PROBLEM JOURNAL OF VIDEO PRODUCTION, ADVERTISING & OPERATION



ENTERED AS SECONDICLASS MATTER, AT THE POST-OFFICE, NEW YORK, N.

GIMBEL BROS.' FASHIONS ON NBC VIDEO NETWORK



→ WHO'LL PRODUCE TELEVISION !— SEE PAGE 9 → AUDIENCE PROGRAM PREFERENCES — PAGE 10

AND 38 OTHER FEATURE ARTICLES OF CURRENT INTEREST

to the RADIO INDUSTRY

Whether Amplitude Modulation . . . Frequency Modulation . . . or Television – dependability is a *must* for all broadcast equipment.

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Newark 1, N. J.

Federal Telephone and Radio Corporation

More than

Vol. 1, No. 3 . . .

Spring, 1945

With the accelerated war tempo in Europe and the Far East, television planning and promotion has been noticeably stepped up in recent weeks. Witness the RCA-NBC demonstration of postuar television for the press on March 15, and DuMont's demonstration of its 20-inch direct viewing tube before the TBA directors; and in Chicago of Admiral Corporation's and Marshall Field & Co.'s embarkation on regular television schedules; the Blue's entrance into television and the steadily increasing number of applications for television channels: of Gimbel Bros. use of tele-relays in telecasting a fashion show, and R. H. Macy's renewed television time at WABD: of NBC's greatly expanded television activity—all harbingers of television, all of which The TELEVISER will report, comment and analyze for its readers in the months to come.

IRWIN A. SHANE Editor & Publisher

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Sirs: I want to take this opportunity to congratulate you and your staff on the excellent editorial content of your magazine. . . The splendid material you have exhibited in past issues, and I'm certain you will continue to offer in all future ones, contributes materially to a more thorough knowledge of television by all those interested in the furtherance of this new unparalleled medium of communication.

ALLEN B. DU MONT, President Allen B. DuMont Laboratories, Inc. Passaic, N. J.

Sirs: May I offer congratulations on your recent issue of TELEVISER. I feel that the variety of content is exceptionally good and heartily recommend that you keep up the good work. ... I am sure that a magazine such as yours will be a great asset to the many aspirants into this new field called Television.

PAUL B. MOWREY, Television Director The Blue Network

New York City.

Sirs: This past Sunday I spent a most pleasant hour reading Volume I, Number 2 of the TELEVISER. It hardly seems possible to me that such a comprehensive piece of reporting could be done in this period in the development of the video art. Every article is packed with interest and contributed much needed information to help all those who are involved in the postwar development of television broadcasting. . . . You are making a most valuable contribution to the postwar development of television broadcasting. You are helping to lay the groundwork which is so essential for the rapid development of the most promising of all new postwar developments . . . television. . . . Congratulations, and keep up the good work!

THOMAS F. JOYCE, Former Gen'l Mgr. Radio, Phonograph & Television Dept. Radio Corporation of America Camden, N. J.

Sirs: Congratulations on your first two issues. They are without a douht just "what the doctor ordered." Keep up the good work of keeping us informed. Would appreciate seeing more scripts with a few shots to illustrate.

HARRY BUBECK, Production Director National Broadcasting Company Chicago, 111.

Sirs: Your magazine arrived yesterday and 1 didn't take my eyes from the publication until I had read it from cover to cover. . . . Yes, my friends, you have tapped the vein and from what I have seen, you have begun your operations in a manner that will mean profit to you and your readers. . . . My short experience in the field of television leads me to disagree with some of the opinions expressed in the articles, but, by and large, the thinking behind those opinions is definitely constructive; and in many cases opens new avenues of thought for the television neophyte. . . . We, on this coast, are limited to a haphazard experience in this mighty field by the lack of adequate equipment. So, when a publication like yours comes along, we greedily drink in every word in the hope that we may absorb some of the ideas of your contributors. . . When the time arrives that we will be able to practice what we see preached in your magazine, those ideas will come in mighty handy as a springboard from which we may jump. . . . Keep those magazines coming my way, please. I don't want to miss a single issue!

SID SINGER

Columbia Broadcasting System Los Angeles, Calif.

Sirs: Will you please send me a copy of the latest issue of your publication? OVID RISO, Advertising Mgr. Philco Internat'l Corp. New York.

Sirs: Congratulations on the make-up and contents of the TELEVISER, and best wishes. LEE DE FOREST, Dir. of Research Lee De Forest Laboratories Los Angeles, Calif.

Sirs: I am quite enthused with your magazine as it is the only contact possible with television in Philadelphia. . . . P.S. Could I have another copy of the magazine? Someone else evidently likes it. They took it out of my file.

SCOTT MACGREGOR Robinson Recording Labs. Philadelphia. Pa.

Sirs: The comments and reactions received from your magazine are the most favorable I have ever heard on any publication to date. Everyone has said that it is the best magazine put out on the subject. No one who has seen it has gone away without purchasing a copy, or subscription, and I think that should speak for itself.

SUE WELDON, Exec. Sec'y Affiliated Committee for Telev. Hollywood, Calif.

Sirs: May I congratulate you on your efforts to make TELEVISER the perfect television magazine? You've certainly gotten off to an auspicious start. . . Best wishes for continued success with your splendid magazine. I am looking forward to the next issue!

AGNES GREW Grew Associates New York.

Sirs: I have just seen a copy of your magazine which arrived several days ago, and would very much like to enter a one year's subscription. . . . At the same time, may I ask if it would be possible to start this year's subscription with the first issue, so that in years to come, I may have a complete file of what should be a very helpful magazine?

THOMAS O'CONNOR Station WBAL Baltimore, Md.

Sirs: I am enclosing check for year's subscription to TELEVISER magazine. This is what I

have been looking for. VIRGIL V. SHARPE, News Editor Station KOIL Omedia Nickeyska

Omaha, Nebraska.

Sirs: The TELEVISER is the only magazine in the video field that can definitely be used as a textbook. No matter what the angle of interest in television, I find definite appeal and information in the TELEVISER.

C. J. WOODWORTH Music Division Radio Station WHK-WCLE Clevel.nd. Obio.

Sirs: After searching in vain for such literature on television as the TELEVISER, you can imagine with what enjoyment I devoured the current issue from "kiver to lid." The magazine is truly an answer to the need for publications on the new budding industry, and the diversified articles covering the various phases of television are more than satisfying.

STEVE BRIGGS Midland, Texas.

Sirs: I recently read an issue of TELEVISER and find it to be one of the best handbooks yet designed for the active use of radio producers interested in the use of television. The very concrete outlines for the production of television leaves little to the imagination or speculation on his part who has not as yet had an opportunity to work with television as a medium. . . . Would you please enter my name for subscription to TELEVISER.

JOHN SAUNDERS WGAR Broadcasting Co. Cleveland, Obio.

Sirs: Your magazine is one that I think would he very valuable to our staff, and I am wondering whether it would be possible to get a half dozen extra copies of it. I would be greatly obliged to you. GEO, W. TRENDLE, Pres.

GEO. W. TRENDLE, Pres. King-Trendle Broadcasting Corp. Detroit, Mich.

KINDLY PLACE ORDER FOR 250 COPIES TELEVISER AND SCHEDULE WINDOW DISPLAY FOR OUR STORE. F. W. Edwards and Son

Rochester, N. Y.

Sirs: I enjoyed reading your publication and I sincerely hope that it will become one of the foremost journals covering television.

J. R. POPPELE, Chief Engineer Station WOR New York.

Sirs: Regarding the TELEVISER, let me say my enthusiasm knows no bounds. It is certainly one of the most informative magazines I have ever read.... My only suggestion, to add to the sentiments of some of your other readers, is to publish the TELEVISER monthly.

VAL GREENWELL, Advertising Manager The Paris Co.

Salt Lake City, Utab.

Sirs: I want to compliment you on the very interesting TELEVISER window display which we used in our Market Street window for a period of two weeks. It created a great deal of comment and went far to educate the people of Philadelphia to the possibilities of television as an entertainment medium

as an entertainment medium. DAVID ARONS, Publicity Director Gimbel Bros.—Philadelphia (Continued on page 40)

TELEVISER

ELECTRONIC TELEVISION IS AN RCA DEVELOPMENT

This is the first of a series of advertisements which will show that RCA engineers developed the basic essentials of the electronic television system — including tubes and circuits.

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

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

I. THE ICONOSCOPE

PRACTICAL TELEVISION began when television became all-electronic. ALL-electronic television began with the RCA Iconoscope.

The desirable possibility of displacing mechanical scanners by an all-electronic system was recognized very early. However, a practical electronic television pick-up device required a sensitivity that no ordinary tube possessed.

The Iconoscope, developed by Dr.

V. K. Zworykin. Associate Director of RCA Laboratories, was the first electron tube to answer this need. By utilizing the now famous "storage principle." in which energy is stored up between successive scannings, the Iconoscope made electronic television a reality.

Under the direction of Dr. Zworykin, RCA engineers have brought the fconoscope to its present high degree of perfection.



RADIO CORPORATION OF AMERICA

The Fountainhead of Modern Tube Development Is RCA

RCA VICTOR DIVISION · CAMDEN, NEW JERSEY In Canada, RCA VICTOR COMPANY LIMITED, Montreal



By LARRY CARL

OWLES BROADCASTING SERV-ICE, operators of Station WOL, Washington, will soon file for a high definition experimental television station situated between 700 and 900 megacycles. This was revealed by Comdr. T. A. M. Craven, Cowles' vice-president and former member of the F.C.C.

"Cowles," he stated, "is definitely committed to high-definition tele and plans to introduce and experiment with color television as soon as conditions permit."

Until television has a mass audience. Cowles is planning the construction of a 400-seat television theatre, which will pick up the Cowles television signal and amplify it for screen presentation.

Under the contemplated set-up, there would be a regular admission charge. In non-tele hours the theatre would run conventional films. If the television theatre idea succeeded, Cowles would extend its operations to include neighborhood theatres.

"Although WOL's television station will be interested in programs from other parts of the country, we're definitely *not* interested in forming our own television network," stated Craven. "Cowles would rather go along with the present network services."

The color tele transmitter of WOL, Washington, will be a Westinghouse unit. Twenty-five Zenith receivers will be installed around the nation's capitol to demonstrate WOL's high-definition color television to the public.

WOL plans to be on the air with its experimental video unit within six months after they receive the green light from the the FCC and will spend up to \$75,000 for the transmitter alone.

* * * DU MONT Laboratories' experimental station, W3XWT, should be on the air by the time the fall issue of the TELEVISER is out, Installation of equipment is already going ahead under the direction of Dr. Thomas T. Goldsmith, of the Du Mont staff, with Julian Armstrong in charge of antenna construction. Studios and transmitter will be in the Hotel According to Les Arries, who will manage the new television outlet, Du Mont plans to spend \$100.000 to remodel the ballroom of the Harrington Hotel and a suite of four rooms for studio space. Installation of the Du Mont transmitter tower started in March and should be well along by the time this appears. Du Mont's tower will be the only one in central Washington, a permit having been granted before the City Planning Agency banned such installations downtown.

Du Mont also plans to install 25 prewar receivers around Washington, especially in hospitals like Walter Reed (Army) and the Bethesda Medical Center (Navy).

Washington is only one leg of the eventual Du Mont television network. Outlets in Boston, Philadelphia and Baltimore are planned, with plans already underway for penetration into the Midwest and Rocky Mountain areas.

* *

PHILCO has asked for an additional increase in the power of the booster stations for their television relay service between Washington and Philadelphia. Increase sought is from 15 watts to 40 watts for each station.

* *

TRANS-LUX THEATRES plan a new 2,000 seat theatre equipped to use large screen television. This is the first theatre television announced for Washington so far.

SCRIPPS-HOWARD, publishers of the Washington Daily News, have applied for Channel 1, and will spend \$175,000 for RCA equipment. Transmitter location will be on North Powhatan Street in Falls Church, Virginia, just across the Potomac from Washington, with studios in the city. Scripps-Howard Radio plans to start with a minimum of four hours tele a week, carrying on program research and working towards the general improvement of service to the public. Mort Watters, dynamic vice-president of Scripps-Howard Radio, will be in charge of the station. The station's application is now in the FCC pending file. Du Mont has also asked for Channel 1. Wonder who'll get it?

BAMBERGER Broadcasting Service has asked for Channel 4 to operate a "sight and sound" service in the District of Columbia and vicinity and will spend at least \$274,900 for RCA equipment. They plan to be on the air a minimum of 15 hours a week. J. R. Poppele, chief engineer of WOR who was recently elected president of the Television Broadcasters' Association, will be in technical charge of the Washington service. Channel 4 has also been requested by the *Times-Herald*. (Another interesting development!)

* * * BALTIMORE NOTES

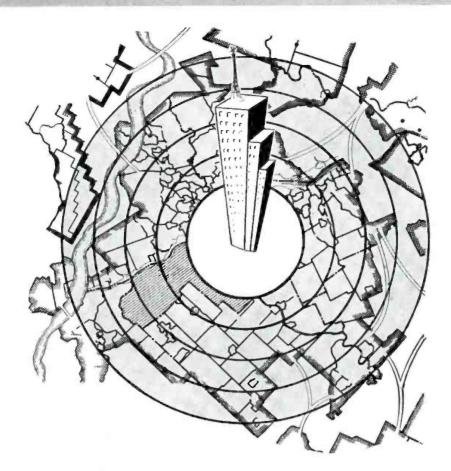
HEARST RADIO has applied for television Channel 6 for WBAL, with the transmitter antenna to be located on the O'Sullivan Building, with studios situated in the Lexington Building, the present location of WBAL. RCA equipment, with 4000-watts visual and 3000-watts aural power, totaling approximately \$229,-500 will be purchased. Hearst plans to promote television as a "distinct and separate service." WWDC, Washington, 32 miles away, has also asked for Channel 6. Can it be done?

Speaking of Channel 6, JOSEPH M. ZAMOISKI CO., wholesale electrical products distributors, want to operate tele in Baltimore on this frequency too. (Zamoiski owns Columbia Wholesalers of Baltimore and Washington and a majority interest in Columbia Wholesalers of New England.) As they distribute Philco products, it's natural Philco equipment should be selected. F. U. Bingley, chief television engineer for Philco, will assist in the installation. Total cost will be close to \$423,875.

TOWER REALTY CO. wants Channel 5 in Baltimore for tele and sound. If they get it, they plan to spend at least \$135,-000 on equipment and to operate 9 hours a week at the start. Transmitter will be in the 18-story Tower Building, owned by the applicant. Technical advisor is George F. Corcoran, professor of electrical engineering at the University of Maryland. He was formerly professor of electrical engineering at lowa State College and in charge of the college experimental television station W9XUI.

WITH Television Station. Tom Tinsley, president of the Maryland Broadcasting Co., operators of WITH, one of the (Continued on page 58)

Harrington.



IS YOUR HAT IN The television ring?

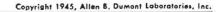
Television promises unprecedented profit and prestige to men of vision and energy. Television will be tomorrow's highroad to local and national leadership.

If you plan to toss your hat in the Television ring, arrange now to assure both early postwar delivery of your telecasting equipment and the proper training of your Television station's operating personnel. Both equipment and staff training are provided for in DuMont's Equipment Reservation Plan.

DuMont-engineered telecasting equipment has

rugged dependability and practical flexibility; will be designed for economical operation and is realistically priced. These facts have been spectacularly demonstrated by more than 4 years' continuous operation in 3 of the nation's 9 Television stations.

Furthermore, a pattern for profitable station design, management and programming has been set at DuMont's pioneer station, WABD New York...a pattern and backlog of Television "know-how" which is available to prospective station owners. Call, write or telegraph today.



Precision Electronics and Television

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

TELE-HIGHLIGHTS By STANLEY KEMPNER

January 1 to March 31

Largest American department store, R. H. Macy & Co., New York, inaugurates regularly scheduled weekly program over DuMont's WABD. Initial stanza features collector's items from the famous "Corner Shop" . . . National Retail Dry Goods Assn. at Pennsylvania Hotel (N. Y.) themes advantages of television tailored directly to needs of small retailers through use of Intra-Store Television Systems. . . . Ira A. Hirschmann, vice-president, advertising and sales promotion director of Bloomingdale's (N. Y.) is appointed to organize frequency modulation and television activities for Federated Dept. Stores (See story on page 49)..., Farnsworth Television & Radio Corp. (Ft. Wayne, Ind.) is granted a license to erect an experimental television station.

Spokane, Washington, and environs will have television if Federal Communications Commission approves installation of a \$300,000 video transmitter plant filed by Louis Wasmer, Inc., operators of radio stations KHQ and KGA in that area.... Thirty million Americans will own television receivers within 10 years after the industry is given the "green light," Thomas F. Joyce, RCA-Victor executive, predicts to the Engineering Society in Cincinnati, Ohio....

A preview of America's postwar radio spectrum from 25 to 30,000 megacycles, forecasting changes and expansion in many types of radio services and addition of several new and novel ones, is unveiled in the Federal Communication's Commissions' report on allocation hearings held in Washington last September. Highlights of FCC's proposed plan includes: FM to be moved up from its present 42-50 megacycles to 84-102. Educational FM to get 20 channels from 84 to 88 mc. Commercial television to get 12 channels from 44 to 216 mc., though not contiguous. Experimental television to be given from 480 to 920 mc., encouraging color transmission. Railroads to be allotted 33 adjacent channels, from 156 to 162 mc.; and "Walkie-talkies" to be given 460-470 mc., permitting 60 to 70 channels.

Thus television remains roughly where it is now. It gets six channels from 44 to 84 mc., and six others from 180 to 216 mc. This gives television the same number of channels-twelve-below 225 mc. as before. No additional frequencies can be assigned between 225 and 300 mc., the FCC states, because all these frequencies are required for Government use. Previously it had 18 channels from 50 to 294 mc. Space between 480 and 920 mc. proposed for experimental television to develop color pictures and higher definition monochrome on wide channels. No allocation for theatre television is made, but FCC indicates they will consider applications for experimental authorizations. No allocations for educational video systems is given. Effect on present-used television receivers as result of proposed allocations will be very little at the moment, observers point out. One engineer declares video sets may even become cheaper, and require little modification.

* * *

Tom Joyce, RCA-Victor general manager of television dept., speaking this time before the Ad Club of Washington, D. C., puts number of additional television jobs at 300,000 within five years after the "green light" is given. Breakdown given shows estimates of 67,000 more in broadcasting stations (excluding artists, writers, directors, etc.); 135,000 more in retail and wholesale distribution; and 85,000 more radio-television servicemen. Billing of video industry at peak of fifth year in terms of retail pricing he estimates will be approximately \$1,440,000,000, as contrasted with the 1941 retail value of approximately \$620,000,000.

* * *

Canada sets up own Radio Technical Planning Board to work along lines of American RTPB now headed by Dr. W. R. G. Baker, vice-president in charge of General Electric Company's Electronics Dept. One panel will deal with radio frequencies for FM broadcasting and for television. . . . Immediate resumption of television by the British Broadcasting Corporation at its Alexandra Place Station (London) is said to have been recommended by Lord Hankey's television committee in its report to the government. . . . Reports declare English will operate on old definition of 405 lines in the beginning but point out resultant picture will be largely improved because of war-time progress in television research.... Some television experts, it is said in London, have put forward suggestions for various standards up to 1,200 lines, but the Hankey Committee is likely to stress the need for an international agreement. The original Baird transmissions from the BBC were on a definition of 30 lines....

James Lawrence Fly, former chairman of the FFC in a speech before the Television Press Club of New York predicts moving of television to higher frequencies where full development of color can be made and where it will remain with "a splendid and enduring service" . . . Ralph B. Austrian, excutive vice-president, RKO-Television Corp., at the same meeting proposes a plan to build circulation whereby set manufacturers would shoulder burden of supplying localized video program material to retailers in specific areas throughout the nation and suggests the medium of films for that particular use. . . . J. J. Nance, vice-president of Zenith Radio Corp. of Chicago, in speech before New York Society of Security Analysts, suggests two possibilities of providing a box office for television: first, by having television enter the home over a wire and having subscribers charged as they now are for telephone service; and second, by introduction of a scrambler that would ruin reception unless the receiver was equipped with an unscrambler rented from the program sponsor.

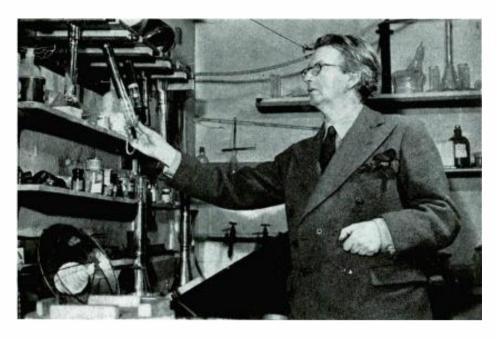
* * *

Television, greatly improved by wartime research, looms as a new link in better understanding between nations, Brigadier-General David Sarnoff, president of the Radio Corporation of America, states at the American Noble Center's "One World" dinner in bonor of the late W endell Wilkie.... Tom Joyce, 23 years with the RCA-Victor Division of RCA, and one of the chief television speakers in the industry, resigns from firm.

FCC holds appeal hearing at the National Museum in Washington to determine if proposals to move FM up in spectrum and allocate television bands, are to be enacted into set regulations. Paul Porter, newly appointed chairman of the FCC, presides. . . . Television Broadcasters Assn. expresses "appreciation of the Commission's recognition of the television

(Continued on page 55)

I: PROGRAMMING AND PRODUCTION



John Logie Baird shown in his London television laboratory. Since the war's start Baird has been conducting experiments in electronic color television.

John Logie Baird Reports on Color and Stereoscopic Television

By JOHN L. BAIRD

ED. NOTE: In the following article, John L. Baird, noted British television inventor. tells of his "development" of electronic color television in his wartime London laboratory. Because of the editorial deadline, the Televiser editors were unable to check the actual progress of Baird's color experiments, but publish the article because of its interest value.

(By Cable from London)

HEN war broke out in 1939 the British Broadcasting Corporation, for reasons of national security, immediately ceased broadcasting television. This meant that, from a commercial standpoint, television came to a complete standstill. Research however was still possible.

Though Baird Television Ltd., the Company of which I was then President, had to close down I was able to continue independent private research, and during the last four and a half years have been developing television in natural color and stereoscopic relief.

TELEVISER

Color television is no new thing, and it will perhaps astonish many to find that both color television and stereoscopic television were shown for the first time as far back as 1928. At that date I demonstrated experimental apparatus showing television in stereoscopic relief at the annual meeting of the British Association.

These demonstrations were given with apparatus of mechanical type, whereas modern television receivers now almost exclusively use a cathode ray tube. In 1939 just before the outbreak of war, I was able to show color television, using a standard type cathode ray tube and during the war was able to develop this to a stage of commercial practicability. The 1939 machine used a revolving color disc to add the color, the principle being to send red, blue and green images in rapid succession causing them to blend to form a picture in natural colors, very much in the same way as color printing.

During the war I have developed a system dispensing altogether with the

revolving color disc so that the color television receiver is now entirely free from any revolving or moving parts, the color coming direct from the cathode ray tube. The pictures on the latest type of apparatus show twice as much detail as those sent out by the BBC in 1939, and the pictures are shown on a screen two feet by two feet six inches in size.

The addition of color to the television screen gives a very remarkable improvement to the entertainment value of the picture, but in my opinion an even greater improvement in the visual effect is obtained by the addition of stereoscopic depth.

Stereoscopy is very little understood now-a-days, although strangely enough in the days of our fathers and grandfathers the stereoscope was to be seen in almost every drawing room. Looking through eyepieces the observer sees, not a flat photograph, but figures and objects standing out in relief as in the actual scene.

In the experimental apparatus shown

in 1928 I applied this principle to television and was able to show television images in steroscopic relief. During the war I have developed stereoscopic television and applied it to the cathode ray tube and by combining it with color transmitting apparatus have been able to show television in complete natural color and full stereoscopic relief. That is with the complete effect of reality. This was demonstrated to the scientific press in 1941.

Striking Effects Achieved

The effects are very striking, the impression being that of looking through a window at the actual scene itself. If the person being transmitted puts his hand forward, the observer gets the impression of a hand approaching him and actually coming out towards him through the window. After looking at such stereoscopic views for some time and then going back to look at the ordinary "flat" television picture the gain in pictorial effect obtained by stereoscopy is very marked.

After the war when television begins again it will probably be with black and white pictures such as we saw before the war. Color will, I expect, be introduced as an adjunct to the ordinary programme, as is now the case with colored pictures in the cinema. In the same way stereoscopic television will also be introduced.

Pre-war television sets cannot receive either color or stereoscopic television, but it will be possible to have these sets adapted. In addition to color and stereoscopic developments great advances have taken place in the design and simplification of television sets and the post war set will show many marked advances over those available in 1939. The cinema will also be provided with television screens vastly superior to those installed in a number of London cinemas in 1939 and used to show topical events.

In post-war days we may expect every cinema to have its television screen and in time to come these screens will show the television picture in full natural color and ultimately with the complete effect of stereoscopic relief.

How Color Tele Is Obtained

The technical processes involved in the production of color and stereoscopic television are too complicated to be given in any detail to the general reader, but a brief outline of the principles involved



CIRCUS IN COLOR AND RELIEF is Goal of Baird Wartime Television Experiments in Electronic Color and Stereoscopy.

might be of interest. All the colors seen by the human eye can be reproduced by suitable mixtures of three primary colors, for radio vision, red, blue and green. This principle is taken advantage of by sending out on the television transmitter, firstly a picture containing only the blue parts of the picture and finally a picture containing only the green parts of the picture. Purple, for example, is produced where blue is superimposed on red, yellow where green is superimposed on red and in like manner all intermeditae colors can be obtained. What happens then at the receiver is that red, blue and green pictures appear on the screen in rapid succession and blend together to reproduce every natural color.

Stereoscopy is not so readily explained, but roughly speaking the impression we gain of depth and solidity is due to the fact that our left and right eyes see each a slightly different picture of the same object. If for example a finger is held up in front of the eyes and viewed, first with the left eye closed, then with the right eye closed the finger will be seen to be displaced an inch or so, each eye seeing it in a different position. When both eyes are open, however, instead of our seeing two fingers the brain blends the two different images into one and gives to this one image the added quality of depth. A one eyed man loses this faculty and has considerable difficulty in judging distances; also a drunken man loses the faculty of combining the left and right eye images and "sees double."

Transmits Two Images

In stereoscopic television two images are sent out by the transmitter, one being a picture of the scene as viewed by the right eye, the other a picture of the scene as viewed by the left eye. These pictures appear on the receiving screen in very rapid succession and are viewed through an optical device which enables the right eye to see only the right eye picture and the left eye only the left eye picture. In one form of the device the optical arrangement is contained in the receiver in which no glasses or eye-pieces are necessary.

From a technical aspect color and stereoscopic television broadcasting present no difficulty. The commercial aspect however is not so straightforward. Whether or not the time is ripe to complicate television matters by introducing color and stereoscopy is a matter which some people might question. But it may be taken as a certainty that sooner or latter these advances are bound to be made available to the public.

WHO WILL PRODUCE TELEVISION?

THE question of who is going to produce television is being vigorously discussed in television circles and in the trade press. Giving rise to the debate is the prevailing opposition of the two major networks to shows produced by outsiders whether they be advertising agencies, program producers, or motion picture companies; the pronouncements, from time to time, of motion picture advocates that the film industry will supply all, or nearly all, television fare; and the statements of advertising agencies that they will produce all the programs required by their clients for television.

From all this hubbub naturally arises the question: W bo will produce television?

The final answer, no doubt, rests with television's ultimate postwar requirements, as indicated by listener preferences; the location of the station transmitting the program and whether the station is affiliated with a network; type and class of sponsors; educational level of listeners; and other yet unpredictable factors that are certain to affect future program selection and production.

But to the interested student of television, in the Year 2, or 3, BCT (Before Commercial Television) it would appear that the postwar program requirements of television will be so extensive that the industry will require the total product of not only one producer, or one group of producers, but of all producers—networks, advertising agencies, film companies, package producing agencies, free-lance producers, et al.

Each, no doubt, will fill an essential place in the television production structure. To many, this set-up appears as follows:

Networks: Will produce sustaining programs, arrange field pick-ups, educational programs, "prestige" programs, and some commercial programs;

Local Stations: Sustaining programs, field pick-ups, and simple live commercial productions;

Scene from a recent performance of "Carmen," Station WNBT, New York City, directed by Mr. Herbert Graf, NBC musical consultant

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Film Corporations (Hollywood companies and subsidiaries): High-budget programs, intended for syndication (i.e., repeats by many stations); films for manufacturers for syndication on intra-store tele systems; one-minute commercials and ten-minute "shorts";

Film Companies (small): Ten-minute shorts, one-minute commercials;

Advertising Agencies (large): Simple dramatized programs that do not involve too much production; visual and dramatized "commercials";

Advertising Agencies (small): Simple visual or dramatized commercials for program "package" purchased from program producing agencies or film companies;

Talent Agencies: Production of live musical shows, variety shows and dramatic shows using "name" talent for network shows; Independent Producers (Independent program "package" agencies): All types of television programs, from soap operas to "first nighter" dramatic shows, from simple variety shows to musical tele-extravaganzas; from fashion shows to grand opera, with each producer probably specializing in a particular type of television entertainment.

This is the set-up as it appears to many who are close to the television picture, a set-up which may change as the number of stations increases and economical means are developed in network transmission of television programs. It is also based upon the belief that the networks will not continue to operate under a "closedstudio" set-up, but will permit outside agencies and producers to bring in program packages that meet the network standards. Developments in the field of motion picture productions for television may also drastically alter the postwar production picture. But in the final analysis, it will still be the viewers collective judgment that will eventually determine everything. In the meantime, who'll produce television is still any man's guess.



WHAT THE AUDIENCE WANTS!-RESULTS OF A TELE LISTENER SURVEY

FROM Station WRGB, in Schenectady, N. Y., during the last five years have emanated more than 900 different programs. These have ranged from newscasts, light operas, variety, drama, sports, and audience participation programs to night club and circus acts, educational programs, and straight commercials. As a result, the WRGB audiences in Schenectady, Troy and Albany have perhaps had the most varied kind of television fare of any similar audience.

Recently the station executives decided to poll their audiences for all possible expressions of listener preferences. They drafted a four-page questionnaire that had everything a program manager would want to know about audience likes and dislikes. An interviewer was borrowed from the market research departments and sent ringing doorbells of ten per cent of the television set owners in the WRGB viewing area. The remaining ninety per cent received their questionnaires by mail, with 58 per cent returning them.

Not entirely satisfied, the WRGB executives had five girls complete 250 telephone calls during a two-hour test period on Friday and Saturday nights during television broadcasts.

Questions Were Varied

The queries included questions regarding (1) The average home attendance for television programs; (2) the proportion of children to adults; (3) the time of day preferred for programs; (4) preference of live shows over motion pictures and which came through most clearly; (5) whether movie shorts were preferred to full length features; (6) the type of live talent programs preferred; (7) the types of sport shows most popular with the television audience; (8) the type of variety acts found most enjoyable; (9) the best method of presenting news; (10) the length of plays preferred; (11) the kind of music wanted and the musical instrument most preferred; (12) specific programs that rated highest with audience.

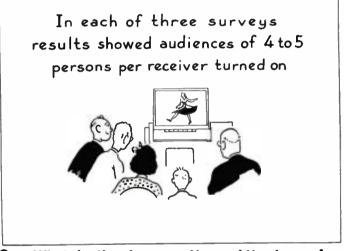
Of the afternoon programs presented by the station two days a week for more than a year, it was found that the audience was one-fifth that of the evening audience, a factor to be remembered by advertisers who buy postwar television time.

Regarding music and musicians, the station found that the audience enjoy soloists better than groups—either choruses or orchestras. And they prefer instrumentalists to vocalists. Of the kinds of music preferred, the audience voted for classical over popular, which may be due to the preponderance of persons of higher income and education owning receivers at this time.

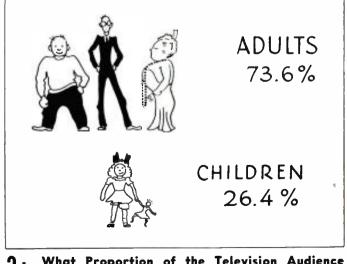
The survey confirmed what had already been known to television people, namely, that the public likes programs which have an element of spontaneity—programs the outcome of which cannot be predetermined as with sports, games, and onthe-spot-news programs—where anything can happen and often does. Other findings of the survey were as follows:

AVERAGE EVENING BROADCAST Sets Sets not turned on turned on 60.6% 39.4%

What Proportion of the Receiving Sets Are
 Tuned in for the Average Broadcast?

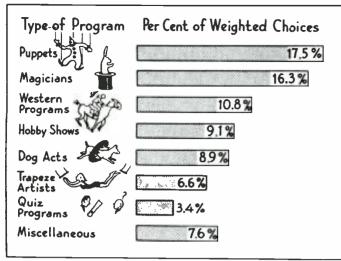


 What is the Average Home Attendance for Television Programs?

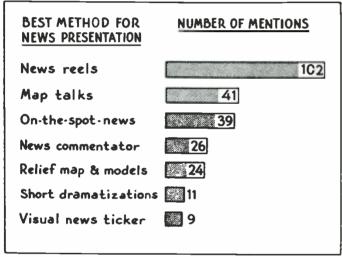


). What Proportion of the Television Audience). Consists of Children?

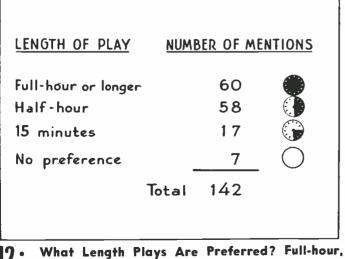
Per Cent of Respondents Prefer full-length movies 79 % Prefer movie shorts 15 % Enjoy both 6 % 100 %
7 · Does the Audience Prefer Movie Shorts or Full . Length Features?
RATING OF LIVE TALENT PROGRAMS Sports Quizz Program Light Opera Variety Shows Puppet Shows Plays full-length Personalities News Sector
0 What Type of Live Talent Programs Are Pre- 0. ferred? Sports, Plays, News, Opera?
TYPE OF SPORT PER CENT OF WEIGHTED CHOICES Boxing 21.1% Wrestling 19.0% Baseball 94% Football 9.1% Skating 7.0% Skiing 5.3% Fencing 4.62 Swimming 4.1% Miscellaneous 14.1%

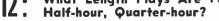


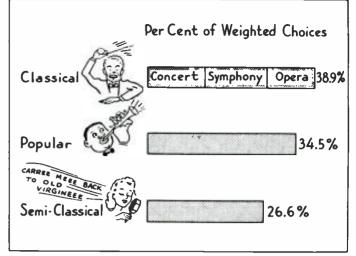
What Type of Variety Acts Does the Audience Want? Quiz Programs, Dog Acts, Puppets?



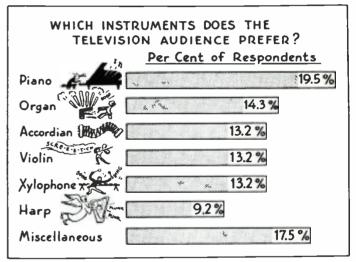
What Is the Best Method of Presenting News? **II**: Map Talks, Commentators, News Reels?



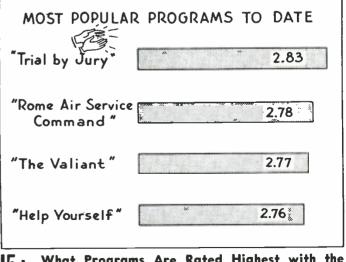




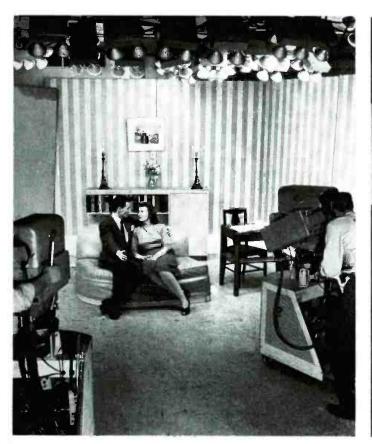
- What Kind of Music Does the Audience Want? 13 :
 - **Popular, Classical or Semi-Classical?**



Which Musical Instruments Does a Television 14 Audience Prefer? Violin, Organ, Piano, Harp?



What Programs Are Rated Highest with the 15: **Television Audience?**





LONG SHOT: View of Two Actors (Stuart Nedd and Barbara Engelhart) in "Saturday Supplement" at WABD. Director has camera back for long shot, which shows up details of room, but draws attention from actors.

SEMI CLOSE-UP: Director has camera "dolly in" for semi close-up of actors after establishing locale through long shot. Note how more interesting is this view. Second camera is readied for closeup of kiss.

SO...YOU WANT TO DIRECT!

YOU do? (So does everyone else). It seems so very easy (and it is, once you know how!) to order cameras around a studio. "Take one," you say. "Take two," "Take three." "Dolly in, Camera One, Pan Right, Camera Two. Dissolve ... Montage ... Switch ... Follow focus ... Blow her up. ...

Yes, it's easy. Just learn a few easy rules, turn on the lights, talk into the headphone, and everything will come out all right . . . so you hope!

"Roll the film ... cue the soundman dolly number one in for a close-up, Number One ... Number Two clean-up your focus, throw more spots on the dame increase the monitor gain ... standby for the commercial ... wrap it up ... Goodnight!"

Directing is easy, once you know how. So, if you're interested in becoming a director, just read on. If not, just go on to the next article....

First, there's a matter of understanding

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what a television studio is like and how it operates. Needless to say, a television studio is very much like a radio studio, with the exception that it contains two or three electronic cameras; a multitude of ceiling, spot and flood lights; scenery; cables; and technicians (cameramen, lightmen, mike-boom man) wearing headphones, and who receive instructions from the control room, where sit the program and technical directors, with eyes fixed on "monitor" screens.

It should be understood that the studio's two or three cameras used in a telecast all operate simultaneously, under the direction of the program director, who is free to use whatever camera he chooses at a particular moment (or second) for a closeup, long or medium shot by merely saying to his technical director, "Take one ... take two ... or take three." The technical director then switches to the specified camera by the mere pressing of a button on the control panel. Now that you understand studio operation, the next thing to learn is studio terminology. (A complete table is published on page 28.) The program director should be able to call out his directions in rapid-fire order. Every film man is already familiar with most of the terms, as nearly all of them originated in motion pictures. The terms to learn are:

- TAKE: A switching (in the control room) to a specified camera. (Thus, if the director wants Camera Two, he says "Take Two.")
- DISSOLVE: The gradual fading-out of one camera (or scene) and the fadingin of another. (Direction: "Dissolve to Camera 1," when director wants a merging of scenes or cameras.)
- MONTAGE: A superimposing of scenes. (Direction: "Montage Cameras 1 and 2.")
- DOLLY IN: Movement of the camera forward, causing image to become (Continued on page 15)

Key to Tele Success: "ADVANCE PREPARATION!"

By PATRICIA MURRAY

T IS by no means sufficient for a television director to appear in a studio at the appointed time for first rehearsal with an idea that his work is just beginning.

Prior to the first rehearsal, the director should have a clear idea of the space restrictions with which he will be faced. He must also take into consideration the number of cameras at his disposal. With these two points established, he is now ready to plot out camera routines for his show.

Working with two cameras will limit the action of his show considerably. While setting up the camera routine, however, he must guard against scheduling camera moves, which, in actual practice, will prove to be physically impossible.

For an example, let us invent a situation. Set No. 1, occupying the right side of the studio, has a pair of singers working on it. Set No. 2, on the left side of the studio, is furnished with a comedian ready to go into his act. Halfway between the two sets, the announcer stands, in readiness to introduce the comedian. (See Figure X.)

In plotting out his camera schedule the director assigns both Camera A and Camera B to cover Set No. 1. This, of course, is for the purpose of variety in the pictures of the two singers. Prior to conclusion of the songsters' act, the director must release one of the cameras from Set No. 1, so that it may focus on the announcer and be ready to shoot when the time comes.

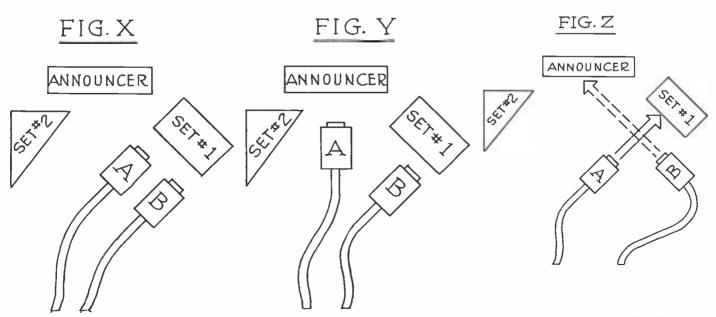
The director, however, in view of the act to follow, is not free to order just *any* camera to his bidding. Because of this fact, which will be repeated many times before the end of the program, it is so important for a director to know what his plans are to be in advance of any rehearsal. True, all this can be clarified for him in the course of rehearsal but only at expense of crew and performers alike, who will experience the trial and error method with him. And no one can or should blame them for objecting. It is not necessary if a director has done his job properly.

In television, because of the coaxial

cables attached to the cameras, it is impossible for one camera to cross behind another. This, in many cases, necessitates some very artful manipulation in order to keep the cameras in proper relation to each other and keep the show going at the same time.

We will assume that Camera A and Camera B, left and right, respectively, are pointed toward Set No. 1. Now, if the director orders Camera A to focus on the announcer, he's going to find himself in a very difficult situation when he tries to get Camera B over to Set No. 2. Camera B would be unable to cross behind Camera A (which would then be shooting the announcer) because of Camera A's cable. Nor would Camera B be able to cross in front of Camera A since it obviously would get into Camera A's picture. (See Figure Y.)

This becomes perfectly clear to the director in his pre-rehearsal perusal of his script. Consequently, in anticipation of this particular situation, he plans well in advance. While Camera A and Camera B are working on Set No. 1, the director orders Camera A, which still points to Set No. 1, to dolly back, or withdraw.



Then, when Camera A has the picture, the director orders Camera B to switch its position to enable it to cross-shoot to where the announcer is standing. In other words, Camera A, now withdrawn several feet from its subject, allows sufficient space for Camera B (still on the right of A) to turn its lens toward the announcer to get an unobstructed view of the person. Once Camera B has the picture, Camera A is free to move over to Set No. 1, to get into position to shoot the next act. (See FigureZ.)

A director may occasionally tell himself that the camera routine can be worked out in rehearsal with a minimum of time and trouble. On the whole, however, the camera routine should be worked out in its entirety, prior to any rehearsal. Furthermore, if a director has any doubts concerning the possibility of certain moves, he should have alternative lines of action marked on his script.

Preparation Brings Cooperation

In short (and this applies to the work being done today, rather than that in the future, when rehearsal time for both crew and performers is certain to be more abundant than at present) any steps that a director can take to insure the smoothness of his first rehearsal will be well repaid by the gratitude and resulting cooperation of those connected with his show.

Aside from the matter of their cooperative spirit, all those connected with the program would do better work, automatically. It is confusing to crew and performers to be given directions, which are progressively changed again and again. A clear-cut piece of direction given at first rehearsal and adhered to rigidly from that time on is the best possible guarantee for smooth production in general.

In a situation where a director uses the same program format from week to week, so that he and his camera crew are familiar with routine, there is obviously little need for detailed camera schedule prior to rehearsal. But, for those directors with a new show "coming up," there are two words they should adopt as their motto: *Advance Preparation!*

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So...You Want to Direct!

(Continued from page 13)

larger as in a close-up. (Direction: "Dolly in Camera 1, slowly and in focus—you're on the air!")

DOLLY OUT: Movement of the camera backward.

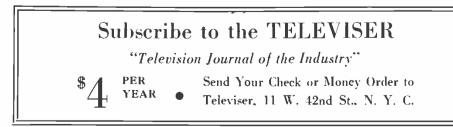
- FRAME THE PICTURE: Composition of the scene so that the components are in proper balance allowance for sufficient head-room, and actors are properly "framed," i.e., properly centered in the picture.
- HEAD ROOM: Area above the heads of the actors to give proper balance to a picture: (Spoken Direction: "Allow more headroom," or "less headroom.")
- PANNING: The horizontal sweep of the camera, when moving from one actor to another or place on the set; (Spoken Direction: "Pan right," or "Pan left, Camera 1").
- TILTING: Vertical movement of the camera, up or down, as when tilting down to a dancer's legs. (Spoken Direction: "Tilt . . . or pan . . . down, or "Tilt up.")
- FOLLOW FOCUS: Adjustment of a camera's focus while the camera is in motion, as in a dolly or pan shot or when there's movement toward the camera. (Spoken Direction: "Dolly in ... and follow focus.")
- CLEAN UP FOCUS: Sharpening of focus by cameraman when original picture is not sharp. (Spoken Direction: "Clean Up your focus, number 2.")
- TWO SHOT: A grouping of two actors in a picture: (Spoken Direction: "Take a two-shot on left," or "three shot on right").
- CLOSE-UP: A shot taken at close range, usually within a yard or two of the performer (or object), sometimes closer, which results in shooting of head and shoulders of performers. (Spoken Direction: "Move in No. 2 for *close-up* of girl.")

- LONG SHOT: A shot taken at a distance from the performers (not recommended that it be used too often in a telecast because of today's small size screen), which results in a full length view of performers. (Spoken Direction: "Come back, No. 1, for a long shot.")
- MEDIUM SHOT: A shot which usually includes upper torso, or waist, of performers, a shot most frequently used. (Spoken Direction: "Move in, No. 2, for a nice *medium shot* of boy and girl.")

Other studio jargon includes: "roll the music (or film)"; "put on your 'cans'," when you want the studio technicians and cameramen to put on their headsets; "cut your beams," when you want the cameras turned off at the conclusion of a performance; "increase the monitor gain," when you want increase in the volume of sound; "fade out the picture," when you want a gradual disappearance of the picture from the screen.

A typical run-through might sound as follows: "Stand-by, studio . . . one minute to air time." "All right, roll the music . . . fade in one . . . lap dissolve to two ... strike the easel ... Number one get a long shot of room . . . take one . . . number two, get a two shot of boy and girl ... steady ... take two ... begin to dolly in, Number 1, slowly and in focus . . . take one . . . hold it, one, freeze your camera . . . Camera 2, pan with her as she rises . . . take two . . . dolly out, one, for medium shot . . . more headroom, one, and pan slightly right . . . that's it . . . hold it, one . . . take one . . . get ready, Camera Two, for a fast dolly-in on the kiss . . . all right, two, start dollying . . . take Two . . . fade the picture . . . music up, and out!

Do you still want to become a television director? The line forms on the right!



LOG OF A TELE PROGRAM—"QUEEN WAS IN THE KITCHEN"

PRESENTED: January 29, 1945—8:45 P.M. STATION: W ABD-DuMont, New York City SPONSOR: American Kitchens PRODUCER: Gerald O. Kaye DIRECTOR: Ted Cott Written by Sheldon Clark



8:41 P.M.-Four min. to air-time. Last-minute check-up being hastily made.

8:41 P. M.—4 minutes before air time. Cameras are in position, lights and sound have been checked. Producer Gerald O. Kaye with hat on, huddles with Technical Director, Louis A. Sposa and Program Director, Ted Cott, about handling of the commercial.

8:45 P. M.— "Studio B—you're on!" Flashes master control. Camera 1 dollies in and focuses on the title card rack. "The Queen Was In The Kitchen" is on the air. Director, Ted Cott calls for music and cameras.

8:49 P. M.—Camera 2 is in position to pick up Narrator Allen Prescott immediately following the 7th title card. Prescott explains that the M.D. on the black case signifies Master Designer of Kitchens. Prescott leads into the opening shot of the American Kitchen with "Here's the World's Busiest Spot—The Kitchen."

8:54 P. M.—Here's Mrs. Brown getting the ingredients together for a cake she's baking. The intruder at the window is fast-talking, gissipy Mrs. Merkle, who suggests that Mr. Brown possibly may forget that today is his wedding anniversary. Perish the thought. Camera 2 is in a long shot position to pick up the full kitchen.

8:57 P. M.—Boom light is swung over Mrs. Merkle's head to pick up her phone conversation with Mr. Brown, who tells Mrs. Merkle to advise his wife that he's bringing 3 guests for dinner.

8:59 P. M.—Camera 1 rolls in for a 3 shot to up facial expressions when Willie shouts "Bang, bang, bang—I'm the Lone Ranger." Indignant Mrs. Merkle rushes out without telling Mrs. Brown thather husband is bringing three people home for dinner.



8:45 P.M.—"Studio B—You're ON!" Cameras in position for title cards.



8:54 P.M.—The show's underway! Cameras, lights, sound-boom in exact places.

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8:57 P.M.-The mike-boom swings over to pick-up Mrs. Merkle's conversation.



8:59 P.M.—"Bang, bang, bang—I'm the Lone Ranger," shouts Willie in window.



9:11 P.M.—Camera 2 dollies in for semi close-up of the three happy Browns. TELEVISER

9:03 P. M.—Camera 2 rolls back for a long shot of the milkman, Mrs. Brown and the gasman. The overhead boom light is swung in a position to pick up the milkman's vehement denunciation of the Lone Ranger and radio in general.

9:05 P. M.—Camera 1 pans from a long shot position to the entrance of the florist delivery boy. Mrs. Brown believes the flowers are from her husband as an anniversary remembrance. This is a comedy scene when Mrs. Brown discovers the box contains condolence lilies. The delivery was made to the wrong address.

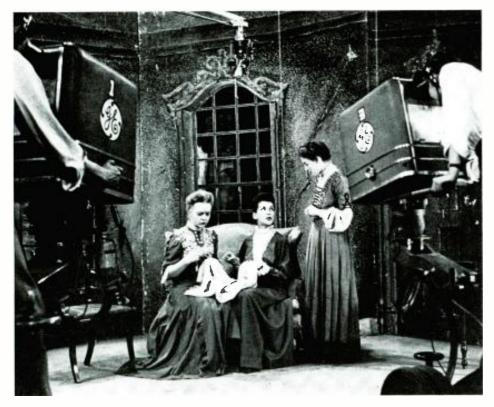
9:08 P. M.—Camera 2 dollies in for a close-up while Mr. Brown with a wary eye on the kitchen knife in his wife's hands tries to maneuver himself out of a tight situation.

9:09 P. M.—He made it. The three guests for dinner are the Minister that married them, the best man and the maid of honor. Mrs. Brown is elated that hubby did not forget their Anniversary. Did he remember—or was it a coincidence that he brought these three guests home for dinner? It doesn't matter. Mrs. Brown is happy, though Junior is skeptical. Camera 1 in long shot position.

9:11 P. M.—Camera 2 rolls in for close-up to show the family gathered around Mrs. Brown's Happy Anniversary cake, which survived the tumult in the kitchen during the baking period. So Mr. Brown is anxious as to what the guests are going to be served for dinner. Mrs. Brown replies with a wink into the lens of camera 1 (close-up) "Let them eat cake."

9:12 P. M.—Camera 1 dollies in for a close-up of the commercial. Narrator, Allen Prescott explains to Mrs. M. the content of the black case the device for the planning of an American Kitchen in any size room. Harry Armbright, American Kitchens Eastern District Manager, manipulates the Plan-A-Kit. Director lap dissolves, and camera 2 picks up the completed kitchen.

9:15 P. M.—Here is camera 2 focusing on the completed kitchen. This is repeated three times with Armbright showing the construction over camera 1. Camera 2 then picks up the completed unit. Kitchens shown are straight wall, L shaped and U shaped. "The End" is super-imposed over this last scene. Music and out.



RADIO vs TELEVISION

By TED COLLINS

T'S coming. There'll soon be a reshuffling of radio's talent values once television starts burrowing into the entertainment, cultural and home lives of Americans. Not that television will erase radio from the entertainment picture; that's certainly not in the cards according to even the most pessimistic authorities' predictions. But the conflict for double-threat talent, for programs adaptable to *botb* radio and television, conjures up visions of an advertisers' Armageddon.

It's only natural. Even today, when we have personalities on radio programs who are known and loved by a good-sized cross-section of the general public, advertisers are building not only their radio programs but also their entire newspaper, magazine, billboard and trade journal campaigns around these personalities. Cartoon strips have shown the adventures of Charlie McCarthy as he goes through life popularizing his sponsor's wares. Gracie Allen and the beleaguered George Burns are known visually as well as by their voices thanks to *sight* promotion by their sponsor—and that approach has been the fulcrum by which sales and brand acceptance have been levered up.

How much more powerful than pictures and cartoons of these "product characters" then would be the real life utilization of these personalities as sturdy *buman* foundations for mammoth advertising campaigns? The wonderfully intimate quality of television practically demands that sponsors seek out these visually pleasing pillars of their sales programs and book their services on longterm contracts.

It is likely, if not inevitable, that television characters arise from the ranks of those radio artists who are most pleasing to the eye. This doesn't mean that every girl must be a perfect 36, provocative and winsome. Nor need every man be a muscular mahogany menace. Dr. Christian will still be the wonderfully understanding, kindly person Jean Herscholt created and television will not only capture the good fellowship in his voice, it will also show the twinkle in his eyes and the gentle smile on his lips. Comfortable, beloved women of the "Aunt Jenny" type will still make kitchens take Three spinster sisters discuss their brother's coming marriage. From a recent Tele-Workshop production at GE.

on the aura of a wonderful place in which culinary magicians ply their allimportant art. Sophie Tucker today would be as much a hit on television as she is in person anywhere else.

Television can go even farther. The handsome, dashing Jay Jostyn of "Mr. District Attorney" fame could go even more successfully on television than he does on radio because Jay looks the part he portrays. Television could show him *at scenes of actual crimes reported in the day's newspapers!* When he exposes forgery, he can *show* the audience how to detect the real from the phoney. The added excitement of showing as well as telling about the experience of this scourge of criminals would undoubtedly multiply the already high success of this show.

And just think of the job any parent would have trying to pry an intent youngster from the television receiver while the Lone Ranger and Tonto go about their task (on televised film, of course) of cleaning up the West.

On WABD we've tried a number of programs which Lee Cooley has termed 'televersions." These are television adaptations of radio programs. Some, we must confess, have flopped. Others have come through magnificently. Allen Prescott's "The Wifesaver" held a delighted television audience very securely through a hilarious 15 minutes while Prescott did his regular announcing stint supported by skilled pantominists. "Aunt Jenny's Real Life Stories" took on all the gripping appeal of a well-handled movie when we saw the story enacted before our eyes. It's possible that, later, we'll be able to develop "televersions" of more of these major shows. Certainly the television audience has set up a clamor for more programs of the caliber of "Double or Nothing" as it appeared on WABD with John Reed King as master of ceremonies during the "Treasury" program series conducted in conjunction with the Sixth War Loan.

Surprisingly enough, a well-balanced radio program can often, when translated into corresponding 'televersions,'' make a well-balanced evening of television entertainment. Bob Hope movies give us some idea of how smoothly that wonderful comedian can shift from aural to visual roles. Fibber McGee and Molly, with their rich, homespun humor, can easily be the object of admiring audiences, pleasantly amused attention on television receivers. The Lux Radio theater can do an even more effective job of giving audiences the illusion of having spent an evening at the theatre when it's on television.

Some radio programs are inherently not visual, however. To make these effective, entirely new concepts in programming and tieing sight in with sound will have to be developed. Perhaps "Fantasia" presented a clue to how classical music can be translated into a visual medium. Or maybe it lies in the Auroratone which presents pleasant, though meaningless, patterns for the eye to follow while the ear listens to corresponding sound impulses.

Newscasts take on added vitality and have something more tangible than the announcer's voice on which they can be predicated. Soap operas can take the form of a welcome and friendly visitor coming into the home and chatting with the housewife via her television receiver, or they can become visual versions of the present-day skits carrying a suffering heroine from the edge of one cliff to the edge of the next in the course of 15 frightening minutes. Carve out almost any chunk of the radio day you wish and it can, with imagination, ingenuity and intelligence, be translated into strong television programming material.

Television, then, can absorb many of radio's programs. And it will be able to allow for an added utilization of radio's talent. But this transition will require some upheavals in program planning that will near earthquake proportions. Shows must be planned in advance. Actors must memorize their lines. Time will be needed for whipping of sets and properties into shape, and costuming and make-up will be fully as important as sound effects. Quick, low-cost movie manufacturing will be evolved in a manner that will compel our West Coast producers to develop more efficiency.

It's coming. The combination of radio and television talent will mean an even greater respect for quality performances than the deep one all of us have today.

TELEVISION QUIZ...

How many of the following questions can you answer? From the Final Examina-tion, television class of the City College of New York. Score yourself 4 points for each correct answer. EXCELLENT, 88 to 96; GOOD, 76 to 84; FAIR, 64 to 72.

- 1. What is the approximate range of the television signal?
- 2. By what two methods are television stations linked together?
- 3. What two cities are now linked to New York thus forming the first PI television network? -- >>
- 4. New York City now has three television stations operating. Name two.
- 5. Intra department store television is sometimes known as..... television.
- 6. What is the literal translation of television?
- 7. In the final analysis, what will be the advertiser's yardstick in measuring television as a medium?
- 8. A property of television is "immediacy." Name a type of program that best exemplifies this.
- 9. What in television programming parallels radio's use of records?
- 10 Television has been described as a "living mail order catalog" for what type of sponsor?
- 11. If you were casting a television dramatic show and rehearsal time was limited, from what allied entertainment field would you seek talent?
- 12. Shadows on the screen of a television receiver are known as cross-lines high lights mirages megacycles ghosts.v
- The approximate number of televi-13. sion receivers now in use in the United States is 500 8.000 20.000 50,000
- 14. More than half the television receivers in use are in homes in Schenectady/ Chicago Philadelphia New York Los Angeles.
- 15. If television enjoys the success of radio, this country will be serviced by approximately how many stations? 100 375 500 1,000 3,000

- 16. The approximate cost of building a class A television station is \$25,000 \$250,000 \$800,000
- 17. Who issues the wave lengths to television station operators? NBC CBS' RCA GE DuMont FCCY TWA.
- 18. The "eye" of the television camera is better known as a bulb lamp iconoscope, lens
- 19. The viewing screen of the television receiver is better known as a frame control side band kinescope,
- 20. The television director communicates with the cameramen during the program by sign language writing on a board short wave seismograph telephone
- 21. The most recent surveys indicate that the average number of viewers of a television program in the home is 3

11 15 7 20

- 22. A horizontal sweep of the camera is known as shooting panning . panorama
- 23. According to the Better Vision Institute what percentage of what we learn is attributed to vision? 5% 20% 40% 60% 80%
- A television camera "pictures" a 24. ball game at the Yankee Stadium and relays the signal back to the WNBT station transmitter which in turn beams the program to WRGB's relay station. The signal is picked up by the GE transmitter in Schenectady which services Walter Dailey's television receiver thirty miles north of the city. How much time does this entire operation take?
 - 5 minutes 10 seconds one minute a fraction of a second 11 seconds.

A N S W E R S

(1) 50 miles. (2) Coxial Cahle and Relay Stations. (3) Schenectady and Philadelphia. (4) WABD, WNBT. (5) Jeep. (6) To set at a distance. (7) Audience. (8) On the Spot News Coverage. (9) Films. (10) Department Store. (11) Theatre. (12) Ghosts. (13) 8000. (14) New York. (15) 1,000. (16) \$250,000. (17) FCC. (18) Iconoscope. (19) Kinescope. (20) Telephone. (21) Seven. (22) Panning. (23) 80%. (24) A fraction of a second.

ACTORS FOR TELEVISION

By EDWARD SOBEL*

Senior Producer, NBC Television

B ECAUSE television has been perfected and fostered by radio people it has become the common belief that radio actors would naturally gravitate into television. But when we examine the technique, and the producing and directing of a television show from the actor's viewpoint we find that it is more closely related to the theatre than any other medium.

Again because television is in the hands of radio there is much too much radio thinking with regard to television. We talk of the fifteen minute show, the one minute commercial, the five minute spot. We are asked what are you going to do about the soap operas—the daily serials—etc., and because of that thinking jump to the conclusion that live talent shows are to be the luxury of television.

In a large sense all mediums of enterment look to the theatre as their source of supply for talent. Look through your Motion Picture Almanac or year book. Look over page after page of actors who have appeared in pictures: from Bud Abbot to George Zucco the pages are filled with names of stage actors. True enough here and there a bit of cheese cake or a gas station apollo has been elevated to stardom but look at the supporting cast and see all the legitimate actors the director has called in for insurance. And again see how long those trick stars last as against your Tracys, Gables, Marches, Robinsons, Betty Davis', Hepburns, etc. Your highest rated radio artists had their beginning and their schooling in the theatre. Your Bob Hopes, Jack Bennys, Fred Allens, Bob Burns and so on down the line all came from the theatre. If you go through the cast of your better radio dramatic shows you will find them honeycombed with theatre actors. Why is this? Primarily it is because the theatre is the only medium where the artist is in direct conflict or accord with his audience. It is through this direct touch with the audience that he learns timing and projection and develops that intangible something called

personality. It is further, the only medium which affords an actor sufficient rehearsal time so that he can gradually create the character he is portraying. Then after that gives him some time out of town to polish his performance.

One Dimensional Actors

Your radio actor, without theatre background, is prone to be a superficial actor. Because the medium is one dimensional it has given birth to a great school of one dimensional actors. A few years back legitimate producers thought they had discovered a great mine of talent by hiring strictly radio actors. They were pleased, at first, when they heard great first readings. But they were dismayed later on because no matter how long those actors rehearsed nor how well they were directed their readings never varied from the first rehearsal. The actor has learned that radio trick of looking at a script and giving a good reading without trying to get under the part in any way. Lack of rehearsal time has made this a necessity in radio. True enough today

some of our better dramatic radio shows are taking more time but the average 1/2-hour radio show rehearses about five hours.

Look at the cards given to a radio producer by the artists and see what they set down as qualifications, just two main items-dialects and voice range. In the November 1944 National Radio Artists directory, I found one actor, and I understand he's rated pretty well in the field, claiming he can do all of the following characterizations: American Bronx, Brooklyn, Canuck, Hillbilly, Indian, Mexican, Midwestern, Negro, New England, New Yorkese, Rural, Southern, Texas, Tough Western, Australian, Cockney, English, Irish, Lancashire, Scotch, Welsh, Yorkshire, Armenian, Belgian Continental, Czechoslovakian, Danish, Dutch, French, German, Greek, Hungarian, Italian, Italian Low, Jewish, Polish, Portugese, Rhineland, Russian, Spanish, South American, Swedish, Vienese, Chinese, Japanese, Hindu, Malay, Mohammedan, Near East, Polyne-

ANGELS ON TELEVISION . . .



"Harps O' Swing" on Variety Program of Television Station W6XYZ, Hollywood, Calif.

^{*} Text of an address before the TBA conference.

sian, Punjabi. And as to voice range he says from sixteen to senility.

Even Lon Chaney when he was billed as the man with the 1,000 faces would hesitate to cover all those characterizations. The radio artist knows nothing at all about moving around a set. And worse still he just can't stand still when it is required. He doesn't know how to play with other actors. In radio, due to the "mike" technique, each performer is giving a solo performance. He can scream with fright or joy, he can be happy or sad, he can live or he can die but nothing in his face will ever show it.

The picture actor, particularly if he has had stage experience is more desirable than the radio actor. But here too you meet up with certain limitations. First there is the memorizing of the script. The average picture actor has lost this knack and it is a knack which through non-usage can easily be lost. In Hollywood three pages of shooting script in an A picture and about five in a B is a pretty good days work. The actor is told the day before what scenes he will be called for and he familiarizes himself with those scenes. He does not memorize them. He will tell you it allows for a more spontaneous performance if he learns the lines just before he goes on the set. I defy anyone to be sponstaneous after the 9th or 10th take which is certainly not infrequent in an A picture. He just doesn't have to memorize, so why do it? The picture actor is also too camera conscious. He will fight for his best side being photographed and jockey other players around. He has learned the trick of giving bad readings of bis lines when close ups of other actors are being shot and he is talking off screen so the director will have to use his matching close ups for his dialogue. He goes in for solo performances and very often does not play up to or with his fellow performer. Because a picture is shot in so many different stages and the same scene repeated so often he has often lost the sense of character development and is given to superficial registering of moods, etc. This is being overcome a great deal in Hollywood because more and more directors are rehearsing their casts almost like plays before they start on the picture and because they are using longer sequences on one camera set up.

If you want to see stage acting technique applied to pictures see Laura and see how much better Clifton Webb,



Scene from "Birthday in Alsace-Lorraine," produced by NBC Television over station WNBT, New York City.

Judith Anderson and Vincent Price play to their fellow actors, the cheese cake stars I referred to earlier. See also the value here of pauses and reactions. This is something a radio actor knows nothing about. In radio a pause is strictly taboo. Cues have to be picked up instantaneously and it is a hard habit for an actor to break.

Legitimate Actor Is Best

The legitimate stage actor is best for television because:

- 1. He can memorize his part more easily and in a pinch will even know how to ad lib.
- 2. He knows how to develop mood and characterization from a beginning to a climax.
- 3. He can play with his fellow actors and will be more willing to submerge himself and consider the *play* as a whole rather than the part.
- Because of experience with audiences he is better in timing and in judging laughs.
- 5. He can move around with naturalness and ease.
- 6. He is accustomed to scenery and furniture and can use them to advantage.
- He is more apt to take direction and react to direction more intelligently.
- As we all know the legitimate theatre

is a small field and more and more it is being raided by Hollywood and radio. *Variety* of November 29th carried the headline, "Legit Balks Talent Loss" and the sub headline read, "Long Term Pacts vs. Pix Air Lure." Then it went on to tell about legitimate producers asking Equity to allow them to issue long term contracts to protect them against pictures and radio.

So the question naturally arises— Where are the actors coming from?

I believe that the smaller television stations throughout the country should be used like minor league baseball clubs or if you like, straw hat theatres, to develop talent. Just as the "Borscht" circuit is developing comedians like Danny Kaye and others, so these stations could take the hundreds of stars of tomorrow who now gravitate to New York and Hollywood and give them the necessary background and training. I believe television will have to encourage the little theatres or community theatres which are growing ever more in number throughout the country. Dramatics, acting, writing, directing, are being taught in all our universities and colleges and a great deal of good potential talent is there if only they had a place to develop. I believe television can provide that place. I think to carry out the baseball illustration I just made that the larger television stations should help and encourage the smaller stations to do just this.



WOMEN IN TELEVISION By MARIAN THOMAS

THERE's hardly a job in television whether it be station manager, cameraman, technician, director, scene designer, announcer or station executive that's not filled today by women, many of whom have received national recognition.

There's Helen Carson, for example, who is manager of Station WBKB in Chicago; there's Helen Rhodes, who writes, directs, produces and announces at WRGB in Schenectady; there's Eleanor Balz at WABC who books films, and Lois Sheen who handles guest relations. There's Charlotte Stern at WNBT who is in charge of the station's promotional activities, and Lela Swift at WCBW who, among her other duties, is assistant floor director.

These are but a few of the women who occupy important jobs in today's television stations. Still others are employed as cameramen, soundmen, video and audio technicians, projection machine operators, sound-boom manipulators, make-up artists, and in many other jobs around a television studio, especially in Station WBKB, Chicago, where the entire station is 'manned' by women—all, with the exception of one lone male chief engineer.

At the Du Mont Station, WABD, when the manpower crisis began to make serious inroads on its male personnel, women in slacks blossomed forth one day last month as "cable engineers" (studioese for people who haul co-axial cables out of the way of the cameramen).

At DuMont, Dotty Wooten is it's popular and attractive young announcer, who started as a stenographer in 1943, and in an emergency filled the announcing post that she has had ever since.

But not all women working in television, however, are employed directly by television stations.

There's Edna Gamble, wife of the television producer, Bud Gamble, who has her own studio and spends her time designing television scenery and experimenting with special lighting effects.

There's Patricia Murray, talented television writer and performer, who started her television career in 1939 as "Miss Television" at the N. Y. World's Fair.

Then, there's Wanda Marvin, television reviewer for Billboard, now on leave of absence, who has reviewed more television shows than any other critic.

In talent agencies, publishing companies, advertising agencies, and elsewhere, women are also filling television jobs, often of their own creation, and making good. Television's best known announcer is Dotty Wooten, staff announcer for WABD-DuMont Dotty's natural, homey quality and dazzling smile contribute much to her tele success.

At the William Morris Agency, there's Selma Lee who heads the television talent department which she founded last year, at a time when television production was limited to only a single station, WABD. With three stations now televising live shows in New York, Selma Lee's talent department at William Morris is kept busy filling talent requests.

At MADEMOISELLE, Frances Hughes and Geri Trotta supervise their publication's television activities and prepare the scripts for the magazine's "Women in Wartime" series. (See page 42 for story.)

Among the career women in television, Edna Gamble is considered unique. She has her own little studio on East Fiftyseventh Street where she designs and paints the sets for ad agencies and for her husband's shows. It seems that no set is too large or too involved for Edna to tackle. But she admits that getting the sets ready on time for telecasts often keeps her awake nights. Despite the often 'beatthe-clock'' nature of her work, she says television is the most fascinating work possible for an artist.

Another exciting job is held by Lela Swift, assistant floor manager for CBS Television. Miss Swift, small, dark and very active, is on the floor of the studio during every telecast. Through her headset she receives instructions from the control-room for stage hands and actors, which she conveys by means of busy hand signals.

Her knowledge of television goes back to 1941 when she became secretary to Dr. Peter Goldmark, CBS' color expert, and then his administrative assistant. She came to CBS in 1944.

Doing an all-around, manifold job in television is Helen Rhodes, who announces, plans and directs programs at Station WRGB, Schenectady. On numerous occasions she has conceived shows, prepared the scripts, found the actors and rehearsed them through line and camera rehearsals, and finally directed the programs on the air. When the need arises, Miss Rhodes also assists with costuming and make-up of actors. Being videogenic, she also announces many of WRGB programs.

Another "woman in television" at WRGB is Nan Nelson, who produces "Even Song," a fifteen-minute religious program every Sunday; and is in charge of children's programs, and works with agencies in producing commercial shows.

That television offers opportunities to women interested in advertising and promotion is evidenced by the recent appointment of Charlotte F. Stern as Manager of Promotion for the National Broadcasting Company's television station WNBT in New York. Slender, dark and soft-voiced, Miss Stern had eight years of varied advertising and promotion experience before she joined NBC in September, 1943, as a writer in the network's Advertising and Promotion Department.

Asked how she got into television in the first place, Miss Stern contends it was sheer good luck. Her first writing assignment at the new job was the preparation of a booklet concerning the RCA-NBC pioneering effort in radio and television. requiring voluminous research on her part.

Her fascination with the new medium grew in proportionate bounds to her investigations into NBC's television history. Because of this enthusiasm, and the knowledge of the medium which resulted from her researches—and the fact that she had handled many of the department's television promotions to that time— Charles P. Hammond, NBC's Director of Advertising and Promotion, gave her the present assignment when the National Broadcasting Company recently accelerated its television operations.

Extremely videogenic, talented and blonde is Patricia Murray, who has made television her career since 1938. For what is no doubt a record, she has, since November, 1943, appeared every Wednesday evening as announcer and "emcee" for Lever Bros. "Wednesdays at Nine" program from WABD.

While majoring in journalism at the University of Pennsylvania, Pat Murray joined Hedgerow Theatre, outside Philadelphia, where she played many roles. When she came to New York in 1938, her first job in television was with Thomas Hutchinson, who was then television director of the National Broadcasting Co. In May, 1939, she was selected as Miss Liberty for the Macfadden Exhibit at the New York World's Fair, and as Miss Television for the RCA Exhibit that summer. In the spring of the following year, Miss Murray won the "Miss Television" contest, sponsored by NBC.

She joined Printers' Ink in 1942, as assistant to the news editor, and in November, 1943, she began her present series of weekly commercial telecasts. At Printers' Ink she handles all television news. She is also a regular contributor to The TELEVISER.

One of the best known and respected reviewers of television productions is Wanda Marvin, five-foot-two honey blonde, the only woman television critic in the business. In her sixteen months of reviewing the Wednesday night telecasts of WABC for *Billboard*, she holds the record of having reviewed more television shows than anyone else. Unlike some of

Two of the three directors shown here at Station WRGB, Schenectady, are women.



TELEVISER



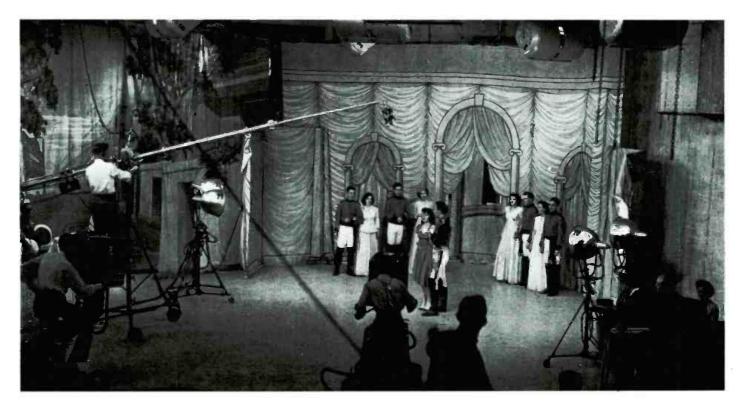
Lela Swift, floor manager at Station WCBW.

her contemporaries, Miss Marvin has kept her reviews restrained and constructive, has tried hard to understand the problems of the producer and the limitations of television today. Her perfect honesty, good judgment, and interest in television has won for her the praise and admiration of nearly all producers.

Both she and Miss Murray are members of the board of governors of the Television Press Club of New York. Miss Marvin is now on an extended leave of absence from *Billboard*.

While many of the jobs filled by women today have resulted from wartime manpower shortages, there is little question in the minds of many television executives that women will continue to fill important jobs in the postwar period, especially as writers, producers and directors of women's fashion shows, children's shows, in fact, any show with a woman's angle; as art directors, costumers, hairdressers, and make-up artists; as production assistants, talent agents, and in publicity, advertising and promotion.

In the meantime, women today are showing what they can do in television from station managers to "cable engineers"—and being smartly *videogenic* at their jobs!



LIGHT OPERA ON TELEVISION

By BOB STONE

Program Director, WRGB

A LTHOUGH television programming is still very much in the experimental stage, we of WRGB have found it possible to set some half dozen types of program definitely in the credit column as regards audience response. Not the least of these, is Light Opera, which with its various elements of music, plot, dialogue, etc., etc., has been found to offer something of interest to nearly everyone. Here is a resumé of our work in this field to date.

A presentation of "Iolanthe" was our first attempt to televise a light opera. This occurred during the first few weeks of operation in our present studio, and our programming technique being still decidedly primitive, we did not attempt to reproduce the original stage spectacle. Instead, we presented the principals and minor characters visually and placed the chorus with the orchestra on an offstage microphone, making such cuts in the score as were necessitated by this procedure. The production, by the way, was that of the local light opera company.

Our next essay in this field was "The Pirates of Penzance," in its production by the State Teachers' College, directed and accompanied by Dr. T. Frederic H. Candlyn, himself a noted composer and organist. This time we tried the expedient of using half the chorus on set in Act I, and the other half in Act II. This gave the proper choral effect, without unduly cluttering the scene with choristers.

Oscar Straus' "A Waltz Dream" (another offering of the local group) proved sure-fire television. Not so A. Baldwin Sloane's "The Mocking Bird," whose chief assets—pageantry and mass movement—are ill adapted to the present dimensions of the television screen. Nonetheless, it rated well with televiewers. It was, incidentally, a production of the Alba-Del Society of Albany.

Again the State Teachers' College scored, with "The Gondoliers"—in the writer's opinion, the greatest of light operas, musically at least. This was followed by an even more significant event the first telecast of a production by the Julius Hartt Musical Foundation of Hartford, Connecticut, whose opera department is doing invaluable pioneer work in the popularising of opera through intelligent staging. The work of their unique executive triumvirate—Moshe Paranov, musical director; Friedrich Schorr, vocal coach; and Elmer Nagy, director of the various phases of dramatic production was readily apparent in the thoroughly professional routining of the performers. The vehicle was "Marriage by Lantern Light" by Jacques Offenbach—who incidentally represents a source of permanent light opera repertory rivalling Gilbert and Sullivan. The male lead in this production was sung by Carlos Alexander, well known bass-baritone recitalist.

Another milestone was achieved through the formation, and opening production, of WRGB's own light opera companyour first light opera telecast not previously gotten up for stage presentation. The work chosen was Julius Eichberg's "The Doctor of Alcantara," a naive but extremely tuneful piece based on Italian opera buffa models, which combined the advantage of quick appeal, utter novelty, and entire absence of chorus, which latter enabled us to tighten up our camera shots as never before. Also, the production brought fresh laurels to Arthur J. Sherburne-long prominent in local symphonic, operatic, and chamber activitiesas conductor extraordinary for WRGB.

We celebrated Christmas Week, 1943, with a telecast of another fine Julius Hartt production: "Hansel and Gretel." Although this work is part of the repertory of all the great opera houses, it may be considered a light opera in all but its musical exactions, so I make hold to include it here. The success of the production was threatened by a near tragedythe set for Act II (a luxuriant twodimensional forest) failed to arrive in time; so, considerably after the eleventh hour, our prop men were dispatched for Christmas trees as the only possible substitute. These were obtained, and bases for them were hastily knocked together on the Act II set while Act I was actually in progress. A quantity of ersatz grass (courtesy of a local mortician) completed the effect of luxuriant vegetation . . Program Note: Hugh Thomson, baritone, now with the Metropolitan Opera Company, sang the role of Peter, the father.

For its second production, the WRGB Light Opera Company presented "Trial by Jury," which was long unsurpassed among our studio programs in point of audience rating. Dave Kroman as the Judge and Larry Algeo as the Counsel for Plaintiff should be mentioned as having the authentic Savoyard manner—an all too infrequent quality in American representations of Gilbert and Sullivan.

New Offenbach Opera Presented

"The Mikado" was the third annual offering of the State Teachers' College. It proved its indestructibility, were such proof required, by rising triumphantly above such disadvantages as indifferent talent and insufficient rehearsal, and received fairly high audience rating.

Our most recent light-opera was presented on March 9th. It was Jacques Offenbach's "Panni d'appi" (Apple of My Eye") produced by the Television Workshop, and directed by Sanford Meisner. Our presentation, by the way, was the first ever given in this country.

In closing: I sincerely believe that the operatic renascence which is taking place today in the music schools, in the music departments of universities and colleges, and in a number of experimental groups, largely in New York City, will be of direct benefit to television program-wise, while television can reciprocate by providing a comparatively inexpensive outlet for an art-form which is being revitalized and popularized as never before in its hitherto stuffy and tradition-bound history.

TELEVISER

COPYRIGHT AND TELEVISION

By C. J. WOODWORTH

A S A RESULT of radio's widely publicized copyright difficulties in 1940-41, the radio broadcasting industry became acutely copyright conscious and has since exercised caution and care in the clearance of published works used on radio.

Great are the problems of copyright for radio, but greater are they for television.

The Copyright Law, practically unchanged since 1909. ingeniously covers audible performances, and visual performances as applied to films. Both types can be protected by copies of scripts and prints of films (a print or two from each scene), registered according to provisions of the copyright law. But television, only a dream in the minds of a few far-sighted scientists, never entered the minds of American lawmakers when the present copyright law was passed. Little provision is therefore made for the registry and protection of a television production as such.

There should be little difficulty in registry of a telefilm, or in clearance procedure, providing exhaustive search is made of all otherwise copyrightable matter that goes into its makeup. Individual prints, or sequences of film, should of course be submitted as in the case of film for theatre projection. But it will not suffice merely to register the script of a livetalent tele show. The procedure of filing photographs of several parts of a show would, in most cases, be cumbersome and costly. At the present time, however, with the copyright law as it is, there seems no other form of adequate protection, than to register full tele script, together with detail photographs of at least four main sequences.

Suppose we examine the clearance angle for a moment. In audio broadcasts all we need to determine are the following factors: agency (when the work is licensed through an agency), true ownership, fair use, parody, ethical status (FCC rulings). But television adds the right of privacy (right to prevent publication of pictures) which could possibly arise from the televising of audience-participation shows or public events.

Then there is the problem of adaptations for television. Hardly any modern novel or play that might be considered for television, could safely be used in this regard without definite agreement between broadcaster and author, or author's agent. And to date there exists no simple means of determining ownership of many books, plays and novels. There is a need for licensing agencies, like the well known groups that control thousands of music copyrights in the field of authorship.

Due to either the rapacity or the shortsightedness of some authors, much of the world's greatest literature has been kept off the air. This condition bids fair to grow worse unless some arrangement of fair license fees and iron-bound use contracts can be worked out in regard to televising current or past "best sellers" and other works of public appeal.

The copyright law is a federal statute, and as such has nicely sharpened teeth. Infringement is infringement, whether inadvertent or deliberate-and costly when sufficient grounds exist to sustain a court action. With the many new possibilities of infringement present in television, broadcasters should wisely establish now a central clearing agency or research bureau, available to all at a reasonable yearly fee, where they could take their tele copyright problems and be sure of guidance through the legal pitfalls that may surround even so harmless a telecast as "'Little Red Riding Hood." Don't laugh! Audio broadcasters today have trouble, real trouble, with "ghosts," longlost writers and alleged "owners" of such works as "Chicken Reel" or "Old Oaken Bucket." Some will even go to the extent of producing as evidence lengthy genealogies showing an alleged family claim to the work of this or that famous author or composer. What heights some of these mode daring individuals will go, relying on the not-too-sure attitude of broadcasters toward televisable material-can only be left for time to tell.

It seems evident, therefore, that television copyright clearance technique will have to grow with the medium, not allowing costly suits and "trial and error" methods later on retard the progress of television programming. It is not too soon for every telecaster, and future telecaster, to start giving copyright a place in his thinking and doing something about it perhaps through the TBA.

VISIT TO A U. S. GOV'T TELEVISION STUDIO

By LARRY CARL

Televiser Staff Correspondent

N THE building register of the U. S. Dept. of the Interior, in Washington, D. C., there's a line that should interest every radio and television man. It reads: "8th Floor, GOV-ERNMENT BROADCASTING & TELEVISION STUDIOS."

Interested, I entered the elevator and was whisked to the 7th floor, from where it is a brief walk, past a "No Visitors" sign, to the U. S. Government's radio and television studios on the eight floor, the "penthouse" as it is known to the employees.

I asked for the director, and was ushered into a well-appointed office and was soon greeted by congenial Shannon Allen, director of the Dept. of Interior's radio activities.

When queried on television, he answered: "Yes, we're doing a great deal of thinking and planning for television."

5 Million Ft. of Film

"In fact, in the files of the Interior's Motion Picture Division,' we have more than five million feet of film of both 16 mm. and 35 mm. reels, that have been classified for use on television. The films range from exciting National Park travelogues to cartoons on 'How To Mine Coal,' 'Indian Life in New Mexico,' and on almost every subject imaginable, all of which are available at no charge to any television station writing in for them.

"The Dept. of the Interior has many departments which the public has almost forgotten during the war, such as the National Park Service, Fish and Wildlife Service, the Indian Bureau, and the Bureau of Mines, all of which are planning to promote their services by films specially prepared for television, which are planned to reach millions of postwar travel-hungry citizens."

Tele Studio Under Construction

But even more significant is the television studio now under construction by the Interior Department. In the control room they were installing a 16 mm. projector, turn-tables, monitors, etc. The projector will be connected with the television receiver by a coaxial cable, "built in" under the studio floor.

In the future, according to Mr. Allen, it will be possible for a Government official, with a message for the public, to come to Interior's studios and at one "sitting" make films; slides for "stills"; electrical transcriptions; and appear on radio and television broadcasts.

Equipment From Surplus Property

When we inquired about "the equipment?" Mr. Allen replied, "I can't tell how much it will cost. IT MAY NOT COST US A CENT!" Somewhat astounded, we inquired, "HOW?"

"Through the Surplus Property of the Government," was the answer.

"Just how much surplus property Interior's radio and television studios will be able to reclaim for television experiments and how much will have to be purchased new is impossible to estimate at the moment," replied Mr. Allen, as he ushered us into Washington's largest radio studio.

Mr. Allen pointed out the possibilities of converting the observation room into a "camera and boom base." The studio itself is large enough to house small dramatic groups, but it has no stage or dressing room as yet.

The interest of many of Allen's assistants is such that some of them work nights, on their own time, experimenting with programming and special engineering problems connected with television. The Acting Chief Engineer, Herbert F. Dengler, of Interior's radio activities, was formerly with NBC and was in charge of NBC television at the New York Worlds Fair.

To Produce Gov't Tele Shows

What it boils down to is this: The Interior Department plans to act as the production agency for the Government's post-war television shows, the same as it does for most Government radio productions. It will contact talent, plan and produce shows for its own department and for other Government departments not equipped for such work. These shows will be telecast through established networks. In addition to "live" shows, the Interior Department, through its "Television" and "Motion Picture" divisions, will prepare both 16 mm. custom-made film shows for television use. This will involve a gradual expansion in the program and technical staffs of the Department, but no additions are planned immediately.

In the meantime, Mr. Allen stated, Interior Department will cooperate with Washington's two experimental television stations (Philco and DuMont) when they go on the air. One thing Shannon Allen wants made clear: "The Government does *not* intend to operate any television stations of its own." But Interior is installing special antenna equipment on top of its building for television reception.

That, in a nutshell, is what Uncle Sam is doing at the moment about television.

CAMERA GIRL . . .



Betty Jane Smith, CBS Dancer, takes the cameraman's place during an intermission. (CBS Photo.)



The Dance on Television

By GEORGE LEON

D ANCING is almost purely pantomimic and so constitutes an ideal form of television entertainment. When properly presented, dancing has the vitality and the appeal necessary as entertainment, as a means of expressing a message.

Dancing is pantomime, and as such it is understood by nearly all, either directly or through its connotations. A recent rally sponsoring the cause of Republican Spain was highlighted by the appearance of the celebrated Spanish dancer, Carmen Amaya. Her dancing was the most direct route to bringing the audience to the realization of the spirit of the Spanish people.

New Horizons for Tele Dancer

Dancing is primarily visual. So is television. The dance-director, or the choreographer, has in television the means for new and enlarged horizons.

His first and foremost advantage in television is the ability of the camera to subordinate conflicting dance elements to their proper place. In the theatre, the problem often arises whereby a soloist, who should have all of the audience's attention at some particular moment, isn't getting it because the balance of the dance group present a distracting influence. In television this can be eliminated by switching to a close-up of the soloist, or the group can be defocussed.

Another problem for the dance director is having dancers in two groups moving simultaneously, but in contrary patterns. As each group is as important as the other, each should get complete attention from the audience. With the camera we pick up Group One long enough to fix the movement in the audience's mind. Then, the other camera picks up Group Two. At the same time an effect of heightened interest is achieved by switching from one camera to the other.

Close-Ups of Hands Possible

Then, too, a dancer may be only miming. He is stationary, but he is registering an emotion or telling us something of importance to the plot. An extreme closeup will show his hands and face. With those elements the dancer tells his story.

In England unusual effects were produced by televising a dancer with five cameras simultaneously. On the screen appeared five images from five angles of the same dancer.

Television will bring the ballet stage into the home, enriching the viewer (who may never have had the desire to attend a ballet concert) and at the same time create an intimacy between the artist and the public. That intimacy is necessary to dancer and choreographer. Of more practical value is the consideration that television will permit creation of ballets impossible to do on the stage. The introduction of narration could bridge gaps in the stories, replacing the program notes. Dialogue spoken by the dancers could also be used. Moods could be conveyed by fog, smoke, the sound of crickets, the crashing of waves. The possibilities are limitless!



A RT on television means more than just televising paintings or sculptures. It means bringing art closer to the public.

The public shows an ever increasing interest in art. During the 1942-43 season, the Museum of Modern Art enjoyed an attendance of 293,234 and 385,806 during the 1943-44 season. These figures are significant.

Now, how many people purchase paintings? Art News, in a recent issue, reported that 17 galleries in 10 months sold 3,711 paintings for a total of \$1,800,000, with 212 paintings for one gallery. 35% of the buyers were "new collectors."

The ever growing number of published art books, is the third factual evidence of the public's interest, if such evidence is necessary.

If we agree there IS A NEED for art for the general public, the next question is: How to fill this need?

Television has its advantages as well as its limitations. The advantage is that we can bring paintings into the homes of millions of people in the post-war world. The disadvantage is that television cannot reproduce colors, and some colors (for example red or black) bear distorted color-values in relation to the other hues.

Television is a new medium, and we must adjust our art programs to the medium.

The first consideration is for the art program to be ENTERTAINING. It should have a story. There should be movement, conversation, humor and variety.

The Norman D. Waters Associates advertising agency produced the first commercially sponsored show of this kind on December 3rd, on WABD-DuMont. The writer was asked to do the show.

We started with a brief introduction. Then we switched to a short scene in a museum with two girls filling the role of the Public. Then we switched to a scene in an artist's studio (my studio). We selected the paintings to be shown in such a manner that there would be variety, and still all of them should carry the main message. The message was that an artist is not attempting to copy with photographic reality the objects he is painting, but rather to express his own emotions, his personality. Here we had some paintings by myself, one by Picasso, and a painting done by an insane person. We used an African mask, to show the origin of cubism, then two natural objects: a turtle bone and a root of a cyprus tree, to show that a natural object can have beauty without any work of an artist.

Did "Synthetic Vision" of Public

To break up the rhythm of showing paintings and sculptures, I sketched one of the girls. In conclusion I did a "synthetic vision" of the public, using as a symbol a large eye, the tube and wires of the set, together within the frame of the screen. This was all done before the camera.

In order to keep the show fresh and spontaneous, we agreed on the main theme, but the whole show was ad-lib.

The consensus of opinion was that our show was not only art, but it was entertaining as well.

This first experiment showed very good promise for the future development of "art on television." We can continue by "explaining" art in "art appreciation" presentations. We can even bring the "making of art" closer to the public by showing artists at work. In addition, we can visit museums and show outstanding examples of different periods.

All this can be done. But it must be done with action and narrative so that it becomes entertainment and fun. By acquiring the "know how" in this present stage of television, artists will be ready with good shows later on.

LANGUAGE OF TELEVISION:

A Glossary of Terms: 1

AUDIO (Latin: I hear): pertaining to the transmission of sound.

- BLOOM: glare caused by an object reflecting too much light into the lens of the camera.
- BRIGHTNESS CONTROL: the knob on the receiver which varies the average illumination of the reproduced image.
- CATHODE: the electron source in a vacuum tube.
- CATHODE RAY RECEIVER TUBE: vacuum tube for converting electrical energy into corresponding light energy.
- CENTER UP: to center the composition of the picture at the television studio.
- CLOSE SHOT: a shot taken at close range, which includes a portion of the background.
- CLOSE-UP: a shot taken at close range, which includes only the object or person televised.
- COAXIAL CABLE: a special type of cable suitable for conveying television signals.
- CONTRAST CONTROL: the knob on the receiver for adjusting the range of brightness between high lights and shadows in a picture.
- CONTROL ROOM: housing for the monitoring equipment from which the program is both directed and controlled.
- DOLLY: a wheeled camera platform used to move the camera into different positions on the set.
- DOLLY SHOT: a shot taken when the camera is moving upon a dolly.
- ELECTRON GUN: electron source for a strong and highly concentrated electron stream.
- FADE-IN: the gradual appearance of the screen image from total darkness to its full visibility.
- FADE-OUT: the gradual disappearance of the screen image from its full brilliance to total darkness.
- FOCUS: in the receiver, the adjustment of spot definition.
- FRAME: one complete picture. Thirty of these are shown in one second on a television screen.
- FRAMING CONTROL: a knob, or knobs, on the receiver for centering and adjusting the height, width, and centering of the pictures.
- FREQUENCY: the number of cycles per second.
- FREQUENCY MODULATION: the changing in frequency of a carrier wave corresponding to the variations in amplitude of the signal to be transmitted.
- GHOST: an additional and unwanted image appearing in a television picture as a result of signal reflection.
- GOBO: a light-deflecting fin used to direct light in the studio and protect the camera lens from glare.
- HOT LIGHT: a concentrated light used in the studio for emphasizing features and bringing out contours.
- ICONOSCOPE (slang: ike): a type of television camera tube developed by RCA.

(Next Issue: More Tele Terms)



FILM GLAMOUR ON TELE: Alan Ladd and Veronica Lake re-enacting a scene from the Paramount picture, "This Gun for Hire," for television station W6XWY, Los Angeles

Making Motion Pictures for Television

By ARCH B. HEATH and J. RAYMOND HUTCHINSON

ED. NOTE: Of Arch B. Heath, who died recently, Close Up, Feb. 1929 wrote: "To A. B. Heath of Carl Laemmle Productions, will really be due the credit and distinction . . . for having done that which would establish the sound film permanently." (Following production of "Melody of Love").

THERE has seldom been a picture produced by the major companies in the last fifteen years which could not have been produced for half the cost, if all these along the line had half an eye to economy. The "quickie" companies have at times turned out a surprisingly good product for an amazingly low cost of about \$20,000, but the distribution of these are limited and no particular honors go to the producer.

Sometimes, but very seldom, a very fine production has been made by major companies at a comparatively low cost. These have been rare, and invariably they frightened executives so that in the end they ordered sequences reshot or doctored to keep the costs in line. Almost always the production suffered. It is not surprising that the television station manager and the potential advertiser think in terms of \$1,000,000 or \$2,-000,000 for motion picture production costs. The decimals have been very wayward indeed.

Since probably no one has produced a good professional motion picture, or series of motion pictures *for television*, sponsored by a reputable advertiser, the field is open. With the unnecessary costs eliminated, television productions on film are entirely feasible, and in the opinion of many persons they are the best to present television.

In order to try out this idea, the old system must be thrown out the window. Scripts should be timed to the second, as in radio, and not a foot of film made more than the time on the air allows. For the director who takes a scene from many different angles, allowing the film editor to judge the so-called best, let it be understood that there is only *one* BEST angle for every scene which a competent director can select before shooting. It is entirely unnecessary to take a long, medium and close shot, plus several angle shots, the only excuse being "that they might be interesting" and are "protection" for matching up purposes.

In a room set, a director generally makes the sequence in continuity for convenience at the sacrifice of economy, moving the camera and lights with each set-up. And then more often than not, moving back again when the action roams over the first part of the room. All this can be done away with. When a cameraman shoots close ups or semi-close ups, which is the way most of the story is told, the background should be, and almost always is, out of focus. The public can't tell if the rear wall is five or ten feet away. A clever director-there used to be a fewwill find it possible after the long shots are made to make close-ups in one area of the room, thereby saving untold time in re-setting of lights in other sections of the room-an important item of expense. For the most part, the same results can be achieved by simply re-arranging the furniture and the pictures or wall dressings which are called for in the background. Sequences cannot be shot in continuity by this method, but continuity of shooting is not necessary with good directing. A good rule to follow is that the background objects should not be made too prominent -thus focusing most attention to the actors. Lights play a very important part in this, and it is one factor in which television studio productions are very weak.

Television must forget about the "socalled" essential cost of movies, and start from scratch on their own system of motion picture production. The productions can be more economical in many, many ways, and a better product built for television. Many good stories can be tightened to two or three reels. The action can be speeded up, less time given to characterization and detail, and the punches packed lustily in a few rounds. There could be more telling and, if sponsored, more selling, in less time. Incidentally, the television audience will have less time to stop and look, than merely to listen-the impact will have to be greater.

With sound efficiency of production, directing, writing, acting and promoting ten, twenty or thirty thousand dollar *professional* productions can be achieved, especially in a series. This would seem to compare favorably with radio time and production costs, with greater potential selling power.

Movies and television both have to appeal to the ear and eye, they're very much alike-but the sooner television disowns its older relative and starts on its own, the better off it will be. There's no use trying to hide the fact that they will be in competition for the attention of the public, and the sooner we admit that the better for all concerned. We can learn a lot from movie technique; as a matter of fact the public won't accept less. But in making every second count, an improved technique can be developed, aimed to give productions better pace and not drag out for ninety minutes the story which can be told well in thirty.

There are many other items too on economy, or about technique, such as the narrator's vioce describing certain important phases in the story where brief montages could amply illustrate sequences which are now long drawn out on the movie screen. Useless dialogue, and perhaps a thousand incidentals—but all that is an additional story.

The intelligent investigation of the use of motion pictures, and many companies are working on this, will reveal many favorable and practical items for immediate consideration. The following are merely suggestions.

1. All the essential values of motion picture art can be used for television productions — lighting, action, whimsy, fantasy, stark realism, humor, pathos, wistfulness, beauty and a thousand other dynamic factors, some of which were laid aside when 'talkies' came in.

2. An adequate schedule of productions could insure a reasonable supply of films, to be used separately or with other programs which are more exclusively television per se. Alert sponsors might well produce a series for the ensuing quarter at a minimum of cost, assuring noteworthy stars an adequate annual salary.

3. New stars could be developed for the entertainment field who might become box office attractions later.

4. Illness, accident, or other "incidents" might be more readily eliminated. Programs could be keyed, when desired for personal appearance in character.

5. Productions could be made available for more remote stations where chains do not exist, or for good-will promotion in schools, churches, community centers, or abroad. In fact there should be a nontelevision, non-theatre market for these.

6. New story ideas, new directing techniques, fully visual and patterned for the television art, could be added to present advance. Impressionistic or symbolic treatment of stories might be refreshing. Virile imagination of fresh entrants in the entertainment and information fields would be welcome and wholesome.

7. Motion pictures for television could provide an immediate, practical, and economically feasible vehicle for use by reliable sponsors. Their support is an absolute necessity for American television.



"SHOOTING THE STARS": Field Pick-up of Paramount Stars by W6XYZ Field Unit.

BLUE NETWORK'S VIDEO DEBUT

W HETHER radio programs can be successfully transferred to television is a question that has been debated by the experts for months. Most of the opinion has been negative. A few radio die-hards have maintained that it can be done, citing CBS' "The Missus Goes A'Shopping," "Town Meeting of the Air," and several others.

On February 25, the Blue Network launched its series of "radio shows-ontelevision," using the facilities of WRGB in Schenectady and WABD-DuMont in New York in an effort to find the answers to converting top daytime and nightime radio programs to television. The program experiments, according to Mr. Paul Mowrey, in charge of television for the Blue, will be eventually expanded to Chicago and Los Angeles. In the meantime, the New York and Schenectady broadcasts are being watched with interest by radio and television program producers and advertising agencies.

The first in the Blue Network's experimental programs, "Ladies Be Seated," a daytime program, was televised via WRGB on February 25th before an assemblage of newspaper and trade paper editors from New York. Wisely, the questions and "gags" were all visual.

Two days later, the network presented another of its radio program, "On Stage Everybody," this time from Station WABD in New York.

No Outside Performers

The Blue Network's schedule of television includes such well known radio programs as "The Breakfast Club," "The Radio Hall of Fame," "The Quiz Kids," "Fred Waring's Pennsylvanians," and numerous others from its radio repertory.

According to Mr. Mowrey, the Blue intends to use its own performers, not employing outside talent as has been done by other networks.

With the Blue Network's entrance into television, all four networks are now on the air in New York with video programs

COSTUMING FOR TELEVISION

By ROBT. FERTIG

NE of the most rewarding branches of new information stemming from all the television program experimentation and research that's taken place is a new awareness of the requirements of television costume-wise.

Characteristics of the new medium which dictate what is most effective in costuming appear to be as follows:

(1) Television is in monochrome.

(2) Television does its best reproduction job on the middle tones—and its poorest at both extremes of the gray-scale.

(3) Television is a mostly small-screen operation which blends delicate patterns and is at its best with clear, distinct patterns or large masses of solid color.

(4) Television, in its present stages, does not give the same interpretations of color as does, say, panchromatic photography.

(5) Television shows "style in action," as distinct from static newspaper or magazine illustrations or the artificial posing and modeling of the fashion show.

Now let's translate these characteristics into costuming for television.

We will assume that our model is wellproportioned, that she is trained to maintain the erect, regal posture essential to proper wearing of clothes without losing easy grace in movement, and that she is animated both in body and facial expression.

Clothes Must Be Chosen Carefully

Her clothes must be chosen primarily for their dramatic lines. The interesting little gadget on her hat or her lapel and the spinach are discarded for clean sweeping dramatic lines of hat, dress and wraps. So far as possible, ugly, eye-offending lines are avoided. Babushkas give head and shoulder lines as little beauty as a camel's hump possesses. A cape of the same dark color as her suit can give a girl a potato-like shape unless she is permitted to remove it soon after her entrance.

Only when strong catch-lighting is used (that is, when the light shines across the costume so as to cause the texture to cast strong shadows) does a fabric such as camel's hair or richly piled velvet show to advantage. Glossy fabrics, used in con-

TELEVISER

trast to mat-finished ones, seem effective, as when the girl wears a satin blouse with a crepe or wool suit.

Black outfits are oftentimes unsuitable for television at this stage, for two reasons. When black reaches the edge of the picture frame, as in a close-up or medium shot of the figure, there is a white flaring at the edge of the frame caused by something engineers call "secondary emission." Also, unless the black-clad figure is carefully bathed in light strategically placed, it tends to lose detail. White, too, is not always suitable for the medium. Because of its extreme position on the gray-scale, it tends to blend into a single, undetailed mass. Recently a famous designer made her initial appearance on television. She was uncoached by the producer as to her costume and she wore a high-necked, longsleeved white cotton blouse. Her blouse came over on most television receivers as a confusing white blob.

Tones Vary with Lights

Grays, browns, light blues, reds and most other colors assume various middletone positions which are generally more satisfactory than pure black or white in costuming. When the studio lights are incandescent, reds tend to go lighter than most people would expect and blues go darker. Colors come closer to their panchromatic rendition when mercury vapor lamps are used in the studios.

A prominent Broadway actress appeared on a television program wearing a hand-wound turban that hugged her head tightly and a paisley-printed crepe blouse with fullness both in the bosom and sleeves. The undistinguished lines of the turban failed to highlight the actress's famous, classic features. The blouse with its poorly chosen pattern and its loose lines robbed the actress of the advantages of her excellent figure. As a result her performance suffered considerably and, instead of looking like one of the most handsome of women, as she does in real life, she projected on the television screen almost dowdily.

Television costumes must be designed for action. The tight, pencilline skirt will ride up when the girl seats herself or confines her action as she strides about the set. Roomy kick-pleats in front and back will let the costume appear to conform to the requirements of L-85 and yet make for satisfactory television costuming. Similarly, roominess in shoulders and sleeve holes permits easy gestures and prevents the fabric drawing taut at the shoulders or the garment's twisting unattractively.

Quick Changing Costumes Desired

One other factor to which much attention must be paid in costumes for television is their design for easy changing. There can be but short time-lapses between the appearances of a principal character on the screen in live-talent productions because of television's tendencies to use few characters and to use them primarily in closeups. Therefore, if a character is to be shown in several changes of costume in a single show, she must have outfits which can be either worn one over the other, quickly changed, or modified by switching certain accessories.

Another advantage of having easy-toput-on clothes is to sidestep awkward delays in the action. It is often impossible to switch the camera eye from the actress as she struggles into her coat if the sleeves are not easily slipped into. One recent commercial was predicated on the announcer putting on a certain hat with a smooth, easy gesture. It was a soft cloth affair and the announcer couldn't get it on all the way in the second or so time allotted her, so she had to deliver the commercial with her hat perched up on top of her head like a frog on a toadstool.

The performers now actively participating in television are learning the special art of wearing clothes so that they become exciting and eye-compelling to the television audiences. They have learned to set costumes off to their fullest advantage by bearing, grace and television's corollary technique-of-action.

It's up to the program producers, now, to continue to improve their mastery of the peculiar combination of factors that make for the most effective costumes for television.

AND NOW...the General Electric

INTRA-

Television by wire for business, education and industry

The G-E Intra-Tel system can make a store the show place of a community. With it, it will be possible to televise and transmit living pictures throughout the store and in display windows. It is a new sales power that will increase customer traffic on every floor and in every department. THE REPARTMENT STORE

From the television laboratories of General Electric has come a powerful new selling aid for business, a dynamic medium for education, an effective tool for industry. It is G-E Intra-Tel—a television-by-wire system that can carry high-quality pictures and sound and reproduce them anywhere within the range of the system.

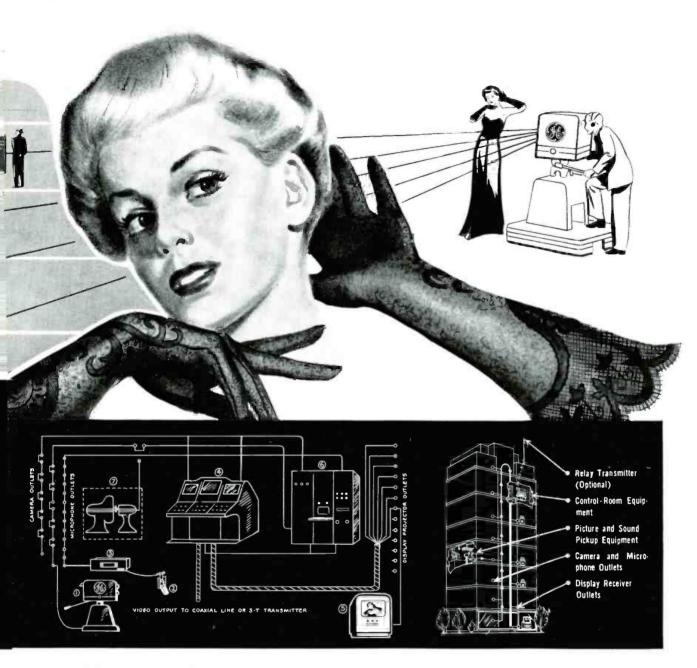
• Intra-Tel has great potentialities. In merchandising it can increase store traffic. With an Intra-Tel system dynamic demonstrations can be displayed simultaneously on every floor and in show windows. In education, the Intra-Tel system can bring special demonstrations, lectures, and motion pictures to every classroom. In industry the Intra-Tel system can provide the means for coordinating activities throughout a plant, observe production progress, to peer into inaccessible places or to observe extremely hazardous operations. The Intra-Tel system uses no transmitter and its installation thus requires neither FCC license nor government approval.

• A G-E Intra-Tel system includes one or more portable pickup cameras, one or more sound microphones, and a control and monitoring console. The entire system is designed so that both picture and sound are fed by cable to any number of home-type or display receivers. If desired, a motion picture projector and film pickup camera can easily be added to the system. Provision can also be made to link the system to any outside local television broadcast station by means of coaxial line or by radio relay.

• For details on G-E Intra-Tel systems and television broadcast systems, see your G-E broadcast equipment representative, or write for the booklet "Television Broadcasting Post-War," *Electronics Department, General Electric, Schenectady 5, N. Y.*







A typical G-E Intra-Tel system. With the Intra-Tel system, portable television cameras and sound microphones can be operated from any place in store or plant. Pictures and sound picked up by cameras (1) and

microphone with microphone amplifier (2) and (3) are fed by cable to the control and monitoring console (4). Outlets at the console make it possible to fed picture and sound signals by cable to any number of

display receivers (5). Amplifiers and pulse generator (6) maintain signal levels and synchronize acanning, respectively. Film projector (7) is used for motion pictures.

Plan to visit General Electric's great television proving ground — WRGB of Schenectody. Every Wednesday and Friday are "open house" days. Write for the folder, "How to get to Schenectady," or see your local G-E broadcast equipment representative. Establish a delivery priority new on your future television equipment. General Electric offers you the "G-E Television Equipment-Reservation Plan." Write for your copy. It explains how you can assure yourself early delivery of your television equipment. Hear the G-E radio programs: "The World Today" news, Monday through Friday, 6:45 p.m., EWT, CBS. "The G-E All-Girl Orchestra," Sunday 10 p.m., EWT, NBC. "The G-E House Party," Monday through Friday, 4 p.m., EWT, CBS.

ANTENNAS · ELECTRONIC TUBES · HOME RECEIVERS

FM · TELEVISION · AM See G.E. for all three !

TELEVISER

(ED. NOTE: THE TELEVISER is grateful to Prentice-Hall for the series of articles by Commander William C. Eddy. They will appear in the book "TEL-EVISION," by Commdr. Eddy, to be published in June by Prentice-Hall, New York City.)

II. EFFECTS WORK

T IS apparent that intelligent use of a flexible lighting control will make it possible to insert effect work into the program in several different ways. This poses the problem as to whether the control room, with its electronic control over the picture brightness, should make the initial switch to effect work at full picture brilliance or fade the picture down before shifting control to the effect engineers.

The best coordination can be obtained by working out a plan of switching prior to the airing of the program. If the effect is to be faded into the program, the control room should accomplish the fade down prior to switching and, conversely, if the effect is designed for full screen brilliance, the control room should transfer the program at a corresponding level.

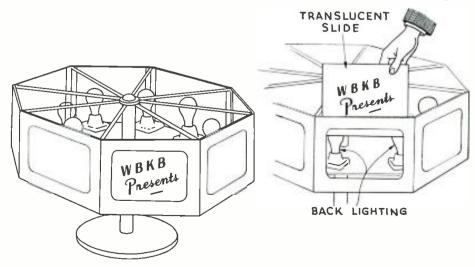
From the technical standpoint, it has been deemed more practical for the control room to take over the initial switch from program to effect work and to allow the effect group to carry on with successive titles up to the last exhibit. Any one of the normal methods of switching is considered satisfactory for bridging from the program into special effects. The direct switch and the "fade downfade up" are most commonly used. "Fade down" and "fade up" are descriptive names given to the process of reduction or increase in picture brilliance to or from a blank unlighted screen.

Tie-Up Methods

Once the program has been given over to the effect group, the continuity of the material and the degree of complexity of the effects will govern the methods used as "tie-ups" between exhibits. Direct switches or wipes are commonly used where copy is contained on more than one slide. In some cases a dissolve between two effects is acceptable, especially where the message is complete on one title and the second title is closely related. The "fade-up fade-down" method of switching should be employed in much the same way that a paragraph would be used in writing to indicate the completion of one thought and the introduction of a new one. All of these changes can normally be accomplished by variation of the lighting used on the effect, but it should be pointed out that wide, unexpected variations of lighting brought about by improper use of the control facilities available to the effect technician can upset the entire electrical balance of the system and the value of the effect itself. This fault is often encountered in switching the picture from the control room to the effect studio or vice versa. This can be avoided if the control room is cognizant of the levels to be expected and knows when the shift will be made.

Effect Work

Effect work many times resolves itself into the problems of miniature staging.



In this category the limitations of a machine exhibition of copy are removed. In many cases, it has been found more expedient to use such methods in preparing the title material for a show because of its close tie-in with the action which follows on the set.

Illustrative of such usage would be the title effect work in NBC's "The Doctor's Wife." To set the scene of the story properly, it was necessary to acquaint the audience with the fact that this doctor lived in the suburbs, in a certain kind of cottage, set well back from the road. The continuity required these details of the situation to be explained, as well as the usual listing of cast and credits. To put all this on a roll title would have made the introduction extremely long and far too wordy to hold audience attention. In the story conference that preceded the casting, it was decided that the use of a miniature to carry the material, in lieu of the more prosaic methods, would be suitable. A miniature street was designed and built, and a series of miniature billboards were placed along the street. These billboards carried the name of the play, the cast, and other copy that could not be illustrated. The second miniature reproduction of the actual cottage was also constructed and, for the opening scene, the stage crew built a full size replica of the entrance door of the cottage. The shooting sequence of these three sets was simple. The street scene was covered by a long parallel dolly shot which took the audience down the street, past the billboards, and out into the open country. At the far end of this set was a miniature picket fence which was again in the foreground of the cottage miniature. This practice of attracting attention to some striking detail in one set and showing the same detail in the succeeding shot of the second set, making it possible to tie the two sets together in the minds

(Continued on page 36)

The hexagonal display device makes a handy, all purpose title machine. Either transparencies or front view titles can be used, although this unit does not lend itself to complex displays.

TYPES OF TITLING MACHINES ...

The field of visual effect work in television is so wide that it is impossible to describe any but the standard types of exhibiting machines which are in use in nearly every studio. The card drop and variations of the half silvered mirror system fall into this category. A simple but efficient unit is the title drum. Such a unit is excellent for work where the cast is limited in number and the credits are not extensive. It does not lend itself to extended copy.

A somewhat similar title effect can be built around the travelling belt. In this case the moving shadows of the lettering in the backdrop creates an extremely interesting result. This sensation is ac-centuated by the lettering apparently growing larger and more distinct as they approach the camera from the position of sharp focus.

CURVED CYCLORAMA

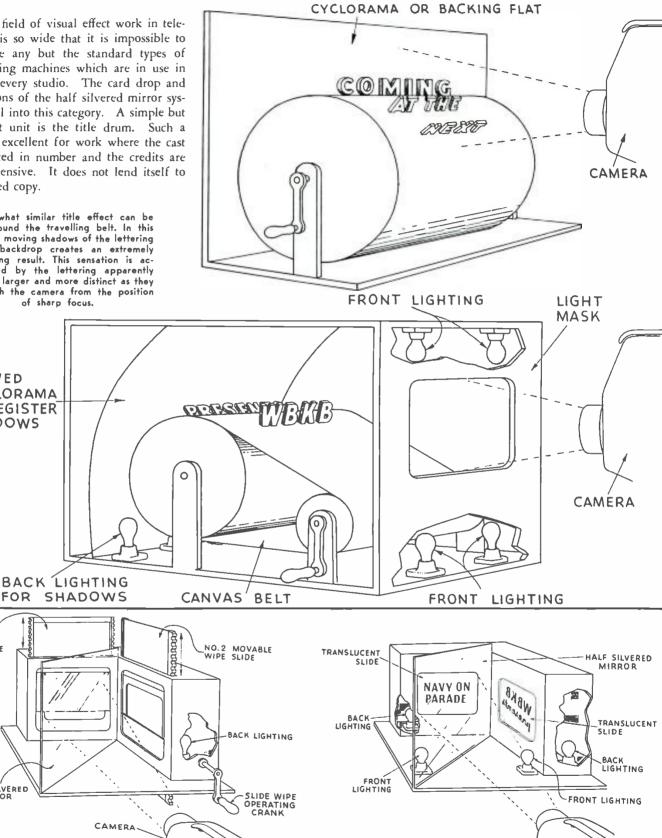
NO.1 MOVABLE

WIPE

SLIDE

HALF SILVERED

TO REGISTER SHADOWS



THE WIPE: For exhibiting two or more titles. The second title slowly obliterates the first title as the second display slides into place. TELEVISER

OPERATION: The two opposed and complementary shutters are operated by one control which obliterates one picture as the second is disclosed. ot the audience, is known as a "pshychological tie-in." In this case, the white fence, first seen among the bushes at the end of the suburban street, is again shown in the right foreground of the second miniature and thus the relation of the cottage to the street, and of the street to the section, is explained.

The camera work on the cottage or second miniature consisted of a long dolly shot which opened at some distance from the fence and carried the audience up through the gate, to the door of the house, where we found two more "tieins" placed to connect with the next shot. In this case, these "tie-ins" consisted of a mail box on the left side of the English type door and the doctor's shingle on the right side. These were duplicated in full scale on the third or life size set. As soon as the picture size of the miniature door matched the picture size of the full sized door on the monitor, the pickup was switched to the third set and the action on the set began with the doctor's lines, who introduced himself as he opened the door and collected his mail. The business of the play, which was shot in interior sets, followed. Such combined use of miniatures, full scale, and title work, is not uncommon in television. The Ronson Lighting Company, in presenting the Ronson Light Opera House, used a miniature theater and ticket booths and full sized sets with unusual effectiveness.

"Pirates of Penzance"

In "The Pirates of Penzance," staged in 1939 by NBC, it was necessary to indicate that the second act would take place inside a castle, at some distance from the first act. We could have said as much in words, but that would not be television and would not have been as effective as the method chosen. In this story we built a miniature castle on a miniature mountain, and placed the entire set on a rotating platform. As the first act closed the cameras faded down and then faded in on a long shot of this slowly rotating castle and mountain. The covering camera started a slow dolly on this scene, gradually increasing speed as the image got larger and the castle, now whirling madly, filled the entire screen and became a blur. The second or off camera, ready for the opening shot on Act II, was adjusted for an equivalent out-of-focus shot on the life size interior of the castle. When both images matched

was one of flying through space toward the castle and through the walls into the interior, where the second act of this popular Gilbert & Sullivan operetta begins,

"Treasure Island"

Another interesting title miniature was the beach scene used as introduction and intermission break in Robert Louis Stevenson's "Treasure Island." The waves washing up on the sand in this set disclosed the title and author without departing from the mood of the production. Because of the complexity of the devices used, the cast of characters was not given until after the play. The names were then shown in Old English type on a parchment background. In many cases, it has been deemed advisable to get directly into the play and to hold the list of characters and credits until the final curtain. This practice provides an opportunity for introducing the actors in costume by dissolving over their billing.

Each story presents a new problem and a host of new possibilities to the effects department. It is wise to vary the title work and methods of exhibition from play to play, so that this part of the program will not become a commonplace item in the evening's entertainment, but will contribute to the success of the story itself. In its favored position of being first on the screen, it can do much to make or break the play that follows.



in size, the switch was made. The effect used as part of a setting. Eddy at left

COST FACTORS IN TELEVISION

THE cost of producing a television program after the war, when the video art really gets under way, is one of the big "moot" questions.

First item to be considered is the cost of "air" time. Rates will vary according to the time you buy, area you want to cover, and the station you are using. Extra rehearsals will add to your expenses. Cost will vary also with size of studio and crew needed for your show.

If it's a packaged show you'll leave the worries and headaches of production to your package agency. If it's being produced by your advertising agency, you will sit in on all problems-but the final responsibility will be theirs. If you are the agency people, this is what you'll have to furnish: rehearsal script embodying the "idea," commercial script to sell the product, prop list, clothes list, actors' list, scenery list. After rehearsal, in which the show grows and changes before your eves, you'll find you need a completely revised script and completely new lists of all the above. All these things cost money.

Actors will, no doubt, be paid wages fixed by a union. The question of union jurisdiction is now being decided. Stage hands, prop men, electricians, musicians, and all the crew will come under union jurisdiction and will be paid accordingly.

Wardrobe and scenery will be a big item in the budget. Interior decorators will also have their place in the budget, as will special effects men.

Make-up men and hair stylists will be as integral a part of television as they are of pictures—perhaps more. When color become a factor, they will assume major importance, as will color advisers.

These are the essential items that will go into a well-rounded budget of the future—applicable to any type of show at any time of day or night, Myriad forms of extras will crop up of course they do with every new industry—but they always remain just that—extras. In actual figures your budget may be in dollars hundreds of thousands—but you will have to allow a place for all of these items no matter what the total,

Will it be worth it? You bet!

CAMERAS AND CAMERAMEN...

By ALAN LOUIS KLEBAN

OU may have a well-scripted, welllighted, well-directed production on the studio floor but with poor camera work, there can be but one result: a poor video show.

When television hits its stride after the war, there will be an urgent need for television cameramen. With only a handful of men trained for television, most of those employed in the future will start from scratch. What is required of a television cameraman?

It would be well to point out, the greatest difference between film and television, from the viewpoint of the cameraman, simply stated, is this:

THERE ARE NO RETAKES!

Those four words put the burden squarely on the shoulders of the cameraman. If the camera is out of focus there are no retakes! If the picture is out of frame, there are no retakes! If the mike boom shows, there are no retakes!

In film, if a similar incident occurs, the shot can be done over and over again until it meets the director's requirements. In television, however, there aren't any second tries. The director can't shout, "Cut! Let's do it over again," though I am sure there are many times he wished he could. In other words, there is no room for anything but top camera work *all* the time. The cameraman simply must be "on the ball!"

Cameraman's Prerequisites

To be a television cameraman you must have the desire to create through a visual medium very much as you would in still or motion pictures. You should also have a good working knowledge of the principles of photography, or cinematography; an understanding of composition, lighting, depth of field, uses for closeups and long shots and basic terminology. These are the pre-requisites.

1. Coordination—Because the man at "ike" gets his directions from the control room through head phones, he must have the ability to coordinate what he hears with what he sees on the set. And what he hears and sees must be coordinated with his hands, because that is how he maintains focus and gets his shots.

2. Timing—A sense of timing is necessary to follow all the action. A per-

TELEVISER

former may leap higher during the show than he did in rehearsal. No one can cue the cameraman on that. He has to time the leap and tilt with the performer in a split second. Or, the performer may suddenly leap to the right or left. The cameraman has to stay with him all the time (it's very bad to televise "dead" air!).

3. Steadiness—The director calls for a pan. You've rehearsed it so you're quite sure of yourself. But are you sure you're panning smoothly or did the camera head bind? It felt as if it jerked a bit when you started, but it looked like very little in the viewer. That "very little" might have looked very rocky on someone's receiver.

4. Memory-This is one business where you must have both aural and visual memory. You must know the show thoroughly yourself. If you have to depend upon cues from the director then he is really doing the show for you. He's wasting precious seconds on you when he should be setting up the next shot or viewing the other monitor. Furthermore, you are using him as a crutch and depending upon him for your next move. You begin worrying where your next shot is or what is going to happen next on the set. If, however, you can remember what comes next, you're that much ahead of yourself and can be at "the right place at the right time." The making or breaking of a good show depends upon a cameraman's memory.

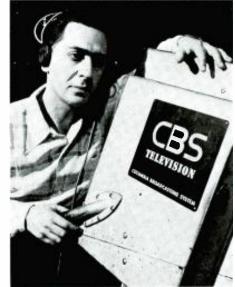
Good television camera work is done smoothly so that the audience is not aware of camera movements. It calls for a thorough understanding of what the director wants; a good working knowledge of the script; ability to improvise if the action varies suddenly from the rehearsal pattern (this is especially true in audience participation, or instantaneous pickup, as in sport shows where the action is unforeseen till air time); all this, plus a bit of mind reading.

Cameraman's Problems

The television cameraman today will find himself coming up against these main problems:

1. Maintaining focus and framing regardless of the speed of the action.

2. Panning in advance of movement



Alan Louis Kleban

so that there is more space in front of the action than in the rear. This makes for better composition and shows the direction of the action.

3. Recomposing—If one character walks out of a shot, you must instantaneously recompose on the person or person remaining in order to maintain a center of interest.

4. Depth of field—Since most televisors have to shoot at F 2.9 or F 3.5 the depth of field is extremely short. Therefore, either the foreground or background or both may be annoyingly out of focus, while the subject itself is sharp. Care has to be taken in composing a picture to that these factors do not become apparent to the television audience. After the war, with better lighting equipment, more sensitive "ikes" and better coated lenses, the cameraman may be able to shoot at F 6.3 or F 8. He will then have a much greater depth of field, resulting in finer pictures with backgrounds, to a greater extent, "in focus."

Rehearsal Procedure

I believe that in order to achieve better pictures and finer camera work, there should be a standard rehearsal procedure. A simple schedule as indicated here would help both director and cameraman to gain a working knowledge of the show.

1. Preliminary Rehearsal-The direc-

tor, actors, cameramen and floor people are assembled for a discussion of the show. At this time scripts are distributed. The director explains the type of show he wants, and the various types of shots required for each particular scene. Later on, the actors go through the action of the script, on the set. The cameramen stand by to observe, but are not yet following on camera.

2. Stop and Start—The cameramen are on the "ikes" at this point. The show is run through scene by scene, with stops and starts for camera direction and correction.

3. Final Run-Tbrougb—There should be at least one complete run-through of the show from start to finish. This is absolutely necessary to give the cameramen a more complete working knowledge of the show as it will take place on the air. It should be quite apparent that a thorough rehearsal will make for better camerawork.

Although the foregoing may sound as if a great amount of stress is being placed on camerawork, I do not mean to imply that the quality of a show rests on the cameramen alone. The good director knows how to use his cameras best to capture the ideas and talent which compose his show. Only with good cameramen, fusing their creative ability with that of the director, is this possible!

WOR'S Planning Board

FTER more than a year of telecasting, WOR has set up a 9-man television planning board to analyze its programs and decide on policies.

Meeting on Tuesday mornings under the leadership of Norman Livingston, program director of WOR, the television planning board discusses the industry's latest programming developments, newest technical progress, union problems, talent, budget, but mostly, "what was wrong with our show last Tuesday night — and how we can improve it," or "what was good about our show, and how can we make it still better."

Letters and telephone calls from listeners are fully analyzed. After some discussion, sometimes quite heated. ways and means to improve the tollowing week's show are decided, and it is then up to Bob Emery, WOR television producer, to carry out the policies decided by the board.

TELEVISION "QUOTES"...

"Television as an advertising medium can help build markets and create jobs for the 10 or 12 million returning ex-servicemen and thus assist in preventing the depression that has followed other wars. It can do this because its demonstrating power, its selling power . . . is. by actual test, about ten times greater than all other advertising media combined!"—THOMAS F. JOYCE, before the Advertising Women of America.

"Television in post-war years, functioning in combination with fleets of airplanes and other electronic devices, will be one of the nation's most potent aids in crime prevention and law enforcement."—FRANK J. WILSON, Chief of The U. S. Secret Service.

"At least one thousand television stations can be placed in operation in the United States during the next decade . . . representing a capital investment of roughly \$250,000,000 . . . and employing in their operations about 65,000 persons directly. There is a potential market for . . . 25,000,000 television receivers in the next decade." O. B. HANSON, Vice-President and Chief Engineer, NBC, before the Senate Interstate Commerce Committee hearings.

"Syndication of television programs via networks will be a necessity in order that the high cost of quality programming may be divided among many stations. The American public is conditioned to good entertainment from motion pictures and television will be expected to furnish program material of comparable status."—R. F. GUY, NBC Engineer.

"The popularization of opera and operetta . . . will be greatly expanded by television, which, by bringing sight to sound, makes the picture of an opera performance complete. . . . English language dialogue, natural acting and settings will be required by the new medium which will force opera to become natural."—HERBERT GRAF, Director of Opera Productions, National Broadcasting Company.

"The Public likes programs that have an element of spontaniety, programs the outcome of which cannot be predetermined. In sports and games and on the spot news programs, the interest of the audience is held by the fact that anything can happen."—ROBERT L. GIBSON, assistant to the Vice-President, Advertising and Publicity Department, General Electric Co.

"Some of the questions to be settled through experimentation are: when will the commercial be brought in; how long will it be; to what extent is it advisable to integrate commercial into the entertainment; under what conditions it can be an isolated spot."—HOYLAND BETTINGER, Program Manager of WRGB, Schenectady.

"Electronic television, now on the verge of becoming a great new industry and a service to the public, answers fully our expectations. It stands forth as a prime example of a major achievement of research and engineering. Into the development of this marvel of the age has gone more concentrated research than into any other modern development."—RALPH R. BEAL, Assistant to Vice President, RCA Laboratories.

"Color television will come in experimentally like early FM. At some point in the future, the same television programs will be transmitted simultaneously in black and white and in color, with at first only a few having color television sets, and the number gradually increasing."—WILLIAM U. WHITE, G. E. Research Laboratory, Schenectady, N. Y.

DOCUMENTARY WRITING for TELEVISION

N WRITING for television, the writer must think in terms of the television camera and the response of the audience to the situations depicted. Just what does all this boil down to?

The writing must be "tight." The situation must be graphic, visual, easily depicted and easily absorbed by the audience's seeing eye. The situations must be presented with an economy of words. The words selected to convey the action must be colorful, forceful, emotional words, words that will stir the listener and hold his interest. Words that are "weak," unrelated to the action, and which fail to move the drama along to its logical and well-paced conclusion must be edited out of the script. In writing for television, it should be remembered that the television drama must maintain a pace that finds no duplicate on radio, the stage, or the screen; and anything which slows the pace must be deleted from the script.

Writing for the Camera Eye

The second requirement is to write for the camera eye. The scene must be visualized by the writer in terms of dissolves, dolly shots, close-ups and long shots, tilting of the camera up or down, and panning from one point to another. All of this suggests that the writer be familiar with camera techniques in order to get the most effective results. At this stage of television, with few writers yet familiar with television, the television director or producer is the one who adapts the script and translates it in terms of cameras. When television becomes a universal

art, the writers for television-like the scenario writer for motion pictures-will indicate the camera directions.

Take a situation, for example, of a writer dramatizing an incident that occurred in the Arctic. According to the news accounts, a C-47, while flying over Iceland, suddenly developed motor trouble and the plane was forced to crash-land on an ice flow. An SOS was picked up by a rescue station of the Army Transport Command before the plane crashed. An hour later a rescue plane came in sight of the wreckage but was unable to land because it lacked ski runners, so medical supplies were dropped by parachute to the men. Later a plane with skiis, carrying a doctor and medical supplies landed and the stricken men were rescued.

This would be handled in a television script as follows.

"RESCUE FROM AN ICE-CAP"

SIGHT

Camera Nos. 1 and 2 on title cards, with dissolves between cards.

Camera No. 1 dissolves to snow-swept, desolate icecap (large table-top miniature) . . then pans across, tilts down, then zooms crazily duplicating movement of a plane in trouble.

Camera No. 2 dissolves to radio room and dollies in slowly on radio operator, tense at his wireless.

Switch to Camera No. 1 for medium long shot.

Camera No. 1 dollies in 2shot of Major and operator.

Camera No. 2 dissolves to on radio plotting room, on men running lines across map.

SOUND RECORD: Wind sound effect, first low then rising to crescendo-then under for airplane "s. e."

RECORD: Sound of airplane, first at high speed, then apparently in trouble . . . then under for

- NARRATOR: (Off Camera.) On the dangerous route from Labrador to Iceland, a C-47 of the Army Transport Command, carrying seven men, crashed on a desolate ice-cap. Before landing, the radio operator sent an SOS, picked up by the Search and Rescue Squadron of the ATS's North Atlantic Division stationed in Greenland. .
- RECORD: Crisp, staccato sound of radio
- messages, repeated several times. . . . OPERATOR: (Listening intensely while typing out message. Interrupts occa-sionally to operate key. Speaks into
- Iceland. Stand by ... (Continues to operate key and type fragments of a message) Here, Corporal, take over (Pulls sheet
- from typewriter and begins to rise) SOLD ER: Attention
- MAJOR: (Entering burriedly) at ease, men.
- OPERATOR: (Handing report to the Major) Just came in, sir.
- MAJOR: (Reads message aloud) "In trouble . . . stand by for crash . . . one engine gone, other on fire . . . seven on board ... stand by ... position. MAJOR: (Looking up) Is this all that
- came through, sergeant SGT.: That's all, sir.
- MAJOR: Then we'll have to locate them by radio direction finder. Very well, sergeant. (Exits.)
 - RECORD: (Miscellaneous sounds of wire-

Dissolve Camera No. 1 to icecap, panning across to right, then left, tilting up and down simulating plane in flight.

Camera No. 2 dollies in on wrecked plane . . . then pans right slowly to pick up message on snow . . . Dissolve Camera No. 1 to radio room of headquarters, medium shot.

Camera No. 2 dollies out for long shot of radio room, showing excited activity . . . men hurrying around with papers and moving about.

No. 1 dissolves to icecap showing plane landing.

less messages coming in . . . constant

chatter of telegraph keys. NARRATOR: (Off Camera.) In the radio directional chart room of Search and Rescue Squadron 3, busy hands draw horizontal, vertical and cris-cross lines. The point where the lines converge on the map is where the wrecked plane and her cargo of seven men had gone down. . . . From the station's public address system comes Stand by all bands, stand by. Rescue plane 7 prepare to take off....

RECORD: (Sound of plane warming up, taking off and in flight.)

- RECORD: (S. E. under for . . .
- NARRATOR: After an hour of hard flying, bucking strong Antarctic winds, the rescue plane came in sight of wreckage of the big C-54. Trodden out on the snow hereby was the ominous message: Man dying.
- **RECORD:** (Filtered sounds of radio voice messages being received. . . .)
- OPERATOR: Come in RP-74. RECORD: RP-74 reporting. Have located wrecked plane. Returning to base. Man's dying. Stand by with doctor, medical supplies and small rescue plane. (Fade for routine radio sound effects of planes in flight.) NARRATOR: (Off Camera.) With no time
- for a dog team, a tiny plane, carrying medical supplies and a doctor, was readied for the take-off. Immediately upon his return, the pilot-after a hasty cup of hot coffee-took off again and an hour later risked landing on the crevasse-cut icecap, skllfuliy maneuvering his plane to reach the six survivors with medical help, saving the life of a critically injured soldier. The next day a ski-fitted plane landed and took off the exhausted men, returning them safely to the base . . . thirty hours after they had crashed. RECORD: (Music; up and out ...)

THE American Television Society is unique among television organizations. Like television itself it has grown in an unplanned, groping, yet healthy and successful manner. And, also like television. it has attracted some of the finest minds in a surprisingly varied number of related fields to the ranks of its supporters. It is the oldest, the broadest and possibly the largest exclusively television organization active in this country.

"Dedicated to the advancement of television," is the slogan into which has been woven the many-faceted functions of the Society.

Some years ago a group of students in a television class decided to perpetrate their interest in sight broadcasting by forming the organization. They invited Norman D. Waters, an advertising agency head who had long been advocating early establishment of permanent television practice and standards, to speak before a meeting. Waters so impressed them that he was invited to accept presidency of ATS.

Soon after Waters took over the reins, war broke out. The Society went on record, vigorously insisting that television broadcasts be continued despite the war. The many constructive benefits to the war effort which have been accomplished by television since that time have vindicated the ATS' militant stand at that delicate period.

There was a lag in television interest in the months following war's outbreak. Yet the Society continued to hold meetings, sometimes with only a handful of members present. Then, bit by bit, these meetings began to assume increasing proportions. Leading trade publications reported on them regularly. Key executives in advertising agencies, manufacturing concerns, talent agencies, film companies, radio stations and networks—every field directly or indirectly related to television —began applying for membership.

Television and the ATS has passed its crisis successfully.

The Society was incorporated. New officers were chosen. The ATS Awards, television's equivalent of the movies' "Oscars," attracted nationwide attention to the continuing growth of television and to the organization. ATS went into its present stage of activity.

First on its current schedule was the clarification and expansion of benefits to members. A program laboratory was set up to prepare and produce broadcasts and give members experience in practical television work. A membership directory was projected as a reference list to members in various branches of television so that they could assist each other, if they wished, on a professional basis. Vigorous meetings, to which leaders in many aspects of television work were invited as speakers, began bringing in not only memhers but also a swelling attendance of guests were held. So successful were these that the Society was forced to seek larger quarters than those afforded at the Capitol Hotel. It now meets monthly in the Auditorium of the Museum of Modern Art in New York.

The Society's own newspaper, the ATS News, was established and distributed free to members each month. A Speakers Bureau was formed within the organization to help other groups become acquainted with basic facts about television. Committees on Education, Public Relations, Research, Library Information, and Motion Pictures wheeled into action. The ATS continued to develop as one of the most potent forces in the country contributing to television.

But this force requires direction lest it be misspent. For this purpose, several committees have been established. A Policy Committee was formed to determine stands ATS takes on major developments in television. An Advisory Committee was recruited from outstanding leaders in television who have agreed to assist the Society in the attainment of its objectives. An Executive Committee has recently been set up to execute the recommendations of these two bodies.

Today the Society is rich in members, tested potentialities and knowledge gained through experimentation throughout its period of growth. It has an enviable group of executives among its leaders. The next step for ATS is obvious. Now that television is about to become more widespread geographically, the time is ripe for the establishment of additional chapters in metropolitan areas throughout the country. LETTERS

(Continued from page 2)

Sirs: We enjoyed this issue very much, and thought it a real improvement on the first. The chnice of articles seemed good, with plenty of variety; and on the whole, just about the correct length. . . The magazine has been passed around to ten or a dnzen in our office.

> HARRY E. FOSTER Harry E. Foster Agencies, Ltd. Toronto, Canada.

Sirs: All I can say about your magazine is that I still haven't finished it—there is so much tn read and study in its pages. About the only suggestion I could make (and it is more of a hope) is that the TELEVISER should be published more frequently than quarterly.

HENRY KLEIN, Publicity Dir. Philip Klein Advertising Agcy. Philadelphia, Pa.

Sirs: The TELEVISER was a pleasant surprise and much more elaborate than I expected. Needless to say, I think it is excellent. . . . About eight or ten people saw the magazine.

PETE SMYTHE, Program Director KLZ Broadcasting Co. Denver, Colo.

Sirs: I would like to see more articles concerned with the less complicated forms of television production to which we stations in the hinderland may have access when we do begin production.

> ALAN PAGE, Program Director Station KVOO Tulsa, Okla.

Sirs: I believe that the TELEVISER choice of articles is excellent. I would, hnwever, like to see more discussion of studin problems and production technique. More explanations of small station operation would be of great interest to those of us who will be isolated from the production centers for some time to come. . . The overall arrangement of the TELEVISER is most satisfactory.

R. D. HERBERT Station KIDO Boise, Idabo

Sirs: Your magazine is informative and highly stimulating. I feel that your magazine furnishes an excellent answer to a whole score of sixtyfour-million-dollar questions... I liked both issues of the TELEVISER very much indeed. The TELEVISER is strictly on the beam; just *keep* it that way!... This service is proving invaluable to me in my work and I am very grateful.... I almost married the thing; even took it to bed with me; wish it came nut every week instead of every three months.

> INES VILA MASIA Radio-Television Dept. Anfenger Advertising Agency, Inc. New Orleans, La.

Sirs: I'd like to congratulate you on your first issue and the outstanding job that you have done. We're looking forward to bigger and better issues of the TELEVISER.

DAVID H. SANDEBERG, Pacific Coast Mgr. Paul H. Raymer Co. San Francisco, Calif.

2: ADVERTISING AND MERCHANDISING

NEW YORK STORES REPORT INTEREST IN RETAIL VIDEO

W ITH R. H. Macy's already on television once a week with a fiveminute evening program, with Gimbels having appointed a television co-ordinator for all its stores, and Bloomingdale's and Abraham & Straus having announced their television plans, The TELEVISER decided to conduct a survey of other leading New York department stores to determine the extent of their interest in television.

It found: (1) Most stores are watching television developments with excited interest; (2) several have no concrete television plans, or at least will not announce them until the war is over; (3) others are adopting a "watch-and-seewhat-happens" attitude.

Arnold Constable & Co., on Fifth Avenue, reported extreme interest in television on the part of the store's executives, believing that "nothing will compare with television as a postwar sales promotion medium for department stores." The store, however, feels it is still too early to announce definite plans, although it hopes "to be among the first in the department store field with television."

When television has proven itself, Lord & Taylor will use the medium and install intra-store television, the advertising manager reported. "Television," she believes, "has a far better chance of succeeding as a department store promotional medium than radio." When queried regarding window television, the respondent thought striking results should be capable of achievement through window video screens.

The James McCreery Co., one of the oldest stores in New York, used television in conjunction with its 107th Anniversary, broadcasting a costume and musical history of the store from Station WABD, and has since been enthusiastic about television's future in retail promotion. Concrete plans, however, must await further developments in television, the store reported.

TELEVISER



FASHION SHOW: Glorianne Lehr, well-known producer of fashion shows, shown with attractive models before a recent telecast from WABD-DuMont, New York City

"Television windows and intra-store television holds out promise as one of the best sales promoting mediums ever devised," stated Amelia Franklin, of Saks-Fifth Avenue's advertising department. She is of the opinion that television will be a great aid in promoting fashions. The store has already learned much about television as a result of several fashion telecasts from nearby WABD. The store's television plans are momentarily in abeyance, pending the war's end.

Franklin Simon, on Fifth Avenue, will hold out for color and large screens. The officials believe that the combination of color and a large picture will prove a powerful producing medium for retail stores, not until then. They do admit, however, that window screens, showing the store's merchandise in motion, whether in black-and-white or in color, will prove a stimulating factor in sales promotion.

B. Altman & Co. reported they are watching developments with great interest but have no immediate postwar television plans. Similar reports were received from four other New York department stores.

GIMBEL BROS., PHILA., ON NBC VIDEO NETWORK

Another "first" was chalked up for department store television, when the first fashion show ever televised on a network basis was presented March 11th over a three-way hookup. The show, "Annual Assembly of Famous Fashions," sponsored by Gimbel Brothers of Philadelphia, was telecast from the WNBT studios of the National Broadcasting Company in New York, and was carried by WRGB in Schenectady and WPTZ in Philadelphia.

Arthur J. Kaufmann, executive vicepresident of the department store, opened the program which featured four top designers interviewed by Adelaide Hawley and Esther Richardson. The designers were Sally Victor, Claire McCardell, Emily Wilkins and Rose Barrack.



"MADEMOISELLE'S" TELE SERIES AT CBS

WO television-minded young editors of *Mademoiselle* believed it should do something about television. They discussed the matter with the other editors and the executives of the magazine, and after talking to the publisher, convinced him that the magazine should try television.

From a modest start at Du Mont last summer, in which fashions and features from the magazine's pages were presented, the television programming experiments began to grow and expand. Recently, *Mademoiselle* signed a six-month contract with CBS Television for a series entitled, "Women in Wartime," presented monthly in cooperation with the War Manpower Commission and other government agencies, with the material taken directly from the printed pages of *Mademoiselle*.

Frances Hughes, coordinating editor, and Geri Trotta, copy editor, are the two staff members who concern themselves with *Mademoiselle*'s television, a successfull series which the publication considers a public service now, and a possible postwar "extension" of its editorial pages. It all started when the two editors attended a meeting of the Television Club. They left convinced that television was a medium that could be effectively employed by a magazine. But why wait until after the war, they asked. Why not begin to experiment with television *now*?

They persuaded the publishers of Mademoiselle of the soundness of their ideas and soon had an appropriation, and they presented their first program over WABD, learning a lot as they went along about space limitations, lighting, make-up, and the fact that professional models ideal for magazines—are not necessarly good television performers. They learned what a camera can and cannot do, the relative effectiveness of "dolly" and "pan" shots, of dissolves and switches.

Mademoiselle's next move in television was to sign up with CBS in November, 1944, for a series of programs as a public service, based on monthly government directives from the magazine. The original contract was renewed for six months in January, 1945. Two weeks after the first contract was signed, the first show in Mademoiselle's current series was under Scene is one of eight changes in sets in recent MADEMOISELLE show, "Housing in Wartime," telecast from CBS. Shows are dramatization of articles in MADEMOISELLE

way with Directive No. 23 on "Girl Geographers," which appeared as the Jobs and Futures article in the November. 1944, issue.

The Mademoiselle team of Frances Hughes and Geri Trotta, in collaboration with Gilbert Seldes, Worthington Miner and Leo Hurwitz of CBS Television, have so far produced "Girl Geographers," "Christmas Without Tinfoil," "Housing and City Planning," and "Not What's New—What's Now," the latter televised on March 14th.

Professional Actors Employed

For the series, professional actors are employed, most of them with Broadway experience. At first, *Mademoiselle's* editor-in-chief, Mrs. Betsy Talbot Blackwell. appeared on the program as the *Mademoiselle* spokesman, but when long rehearsals interfered with other editorial duties, a tall, attractive blond with acting experience, Ruth Woodner, from *Mademoiselle's* fashion department, was recruited for the part.

Pursuing a policy of non-commercial exploitation, no brand names of clothes or other products that appear in *Mademoiselle*'s well-staged productions are mentioned. This is in line with CBS's policy, at the present time, of not airing "commercials."

Show Featured & Scenes

Mademoiselle shows have been characterized by a fresh approach, by a boldness in planning in set, design and in content. Recently, its shows on City Planning and Housing featured eight different scenes, including a subway scene, a street scene, a tenement scene, two different wartime apartments, an army scene, an office and two others.

Mademoiselle is now convinced of television's potentialities in extending a magazine's printed pages, bringing them to life by means of dramatization. It has yet to explore its possibilities as an advertising and sales promotion medium. Meantime, the editors are filling note books with ideas and script outlines for its postwar television plans.

(see Script, Page 61)

TELEVISER

AUDIENCE RESEARCH NOW!

By DR. NORBERT MUHLEN Consultant. The Pulse. Inc., N.Y.C.

FTER many serious losses, caused by unforeseen audience reactions, the radio broadcasting industry has recognized the need for continuous audience studies. If an audience does not listen to a program, however well it is performed and transmitted, the huge investment in the program is lost. Exact audience data is therefore gathered and furnished to advertisers every month. Just as no stock market investor would do without continuous information on the price movement of his securities and the general market, no broadcaster should do without continuous information on the listening movement of his program and "sets-in-use."

There is no reason why such surveys could not be done for television now.

Too Few Sets in Use?

The main objection is usually: there are too few sets in use today to allow mass-interviewing.

Today's small television population is sufficient for a sample of tomorrow's mass television audience. With only 5,000 receivers in the Eastern area, more potential interviewees are available proportionately than in a survey of radio listeners, with an audience of millions.

Only one adjustment need be made. Since today's television homes belong chiefly to the "A" and "B" class, as the upper socio-economic strata are termed in market research language, and since the price of post-war sets, according to industrial forecasts, might range between \$150 and \$500, a large additional number of so-called "C's" and some "D's" will later join the ranks of the audience. There is convincing evidence in the radio field that the tastes, habits and responses of each socio-economic class differ widely, so that the same radio program, rating high with "A's", might rate low with "D's", and vice versa. Therefore, today's video sample has to be broken down to income classes, and adjusted with an eye to the probable stratification of tomorrow.

Too Few Competing Stations?

The next objection is: there are too few competing stations and programs within one coverage area. However, different programs are on the air on different evenings of the week at the same hour. By a comparison and qualitative analysis of the audience response, important data and insight can be gathered.

It is of high importance that these studies be done continuously, at regular intervals-and that's exactly what is not yet done today. It is true that several television stations organize occasional listener surveys by mail; however, a conclusive analysis of facts and figures can not be done on such a basis. Seasonal as well as trend changes can be discovered only on the basis of a series containing audience figures for a longer period of time. Only long-period averages, at least a twelve-month average, can correct the chance errors of a single listening survey and supply valid knowledge of audience structure and behavior.

Need for Tele Research Now

Television audience research should begin *now*, not only to gather analytical material on the nature of the televiewers, but also to develop the new methods and techniques that television audience research will require. Since radio is different from television, audience research will require different methods. These methods can only be found by experimenting with the research methods available today, and developing them according to television's needs. Certain techniques of radio research as well as certain methods of copy testing, movie audience analysis and general advertising efficiency research might be used, adapted to television, and blended into a new research technique. It appears that in television audience research the personal interviews will be preferable to interviews by mail and telephone, and to the mechanical devices used in radio research.

Experience of Radio Research

The experience of radio research indicates that not everybody with a "tunedin" set is actively listening. As television audience research can only be interested in viewers able to recall the contents of a program and advertising message, the counting of televiewers must be limited only to those who are active televiewers, and not to all who have tuned-in sets. At certain hours a video listener may have his set tuned-in, but may not view it more often than at rare intervals.

Therefore, quantitative video audience research will have to begin with personal interviews using "coincidental" methods ("Are you viewing and/or listening to your video right now?"), and "aided recall" methods (showing a printed

CORSETS ON TELEVISION . . .



Ladies of other wars show their corsets for the television cameras in honor of "National Corset Week." Show was produced for Diana Corsets by the Television Workshop, through the Lester Harrison Advertising Agency, New York City

roster containing the programs of the last period, which might be supplemented by showing selected pictures, as used in copy tests).

What Studies Would Contain

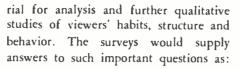
A monthly summation of the viewing habits of at least 800 television homes, classified according to local, socioeconomic, sex and age groups, would contain:

- (a) percentage of radio homes viewing and/or listening to the video program;
- (b) percentage of viewers who viewed and/or listened to the whole program, or only part of it (experimental question);
- (c) percentage of viewers able to recall sponsor or advertising message (sponsor identification, product identification);
- (d) percentage of viewers able to recall the contents of the program (experimental question).

For fact-finding purposes, each group of interviewees should be asked what they did at a certain hour, whether they viewed/listened at that period or not; and if they did not, why?

Answers to Important Questions

The findings of these reports would help to develop new interviewing techniques for television, and serve as mate-



At what hours of the day and evening, at what days of the week, at what time of the year is the highest audience available and willing to look and/or listen? How are the fluctuations of sets-in-use during the day, the week, the season?

Which kind of commercials are most variety, drama, music, sports, news, quiz, et al—are drawing the best audience response?

Which kind of commercials are most popular and enjoy the most favorable recall of sponsor and advertising message? Where ought commercials be located?

What are the attitudes, habits, and preferences of the different economic, age, sex groups when viewing?

What is the best length for different programs—how long before the audience gets tired of viewing one show?

Financing such monthly reports would be less costly than producing one television show which is not viewed by a mass-audience. Research can help to prevent such a danger.



The Biblical story of "David," recently dramatized by children from the "Little Red Schoolhouse" of New York City at Station WRGB, Schenectady

AGENCY AND STUDIO CHIT-CHAT

By ROBT. ENASH

Bob Loewi produced his first television show over WABD, the DuMont station, on March 14. . . . George Lowther is now executive producer at WABD. Louis Spoza heads the program service department there. . . . Lee Cooley, television producer for Ruthrauff and Ryan, and Patricia Murray of Printer's Ink made a winter sports "short" in the mountains of Vermont.... Bob Bright, formerly of NBC, is now head of the art staff for DuMont. . . . Kenneth MacGregor and Al Foster have been signed by Thomas Luckenbill of William Esty and Company to set up two separate units to do television programs. . . . Bert Taylor has been named director of Transmitter Equipment and Sales for DuMont. . . . Leonard F. Cramer, executive vice-president, and Milton J. Alexander. advertising manager, will now make their offices at 515 Madison Ave. ...Raymond Hutchinson, chairman of ATS Awards Committee, has named his committee for this year. . . . Connie Bolland is now scripting for William Esty and Company's telecasts; Bill Strosahl is director of sets and properties for the same organization. . . . Raymond Nelson has set up three groups of ATS members to do television experimentation and programming. . . . George Foster, formerly of the Charles Storm Agency, is now producing a television show every three weeks at DuMont. ... At Ruthrauff and Ryan Agency, Ted Huston replaces Tom Vietor as television director. . . Don Darey, Broadway stage designer. has been added to the production staff of WNBT.... Paul Mourey and Blue Network television staff have been moved to 33 West 42nd Street in Manhattan. . . NBC Television sales staff hard at work lining up sponsors for tele shows. . . . Blue Network offering its shows at actual production costs. Wanna buy? Television Workshop going into production of dramatic and operatic series for WGRB and DuMont. . . . Barbara Jones leaves Life Magazine for post with Tele Workshop. . . . Rumors of DuMont planning to charge \$50 per hour for rehearsal time while continuing to offer air-time FREE

TELEVISION'S MARKET— SOME FACTS & FIGURES

By DAN D. HALPIN*

N ORDER to determine the relative size of the market for television home receivers at given price levels, a survey was made in eleven representative cities of a cross section of the public according to age, income and sex. The question was asked, "Would you or your family consider buying a radio and television receiver if the price were \$400?" 10.3% said "yes." Those who said "no" were asked, "Would you pay \$300?" The cumulative total became 19.9%. At \$250, the cumulative total became 34.3% and finally when the price was put at \$200, the cumulative total of people who said they would buy a television receiver became 61.3%. The conclusion is obvious, that when in the post war period the radio industry produces a good television receiver in the \$200 price range, a high percentage of U. S. homes will be ready to buy television receivers as soon as service is available to them.

First Tele Markets

The first television markets will be metropolitan New York, Philadelphia, Albany, Chicago and Los Angeles where television stations are now operating.

In approximately five years after the commercial resumption of television, television transmitters located in 157 key cities of the United States should be making television program service available to a primary market consisting of 72,159,000 people, 17,252,000 wired homes and 61.5% of the purchasing power of the United States. Shortly thereafter, an additional ten million people should have television available to them by secondary television network developments.

It is estimated that by the end of the fifth full television production year, the annual retail billing will be at the rate of the following approximate figures:

Television sets\$	1,000,000,000
Radio sets	210,000,000
Radio and television	
transmitters and	
studio equipment	12,000,000
Replacement tubes,	
parts and batteries	220,000,000
-	
Total \$	1.442.000.000

These estimates of RCA's, are the result of detailed commercial research and analysis.

This figure of \$1,442,000,000, annual rate, worth of retail sales for the combined television and radio industry is based on the assumption that the industry can expand its television production facilities to build in the fifth full production year television sets at a rate of 5,000,000 to retail for an average price of \$200, and that these sets will be purchased by an eager public. This would actually be the sixth year after civilian production is authorized, for it will take about one year to organize the television production facilities to go forward on the scale that I have outlined.

Result of Careful Study

The figures are based on very careful study and analysis of the public attitude with respect to television and the price levels at which the public is prepared to buy television receivers. First, RCA-Victor's sales experience in the New York market backed by field tests in the Poughkeepsie-Newburgh area after a reduction in price of receivers from \$600 to \$395 and supported by aggressive merchandising, resulted in an increase in sales from a few sales per week to 500 television receiver sales per week until we discontinued the merchandising of television receivers because of the uncertainty which prevailed at that time concerning the future of television broadcasting.

The survey we made to determine the relative size of the television market and previously mentioned was also made for us by another independent survey group



Dan D. Halpin

who reported substantially the same results. However, in this case, when the tough buyer said "No" that he would not buy at \$200, he was asked, "Would you buy a television set if the price were \$100?" One hundred per cent of the answers were "Yes."

In 1943, based on the results of these surveys, we stated our conviction that television's major problem appeared to be the need for an acceptable low cost radio television receiver, and that when the radio industry made receivers available in the two hundred dollar price range, a very high percentage of the homes of the United States would be ready for television as soon as service was available to them. Such a receiver we stated was a possibility based on 1940 labor and material costs.

At the time this statement was made, there were eleven licensed television stations — five Commercial and six Experimental — and seven applications for commercial service pending before the Commission. In addition to stations active in New York (3), Chicago (1), Philadelphia (1) and Los Angeles (1) plus three others in Hollywood, Los Angeles and Chicago, the number of applications for television station licenses pending before the FCC totals, I understand, over 100 as of January 1945.

Surveys Are Corroborated

It is interesting to note that the results of the television market surveys made in August and December 1943, have since been corroborated in the many surveys

^{*} From talk before the Television Producers' Association.

made by organizations not associated with the radio or television industry. For example, 32.4% of "Newsweek" Magazine readers planning to buy a television set rated it as the second preference on this survey, after automobiles.

83.5% of McCall's Magazine Contest entries plan to buy a television set for their living room of tomorrow.

22% of Post War Purchase Cluh accounts of the Franklin Square Savings Bank, Hempstead, Long Island, indicated their no. 1 choice of a post war product was television, even though the price mentioned was \$400. Automobiles polled 13% and washers 12%.

Ross Federal Service Research Organization interviewed a cross section of Chicago population. Of the 10,029 people interviewed the average person stated he was willing to pay \$259 for a television receiver, indicating a market for 62,357 television receivers, or \$34,067,000 worth at retail.

In the survey made for the Worcester, Massachusetts, *Telegram Gazette*, by Fact Finders Inc., 22.7% of people interviewed said they were interested in buying a television receiver if priced at \$200 or less. Second in their preference was washers and third, electric refrigerators.

The development of automatic broadcasting transmitters and their application will, we believe, within ten years after the commercialization of television, make it possible to bring television to most of the areas outside of the 157 markets previously mentioned, to serve 23,700,000 wired homes or 80% of the wired homes in the United States. This would represent a population of about 100,000,000 people or 82% of the United States buying power.

Advertisers experienced in radio will benefit particularly in the use of this new medium of sight and sound with motion —television.

Television as we see it has its greatest value to American business as a broadcast medium to accomplish the first two successful steps in every selling process, to reach prospects in their homes and to provide convincing demonstrations of merchandise. We are sure that advertisers will effectively dramatize the values of their goods and services—via television.

TELEVISION PROGRAMMING FOR DEPARTMENT STORES

By HELEN T. RHODES

B ASICALLY the job of television is to sell merchandise; but also to convey ideas, enjoyment and information.

Television, by its nature, is an entertainment medium, and everyone who watches a television screen expects that all presentations will be done with the full bag of tricks and finesse that characterizes "show business." The main task is to catch and hold the eye; then to enhance or supplement the eye appeal with a good aural story. I can't stress this point enough, for many of the mistakes that have been made in programming to date have resulted from our not having learned to think enough in visual terms.

Nobody knows what is *right* for television yet, but an audience will tell you quickly enough whether your show is good or not.

Programming Staff Requirements

To produce television you will need: A good artist who knows display advertising, set dressing, fundamental principles of pictorial composition, and color. He should have an excellent sense of the dramatic, for herein lies one of television's chief appeals; an idea man who can write . . . who can take any piece of merchandise and weave a short, interesting story around it . . . who can deliver information about your merchandise and make your customers like it. This man must be able to write in terms of pictures.

You will also need a director to coordinate all activity. He must be a showman, who is familiar with his store's policies, the psychology of department store advertising, and the nature of your customer trade.

This is a minimum staff needed for programming. How much additional personnel you'd need will depend on how much time you expect to use, and how much repetition of program would be desirable.

Location of Screens Important

There are many factors to be taken into consideration before you can decide on programming policies. For instance, where will your viewing screens be located? We have suggested display projectors for the show windows, and several on each floor to be supplied from portable equipment and the central control room. It may be desirable to have small screens in some of the elevators. Here you take complete advantage of the susceptibility of the customer. It might also be a good idea to provide a lounge room where shoppers can sit and rest, and where they may see a slightly longer and more detailed presentation on occasion.

Perhaps you will want to deliver a special message to the employees. A screen in the employees' dining room would provide it.

You probably have numerous ideas for the location of your television projectors, where they will be seen easily and still not distract your customers from the merchandise itself.

"Keep Programs Short"

One rule in program planning is to keep programs short and to the point. In all surveys made of commercial programs at WRGB, including the Associated Merchandising Corporation program, it was found that the home audience's interest lagged with each succeeding minute.

This will be even truer in a department store, where most shoppers are in a hurry and do not want to remain standing for any long period of time . . . or even seated, for that matter. That places an added burden on the writers and directors for the message must be short, yet complete; and since it is short the customer's attention must be obtained right from the start of the commercial. As the regular customer becomes conditioned to your telecasting time schedule, he, or she (more likely) will be on hand to watch the special items advertised for the day such as the latest thing in millinery, which may have just come out of the marking room.

Problem of Programming

Once you have decided the location of the projectors and whether the demonstrations will be continuous throughout the day, or spotted intermittently, you come to the problem of programming, based upon the four uses of a department store television system: 1) to display merchandise; 2) demonstrate products; 3) enhance the reputation of the store; 4) to entertain.

In displaying merchandise, the obvious mistake is to design a very beautiful, but static arrangement of articles. With television, you should show clothes being worn, furniture arranged, cosmetics applied. The glamour of the articles will thus be enhanced, and their usability indicated at the same time.

Here is your opportunity to use the most charming voice and the most persuasive appeal and roll them all together into one "socko" commercial.

Perfect Way to Sell

Television is the perfect way to sell the ensemble idea in anything, for the complete picture is what the customer will want to duplicate. Let us assume that you want to sell several odd pieces of Louis XIV furniture. With television you could give the audience a three minute historical sketch of the period, so dramatized that women would flock to buy furniture of that age.

Many women do not understand the gracious living fine china, glass and silver affords. Show them a beautiful dining room, a lovely hostess selecting her table appointments for a dinner party, tips on correct methods of serving and dressing the table and they'll feel they cannot entertain without similar equipment. Build a simple and charming love story around a particular fashion, and women will buy it like mad to add a little zest to their love lives.

Demonstrate Products in Use

Demonstrating products in use is a natural for television. The story idea is inherent and lends itself to easy repetition. It may be furniture polish, or a new way of putting on liquid lipstick. Everyone is fascinated by such a demonstration. I'm always a little embarrassed to go near one of those live demonstrations in department stores because of the highpressure "look-you-in-the-eye" salesmanship usually involved. Many women avoid them for the same reason. But . . . with television, you know no one is breathing down your neck and holding out his palm; you feel you're making up your own mind without bias. And there is a definite psychology of appeal in a seeming lack of pressure.

Perhaps the beauty salon has a new hair treatment which makes it very easy for a customer to dress her own hair. By showing it on the screen, you will draw a great many women into making appointments . . . women who ordinarily would not even be aware you *bad* a beauty salon. And these are all very simple things to do . . . techniques that could be evolved in a short time, varied slightly from time to time, but could be done effectively with a minimum of personnel and rehearsal time.

Novelty products can be demonstrated beautifully with puppets or dolls (from your own toy department) or with models or miniatures, made from materials easily salvaged from show windows or other display material. Miniatures are marvelous for television and certainly are remarkably cheaper and easier to design.

Films Free from Manufacturers

The amount of time you consume in sheer entertainment for your customers will probably be negligible. Certain holidays such as Christmas and Easter might well warrant some special musical program or choral group, but those occasions would probably be exceptions.

Film presentations will be very important in retail program operations. All television stations now in operation use film for almost half of their broadcast time, and many motion picture companies already have plans under way to make films especially for telecasting. Many manufacturers will be able to furnish you institutional shorts about their product which will describe their manufacturing process, the raw materials used and other information interesting to the consumer. These films will make the rounds of all department stores stocking the manufacturer's products. Dress houses, shoe manufacturers, furniture makers, synthetic fabric companies will do much of their advertising in this manner, giving the customer information about the merchandise far more effectively than could any sales person.

Department store advertising recently seems to be more and more of the institutional sort. With television you have an even greater means to boost the name, policies and services of your store. You might find it helpful to do a series of several short programs illustrating your consumer testing services, your credit programs, your buying programs, and any other policies that will interest the customer and give him confidence and pride in buying at your store!

In short, the possibilities for using television are almost endless.



RETAILERS: Avid interest in tele is evidenced from retailers crowded around James D. McLean of the General Electric Company

Television's Centenarian Says: "The First 100 Are the Hardest"

By RAYMOND E. NELSON

T WAS in the middle of my very first rehearsal of my very first show, back in the dim, distant days of early 1943, that Sam Cuff, general manager of Station WABD, restrained one of my more frantic gestures with the placating remark: "It's all right, Nelson, the first hundred shows are hardest." Now that I've turned the century mark in television production, I sometimes wish that he'd been right, because shows number 101, 102, etc., seem to offer their share of problems, too.

A hundred television shows are bound to be studded with interesting experiences. We've tried just about every kind of program, from educational to commercial, to a combination of both. We've tried boxing and judo.

We inaugurated the Storm Television University-the first series of educational programs to be televised on a continuous basis. Our dramatization for "Real Story Magazine" back in February, 1944, was the first magazine commercial in the history of television. Then there was the Army Ordnance Show, in behalf of the Fat Salvage Campaign, for which we managed to sandwich into the tiny Du Mont Studio A-there was only one studio at that time-a full coterie of land mines, anti-aircraft guns, bazookas, and a complete Army aviation control tower manned by WACS. "Yesterday," a musical revue which we did in March of the same year, was the first of our costumed musicals. We followed it a week later with a program for Casual Clothes, in which we improved the technique of televising fashions. Our second magazine commercial, this time for "Click" Magazine, featured a list of notables that included Annabella, Danton Walker, Jack Dempsey, Mickey Walker and some thirty others.

It was in May of that year that we presented "Perchance to Dream," a dramatic show that gave us a chance to experiment with film interludes on a live talent program. It was on the "Tintex Carnival," that same month, that we became aware of the fact that the average professional dancer wasn't very telegenic, generically speaking, and that teaching Conover models to dance made for better-looking television performers than run-of-the-mine Broadway talent would give us.

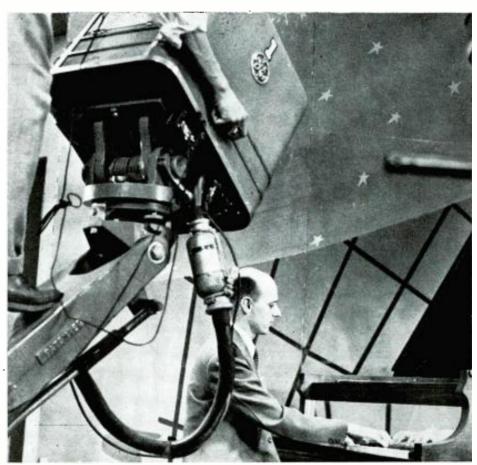
On July 13, 1944, we presented Park & Tilford's "Television Follies of 1944," a $2\frac{1}{2}$ -hour musical revue, with a cast of sixty, 125 costume changes, 28 backdrops, and the first orchestra ever to squeeze itself into WABD's Studio A.

On August 24th, the Storm Television University presented an illustrated lecture on natural history by Dr. Bettman of the Bettman Archives, illustrated by slide film and winding up with a dramatization featuring a Neanderthal man. It was the same month that we presented "This Is London," for Alfred Dunhill of London. The show featured a combination of live talent and film interludes. Film clips of the bombing of London gave reality to a sequence which had as its locale an air raid shelter in London. By September 13, we felt that we were qualified to peek into the crystal ball, and the Storm Television University, in cooperation with "Mechanix Illustrated" Magazine presented "Your World Tomorrow." Two weeks later came our Esquire sponsored "Boys From Boise"—the story of which is too well-known to repeat here.

It was on October 24 that we presented "Rhythm," our first excursion into the ballet field. The Charles M. Storm Company tied up with the New York Daily News and Station WNEW for the election night broadcast of November 7 which ran for $2\frac{1}{2}$ hours, and used film, maps and an assortment of commentators and political luminaries.

And so—on and on through a great many shows, employing a variety of techniques and giving us a world of experience.

HIGH OCTAVES . . .



Earl Pudney at the WRGB piano. Note the mirrored keyboard reflecting Pudney's hands on the keys. Also note position and height of camera on hoist at left

IT'S YOUR MOVE . . .

It's pretty hard to generalize about the commercial aspect of television, even from a comparatively veteran vantage point. Any survey based on the present 3,500 to 5,000-set circulation of the New York area is bound to be approximate, at best. Nevertheless, I have seen enough indications to convince me that television as a selling medium is going to write several new chapters in the annals of advertising. For example, there is the, by now, almost apocryphal story of the professor and the paper globe-a Sherlock Holmes' title, if I ever heard one. This professor appeared on one of our shows demonstrating a paper globe of the world, one of those things that you cut out and put together. At the end of his talk, he offered it to the television audience at \$1. Please bear in mind that it was impossible for a dulcet toned announcer to talk qualities into the product that did not exist. It was a cardboard gadget, which was readily apparent to the televiewers' eye, and the televiewers' ear told him, too, that it rattled like cardboard. As I said before, the program was beamed to between 3,5000 and 5,000 television sets in, for obvious reasons, various stages of disrepair; nevertheless, this professor received over 200 requests for his \$1 article, an astronomical response when compared to what radio can do under similar circumstances.

The various magazines that we have advertised via television have reported that their circulations definitely reflected televisual stimulus. Our fashion show brought several orders for garments advertised, despite the fact that today's mechanical limitations make costume display difficult. The show that we did for the WAC recruiting campaign so impressed one of the women watching the program in the viewing room that she marched into the studio and volunteered—and was sworn in—while the program was still on the air.

The *Esquire* magazine, "Boys from Boise;" gave us a good radio versus television comparison, too. Several hundred viewers, by actual count, bombarded us with their reactions to the show. To prove that a television commercial does make an impression, we asked the television audience to send their cards and letters to the *Esquire* offices. We were trying to see if the actual wordage of a commercial stuck in the listener's mind, in a medium which was primarily sight. All cards and letters, correctly addressed, were received by the



Two champs play checkers before the cameras, using magnetized checkers and magnetized checker-board, both having been specially designed for television

magazine; not a single listener wrote to Station WABD.

Even with today's limited circulation, I think we can say safely that every single account has been highly satisfied with television, and that wide-scale use of the medium will have no trouble proving its commercial worth.

The first hundred shows are the hardest. Well, let's use it as a title, but take a rain check on it as a statement. Maybe it will all seem pretty academic another 100 shows from now.

BLOOMINGDALE'S TELEVISION PLANS

AST January, while department store executives were attending a television session sponsored by the National Retail Dry Goods Association during its annual convention, an announcement issued by Bloomingdale's excited the television industry and retailers throughout the country.

The announcement had to do with Bloomingdale's vice-president and sales promotion director, Ira Hirschmann, being named president of the Metropolitan Television System, a subsidiary of Abraham & Straus and Bloomingdale's.

But what interested the industry was the statement that Mr. Hirschmann would

begin immediately to organize the television and FM plans, not only of the New York and Brooklyn stores, but of all Federated stores, which include F. & R. Lazarus Co., in Columbus, John Shillito Co., in Cincinnati, Ohio, leading midwestern department stores, and Wm. Filene's in Boston.

Television Planning Accelerated

The TELEVISER, interested in Federated Department Stores future plans, learned:

1) Bloomingdale's and affiliates will have special television theatres, seating fifty people, on each floor of their stores;

2) Studios will be located in the stores' auditoriums;

3) Programs are being planned not only to sell merchandise, but for instruction and entertainment as well;

4) Specially trained store personnel, together with talent from the outside, will operate the stores' television systems and appear on programs;

5) Television screens will be located in windows and in strategic locations of each store;

6) The stores will operate their own commercial telecasting stations, which in the case of Bloomingdale's and A & S, will be located at 654 Madison Avenue in New York City, headquarters of Metropolitan Television.

7) The stores will go on a network basis as soon as technical developments make it feasible.

Lehr on Directing . . .

Editor of TELEVISER:

The premise that directing television is different from radio is all too true. A radio show is wrapped up with perfect timing, sound effects and voice tones, while with television, it's important to have all that *plus* good camera work, easy movement of characters and a myriad of other details.

Radio requires only type voice casting, a run-through, and a timing rehearsal. The welltrained sound effects man can go on the air almost "cold." During the show, the director may confer with the producer to cut or stretch

the program, and there his worries end. Now to take television. The entire staging of the show must be worked out by the director with camera switches and angles before the rehearsal begins. The stage is set, actors arrive (with lines memorized), and hectic studio activity begins. Shots are tried for best effects. Instead of four hours of sitting around and "kibitzing" while rehearsing a show for radio, television needs at least eight hours fruitful rehearsal for a half-hour dramatic show. Rehearsals, as though for a legitimate show, without cameras and hours more of intensive rehearsal and staging with cameras and lights before the finished product goes on the air, are necessary. The hazards are greater, too, because the performers must memorize the complete show and must rely on that memory under the stress and strain of a hectic studio while on the air. If anything should go wrong in the studio, cables in the way of a camera, a camera going out of business while on the air, all require a sudden switch of plans while the damage is repaired. Should a prop stick, a dress change held overlong—all have to be handled by the harried television director.

As one sees even at a casual glance, there is a tremendous difference in directing between television and radio. A different type of director is required for each medium. In rare instances a director is proficient in both fields. Usually the temperament and training of radio and television directors are so different it is wise for the radio director to stick to his own field. Unless he is willing to learn the new medium from the ground up he should not GLORIANNE LEHR attempt television. Great Neck, L. I.

Sprogue on Progromming . . .

Editor of TELEVISER:

A hint for post-war television stations that much good talent may be found in their own backyard is suggested by the program activities of WRGB, General Electric's television station at Schenectady, winner of the first American Television Society award for outstanding programming. During its five years of regular scheduled programs, the station has found that dramatic departments of schools and colleges, local little theater and amateur dramatic groups, activities of local organizations and other civic events provide good sources of television program material.

The Colonial Players, formed originally to prepare radio plays, have appeared frequently doing one-act plays, two of which were "The Colonel's Lady" and "Alias the Doctor." The Amsterdam Art Players, a little theater group from near-by Amsterdam, recently presented the "Dickey Bird" and the Charles Wilde Troupe, a group of actors and actresses in Schenectady who work up shows especially for

WRGB, have appeared frequently, their most recent offering was "The Wedding," a oneact playlet.

The staff of WRGB took advantage of the proximity of another theatrical group, The Green Mansion Players of Warrensburg, N. Y., a summer theater group which includes professional actors, singers and dancers who return to Broadway in the fall. This group, presented "Americapers" a television revue. It was rated by the WRGB audience among the top ten programs presented over the station.

The schools and colleges in the up-state area have also proved good program sources. An outstanding production of Alice in Wonderland was offered by the drama department of Russell Sage College of Troy, N. Y. The produc-tion, complete with costumes and scenery and special effects possible with television but not on the stage, made the performance one of entertainment for young and old. New York State College for Teachers presented Gilbert and Sullivan's "The Mikado"; and members of the drama department of Skidmore College performed, "The Last of the Lowries," a one-act play. The radio workshop of one of the local high schools did a one-act play hefore WRGB's cameras, called "Sparkin," that was so successful and well accepted by the audience that it has been repeated.

Western Reserve University, Cleveland, Ohio, actively interested in television, sent a cast to Schenectady to perform "Mail Call," an army comedy. It was a prizewinning drama, written by Lt. Ralph Nelson, U. S. Army Air Corps, in a playwriting contest sponsored by the National Theater Conference. The department of drama of Yale University, under the direction of E. C. Cole, has come to Schenectady many times to produce programs over WRGB. Their most recent contribution is a one-act play written by a graduate of the school and adapted for television by another, called "Pin the Blame."

A special spot of programming is done each Sunday evening when the choirs of the various churches in Schenectady and the area are featured in 15-minute semi-religious programs.

News programs, using commentators from the local newspaper have proved educational and interesting. An area newspaper, The Albany Times-Union, twice presented special programs showing how television might be used to cover the news.

LOUISE	Sprague
Station	WRGB
Schenec	tad y

Dole on "Commercials" . . .

Editor of TELEVISER:

The current NAB ratio of audio-commercials-to-program-time (3 minutes of every 15, daytime), will be too large for television. This will become increasingly evident as television programming develops new techniques for both audio and video commercials and the ultimate wedlock of the two. At the same time, and not in any respect speaking in the guise of an expert at this stage of the game, it is my thought that a video program plot could be handled more naturally and completely if grant-ed full fifteen minutes for "program." As second cousin to the one-act play or the Satur-day-afternoon kids' serial-episode, the 'soap-' for instance, would be hard pressed beers.' fore the camera to present a worthwhile amount of action in their present eleven minute "program" format.

Speaking of programs only, would it not be better to give them . . . let's say, seventeen minutes each . . . fifteen for programs and a maximum of two for audio commercials? Video commercials will have to be regulated by other qualifications than that of time. Three of these seventeen-minute programs in an hour leaves a balance of nine minutes. These I suggest should be used in three segments, each consisting of (1) a ten-second station identification, (2) a two-and-a-half minute spot announcement, and (3) a twenty-second station "service" spot.

The ten-second station identification would immediately follow the sign-off of the sponsored "program," thus effectively eliminating the hitch-hike effect of radio's two-second identification rushed aside by "Blurt's Belch Remedy." Ten seconds of air time also would give the television station a chance for promotion on its own behalf.

The two-and-a-half minute commercial spot announcement would be simply video's version of today's one-minute spot, but the longer time plus video policy similar to the NAB Code, should insure entertainment programming for at least a minute and a half of the time. The thought is that such entertainment programming of spot announcements would avoid a reptition in television of today's radio row over the spots. With the addition of "picture," building entertainment into such spots has unscaled heights of possibilities. Finally, the "service" spot in the division

of time outlined above would give the facilities' salesman a second sale at each "break." The twenty-second "service" spot would include time, temperature, weather forecast, airplane ceiling, overcast, visibility and landing condi-tions, and/or news items. It would close with a quick station identification before the opening of the next program.

A cross-section of an hour as suggested in the aforementioned would log as follows:

P . 1VI.	
1:00:00-1:17:00	"Life in a Laundry"
1:17:00-1:17:10	Station Identification
1:17:10-1:19:40	"Sunshine Spots"
1:19:40-1:20:00	"Weather by Blatz"
1:20:00-1:37:00	"Musically Speaking"
1:37:00-1:37:10	Station Identification
1:37:10-1:39:40	"Red Heart Speaks"
1:39:40-1:40:00	"Time by Blatz"
1:40:00-1:57:00	"Dreier, News Analysis"
1:57:00-1:57:10	Station Identification

The two-and-a-half minute spot, programmed and produced on sound film on a national basis, would be a boon to the secondary television station with limited facilities. It would supply an entracte to the programming, giving the station with limited studio facilities a chance to set up for their next program.

The over-all result of the plan commercially, as compared with radio's four 15-minute segments per hour, would be 10 minutes of audio commercial per hour as compared with today's 13 to 16 minutes per hour. In number of saleable periods for the facilities' salesman, it would total nine per hour as compared with today's eight (except where some stations are selling more than one station break between programs).

I'd he interested in thoughts of both radio and television management on my suggestion. DAVID W. DOLE Associate Radio Director

Henri, Hurst & McDonald, Inc. Chicago, Ill.

3: OPERATION AND MANAGEMENT

VIDEO'S ROVING EYES

Will Help Tele Programming

IVE talent shows of local origin are necessary if a station is to render proper service to its public. To new stations, inexperienced in the technique of television programming, this might impose a severe economic burden. There are several ways that this job can be lightened, principally through the use of "remote pick-ups" for spot news events, on-the-street interviews, important public events, circuses, concerts, local department stores, as well as telecasts from inside the main studio.

For such an operation, the field equipment should be small, light in weight, yet rugged and durable to withstand rough handling. It must be easy to operate and to maintain, and capable of being placed into operation in the shortest possible time. It must operate satisfactorily, under a wide variety of climatic conditions. High definition and good stability during operation are essential. Above all, it must have a maximum sensitivity to permit use under conditions of low light.

Television engineers recognized the need for such equipment, and in 1937 the first step was taken to develop and design, for commercial use, a compact transportable television system. The result was a unit, designed by RCA, which was extensively used at fairs, exhibitions, and demonstrations throughout the country, and also was employed to some extent in a few television stations.

The unit consisted of a control cabinet which was about the size of a 12-inch television receiver and included all of the video control circuits and a monitor. Also provided was an iconoscope-type camera. This demonstration apparatus was not entirely self-sufficient from the standpoint of producing standard television signals and was also fairly large and heavy. It was recognized that in order to provide an equipment that would be suitable for field use, it would be necessary to break the system down into smaller units which could easily be carried.

New Equipment Designed

In 1939, RCA Victor started the development and design of such equipment. The cameras were much smaller than any that had ever been previously constructed and used a small version of the iconoscope pick-up tube. The other units comprising the equipment consisted of a master pulse generator, a pulse shaping unit, camera control, master control, and power supplies. Each of the units, with the exception of the cameras, was constructed in suitcase style and was light enough to be easily carried by one man. Equipment of this type was constructed for the National Broadcasting Company and the Don Lee station in California. It was put into service in the latter part of 1939.

After sufficient field experience had been obtained, certain limitations were found. In particular, in televising football games, which are an extremely popular source of programs, it was discovered that when the late afternoon shadows fell on the field, the sensitivity of the cameras was not sufficient to produce a good quality picture. The next step in the program, therefore, was to adapt the newly developed orthicon to a field camera . . This tube is approximately ten times as sensitive as the iconoscope and greatly extended the scope of field operations.

"BETTER TO SEE YOU . . ."



Orthicon field pickup camera probes scene with telescopic lens for close-ups

In 1940 and 1941, orthicon type field equipment was developed and constructed for such organizations as the Bell Telephone Laboratories, Columbia Broadcasting System, National Broadcasting Company, and Don Lee. It proved to be very satisfactory and enjoyed a variety of uses. For example, all of the pick-ups from Madison Square Garden are made with this type of apparatus. It is easily set up and is so designed as to permit operation by a small staff of technicians.

In actual use, the camera control and master control units are grouped with the synchronizing generator at some central control location. It is possible at this location to preview the picture from each of the cameras before switching to the relay transmitter through the master control unit. The cameras are, of course, located on the field of action and can be spaced as much as 500 feet from the central control location.

The relay transmitter and receiver supplied with this apparatus were designed for operation in the 300 megacycle band. They employ directive antenna systems and satisfactory line of sight transmission over ranges up to ten miles has been obtained.

Long Focal Lens for Close-Ups

In the cameras, provision was incorporated for using a variety of lens types. During an actual pick-up, it is usual practice to provide one of the cameras with a long focal length lens to permit close-ups while the other camera is used with a short, or medium, focal length lens in order to cover a wide portion of the field of action. Panning and tilting heads, of course, are standard equipment. View finders are provided in the cameras so that the cameramen not only can follow the action in the field but also can perform optical focusing.

The camera control units contain the deflection generators and amplifiers for the cameras and the wide band high fidelity video amplifier. A 7-inch monitor is included in each camera control unit as is also a 3-inch oscilloscope to permit accurate adjustment of the signal level.

Signals from the various camera control units are connected to the input of the master control. In this unit, synchronizing signal is mixed with video signal and switches are provided for switching the output of any one of the cameras to the outgoing cable. The 7-inch



FITS IN LUGGAGE CARRIER: New lightweight portable field pick-up equipment can be loaded in luggage carrier of an ordinary motor sedan

monitor is connected to the outgoing cable and a 5-inch oscilloscope is incorporated to maintain signal level adjustments. The outgoing cable, of course, feeds the relay transmitter.

The synchronizing generator consists of two units — one being the master pulse generator, and the other containing the shaping circuits where the synchronizing pulses, blanking pulses, and deflection pulses are formed.

The receiver, like the rest of the apparatus, has wide band amplifiers so that no loss of definition results. AVC circuits are provided to minimize the effects of signal fluctuation. Generally, the receiver is located in either the main studio or the main station transmitter room.

More Sensitive Pick-Up Promised

When the industry is again in a position to start the manufacture of television station equipment, there are a number of additional improvements that may be incorporated.

For example, it may be possible to build new equipment around a more sensitive pick-up tube. It would be possible with this equipment to televise nearly any scene that can be clearly observed by the human eye.

It is likely that the relay transmitter and receiver will operate on higher frequencies and consequently, for the same range of satisfactory transmission, will be considerably smaller and lighter in weight. This will be made possible through the use of extremely directional antenna systems.

It is also expected that the design of the apparatus will be of such form as to permit a more rapid set-up on the field of action. A station wagon or truck can be utilized and the interior arranged so that the control units can be mounted on an operating desk and remain in place during those pick-ups where it is possible to drive the station wagon or truck near to the scene to be televised. This would make necessary the removal of only the cameras from the truck and will materially reduce the set-up time. Provisions could be made for the easy removal of the control and other units so that, when it is not possible to get the truck close to the scene of action, the entire set could be removed in a very short time and placed in operation on the field.

Scope of Field Pick-Ups Extended

With this type of equipment, the scope of field pick-ups will be greatly extended. Events that previously could not be televised because of equipment limitations, such as low sensitivity, could then be successfully utilized. It would, for example, be possible to use the apparatus in a department store for demonstrating products via television to the public or to customers in other parts of the store. This could be done without resorting to the expensive and powerful lights that are now required for adequate illumination.

POSSIBLE "PICKUPS" IN N. Y. and L. A. AREAS*

			No. of
		Capacity	Events
1.	Metropolitan Opera House	3,500	135
2.		22,000	300
3.	Grand Central Palace	Limitless	10
- í .	Gay Blades Ice Casino	1,200	1
5.	St. Nicholas Arena	5,500	200
6.	New York City College	1,600	35
	Lewisohn Stadium	20,000	54
7.	Columbia University		
	Baker Field	33,000	30
	McMillan Theatre	1,266	117
8.	Fordham University1	,000 (aud.)	
		3500	
9.	Polo Grounds	56,000	102
10.	Yankee Stadium	68,361	90
11.	Ebbets Field	34,219	88
12.	N.Y.U. (Hall)	450	
	Hughes Field	7,500	24
	Aqueduct Race Track	40,000	36
14.	Belmont Race Track	50,000	36
15.	Jamaica Race Track	45,000	36
16.	Empire Race Track	25,000	36
17.	Goshen Track	35,000	10
18.	Jamaica Arena	2,500	104
	Broadway Arena	4,200	96
20.	New York Coliseum	16,000	240
21.	Fort Hamilton	2,000	-48
22.	Town Hall	1,500	200
23.		2,760	300
24.	Westchester County	2,000	672
	Centre		130
25.	Randall's Island Stadium	22,000 seats	30
		00,000 cap.	
	Astoria Pool	10,000	33
27.	West Side Tennis Club	13,356	12

Ŧ

	No. of
Capacity	Events
28. Jones Beach	20
29. Jackson Heights	10
Tennis Club1,000 or more (spec.)	
30. Bear Mountain Park	-40
31. Bostwick Field-L. I 4,000-5,000	60
33. Ruppert Stadium 19,000	77
32. Pegasus Club—N. J 2,000	52
34. Roosevelt Stadium	120
35. Roosevelt Raceway10,000-15,000	40
36. Hinchcliffe Stadium 10,000	45

^{3,441}

LOS ANGELES AREA

1. Philharmonic Auditorium	2,700	135
2. Shrine Auditorium	6,750	175
3. Hollywood Bowl	25,000	36
4. Pan Pacific Auditorium	12,500	5
5. Los Angeles Coliseum	, 105,000	104
6. Olympic Auditorium	10,400	104
7. Gilmore Stadium	18,000	104
8. American Legion Stadium	4,600	62
9. Wrigley Field	22,000	120
10. Greek Theatre	5,000	
11. Griffith Park Planetarium	514	
12. Riviera Country Club	5,000	•••••
13. Uplifters Club	1,000 Field	
-	700 Aud.	
14. Santa Anita	30,000	64
15. Hollywood Park	20,000	56
16. Del Mar Turf Club	30,000	
* Suggested by Dan D. Halpin.		

HOWARD F. WORTHAM

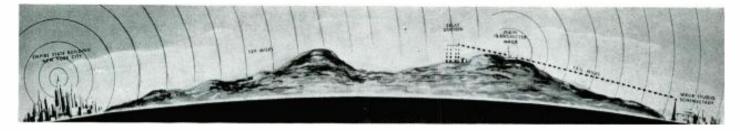
515 MADISON AVENUE

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New York 22, N.Y.

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TELEVISION PROGRAM SYNDICATION

T IS a fairly complicated, costly, and difficult matter to produce a good live-talent television program. Yet, following elaborate preparation and rehearsals, nothing remains after the final performance on the air except a memory. Accordingly it is necessary to get the greatest possible result from each actual television program. Syndication is one of the best means for accomplishing this. By sending a television program over a network, and rebroadcasting it locally through a multitude of stations, it reaches a vastly larger audience.

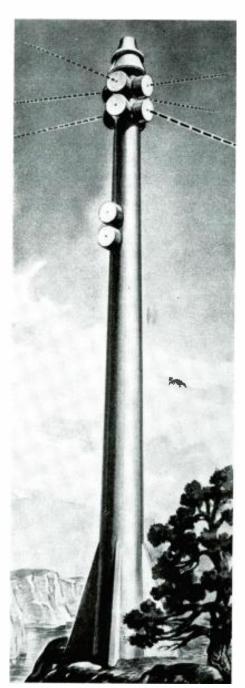
As indicated, programs that are attention-compelling and capable of building up an audience rapidly are usually elaborate and expensive to produce. The crucial economic factor is the cost of the program per listener. Clearly, if a telesion program were to be produced for an audience of one person, television would never start. Since program costs can hardly be reduced below a certain point for a given quality of entertainment, the cost per listener can be decreased primarily by adding to the number of listeners. Probably the most effective way of securing a large audience is to add together the various audiences of stations distributed over the nation and having non-overlapping coverage. The inescapable conclusion is that television network operation, though not precluding localstation success, is an important and desirable factor in television development.

Syndication a National Necessity

Furthermore, television-program syndication is a necessity from the national viewpoint. It promotes national unity. It permits the wider dissemination of cultural material. It enables the political education of the public. It stimulates an understanding of national problems and the development of a national viewpoint.

When television networks are analyzed

By DR. ALFRED N. GOLDSMITH



further, however, an apparently discouraging factor is found. Assume that it costs about \$75 per year to carry a 5-kilocycle sound broadcasting program over a mile of wire. As a national network with all its ramifications uses 20,000 miles of wire, its actual telephone bill will be about one and one-half million dollars. However, television is another story. Instead of using 5 kilocycles for modulation, as in ordinary sound broadcasting over networks, television will use at least 4,250 kilocycles for the picture alone. If it were necessary to use facilities of the telephone-line type at identical rates, this would lead to an annual bill for television transmission over a national network of more than one and one-quarter billion dollars!

Fortunately it is possible to avoid such costs. To begin with, one does not need to use telephone-line facilities at soundtransmission rates since numerous technical improvements are possible which greatly reduce installation and operating costs. In the second place, when one buys the transmission of sight or video frequency bands at a wholesale rate, so to speak, great reductions in costs become possible. And, further, one can somewhat economize in the amount of interconnection required for a national network. While precise figures are not available, it is clear that television syndication can be brought with reasonable economic limits in due course.

Four Syndication Methods

There are at least four methods of carrying television programs from one point to another for pick-up or syndication purposes. The first method uses an equalizer and a specially selected tele-

Automatic, unattended radio relay station, capable of receiving tele signals and retransmitting them distances of 30-50 miles. (Courtesy, RCA.) phone line. It is a useful method for transmission over limited distances (perhaps ten miles or so) and is particularly applicable for pick-up purposes (remote events) in cities. It is unlikely to be technically and economically preferred for long-haul traffic, that is, for nationwide operations.

A second method involves coaxial cables which are essentially conducting pipes carrying an insulated wire running through their center. Extensive plans for a national system of coaxial-cable connections have been announced. Such facilities may become useful in time for television-network operation.

A third method, concerning which little of practical nature has been published, is the wave guide. The wave guide resembles the coaxial cable with the central wire left out. That is, a wave guide is a conducting pipe through which message-carrying electromagnetic waves travel in guided fashion. Such a system may be capable of use in television syndication although no public announcement has been made concerning its state of development and practical application.

Radio Relay System

A fourth and highly promising method is the radio-relay system. Essentially this consists of a group of powerful radio amplifiers placed on tower tops every twenty or thirty miles apart. A message from the first tower is picked up by a receiver on the second tower, greatly strengthened automatically, and re-transmitted or sent on its way to the third tower. Thus the signal runs a relay race from one end of the system to the other. The transmission is of course practically instantaneous. There are a number of technical and operating reasons why a radio-relay system, particularly when it has been once established, can become an economic method of carrying a large number of television, sound, and other signals across country over great distances. A number of plans for the establishment of television radio-relay circuits have been announced and this method will apparently receive a thorough test of its capabilities.

It may be concluded that by one method or another television syndication will become both practical in operation and reasonable in cost. Its influence on program quality, production economics, and general development of television will be profound and helpful.

CORRESPONDENCE

Editor of TELEVISER:

Nineteen Okłahoma cities received a glimpse of post-war things to come when Station WKY, Okłahoma City, toured its Sixth War Loan television show. Over 64,000 people attended the fast moving hour-long performance that featured Sidney Montague, former Northwest Canadian Mounted Policeman, and Roberta Hollywood, blonde singing star from New York, duhbed by Winchell, "First Lady of Television," Wiley and Gene, popular WKY western team, and local talent of the towns when available.

The audience reaction was highly enthusiastic . . . the spectators everywhere found it hard to helieve that this was really television!

The biggest single hit of the tour came after the close of the formal show when bond buyers lined the aisles to get close-ups at the two receivers of friends and neighbors being televised. In Stillwater a dog wandered into the glare of the bright lights and became a star performer when Montague held him up and the cameras rolled.

In Hobart, a sailor just back from the South Pacific was interviewed by Wiley Walker hefore the cameras, surprised his farm mother in the audience who had not seen him in nearly two years.

Each town chose its Television Queen. In most cases she was the young lady who sold the most war honds. She was made up in the latest television make-up by Miss Hollywood, crowned hy Sydney Montague, and presented to her town via Television. Then, as a gift of WKY, the Queen received a \$25 War Bond purchased in her town. The WKY tour was unique in the fact that this was the first time television has ever been taken on one night stands; and remarkahle in that during the three weeks the show was on the road there was not a single failure. The crew of specially trained WKY technicians spent an hour or more after each night's performance packing away every piece of equipment with monotonous precision to safeguard its journey between towns. Trucking experts devised special cushions to place under the equipment to absorb travel shock and vibrations and through painstaking practice loadings before the tour found the hest methods for every day use.

Every newspaper and radio station in the 19 cities co-operated unstintingly. More than 45,000 lines of publicity—news, features, and picture space—were devoted to the show. Radio stations donated sustaining time or received permission from local sponsors to mention the Television Show on their time. Talent of the local shows was loaned for the performance.

In Wewoka, the Times-Democrat, a daily, sold a full page of signature advertising on the show and its principals, and a Wewoka restaurant plugged the WKY show on its menus. In Shawnee, merchants bought a one-third page ad. The performers took their war bond appeal

The performers took their war bond appeal and entertainment to another 22,095 in personal appearances before school children, civic cluh members, and personnel in Army and Navy hospitals and convalescent homes.

DORIS ANNE LUEDKE Station WKY Oklahoma City, Okla.

"TELEVISION HIGHLIGHTS"

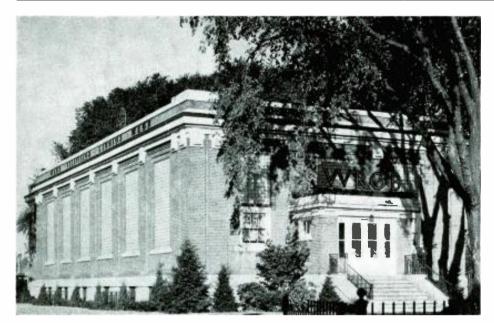
(Continued from page 6)

industry to the nation's economy." Points out an additional six channels will enable complete competition. Also says channel from 102 to 108 mc. should be allocated at once for television (thus making a 13 instead of the 12 now proposed). Insists security in use of allocated channels is imperative, and that FCC make rulings on permanent rather than temporary basis. ... Paul L. Larsen on behalf of Society of Motion Picture Engineers appears before FCC and asks that theatre television be given allocations starting at 190 mc. and running in different bands up to 30,000 mc.

As we go to press: If any proof is required that Television is Here: Macy's, New York, after seven weeks of experimental programs over WABD, decided to continue for a further 19-week period on same station. Program is beard W'ednesday at 9:30 p.m., Gimbel's, Phila-

delphia, is first store to televise fashions on a network basis. . . . Between New York's WNBT, Philco's WPTZ in Philadelphia, and General Electric's WRGB in Schenectady, with anspicious program on March 11. . . . RCA demonstrates large screen home television before an assemblage of editors and publishers, March 15, featuring a special program by the National Broadcasting Company. . . . More and more advertising agencies are taking to the air with television programs. . . . Printer's Ink, in March 8th issue, now classes television, along with radio and periodical advertising, as a legitimate advertising expense. . . . The approach of V-E Day accelerates television thinking and planning in New York and elsewhere. ... The TELEVISER, with this issue, is published by Television Publications, with plans under way for an even bigger and better "journal of video production, advertising and operations."

A TOUR OF STATION WRGB, SCHENECTADY, N. Y.



N THE south bank of the Mohawk River in Schenectady, New York, stands television station WRGB, probably one of the most powerful and best-equipped stations in the United States.

On the air with regularly scheduled programs since 1939, WRGB considers itself primarily a laboratory for experiments in programming, staging, lighting and engineering problems.

Its young and enthusiastic staff originates programs three evenings a week. In addition, the station relays a program each week from Station WNBT in New York City. These, plus the televising of motion picture film, makes a total of eight hours of telecasting each week.

Unlike most television stations today, WRGB already has a history and a tradition dating to 1926 when Dr. E. F. W. Alexanderson, G. E. engineer, developed a mechanical method of television, using mirrors mounted on a wheel. Two years later, using a rotating perforated disk to scan the image, WGY, G-E radio station at Schenectady, became the pioneer television station broadcasting on a regular schedule of three afternoons a week. In August of the same year a remote broadcast of Governor Alfred E. Smith as he made a speech

A cutaway drawing of WRGB's studio. Note the 3 cameras, studio audience, control booth, mercury vapor lights accepting the Presidential nomination of the Democratic Party at Albany, N. Y., was telecast from Schenectady. In September of 1928 the first play ever to be presented by television, "The Queen's Messenger," was telecast from radio station WGY. The camera's range then covered so small an area that only the actors' faces or play of hands could be shown to indicate the action.

A year later the cathode-ray tube was

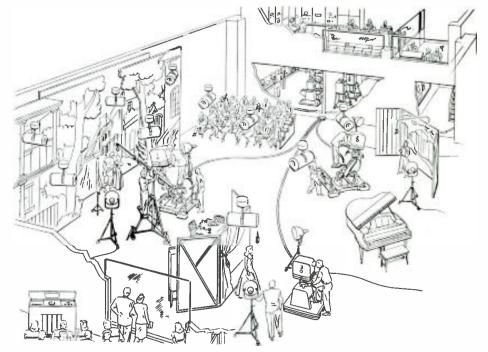
Home of Station WRGB—former clubhouse for GE employees—has large, spacious, comfortably air-conditioned studio

introduced and in 1930 G.E. engineers projected television upon a seven-foot screen before a theater audience, for the first time, at Proctor's Theater, Schenectady. In 1931 a 30-line, 15-picture-persecond television system was used to send geometric patterns to Berlin, Germany, with a fair degree of success. The first long-distance reception of modern high definition television took place in the Helderberg Hills near Schenectady. There, 129 miles from New York City and 7,900 feet below the line of sight, pictures of King George and Queen Elizabeth of England touring the New York World's Fair on June 10, 1939 were received.

Regular Service Begun Nov. 1939

Regular program service at WRGB, however, did not start until November 6, 1939 and has been continuous since that time with the exception of "time out" during 1941 while adjustments in the equipment were made due to changes in standards.

WRGB is housed in its own building. The studio proper is 42 by 70 feet, air conditioned and sound proof. Lighting for telecasting is furnished by ceiling



and floor lamps of the water-cooled mercury vapor type, which allow staff, actors and studio audience complete freedom from the excessive heat of incandescents. The ceiling lamps are controlled from a central desk and may be turned in whatever direction required or tilted at any desired angle. Behind the studio is the motion picture film projection room and a repair shop. Above the studio floor level in the front of the building is the viewing room where the show may be watched from easy chairs on a receiver set or, by turning the head, from the studio floor directly. At the rear of the building, opposite the viewing room, is the control room complete with monitor panel. Offices, rehearsal room, scenery workshop and store room are in the basement.

The main transmitter and relay stations are located in the Helderberg mountains about 12 air miles from Schenectady.

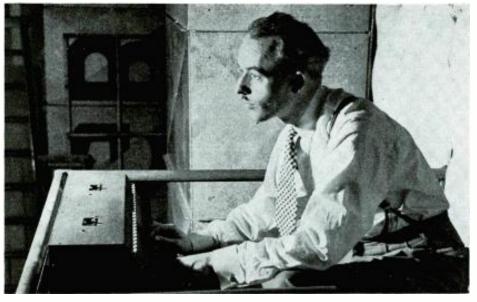
Interesting as the studio and equipment might be, what goes on within those brick walls is equally exciting. The program staff is willing and anxious to try almost any type program, try it again and again in an effort to find the answer to "how it should be done" on television.

Touring the Studio

Would you like to watch a live program? Then join The TELEVISER studio tour of WRGB.

At one end of the studio you see two sets all prepared, as well as an announcer's spot over against the wall. The opening scene of the play tonight is laid in the dining room of a house on the rock-bound coast of Maine . . . that's the set to the right. Cameras one and three are now getting lined up for the opening shot. They are focusing and centering the set in their viewers. The third camera, No. 2, will remain where it is all evening trained on the announcer. The second interior setting you see to the left is of a New York apartment where the action of the play shifts during the latter part and the cameras that are now on the Maine dining room will shift to this set when the action calls for them.

How can the television audience determine that the dining room is in Maine except from the dialogue? That's easy. When the first slide, size $3\frac{1}{4}$ by 4 inches is inserted in the projector, which is in that room off the rear of the studio, and announces the title of the play, cast,



LIGHT CONTROL CONSOLE: WRGB's mercury vapor lights are controlled via this console, turned and tilted any angle desired for best lighting effects

credits, etc., it will be followed by the projection of a film strip which will show the rugged and stormy coast of Maine. A narrator here in the studio will be heard, but not seen on the television screen and he will set the mood and location in accompaniment to the film strip. Then the film will be dissolved out and the dining room interior dissolved in and the live program will be under way.

How is the film started at the proper time? The technical director, who does all the cueing for slides, film, etc., has a script by his side in the control room. He knows how long the film should be run to reach the proper speed in time for projection. Through careful rehearsal he knows the exact second to push the button before him that starts the reel going in the projection room below.

The narrator in the studio cues himself as to when to start talking in one of two ways, both the result of rehearsal and making notations on his script. He

See the person on the sets with a light meter? He is checking the light level in all action spots of the set to insure the sharpest, clearest and most effective lighting for the television image.

There, a light just flashed over the door. It's just a matter of seconds now until the station goes on the air. You can either go up to the viewing lounge and watch the show on a receiver from where a view of the studio floor is also available. Or you can go to the lobby of the control room, overlooking the rear of the studio and watch what goes on below in the studio, as well as from a receiver. In addition we can also see the staff in the control room. Let's go to the control room and see how all these separate pieces of activity are fused to make a smooth, finished television program.

Close Teamwork Required

The station announcer has taken his position before camera 2. He has his own special overhanging microphone. You can also see the narrator for the play taking his position before another microphone, ready to go. Now on the screen you see the announcer opening the evening's performance, giving notices of future programs and station identification. Now we dissolve from him to the slide announcing the play, now the film of the Maine coast and the narrator's voice over it. At the last frame of the film, dissolve in the dining room interior, with a medium long shot to take in enough of the set to orient the audience. You can notice the cameras moving around according to instructions as the story unfolds.

The time is getting close now to leave the dining room set and shift to the New York apartment. Notice camera 3 going in for a closeup of the leading character while camera 1 is moving over to the New York set preparatory for the shift of action. As soon as the scene in the Maine dining room is over, the time and distance intervals between the two scenes is bridged by a film strip of New York's street scenes, which locates the second set for the audience and gives the cast and camera 1 time to shift to the other set. This film strip is cued in by the technical director from the dialogue immediately preceding the shift of action and was marked on his script during rehearsal. Now we are launched on the final lap of the play. It is only a oneact play, taking less than 30 minutes, but you have seen what a tremendous amount of teamwork has gone into its telecast.

can view the film as it appears from a receiver set in the studio and cue his script by certain pictures in the film. Or, without the receiver in view, in advance he can write his script timed to the film.

Producer Directs the Cameramen

The program producer directs the cameramen from his desk in the control room. You notice they are all wearing earphones, as is also the stage manager. Long shots, closeups, medium shots and angles are called for by the producer. These have been all carefully rehearsed ahead of time and written into the script so that the producer actually has only to prompt the cameramen or take over if some emergency occurs, like actors forgetting their cues, eliminating some lines or action that would leave the cameramen behind.

So far mention has been made only of the visual technique. However, the voice and sound that go with the television picture are as important and sometimes as complicated. It is the audio director, who also occupies a chair of honor in the control room along with the producer and technical director, with whom the responsibility lies to see that the voices of the characters in the play, the voice of the narrator, the sound effects necessary in the program come in at the right time and at the proper level. It is he, or in WRGB's case, she, who guides the operator of the boom microphone in the same manner as the producer guides the cameramen. It is she who dubs in musical backgrounds on cue from the producer. It is she who controls fading in and out of all sound, whether live or accompanying a film.

Now the last line of the play has been spoken, and we return to the announcer whose lighting and camera shot have remained stationary throughout the evening. He signs the station off the air, much as a radio announcer does, and the evening's entertainment and our studio tour is over....

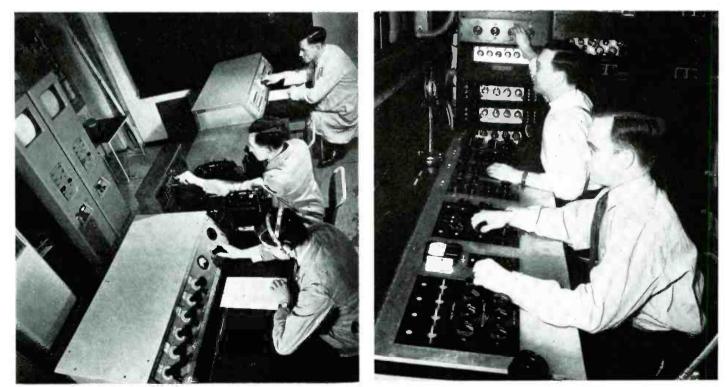
Washington Video Notes

(Continued from page 4)

most progressive 250-watt stations in the country, has asked for Channel 3 and will spend around \$162,250 for equipment. Operation, at first, will be for a minimum of 36 hours a week. (Quite an ambitious schedule!) General Electric equipment, 4 kw. visual and kw. aural transmitter, will be used. WITH already operates FM developmental station W3XMB, carrying on interference experiments on FM frequencies below 60 megacycles with W3XO, the Jansky & Bailey experimental FM Station in Washington, D. C.

It appears very little thought has been given by applicants to "interference factors" since Baltimore and Washington are only 32 miles apart; and frequencies above 25 megacycles experience interference of a serious nature. Interference decreases as the frequenccy increases up to 1,000 megacycles. So there's going to be a great deal of amending, with hearings held on these applications once the FCC-WPB freeze is lifted.

BRITISH AND AMERICAN CONTROLS ...



B.B.C.—Audio and video mixing desks in Central Control Room, Alexandra Pałace, London

N.B.C.—High up in Studio 3-H sit these two audio and video engineers at the control panels

4: REVIEWS, SCRIPTS AND VIEWS

BOOKS:

RADIO'S 100 MEN OF SCIENCE, by Orin Dunlap. Harper & Bros., 1944.

THE future of radio and television and its unlimited opportunities for discovery and invention, mirrored against the fascinating background of the past, are graphically revealed in the book "Radio's 100 Men of Science," by Orrin E. Dunlap, Jr., recently published by Harper & Bros. In 100 biographical narratives, each in itself an individual story of achievement, Mr. Dunlap interweaves the lives of the scientists with their discoveries and interprets the significance of their contributions to the advance of radio.

The history of radio, electronics and television unfolds as a progressive story extending from Thalos of Miletus, who first observed "elektron sparks" on through Faraday, Maxwell, Hertz, and Marconi, from Fessenden and DeForest to Zworykin and other contemporaries of television fame.

The story discloses how throughout the centuries Nature dropped the clues to wireless, and how each discoverer in turn received inspiration from predecessors; most of them began as Edison once remarked, "where the other fellow left off." An introductory chapter "The Genesis of Radio," reveals how radio is the creation of a long line of scientists whose work in the discovery of the laws of Nature and in designing instruments to harness the elusive forces of science, goes back more than 100 years.

Although many pre-Marconi men experimenting in the realm of electricity believed that they had found clues to wireless, history discloses that they failed to recognize radiation as the key to success in signaling through space. Marconi grasped the idea and made electromagnetic radiation a practical means of electrical communication thereby gaining the title "Inventor of Wireless."

Selecting from radio's 100 pioneers in science, the most outstanding according to the importance of their contribution to the advance of radio, Mr. Dunlap names the "Big Ten" as follows: Faraday,

TELEVISER

Henry, Maxwell, Hertz, Marconi, Fessenden, Fleming, DeForest, Armstrong and Zworykin.

Having met and talked with many of the radio pioneers and having corresponded with others, Mr. Dunlap recalls numerous anecdotes and gives his impressions of their personalities.

The author explains that selection of the pathfinders for a place in "Radio's 100 Men of Science" necessarily includes the pioneer scientists of electricity for they blazed the trails that led to radio.

Inventors are recognized as having their own individual styles as do artists, authors, composers and songwriters. Mr. Dunlap places inventors in two classes those who create systems and those who invent devices. Maxwell and Marconi are classified as systemic. They dealt with a broad general field, or association of things into vast functional aggregations. Edison and DeForest were device inventors, whose achievements greatly stimulated systemic developments — Edison, electric lighting, the phonograph and the motion picture; DeForest, broadcasting.

In the foreword it is pointed out that the men on the roster of "Radio's 100 Men of Science" have played important parts to effect in radio a radical change or entire change; they have reconstructed or rebuilt on new lines. The story records how they drove stakes along the pathways of progress; they erected mileposts. They built stairways, not merely steps, from floor to floor in the mighty and towering structure of radio. Each man was a pioneer in his particular field-an originator of a new device or a new method which went beyond merely skilled technique and exerted a profound influence on one or more of the arts. Their charm was and is in their simplicity; their fame in electricity, radio, electronics, and television!

RECOMMENDED READING

If they aren't available from your local bookstore, write to our Readers' Service Bureau.

Camm, F. J.	Television Manual (1943)
Chapple, H. J.	Popular Television (1935)
DeForest, L.	Television, Today & Tomorrow (1942)
Dinsdale, A.	First Principles of Television (1932)
Dunlap, O. E.	Outlook for Television (1932)
Dunlap, O. E.	The Future of Television (1942)
Fink, D. G.	Principles of Television Eng'g (1940)
Hathaway, G.	Fundamentals of Radio (1944)
Hathaway, K. A.	Television, A Practical Treatise (1933)
Hubbell, R.	1000 Years of Television (1942)
Hutchinson, R.	Television Up-To-Date (London 1937)
Kerby, P.	The Victory of Television (1939)
Lawrence, J.	Off Mike (1944)
Lee, R. E.	Television: The Revolution (1944)
Legg & Fairthorne	Cinema and Television (1939)
Lohr, L.	Television Broadcasting (1940)
Maloff & Epstein	Electron Optics in Television (1938)
Mills, J.	Today and Tomorrow (1944)
Moseley, S. A.	Television—A Guide to the Amateur (1936)
Pennsylvania	WPA Writers' Program-Television (1912)
Porterfield & Reynolds	We Present Television (1940)
RCA Volume II	Collected Addresses & Papers (1937)
Tyson	Do You Want to Get Into Radio? (1940)
Zworykin	Television (1940)

MAGAZINES:

WHAT THE BRITISH LEARNED ABOUT TELEVISION, by Richard Manville. Printers' Ink.

Although what the British have learned about television follows pretty generally the lessons learned by us Americans, the problems faced by BBC in resuming television after the war are the same familiar ones American telecasters are this moment wrangling over—standards, screen size, color, etc.—our Allies across the Atlantic have several successful results of unique pre-war experiments, untried in this country to this reader's knowledge, to add to the combined, international knowledge of the new medium.

This is brought out in six uneven articles by Richard Manville, published in Printer's Ink during December and January. Taken from the transcripts of a recent series of broadcasts by BBC summarizing its television experiences, they present in question-answer form the British view of television which can serve as another good preliminary review of the subject for the initiate, but which the "old-hand" will find generally dull and repetitious with a few exceptions.

The exceptions include, first, such random facts as:

British home receivers cost \$160 before the war.

BBC, in 1940, had a total home audience of nearly 100,000.

A special television cable was permanently laid around the busiest parts of London, to which lines were hooked for remote transmission of special events.

Dramatic productions for television were often rehearsed as long as 21/2 weeks.

Tele studios should be centrally located (not outside city limits as some advocate) so that talent and news personalities can be quickly brought before the cameras.

Television will probably kill sound broadcasting altogether—except for news flashes and background music.

The one outstanding exception to the hodge-podge of the facts gathered together in these articles is the description of the work BBC did in interpreting music, art, dancing via television. The fifth article, appearing in the January 5th issue, makes up for all the rest with its accounts of pantomime opera productions, imaginative music-dance treatments of a Bach Fugue, the televising of a symphony orchestra in action, special television ballets. This should be a must to all interested in television production.

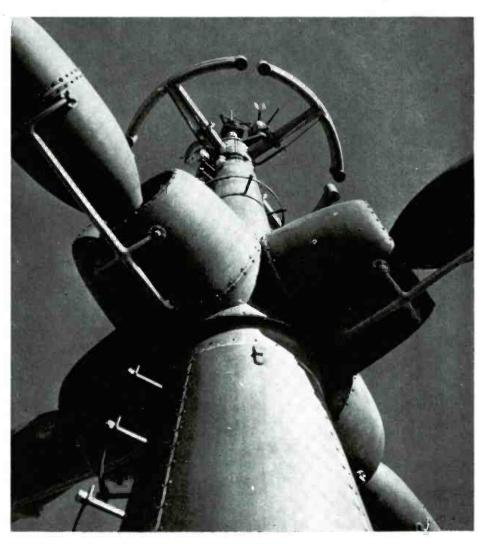
WHAT A YEAR OF TELEVISION HAS TAUGHT LEVER BROS. ABOUT COMMERCIALS, by Patricia Murray. Printers' Ink, February 9, 1945.

Those interested in television commercials will find this account of one year's experimentation by Lever Brothers interesting and provocative. The oldest, livetalent, commercial television shows still running, "Wednesday at Nine Is Lever Brothers' Time," has a history of many different types of productions including a recent attempt to bring the radio soap operas, "Aunt Jenny" and "Big Sister," before the cameras. But it is in the field of commercials often amusing, frequently startling, always original—that the show has made its biggest mark. Don't miss Pat Murray's account of these!

WHY MARIONETTES ARE A TELE-VISION NATURAL, by Gorman Loss. *Printers' Ink*, February 16, 1944.

Here is another wonderful idea!—Marionettes for television!—They are ideal for depicting trade characters in the commercial portion of a television show; they are the best medium for the animation of comic strips via television; they require little working space; they don't have to memorize scripts; they're versatile.

The only problem, according to Mr. Loss, is that there aren't very many topflight marionette companies in this country, so that potential users of the medium will have to start hunting now for talent.



Grotesque looking structure is WNBT's television antennas atop Empire State. Sound emanates from hornlike rods; tele signals from oval shaped solids below

"HOUSING IN WARTIME"

Presented by MADEMOISELLE

CBS Television, Feb. 15, 1944

VIDEO	AUDIO	VIDEO	AUDIO
No. 1 on Mlle. READY No. 2 MLLE: When most of us hear the words housing and city planning, we reach for the comic strip. We think of dull statistics and billion dollar projects and undecipherable blue- prints. Maybe you wonder then, why a young woman's magazine should devote an entire issue as Mademoiselle did recently to a sub-		TAKE 1	VICKI: Oh, yeh! What's up?
	strip. We think of dull statistics and billion	Set up subway and kid flats.	KAY: Remember that cute looking sailor I met last week?
	TAKE 2	VICKI: I should. You've been talking about nothing alse all week.	
	ject seemingly as remote and complex as housing.		KAY: He called me at the office this afternoon. Aasked me for a date tonight.
DISS. TO No. 2 (Easel) (Pic. No. 1) READY 3 on 4 DISS. TO 3-Pull 2	Well to millions of our sweethearts and husbands, home is pretty important these days They dream of home wherever they are:	TAKE 1 (No. 2 on Vicki)	VICKI: Oh, wonderful! What are you going to wear? I don't know! I was thinking about wearing that little brown number. Or, do you think that's too sophisticated? Maybe my blue crepe would be more becoming. Oh
(Pic. 2, 3, 4, 5)	SAIPAN Luzon Schmidt		just look at my beautiful new housecoat (<i>Takes it out of closet and holds it up.</i>) It's all crushed
DISS. TO No. 2 (Pic. 6) DISS. TO No. 3 (Pic. 7) Slide No. 2	PRUEM Home pierces their thoughts as they wait the long wait before going <i>into battle</i> . Home is their driving idea as they face the guns and bombs <i>the enemy</i> .	TAKE 2	VICKI: Well, what did you expect putting it in here. There's about as much space in that closet as in this one-room shoe box of an apartment.
DISS. TO No. 2 (Pic. 8) Slide balop (Super-Impos.)	The thought of home hovers over the aches and fevers of the wounded.	ΤΑΚΕ Ι	KAY: I wish you'd put some of your stuff in a drawer. Do you have to hang everything you own?
DISS. TO 3 Slow (Pic. 9) Slide pic.	Home is a far-away thing—a mirage in their desert of loneliness.	TAKE 2 (No. 1 on Kay)	VICKI: Share and share alike is my motto. I don't have any more stuff in that closet than you do.
DISS. TO No. 2 (Pic. 10) Slide balop Slide pic. (Pic. 11)	The picture <i>in their</i> minds is blurred and softened by the impact of their experience. It is the answer <i>to mud and pain</i> and short rations and the threat of <i>violent death</i> .	ТАКЕ 1	KAY: (A little peeved.). Oh, I suppose not (Wanders to desk—takes out cold cream and starts smearing it on her face). What're you doing tonight by the way?
DISS. TO No. 3 (Pic. 12) READY No. 1 on 4	It becomes the perfect embodiment of all that is wished for.		VICKI: Johnny's dropping in after work tonight.
DISS. TO No. 1 MIle. READY No. 2	But the American home is far from perfect. So it's up to the women of America to be	TAKE 2	KAY: What againdoesn't he have a home?
(No. 2 on apt. scene stage C)	he realists. It's up to us to examine objec- tively the kind of homes and cities our fight- ing men are actually coming back to. It's up	TAKE 1	VICKI: Again why I haven't seen Johnny since the day before yesterday.
	to us to plan a good and new "Design for living." And before we can do that we've got to understand what housing and city		KAY: Well, it gripes me to have him hanging around here all night every time he comes I never get any sleep.
	planning means. Sure housing is sta- tistics and blue prints and billion dollar projects—but housing means other things,		VICKI: What's got into you all of a sudden? You never seemed to mind
	Housing is the apartment in which we live		KAY: Look couldn't you and Johnny take in a movie or something?
DISS. TO No. 2 (Apt. of two	entertain	TAKE 2	VICKI: Say why are you so anxious to get rid of us. You've got a date.
girls)	SCENE ONE:		KAY: Well that's just it. My guy is kind of broke. I thought we could try pot luck on the electric grill and well, darn it, four's a crowd in this one-room mansion.
lump and a coffee tab	Furnishings include a studio couch, a desk, a le. Kay and Vicki are in their twenties. As the ki is seated on the couch doing her nails.	TAKE 2	VICKI: Now, look here, you're not going to go smelling up this place with cooking. Any-
Release No. 1 to Apt. scene-2 shot.			thing you make in that kitchenette stays in the house for days.
	VICKI: Hi, Kay you're early.	TAKE 1	KAY: (Flares up.) Well, you've got a nerve. It didn't seem to bother you that time we made
KAY: (Flips off hat and starts removing coat.) Big doings tonight.			supper for Johnny and, oh God, how I hate the smell of fried onions

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VIDEO	AUDIO	
TAKE 1	VICKI: (W'eakly.) That's different. Johnny and I are engaged.	
Watch: Quick Rise	KAY: (Snaps.) Oh! Keep quiet!	
TAKE 2	VICKI: (Appeasingly.) What are they playing at the Sheridan tonight?	
TAKE 1	KAY: (Pumps out of chair and runs to Vicki.) Oh, Vicki! You're a darling. I'm sorry I snapped at you that way. (She presses her cold creamed face to Vicki's.)	
	VICKI: Hey, you're smearing me all up. KAY: (Looks at her and laughs.) Oh! I'm sorry I forgot	
TAKE 2 (Ready 1 and 2 on 4)	VICKI: (Wiping off cold cream.) That's grati- tude You're nice to a gal give her your only apartment for the evening and she smears goo all over your face (She looks at Kay who is tearing two strips of paper and placing them in a book.)	
TAKE 4	VICKI: What are you doing?	
(Release No. 1 to subway scene)	KAY: (W'alks over desk with the book—two pieces of paper sticking out from it.) The same routine. I acted like a perfect brat. We'll draw lots to see who gets the apart- ment tonight.	
Warn—Sound for	VICKI: Now look you don't have to	
Mile. Pickup	KAY: (Extends the book.) Pull	
	VICKI: (Pulls strip and compares it with the one drawn by Kay.) I knew it! Here I go out into the night. (Earnessly.) You know I hate to think how many more times this is going to happen. Gosh! I wish we could find a decent place to live	
Cne: Mlle. Slow Diss.: To No. 1 (Fade in subway sound) Sound up full	MLLE: With a roomy closet, separate hedrooms and a place for privacy—a really decent place to live Housing has also to do with <i>city planning</i> , with travelling from home to work and back again each day—and what it takes out of you.	
SCENE TWO:		
Straphanger is silent at first, reading the paper and swaying with the train. Beside him are two other straphangers with backs to camera. Train jerks suddenly. The three straphangers almost fall over, catch their balance and sway again. Straphanger facing camera begins to talk.		

STRAPHANGER: The city is pretty important to me. Raised a couple of kids in the city that I'm mighty proud of . . . most of my family and friends live here . . . been using the sub-Cue: Ronnie start way for a long time now. Every day I try to make sure I've got a nickel ready before I get to the station so I won't have to stand in Yo-Yo. line at the change booth . . . (Chuckles.) that's because I need my energy to push through the crowds at the turnstile . . . of course, that's really nothing compared to the (Crossfade sound street noises unhum's rush you get on the train platform . . . der) I usually practice a kind of passive resistance down there . . . I just let the crowds shove me along until I get to a spot where the train doors open . . . then the people in the train start shoving to get out and the people behind you keep shoving to get in . . . after a while you find yourself shoving the guy in Slow Diss.: To 2 front just because someone else is shoving you . . . Two hours a day fighting my way to work and back again and eight at the office. That makes a good fourteen hour-day. Cue: Mlle.: No wonder I'm a deadheat hy the time I get home at night.

VIDEO (No. 1 on Ronnie quickly) MLLE: Ronnie doesn't know it but right now Cue: Ronnie he too is giving his thoughts to community planning and its weighty problems. SCENE THREE: LITTLE BOY: I live in apartment 4C, 553 West 103rd Street, borough of Manhattan, New York City, state of New York, United States TAKE 1 of America, western hemisphere. I like living in the city. There's movies on Saturday mati-

TAKE 2

Ready 1 on 4

TAKE 4

(Release No. 2 to sham set)

Truck in slowly-C. U.

Fade sound

Cue: Peterson Cue: Mlle.

> Slow Diss. To No. 2

(No. 1 to slum scene) (Strike-subway and kid-set)

nees. Last week they started a terrific serial, The Masked Marvel. It ended where the gang tied him to a depth charge. Gee, I hope he gets out all right. Once in a while, Pop takes me to one of the big ball games. The only trouble is there's no place where us Bisons can have some fun . . . Bisons, that's the name of the club I belong to . . . the only place we can play any baseball is in the street . . . and just when the bases are full, and you hit a homer, some dopey car comes along and you can't run the bases. Even if we go to the park, it's no good . . . either there's a bunch of big guys playing there and they chase us away or else there's a lot of signs around saying, "Keep off the Grass." Gee, I wish mom could move to a street where they had a real blayeround real playground.

AUDIO

MLLE: Playgrounds for kids-free spaces for fun, and exercise . . . housing is the way young lives are moulded and hammered out of shape . . .

SCENE FOUR:

The scene is the kitchen of Mrs. Petersen's 3-room apt. Mrs. Petersen is a small chunky, stoop shouldered woman of about fifty. She wears about three or four worn sweaters from beneath which her apron falls onto a dull cloth skirt. Sonia, her daughter, is about seventeen years old. maturely built. She wears a sweater and skirt. Mrs. Petersen is taking down, rolling and sprinkling clothes. At their left is a coal cookstore above which is strung some clothes. At the side of the store is a wooden box with some coal and wood. On the stove is a kettle and an old coffee pot.

> MRS. PETERSEN: (Calls out.) Sonia . . . (Pauses and then calls louder.) Sonia! ...

SONIA: (Off Mike. Querulously.) I'm coming . . . (Strolls out fixing an earring.) Don't scream at me mom, my head's splitting already ... (Looks in pot.) ugh ... again? ...

MRS. PETERSEN: (Ignores her remark and looks up at clock.) Ten o'clock . . . a fine time to be gettin' up . . .

SONIA: It was warm in bed . . . this place is always so cold . . . (She extends her hands to the coal stove and then turns around in front of it.)

MRS. PETERSEN: I can't get more coal. There's a shortage . . . I've gotta be sparing with what we got left . . .

SONIA: What good would it do if you got a carload of the stuff. You can't heat three rooms with a kitchen stove . .

MRS. PETERSEN: Put on another sweater. That'll warm ya up . . . (She is interrupted by a rapping of pipes.)

TAKE 1

TAKE 2

Pan to mother

VIDEO	AUDIO	VIDEO	AUDIO
TAKE 1	SONIA: (Holds band to bead as if she's got a bangover.) Oooh my poor head (Grits ber teetb.) Are those kids playing with the pipes again?	TAKE 2	SONIA: (Nervous.) I ah changed my mind about that dress I'm gonna save the money instead.
	MRS. PETERSEN: It's not the kids the	TAKE 1	MRS. PETERSEN: (Turns to Sonia.) You're lying!
	Sonia: Oh fine we don't have any hot		SONIA: (Indignant.) Say who you calling
(Crossfade jazz music)	water to begin with now we won't even have cold water oh fine (Radio blasts out very loud. Sonia reacts immedately and looks up. Shouts.) Turn off that radio up there (The radio subsides and Sonia again places the back of her band to her		MRS. PETERSEN: (Cuts in.) You're lying. You don't have the money for that dress. You didn't work overtime last night or any other night last week.
	forebead.) Oooch	TAKE 2	SONIA: Rave on you're fascinatin' me
TAKE 1 (No. 2 stay on Sonia)	MRS. PETERSEN: You got another one of those headaches?	TAKE 1	MRS. PETERSEN: (Dully.) Where've you been every night?
,	SONIA: (Laughs.) Yeah (Looks at store.) Ya got any coffee there, mom I could use a nice hot cup of coffee		SONIA: You got all the answers you tell me
TAKE 2 MRS. PETERSEN: (Doesn't say anything. Takes a cup from the row of hooks, takes a coffee pot from the stove and pours in some coffee.)	a cup from the row of books, takes a coffee pot from the stove and pours in some coffee.)	READY 2	MRS. PETERSEN: Mrs. Flanagan saw you on Willow street with that hunch of girls last night.
	Why don't you take some juice with this—1 opened a can this morning it's right outside on the window.		SONIA: (Flares up.) Mrs. Flanagan is nothin' but a snoopin' big-nosed
TAKE 1	SONIA: (Takes the cup.) No thanks just coffee (She sighs.)	TAKE 4 (No. 1 to Mile.)	MRS. PETERSEN: What've you been up to with that pack? (Sonia says nothing but stares straight ahead. Her mother crabs her wrists.
	MRS. PETERSEN: (Peers at ber.) You been workin' too hard.		<i>The cup and saucer fall to the floor.)</i> Ya hear me?
TAKE 2	SONIA: (Puts down coffee cup in saucer.) No fooling wadya suggest mom? A trip to Palm Beach maybe or California?		SONIA: (Struggles.) Let go you're hurting me
TAKE 1	MRS. PETERSEN: This isn't the way I wanted it. Your Pop and me had plans for all you		MRS. PETERSEN: (Shakes her harder.) What've you been up to?
	kids we were gonna send you to college hecause you were the oldest.		SONIA: (Yanks ber wrists sway. She speaks bitterly. She rubs her wrist. Her mother's grip hurt.) OK 1'll tell ya what I've
	SONIA: Cut it, willya, mom? Let's not go through that routine again. (Humorously.) You should married a rich man, that's all.		been up to. I've bene getting potted. I been havin' myself a time every night—that's what I've been doin'
TAKE 2 (Pan to Sonia	MRS. PETERSEN: (Sharply.) Your father was a good man, you hear me?	Cue: Mlle. on set	MRS. PETERSEN: That's no good. SONIA: Well, what did y' expect me to do?
	SONIA: It sure paid off, didn't it? Pop was good, all right good and poor! And now I work overtime so the six of us can live in three rotten rooms (Grimaces in disgust and then takes another sip of coffee.)		Solute. Well, what they expect the to do.' Sit around here every night and go nuts? I wanta have fun I wanta dance and meet fellers when I'm home I feel like I ain't livin' I'm sick of this rat trap I don't want to grow up to he all beat out the way you
	MRS. PETERSEN: (Turns away. Goes back to ber activity. She speaks matter of factly.) Did you work overtime last night? (Sits.)		MRS. PETERSEN: (Her fury bas been mount- ing.) At this last she can control herself no longer. She slams the flat of her hand against
TAKE 2	SONIA: (She is startled by the question. Cup of coffee is suspended halfway to her lips. She casts a quick nervous look at her mother. She brings the cup to her lips and does not answer.)	(Warn sound on	Sonia's face.) Sonia's face.) Sonia: (Holds her hand to her face.) You've never done that before, mom. (They look at each other.) I'm gettin' out of here. I'm gettin' outta here so fast it'll make your head
MRS. PETERSEN: Did you? Answer me.	Mlle.) Music—up and un- der	swim (She starts to cry.) I'm gonna ge as far away from this place as I can and I ain't comin' back (Puts bead on table	
	SONIA: (Furtively.) Why sure of course, 1 worked overtime 1 worked overtime every night last week		and bau'ls.) MRS. PETERSEN: (Makes as if to stroke Sonia's bad aiber her lits form the word or
(No. 1 ease in)	Mrs. PETERSEN: Now you'll be able to buy that dress you wanted so bad , we'll go down to Newman's later hefore it closes.	Cue: Mlle. Diss.: To No. 1 Music out	bead either ber lips form the word or she whispers.) Sonia my poor kid (Jazzy sound of radio comes up loud.)
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"SECOND-CLASS MATTER" ... By The Editors

WITH the Spring issue, the TELEVISER enjoys "Second Class" mailing privilege, a privilege accorded only to publications (by Act of Congress, 1879) who have proven their worth in supplying useful knowledge and information and who have demonstrated their stability by enjoying a net paid circulation at least half of the normal print run.

The TELEVISER was originally planned for an initial circulation of 2,500 copies. When the orders started pouring in from all over the country, the print-run was "upped" to over 5,000. We are specially grateful for the support and cooperation we received

We are specially grateful for the support and cooperation we received from the country's television and radio stations, from department stores, advertising agencies, manufacturing companies, and others interested in the advancement of television.

In the radio station category alone, we number now among our friends the following enthusiastic subscribers:

WSNJ (Bridgeton, N. J.); WTTM (Trenton, N. J.); KWKH (Shreveport, La.); WHK (Cleveland, O.); WTRC (Elkhard, Ind.); WAAT (Newark, N. J.); KDYL (Salt Lake City, Utah); WGAN (Portland, Me.); KLO (Ogden, Utah); CKAC (Montreal, Que.); WWL (New Orleans, La.); WCOJ (Columbia, S. C.); KGHL Billings, Mont.); KRLH (Midland, Texas); KHQ-KGA (Spokane, Wash).; WMAQ (Chicago, III.); WIBC (Indianapolis, Ind.); WINX (Washington, D. C.); KUTA (Salt Lake City, Utah); WMBR (Jacksonville, Fla.); WOAI (San Antonio, Tex.); KMOX (Webster Groves, Mo.); WMUR (Manchester, N. H.); WBZ (Boston, Mass.); Evening Star Broadcasting Co. (Washington, D. C.); National Broadcasting Co. (Washington, D. C.); United Broadcasting Co. (Cleveland, O.); KALE (Portland, Ore.); WLW (Cincinnati, O.); WHK (Cleveland, O.).

(Portland, Ore.); WLW (Cincinnati, Ö.); WHK (Cleveland, O.). WMAN (Mansfield, O.); WCAU (Philadelphia, Pa.); WMT (Cedar Rapids, Iowa); WFAA (Dallas, Texas); Westinghouse Radio Stations (Fort Wayne, Ind.); WHAS (Louisville, Ky.); WGNY (Newburgh, N. Y.); KFXM (San Bernardino, Calif.); WBAP-KGKO (Fort Worth, Texas); WJBK (Detroit, Mich.); WBT (Charlotte, N. C.); KDTH (Dubuque, Iowa); KMBC (Kansas City, Mo.); WABF (Brooklyn, N. Y.); WCAE (Pittsburgh, Pa.); KGER (Long Beach, Calif); WHB (Kansas City, Mo.); WWJ (Detroit, Mich.); WBKB (Chicago, Ill.); KXL (Portland, Ore.); National Broadcasting Co. (San Francisco, Calif.); KTUL (Tulsa, Okla.); WSJS-WMIT (Winston-Salem, N. C.); WSPD (Toledo, Ohio); Central Broadcasting Co. (Des Moines, Iowa); WHAM (Rocbester, N. Y.).

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KIDO (Boise, Idaho); WOW (Omaha, Nebr.); WTAG (Worcester, Mass.); KFUO (St. Louis, Mo.); KGNC (Amarillo, Texas); WEEI (Boston, Mass.); KSTP (St. Paul, Minn.); Crosley Corp. (Cincinnati, O.); Rocky Mountain Radio Council (Denver, Colo.); Columbia Broadcasting System (Los Angeles, Calif.); KOIL (Omaha, Nebr.); KGB (San Diego, Calif.); KOY (Phoenix, Ariz.); WWSW (Pittsburgh, Pa.; KWSC (Pullman, Wash.); WNBC (Hartford, Conn.); WCSH (Portland, Me.); Columbia Broadcasting System (Chicago, Ill.); KMOX (St. Louis, Mo.); WTIC (Elmwood, Conn.); KMOX (St. Louis, Mo.); WMPS (Memphis, Tenn.); CKAC (Montreal, Canada); WGN (Cbicago, Ill.); WSPR (Springfield, Mass.); WHAM (Rochester, N, Y.).

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WGAR (Cleveland, O.); WAVE (Louisville, Ky.); WAPO (Chattanooga, Tenn.); WFBC (Greenville, S. C.); KGB (San Diego, Calif.); WSA1 (Cincinnati, O.); WEBC (Duluth, Minn.); WBML (Macon, Ga.); KTAR (Phoenix, Ariz.); WSOO (Sault Ste. Marie, Mich.); WHK (Cleveland, O.); Yankee Network (Boston, Mass.); KFBI (Wichita, Kansas); WBAL (Baltimore, Md.); WOR (New York, N. Y.); KMED (Medford, Ore.); WNEW (New York, N. Y.); WDAY (Fargo, N. D.); Country Broadcasting Services (Sydney, Australia); Canadian Broadcasting Corp. (Montreal, P. Q., Canada).

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WLAC (Nashville, Tenn.); WGAC (Augusta, Ga.); WRAW (Reading, Pa.); WGRC (Louisville, Ky.); WTSP (St. Petersburg, Fla.); WLAW (Lawrence, Mass.); WIZE (Springfield, O.); WIBW (Topeka, Kansas); WING (Dayton, O.); WKBN (Youngstown, O.);
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In the next issue we shall publish a cross-section list of department store subscribers, to be followed by rosters of manufacturing companies, schools, colleges, public and university libraries, advertising agencies, government agencies, foreign governments, men-in-service, etc., to whom the TELEVISER editors are sincerely grateful for their helpful suggestions and cooperation in making the TELEVISER the industry's leading "journal of video production, advertising and operation."

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Already serving TELEVISER subscribers is the recently announced Readers' Service Bureau, created to assist readers every way possible, television-wise. Toward this end the Readers' Service Bureau is assisting TELEVISER subscribers by:

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4. Furnishing readers with names of television organizations and societies, which they may join, and television schools and classes for training;

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6. Sending, upon request, brochures and booklets pertaining to television issued by manufacturing companies and networks;

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