KOY	
KPO	San Francisco, Cal.
KPO	San Francisco, Cal.
KPO KPRO	San Francisco, Cal. Riverside, Cal.
KPO KPRO KQV	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa.
KPO KPRO KQV KRGV	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex.
KPO KPRO KQV KRGV	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex.
KPO KPRO KQV KRGV KRNT	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia.
KPO KPRO KQV KRGV KRNT KROW	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal.
KPO KPRO KQV KRGV KRNT KROW	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal.
KPO KPRO KQV KRGV KRNT KROW KSD	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo.
KPO KPRO KQV KRGV KRNT KROW KSD KSTP	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn.
KPO KPRO KQV KRGV KRNT KSD KSTP KSWO.	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla.
KPO KPRO KQV KRGV KRNT KROW KSD KSTP KSWO	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla.
KPO KPRO KQV KRGV KRNT KSD KSTP KSWO KTAR	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla. Phoenix, Ariz.
KPOKPROKQVKRGVKRNTKROWKSDKSTPKSWOKTARKTHT	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla. Phoenix, Ariz. Houston, Texas
KPO KPRO KQV KRGV KROW KSD KSTP KSWO KTAR KTHT	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla. Phoenix, Ariz. Houston, Texas
KPOKPROKQVKRGVKRNTKROWKSDKSTPKSWOKTARKTHTKTUC	San Francisco, Cal. Riverside, Cal. Pittsburg, Pa. Welasco, Tex. Des Moines, Ia. Oakland, Cal. St. Louis, Mo. St. Paul, Minn. Lawton, Okla. Phoenix, Ariz. Houston, Arizona
KTUI	Tulsa. Okla.
KTUI	Tulsa. Okla.
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Sait Lake City, Otan
KTUL KTUA	Tulsa, OklaSalt Lake City, Utah
KTUL KTUA	Tulsa, Okla. Salt Lake City, Utah
KTUL KTUA	Tulsa. Okla.

WABC	New York, N. Y. Atlanta, Ga. Chicago, Ill. Mobile, Ala. Chattanooga, Tenn. Louisville, Ky. Baltimore, Md. F. Worth, Texas Wilkes-Barre, Pa. Chicago, Ill
WAGA	Atlanta, Ga.
WAIT	Chicago, Ill.
WALA	Mobile, Ala.
WAPO	Chattanooga, Tenn.
WAVE	Louisville, Kv.
WBAI	Baltimore Md
WBAP	Ft Worth Texas
WBAY	Wilkes-Barre Pa
WRRM	Chicago, Ill
WDDM	Buffalo N V
W/DE7	Chicago, III Buffalo, N. Y. Chicago, III. Macon, Ga. Columbus, Ohio Charlotte, N. C. Boston, Mass. Pittsburgh, Pa. Baltimore, Md. Philadelphia Pa
W DEZ	Chicago, Inc.
W DML	C-1 b Obio
W BIN5	Columbus, Onio
WB1	Charlotte, N. C.
WBZ	Boston, Mass.
WCAE	Pittsburgh, Pa.
WCAO	Baltimore, Md.
WCAU	Philadelphia, Pa.
WCBM	Philadelphia, Pa. Baltimore, Md.
WICCO	Minneapolic Minn
WCLO	Janesville, Wisc.
WCOS	Columbia, S. C.
WDAY	Fargo, N. D.
WDRC	Janesville, Wisc. Columbia, S. C. Fargo, N. D. Hartford, Conn.
WEAN	Providence, R. I.
WEBC	Hartford, Conn. Providence, R. I. Duluth, Minn. Boston, Mass. Concord, N. C. Tupele, Miss. New York, N. Y. St. Louis, Mo. Dallas, Texas
WEEI	Boston, Mass.
WEGO	Concord, N. C.
WELO	Tupele, Miss.
WEVD	New York, N. Y.
WEW	St. Louis, Mo.
WFAA	Dallas, Texas
WFBC	Greenville, N. C.
WFBM	Indianapolis, Ind.
WEBR	Baltimore Md.
WEDE	Flint Mich
WEEA	Manchester N H
WEII	Dallas, Texas Greenville, N. C. Indianapolis, Ind. Baltimore, Md. Flint, Mich. Manchester, N. H. Philadelphia, Pa. Youngstown, Ohio Tampa, Fla. Miami, Fla. Augusta, Ga.
WENT	Voungetown Ohio
W FIVI J	Tampa Fla
W.E.A	Miami Fla
WILL	Miami Fla
WGDS	Augusta Ca
WGAC	Codortown Co
WGAA	Cedartown, Ga.
WGAL	Lancaster, Pa.
WGAN	Portiand, Maine
WGAR	Augusta, Ga. Cedartown, Ga. Lancaster, Pa. Portland, Maine Cleveland, Ohio
WGKVCh	nariestown, West Va.
WGL	narlestown, West Va. Ft. Wayne, Ind. Chicago, Ill.
WGN	Chicago, III.

WGNC	Gastonia, N. C. Newburgh, N. Y.
WGNY	Newburgh, N. Y.
WGRC	Louisville, Kv.
WGST	Atlanta, Ga.
WHAM	Rochester N Y
WHAS	Louisville Kv
W/LIR	Louisville, Ky. Atlanta, Ga. Rochester, N. Y. Louisville, Ky. Kansas City, Mo.
WHRC	Canton Ohio
WHIO	Canton, Ohio Dayton, Ohio
WIII	Claveland Ohio
WILLIA	Cleveland, Ohio
WINC	Now York N. Y
WILLO	New York, N. Y. Des Moines, Iowa Hartford, Conn. Indianapolis, Ind. Oreland, Pa.
W II O	Des Monies, Iowa
WHID	Indiananalia Ind
WIBC	Indianapolis, Ind.
WIBG	Oreland, Pa.
W 1D W	Topeka, Kansas
WIND	Chicago, III.
WING	Dayton, Ohio
WINS	New York, N. Y.
WINX	Washington, D. C.
WIP	Philadelphia, Pa.
WIRE	Indianapolis, Ind.
WITH	Baltimore, Md.
WIZE	Springfield, Ohio
WJBK	Chicago, Ill. Dayton, Ohio New York, N. Y. Washington, D. C. Philadelphia, Pa. Indianapolis, Ind. Baltimore, Md. Springfield, Ohio Detroit, Mich. Chicago, Ill. Detroit, Mich. Cleveland, Ohio New York, N. Y. Youngstown, Ohio
WJJD	Chicago, Ill.
WJR	Detroit, Mich.
WJW	Cleveland, Ohio
W JZ	New York, N. Y.
WKBN	Youngstown, Ohio Kokomo, Ind.
WKMO	Kokomo, Ind.
WKY	Oklahoma City, Okla.
WLAC	Nashville, Tenn.
WLAW	Lawrence, Mass.
WLIB	New York, N. Y.
WLW	Cincinnati, Ohio
WMAL	Washington, D. C.
WMAM	Kokomo, Ind. Oklahoma City, Okla. Nashville, Tenn. Lawrence, Mass. New York, N. Y. Cincinnati, Ohio Washington, D. C. Marinette, Wisc.
WMAZ	
WMBD	Péoria, Ill.
WMBG	Richmond, Va.
WMBR	Jacksonville, Fla.
WMCA	New York, N. Y.
WMIF	Daytona Beach, Fla.
WMPS	Memphis, Tenn.
WMUR	Richmond, Va. Richmond, Va. Jacksonville, Fla. New York, N. Y. Daytona Beach, Fla. Memphis, Tenn. Manchester, N. H. Boston, Mass
WNAC	Boston, Mass.
WNBF	Binghamton, N. Y.
WNBH	Boston, Mass. Binghamton, N. Y. New Beford, Mass.

WNEW	New York, N. Y.
WNOE	New Orleans, La. New York, N. Y. New York, N. Y. San Antonio, Texas
WNYC	New York, N. Y.
WNYE	New York, N. Y.
WOAI	San Antonio, Texas
WOC	Davenport, Iowa
WOI	Ames. Iowa
WOI.	Washington D. C.
WONS	Hartford, Conn.
WOR	Davenport, Iowa — Ames, Iowa — Washington, D. C. — Hartford, Conn. New York, N. Y.
wux	Umana. Neb.
W/OW/O	Fort Wayne Ind
WPAT	Paterson, N. J. Jacksonville, Fla. Philadelphia, Pa. Raleigh, N. C. Reading, Pa.
WPDO	Jacksonville, Fla.
WPEN	Philadelphia, Pa.
WPTF	Raleigh, N. C.
WRAW	Reading Pa
WRBI.	Columbus, Ga.
WRC	Columbus, Ga. Washington, D. C.
WRDW	Augusta, Ga.
WREC	Augusta, Ga. Memphis, Tenn. Knoxville, Tenn. Dallas, Texas Gainesville, Fla.
WROL	Knoxville, Tenn.
WRR	Dallas, Texas
WRUF	Gainesville, Fla.
WSAI	Cincinnati, Ohio
WSAN	Cincinnati, Ohio Allentown, Pa.
WSB	Atlanta, Ga
WSBA	York, Pa.
WSIS	.Winston-Salem, N. C.
WSBC	Chicago, Ill.
WSNI	Bridgeton, N. J.
WSOO	Sault St. Marie, Mich.
WSPB	Sarasota, Fla.
WSPD	Toledo, Ohio
WSPR	Springfield, Mass.
WTAG	Worcester, Mass.
WTAR	Norfolk, Va.
WTCN	Winston-Salem, N. C. Chicago, Ill. Bridgeton, N. J. Sault St. Marie, Mich. Sarasota, Fla. Toledo, Ohio Springfield, Mass. Worcester, Mass. Norfolk, Va. Minneapolis, Minn. Hartford, Conn. Milwaukee, Wisc. E. St. Louis, Ill. Toledo, Ohio
WTIC	Hartford, Conn.
WTM J	Milwaukee, Wisc.
WTMV	E. St. Louis, Ill.
WTOL	Toledo, Ohio Washington, D. C.
WTOP	
WTRC	Elkhart, Ind.
WTTM	Trenton, N. J.
WTSP	Elkhart, Ind. Trenton, N. J. St. Petersburgh, Fla. Washington, D. C.
WWDC	Washington, D. C.
W/ W/ I	Detroit, Mich
W/W/T	New Orleans, La.
WWSW	Pittsburgh, Pa. Detroit, Mich.
WXYZ	Detroit, Mich.

For Full Information About Rates and Circulation, Write



Televiser



JOURNAL OF VIDEO PRODUCTION, ADVERTISING & OPERATION

11 WEST FORTY-SECOND ST., NEW YORK 18, N. Y.

IRWIN A. SHANE, Publisher . JUDY DUPUY, Edito

TELEVISER TELEVISER 11 WEST FORTY-SECOND STREET, NEW YORK 18, N. Please Enter My POSITION Subscription Subscription for NAME ONE YEAR FIRM. Order AT \$3.00 ZONE TWO YEARS **ADDRESS** Form AT \$5.00 STATE THREE YEARS CITY AT \$6.50 POSITION Remittance NAME is Enclosed Send It FIRM Bill Company Today Bill Me ZONE ADDRESS. Add 50c for Canada, STATE \$1.00 for Overseas.





BUSINESS REPLY CARD

FIRST CLASS PERMIT No. 43981, Sec. 510, P. L. & R., NEW YORK, N. Y

Televiser

11 W. FORTY-SECOND ST.

NEW YORK 18, N. Y.

TELEVISER

Subscription

Order

Form



Send It