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Television

THE BUSINESS MAGAZINE OF THE INDUSTRY

April 1946

35¢



NBC TELEVISION

*guide to
Commercial
Production Procedure*

Free to
television-minded
Advertisers and
Advertising Agencies

Address requests on
your Company letterhead to:
TELEVISION SALES DEPARTMENT
National Broadcasting Company
30 Rockefeller Plaza
New York 20, N. Y.

NBC TELEVISION

NATIONAL BROADCASTING COMPANY

A SERVICE OF RADIO CORPORATION OF AMERICA

Sherron

MASTER CONTROL BOARD

MODEL SE-200



The character of Sherron's Master Control Board is defined by the following: Five available video channels, or as many as desired. . . . Blending, shading and blanking controls. . . . Mixing of camera for dissolvment for two-tone effect. . . . Additional kinescope for the received signal to view the quality and contrast.

On this board your Monoscope (if desired) contacts are located, as well as all the synchronization generator controls. . . . Also audio monitoring controls, including decibel indication meter, master gain control, inter-office communication.



Easy to operate, no trouble to maintain. Chassis plugs in for quick change over. Every control is accessible to the operating personnel. A video signal oscilloscope is built into this unit for measurement of signal strength, and a loud speaker is also included.

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"Where the Ideal is the Standard, Sherron Units are Standard Equipment."



972

FUTURE TELEVISION BROADCASTERS VISITED G. E.'s WRGB IN 1945

*Plan your trip to
Schenectady now*



TO produce the finest pictures needed to show in television, tomorrow's television broadcasters are thronging to General Electric's WRGB in Schenectady *every day*. Here at the world's most powerful and best equipped television station they survey station operation and management, programming, promotion, and maintenance.

With workshops for building properties and for constructing experimental electrical equipment, dressing rooms for actors, transmitting and receiving equipment, studio control and monitoring equipment and special film projectors, WRGB contains *all* of the elements necessary for the modern television studio. Here future broadcasters can study every phase of their new television station and discuss their plans with G-E experts—script writers, costume and stage set designers, lighting

specialists, camera operators, stage and technical directors, equipment designers, and experienced maintenance technicians.

If you have not seen G-E television in action and are not making use of General Electric's 20 years of television experience, visit WRGB at Schenectady now. Every Wednesday and Friday WRGB holds "open house". Write for the folder "How to get to Schenectady", or see your G-E broadcast sales engineer. He will be glad to plan your visit. *Electronics Department, General Electric Company, Schenectady 5, New York.*

Order "Television Show Business" today. 246 lavishly illustrated pages of television "know-how", by Judy Dupuy. An indispensable guide to successful programming and production. \$2.50 per copy.



STUDIO AND STATION EQUIPMENT • TRANSMITTERS • ANTENNAS • TUBES • RECEIVERS

GENERAL ELECTRIC

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First and Greatest Name in Electronics

Television

VOLUME III, NUMBER 4

APRIL, 1946

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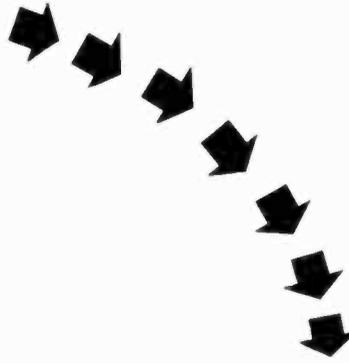
Just talking . . .

A word about our departments. There isn't a tremendous amount of activity in television these days, it's still mostly talk. But what ever does happen of any importance you can be sure to find in our departments. Take our Programming department—you'll find none of the prophecies or "expert" dogma. You will find though a review of all programming of the past month. The same goes for our Advertising department—no double talk about pictures being worth ten thousand words—just factual descriptions of commercials, and reporting of agency activity together with a monthly list of all agencies and advertisers using television. The same goes for our Equipment and Washington departments. Yes, you will find complete coverage of all developments in the industry by reading these departments every month. That's why we're kind of proud of them.

FREDERICK A. KUGEL

Published monthly by Frederick Kugel Company, 600 Madison Ave., New York 22, N. Y. Single copy, 35 cents. Yearly subscription in the United States, its possessions and nations of the Pan American Union, \$3.50; in Canada, \$4.00; elsewhere, \$4.50. Entered as second-class matter February 20, 1945, at the postoffice at New York, New York, under the act of March 3, 1879. Copyright 1946 by Frederick Kugel Company. All rights reserved. Editorial content may not be reproduced in any form without permission.

WASHINGTON

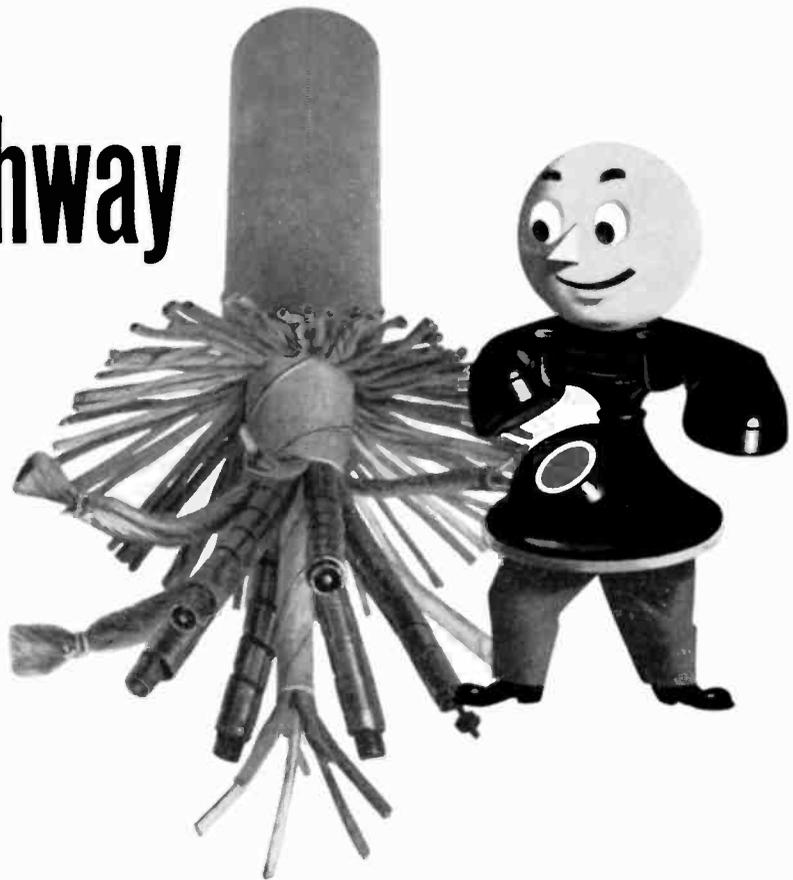


television highway

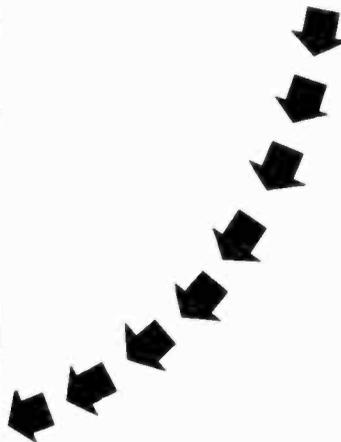
Television history was made when the recent Lincoln's Birthday ceremony was televised from the nation's capital to the people of Greater New York.

The impressive event inaugurated experimental use of the Bell System's recently completed broad band coaxial highway between New York City and Washington, D. C.

This new 225-mile span represents a pioneer step toward Bell System communications networks that some day will add sight to the sound of nation-wide broadcasts.



BELL TELEPHONE SYSTEM



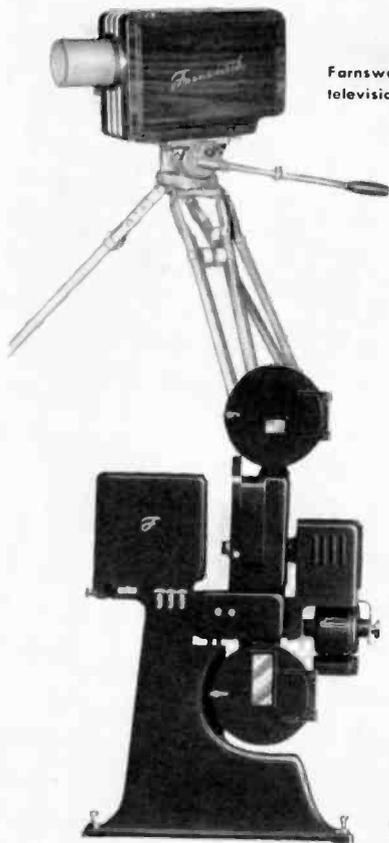
NEW YORK



Look to the pioneer...

FARNSWORTH...

for Better Television Equipment!



Farnsworth direct pick-up television camera.



"Iconoscope" Type Camera Tube.

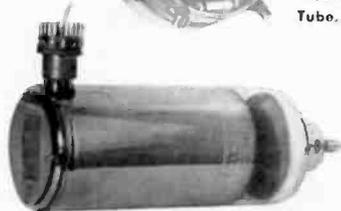


Image Dissector Type Camera tube.



Electron Multiplier Tubes.

Farnsworth Telecine Projector for transmission of motion picture film in television programs.



Farnsworth console for control of studio or film television programs, making possible the simultaneous operation of one or more television cameras.



A four-kilowatt Farnsworth television picture transmitter.

Farnsworth! The name you think of *first* in television! With a rich heritage of eighteen years of experience in electronic television, with increased plant facilities, with war-acquired skills and techniques, Farnsworth is ready to meet the industry's need for communications, broadcasting and television transmission and reception units, including technical equipment for laboratory use.

FARNSWORTH

*Television • Radio
Phonograph - Radio*

FARNSWORTH TELEVISION & RADIO CORPORATION, Fort Wayne 1, Indiana

Farnsworth Radio and Television Receivers and Transmitters • Aircraft Radio Equipment • Farnsworth Television Tubes • Halstead Mobile Communications and Traffic Control Systems for Rail and Highway • the Farnsworth Phonograph-Radio • the Capehart • the Panamuse by Capehart



Question of the month

when will uhf color television be in operation?

by **frederick a. kugel**

THE color-black and white controversy has completely confused the industry. Prospective tele applicants are divided as to whether to wait for color or go into black-and white now. Set manufacturers, with the exception of a few of the leaders, are stalling just as long as they possibly can. Advertising and agency men admit that they have no idea what it's all about. CBS, Zenith and Federal make one claim. RCA, DuMont, Philco and others make counter claims.

The function of a trade publication is to clarify such muddled situations. To do this, we went to one of the few independent groups in the industry — consulting radio engineers — a group which should be qualified to pass judgment on this controversy. We asked their opinion on how soon they believed commercial color television would be technically and economically feasible — the time element involved before UHF color television could get into operation.

35 questionnaires were sent to consulting engineers throughout the country. 29 answered — 7 placed color television from 6 to 10 years away. 12 estimated the time element at five years. 7 thought color would be in operation within two years. Three would not make any commitments as to time. An average of the 26 replies on the time element puts color television five years away.

Here's a box score of the answers:

10 yrs.	7 yrs.	6 yrs.	5 yrs.	2 yrs.	1 yr.	non-committal
4	2	1	12	5	2	3

General feeling is that there has been too much mugging, too little information available on color. Perhaps more revealing than the time estimates are the following comments by some of the engineers:

Paul F. Godley — 10 years

"A number of factors other than technique and economy bear upon a proper answer to the question in your mind; and for this reason, in part, no answer can be better than a guess.

"Assuming perfected designs and production techniques color television could be 'commercial' in 5 years. But — all things being considered — something like 10 years, it seems to me, would be a better guess.

"How long, after development and demonstration, did it take A.C. power or FM broadcasting — to name but two of many comparable new conceptions to become 'feasible' from the standpoint of the commercial operator?"

John V. L. Hogan

"I don't know. Color television is technically feasible today, but there is as yet no proof that it will ever be economically feasible — nor, for that matter, is there such proof as to monochrome television."

John Creutz — 5 years

"No one had an intelligent basis on which to predict how many years would elapse before that time. It would be a terrible mistake to delay black-and-white until color comes along.

"If we can get black-and-white into operation now and discover what kinds of programs people want, and learn to handle a lot of bugs which may crop up in the service, later on we will be able to shift right over into color without as much difficulty. If we don't get into black-and-white now, we will have to do a lot of preliminary work when color goes commercial.

"A long time is necessary for the jump over from lab tests to commercial production of receivers. Television has got an awfully hard fight to compete on a dollars-and-cents basis with other media and lots of experience is needed. People who really mean business in tele and don't just want to be in the swim should get into it now. Those who aren't really interested in its development for the long-run had best stay out.

"If there were a war emergency or any particular pressure behind government and industry we could have color almost immediately. However, in the normal run of things — with other factors, economic and equipment-wise to be considered — it will take a much longer time."

A. James Ebel — 5 years



"Only after a single system of television transmission is established, will the service become universally popular with the general public. Since color television represents the ultimate in television transmission, it seems wise to concentrate on that system. I am confident, that color television will be technically feasible in less than five years. However, five years will be required for complete commercial feasibility."

Frank H. McIntosh — 1 year

"The American people will not be satisfied with anything less than color — even the progress that has been made in this medium is "none too good" at the present time."

George M. Lohnes

"Don't feel too qualified to talk . . . television experience too limited . . . some clients believe in black and white, others in color . . . one client is going ahead with black and white."

C. M. Jansky, Jr. — 10 years



"I do not believe that the facts are available to justify quantitative time estimates as asked for. Therefore any specific estimate is a guess and one man's is about as good as another's. We were told in 1938 that monochrome television on frequencies near 100 megacycles was "here." It still is "around the corner." The basic technical and apparatus problems to be met in high band television are more complex and difficult than with low band television. A conclusion

that the public will not accept low band monochrome television (and I agree with Columbia on this point) does

not automatically solve the problems to be met with color in the high band. Technically it means that new and more difficult problems must be solved—if they can. Obviously in going to higher bands and color there will be added delay before the industry has been brought to a point—technically where it can face the problems of economics which must also be solved.”

Raymond M. Wilmotte



“I think that your question as to the number of years it will take for color television to be technically and economically feasible is premature. The key to the problem, it seems to me, is going to be the propagation characteristics at frequencies in the hundreds of megacycles. There has not been published any adequate information on which we can judge propagation problems in cities. We

have some knowledge, but that knowledge is largely qualitative. An engineering opinion can hardly be given on qualitative knowledge. It should not be difficult to make a study of this field and gauge the relative likelihood of ghosts becoming more or less of a problem as the frequency increases, and to gauge also the relative cost at the receiver as the frequency increases of combating these ghosts. The fact is, however, that no one has made such a study. I hope when such a study is eventually undertaken, it will not be carried out by organizations that may be accused of being biased. If it is, it becomes too difficult for the government to distinguish between engineering truths and economic wishful thinking.”

John H. Barron — 5 years

“Do not believe black and white television should be held up pending perfection of color television. Operation with black and white pictures will permit improvement of engineering and programming.”

John J. Keel — 7 years



“Color television is definitely the miracle invention of our time. However, it will take at least five or more years for commercial color television to become technically and economically feasible.

“After a great struggle for practical commercial realization, black and white television is now at our door, but there is still considerable advancement to be made in the arts and techniques of it. We should by all means strive for the best quality before get-

ting into the many obvious and complex problems of television.

When color television advances to a stage of practical commercial application and reality, the American public will undoubtedly accept it as worthwhile. There are numerous examples of this, one being, the great advancement in the art of broadcasting by means of FM, which the public accepted wholeheartedly as an added service.

“When the time comes for color television to be an added service or the eventual transition from black and white to color television, I am sure we will find the American public ready and willing to accept the expense of the improved service, as proved in past instances. We Americans think nothing of buying a new model automobile every few years, just for the added comfort and pleasure, etc.

“We should go full speed ahead without delay, and

strive to perfect black and white television even more and also set it up on a commercially sound basis. After that, color television with all its improvements can follow, in much the same way that FM followed the ultimate in AM Broadcasting.”

Ernest J. Vogt — 5 years

“It is my belief that it will require at least two years for the technical development of color television in all its phases. I do not feel that it will be economically practical for approximately five years.”

Garo W. Ray — 10 years



“Compared to color television problems the FM picture is a toy. Discounting war years—compare the progress of FM from its beginning to today. Where are we? Do you know for sure the gain of a 6 bar antenna? I don’t, and I don’t think the manufacturer does either simply because there hasn’t been enough work done on such things—it does take time and the sooner we realize it the better we will all understand that color television is not around the corner.

Dr. Alfred N. Goldsmith — 5 years



“Above estimate assumes 500-1000 mc. electromechanical cyclic system. If 500-10,000 mc. simultaneous electronic system is involved, it is likely 10 years would be needed for commercialization.”

time element placed by consulting engineers

H. V. Anderson	10 years
Victor J. Andrew	5 years
John H. Barron	5 years
William E. Bennis	5 years
William Burnett	2 years
J. A. Chambers	5 years
John Creutz	5 years
George C. Davis	2 years
F. Dillard	6 years
A. James Ebel	5 years
Benson D. Gille	7 years
Paul F. Godley	10 years
Alfred N. Goldsmith	5 years
John V. L. Hogan	non-committal
C. M. Jansky	10 years
Frank G. Kear	2 years
John J. Keel	5-7 years
George M. Lohnes	non-committal
Frank H. McIntosh	1 year
Garo Ray	10 years
Henry B. Riblett	2 years
Andrew D. Ring	5 years
Harold C. Singleton	5 years
Ernest J. Vogt	5 years
V. Watson	5 years
Raymond M. Wilmotte	non-committal
Anonymous	1 year
Anonymous	2 years
Anonymous	5 years

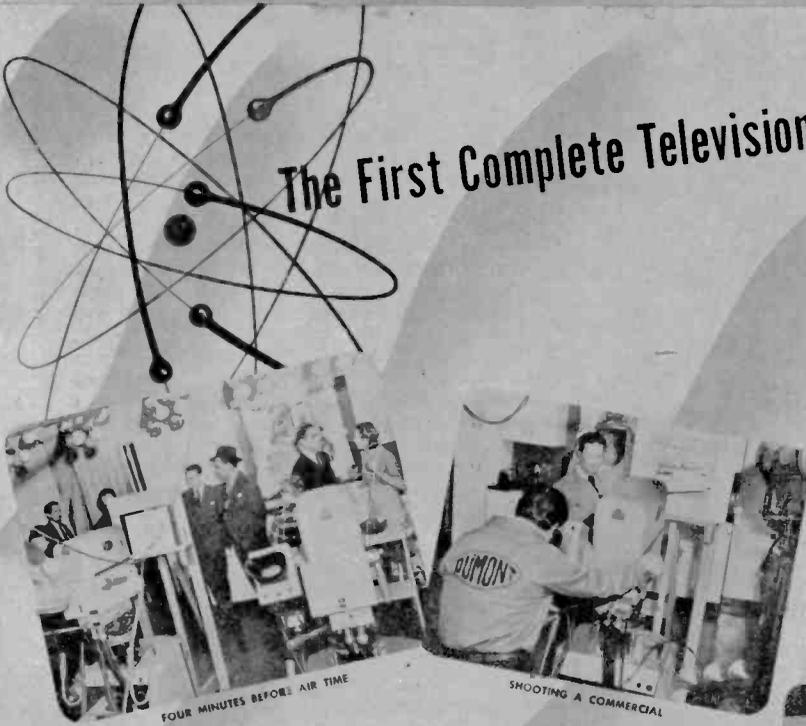
The First Complete Television Show for the First Complete Kitchen

On Sunday night, January 28, 1945, American Central Manufacturing Corporation broadcast an original television show over Station WABD, New York City. This production, entitled "The Queen was in the Kitchen," is the first show ever televised to promote a complete kitchen.

The entire action of this humorous play took place in an AMERICAN KITCHEN which had been set up on a stage in the television studio of WABD. As a result, the world's most modern kitchen sold itself for a full 30 minutes—the entire period of the show.

The innovation of advertising kitchen equipment via television is in keeping with American Central Manufacturing Corporation's progressive policy of effective advertising in all media. This television show—combined with extensive advertising in other media—is a powerful start in a program which will become more extensive as time goes by . . . a program aimed to give AMERICAN KITCHEN dealers a tremendous advantage over all others competing for the homemakers' dollars.

American
KITCHENS



FOUR MINUTES BEFORE AIR TIME

SHOOTING A COMMERCIAL

HOW YOU CAN CASH IN ON THIS TELEVISION SHOW

... Everyone today is vitally interested in the modern miracle of television.

... Inside this folder is a unique, original explanation of this television show . . . an explanation of interest to every one of your prospects, present and future.

... To tie up your store with television in the minds of your customers is to give added prestige and

progressive modernism to your store in their minds.

... To make this tie-up, display the inside fold of this broadside so that people can see it in passing. Hang it in your best show window . . . or stick it inside your front door—or on any surface readily seen by many people.

... Hang this poster NOW! For extra copies, write—

AMERICAN CENTRAL MANUFACTURING CORPORATION, CONNERSVILLE, INDIANA



GUEST AUDIENCE VIEWING THE SHOW

MONITORS IN THE CONTROL ROOM

television's + ... is promotion

by sidney r. lane

CONSCIOUS of the slender tele audience they have for today's programs, a few alert advertisers have been getting their money's worth through well-planned and well-timed promotional tie-ups. Telecasts beamed to limited audiences have been expanded to national coverage by the simple expedient of hooking the video program to the U. S. Mail. Television has offered a new angle for promotional material and some sponsors and agencies have prepared campaigns in all media—newspaper, radio, direct mail, commercial movies—thus harnessing the promotional value of sending pictures of their products through the air. And they have found that tele does pay ad dividends today when promoted with imagination.

cluett peabody

A particularly well-planned campaign was conducted by the Sanforized Division of Cluett Peabody, under the direction of R. M. Dowling, sales and advertising manager of the company. This was mailed to the publicity directors of 300 important department stores in the country. Interesting was the approach of forthright honesty which keyed the entire series.

First mailing consisted of a letter declaring that

although some people thought television was for the world of tomorrow "we at 'Sanforized' believe that now is the best time to begin actual telecasting . . . to gain experience in programming . . . to devise and test techniques and methods . . . in short, to explore every possibility of this fascinating new advertising medium. And believing this, we are doing something about it!" Letter went on to describe the plans for their series of experimental programs titled "Fashions—Coming and Becoming," produced by Young & Rubicam over WABD. It was reiterated that these were experimental, and that Sanforized had no intention of keeping to themselves knowledge gained from this work. They promised to send reprints of the script, with marginal notes and comments, which would constitute a complete critique of each program. In addition they offered to secure tickets to the telecasts for any store executives coming to New York, and a convenient reservation blank was enclosed.

Shortly after this letter went out, the complete script of the initial telecast was mailed. On the bottom of each page of the manuscript was an analysis of the good and bad features of the dialogue and action. Pictures were spotted

American Central Manufacturing Corp. sent out the above-booklet to let their dealers know that they had the support of an alert and progressive advertising campaign.



Here are two sample pages from one of the twelve interesting and complete reports which the Sanforized Division of Cluett Peabody sent out to publicity heads of 300 leading department stores. Changes in the script were indicated, and the bottom margin of each page carried an honest critique of the strong and weak points, with special stress on future improvements this experience would bring. Typical of this self-evaluation were such comments as: "The idea was good but the execution faulty . . . Moral: If you can't do animation as well as Walt Disney, don't try." . . . "The commercial reads well and fits into the script but it was a radio, not a television commercial."

throughout the presentation to give added punch, and criticisms were typed in contrasting red ink. Throughout the critique was the thought "this is what we learned, and this is for your education as well as ours."

In all there are twelve complete reports, one for each of the telecasts, which were given every other week over a twenty-four week period. Underlying theme in all the scripts was a sustained enthusiasm for learning this new medium, a frank appraisal of the weak spots, and a sense of cooperation between the manufacturer and the retailer. Last report closed on a highly optimistic note with a promise to be back in television soon.

The whole series successfully conveyed the idea of Cluett Peabody's progressiveness and willingness to cooperate in helping their dealers. Company found a definite extra profit in taking their customers behind the scenes with them, via this new medium and its successful promotion.

american kitchens

American Central Manufacturing Co., which sponsored "the first complete television show for the first complete kitchen" over WABD, gave their telecast a double barreled promotional splurge, using both film and dealer mailing pieces.

The film, titled "Tell It With Television" and produced by Jam Handy, took the audience behind the scenes of the production and clearly demonstrated the many entertaining features possible in a tele program, without losing sight of the often subtle, but never absent commercial treatment employed in the telecast.

The promotional folder, sent to all dealer outlets, out-

lined the obvious effectiveness of tele advertising for their product. Dealer messages were printed on the back of the folder, reiterating the profits in store for outlets who handled this progressively merchandised line. A note titled "How You Can Cash In On This Television Show" told the advantages of "tying the store up with television in the minds of the customers to give added prestige and progressive modernism to your store in their minds."

Completely unfolded, the brochure became an attractive four-color poster which graphically announced that "American Kitchens Present the Newest in Television." Twelve outstanding shots of the show were reproduced with technical terms, and a description of the action which took place in each of the frames. To add further punch, running time and stage numbers were included, together with a short glossary of television terms.

This two-way exploitation of one show demonstrated a sound understanding of the promotional value of television, even in these days of slender audiences which the present set shortage causes. They were good examples of the appreciation of secondary coverage which can be more rewarding numerically than the initial effort.

chef boy-ar-dee

Chef Boy-Ar-Dee prepared a 16-page booklet promoting their telecast over WRGB in cooperation with the American Broadcasting Company. Pamphlet was profusely illustrated with scenes of the show, which featured the cooking of the spaghetti by a chef who was none other than the president of the company. There is something flattering, and personal about seeing the head of the company, working in the kitchen while he prepares his own product. The sincerity he felt is well conveyed in the booklet which received wide distribution. The last page explains how the company went into television with their fingers crossed, and how they came away with the feeling of having witnessed a miracle.

Promotional angle here stressed that the company was always on the alert for more and better advertising support for their products in all media.

rca victor

RCA Victor sent out a four-page broadside calling attention to the promotion they were doing to push their products via television. Promotional piece detailed the type of announcement and show they were putting on over the tele-pix waves to demonstrate the products produced by the company. Brochure played up other promotional material, such as point of sale pieces, posters, window display material, newspaper, magazine and radio

tie-ins. However, main theme was kept to the television promotion, centering around the Ice-Capades of 1946 and the television show in which they presented the many products RCA makes for entertainment in the home . . . of which, of course, television is the best.

mueller macaroni

Mueller Macaroni, through Duane Jones agency, is planning to send out the opening souvenir program of the DuMont Wanamaker Studios. This will be mailed to all their dealers and will have an insert linking up the tele tie-in by stressing the value to dealers.

audience building

The importance of working with sales outlets cannot be over-emphasized. But there is also work that can be done to insure that today's audience — as well as tomorrow's potential one — are made aware of your program via television. When "Cavalcade of America" hit the telewaves NBC ran display ads in three New York newspapers announcing the program. Copies of the ad were mailed to the 5,200 set owners in the metropolitan area. (Agency is BBD&O.)

Pan American World Airways recent advertising campaign played up their television program — a film travelogue on distant picturesque lands which can be reached by Pan American planes. Typical ad layout reproduced a scene from the telecast, with the statement "Last week hundreds saw Switzerland by television." Tie-in is achieved by lead copy line — "Tomorrow thousands will go to Switzerland by Clipper."

Another example of good audience building was that of Esso Marketeers (Marschalk & Pratt agency) who sent personal letters of invitation to their "Date with West Virginia" film telecast, along with a road map of the state. These went to the complete list of set owners in the metropolitan district, effectively tying the travel film in with television.

summary

Though a certain amount of good alert promotional tie-ups with tele activity has been accomplished, too few of the agencies are attacking the job with sufficient vigor. There has been little application to the many-sided possibilities of linking television to the general advertising and merchandising picture. Too often the agencies overlook the tremendous plus value of intelligent promotion. Too many shows have been produced without an advance agent to whet the appetite, or a follow-up campaign to capitalize on the high interest which any step into tele rates.

Here's the cover of the interesting 16 page booklet prepared by Chef Boy-Ar-Dee on their tele show. Pamphlet pointed up the wonders of television, through which the ease and fun of preparing this spaghetti was conveyed to the viewer."



television outlook in pittsburgh

THE air has cleared up considerably in the "Smoky City", what with three out of the original five applicants for the four channels withdrawing.

Westinghouse; Allegheny Broadcasting Corporation, licensee of KQV; Hearst Radio affiliate WCAE; Scripps-Howard, and Allen B. DuMont Laboratories were the original five applicants. Allegheny's withdrawal is understandable — in view of their statement of \$133,000 capital in their FCC application. Scripps-Howard, to date has pulled out of both Washington and Pittsburgh as the hearings drew near, although they are rumored to be considering applications for other cities. Hearst has also withdrawn their application from Milwaukee. Thus Westinghouse and DuMont are the only two applicants left.

Westinghouse has announced plans to manufacture color studio equipment for the 480 to 920 mc. band. However the following statement to TELEVISION clarifies their position: "Westinghouse has a broad interest in all television development. Thus, despite our current attention to color television — and the fact that we are at present building studio equipment for this service — we will not withdraw any of our applications for television stations at the lower frequencies."

DuMont with operating station WABD in New York, and an okay on their Washington experimental station in Washington, also have applications in Cleveland and Cincinnati.

That smoke that gets on your collar and gives Pittsburgh its nickname might get nothing but curses from the visitor but to the native of the town it's the perfume of money. When Pittsburgh's unrivaled steel mills are in full production the population of their retail trading area spends more than 750 million dollars a year. And THAT ain't smoke.

Pittsburgh proper has a population of 630,000, with a trading area population of two million or over, a worthy target for the sales messages of the two alert and powerful interests who have applied for commercial stations in that area.

allen b. dumont laboratories, inc.

Address—515 Madison Avenue, New York

Officers—Allen DuMont, President; Paul Raibourn, Treasurer; Leonard Cramer, Vice-President

Estimated Costs

1. Vis. transmitter	\$65,000
2. Aural transmitter plus tubes	
3. Antenna System	17,500
4. Studio Equipment	90,000
5. Studio Lighting	10,000
6. F & M Monitors	65,000
7. Land	5,000
8. Building	20,000
9. Other items	50,000 studio

Estimated Total Costs \$260,500

Estimated Operation Costs per month—\$20,000

Channel—#2 or #3

Kilocycles—54-60

ESR—3180

Antenna

Height, sea level—1,783 feet

Height, ground level—458 feet

Transmitter location—Montana and Swanson Streets, Pittsburgh

Power, aural & visual—aural 12.5 kw—visual 25 kw

Population—2,323,650

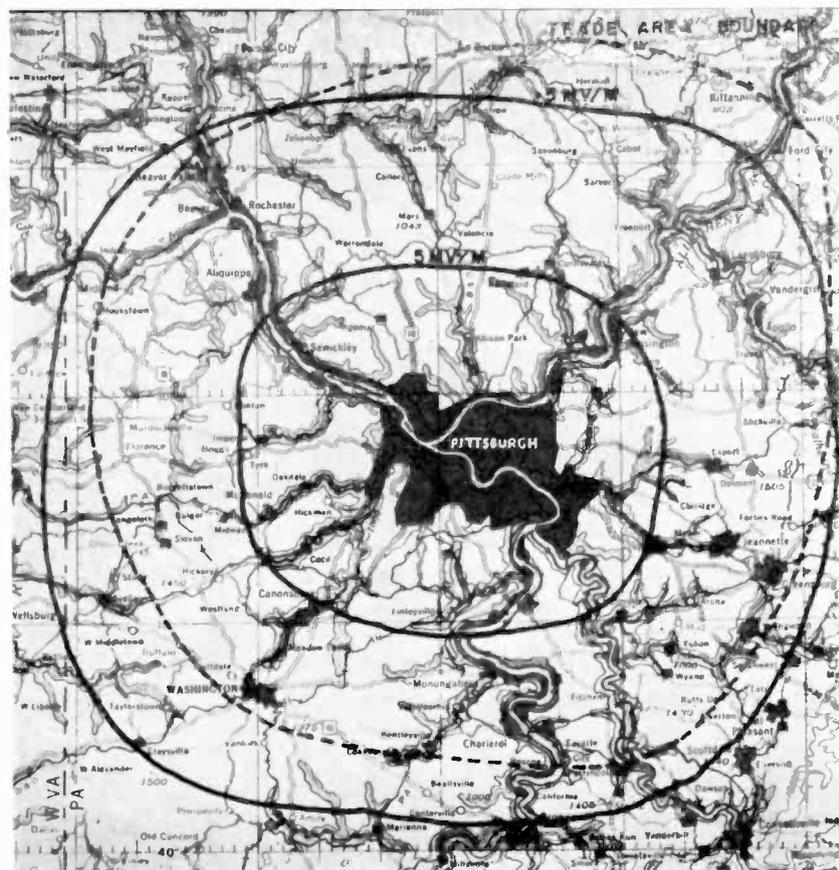
Size of area—pr. 941 square miles—sec. 4.917.5

Lawyers—Col. William Roberts

Misc.—Company proposes 5-station hookup of owned and operated tele stations; Washington, D. C.; Pittsburgh, Pa.; New York City; Cincinnati and Cleveland, Ohio. WABD is operating in New York. FCC has granted DuMont Washington application.

(continued on page 19)

Black lines indicate both the primary and secondary coverage in the Pittsburgh area which can be given by a 25 kw station, assuming that the antenna is 500 feet high and located in the center of the business district. Dotted line indicates the trading area. Contour map, courtesy of Allen B. DuMont Laboratories, Inc.



setting up a production facilities department

by mary gannon

BREAKING 28 hours a week of programming into such segments as 15 minute, half hour, or even one hour shows is going to call for a lot of variety in the formats presented. And that same degree of variety must also be reflected in the settings and backgrounds of each telecast. The lunch counter in Joe's Diner looks very familiar to the televiewer if it appears as a soda fountain the next night and repeats itself as the bar in Kelly's saloon the night after. Not that all these items have to be stocked! A coat of paint, some molding, and a lot of imagination can turn a disreputable bar into an altar rail—and on very short notice too!

While the ultimate settings depend on the skill of the production managers and art directors, on the practical side there are certain basic principles which prospective television broadcasters can follow in planning their production facilities department.

Most important factor and the rule of thumb by which scenic elements should be judged are their degree of interchangeability. Everything that's built or bought—from flats to platforms—should be in the same scale so that each piece can be easily incorporated into the system.

On this question of building or buying, a studio will find their own workshop a big money saver. Flats, drops, small props, unit pieces can be quickly constructed. Little original outlay is needed. A bandsaw, table saw, bench grinder are enough to set up shop—but of course you can go on from there.

flats

Basis of every set, whether interior or exterior, are the standard unit flats. As to height, operating stations' preference is pegged at either 9' or 10'. Either of these sizes is below average ceiling height, and yet high enough for camera focusing.

Handiest types are free standing, with jack on back, which can be sandbagged into fixed positions. Mounted on frames, the heavy canvas or duck surface must be primed first with glue sizing to condition it for the many different faces it will assume. Casein base water color paints seem



Particular attention was paid to detail in this corner of the living room set where much of the conversation took place. Note the picture on the wall placed there to add interest to these sequences. Draperies were used instead of a door and the end table, lamp and book grouping made the room seem lived in and added a homey touch. Charles Holden is production manager at CBS; Jim McNaughton is art director.

to be the answer to quick and repeated changes. With a drying time of anywhere from 20 minutes to an hour, one coat will completely cover the old design. Tests have proved that from 65 to 80 coats can be used on one flat—and that means 65 to 80 different sets. After such a wear life, canvas can be ripped off the frame, a new one put on, and the same thing started all over again.

Flats can also be papered but it's wise to remove the paper before paint is applied over it. Otherwise the paper is liable to buckle.

But it takes more than paper and paint to completely change the appearance of a flat. Standard molding also comes in handy to add character, to give a period accent, or as paneling trim.

For exteriors, textured surfaced stone blocks or wood slats can be achieved through painting. However for more realistic treatments, necessary when the camera comes in for close-ups, two-inch thick Celotex scenic blocks can be cut to size and nailed on. With space left for simulated concrete filling, a stone effect is easily achieved. Brick veneer, with the outer surface deeply scored to give a gravelly appearance, is also available in sheet form for nailing right onto the flat.

Door and window units should be in the same scale as the standard flat. Door units should include right and left exits and a French door plug. Simple panel, flush types can be given overdoor decoration and, through the use of molding, can be transformed into late Renaissance, Georgian, Empire, etc. Two or three different types of windows

such as the standard double hung, mullion types, casement windows, etc., will allow for variety.

Round arches and columns can stand on their own when used with drapes. But they should be in the same scale as the other flats for incorporation into a set. Besides the decorative value, they can be grouped into attractive openings. Thickness pieces and backing pieces are also necessary to round out the unit. These can be stock as they are never in sharp focus. Textured plaster effect is usually good, and the inclusion of curved niches for statuary, flower pots, etc. in the backing piece adds that much more interest to the set.

A little pre-planning here in relation to wall space will help in getting the maximum number of set-ups in a studio. 4', 2' and 18" units have been found most practical by Bob Bright of DuMont, while Charles Holden of CBS uses 5'9" and 4' flats. At WRGB, Charlie McGarahan stocks 5' units, with several 2', 3' and 4' filler pieces.

NBC's production facilities manager, Ray Kelly, has devised a structural element set-up, based on an interlocking unit principle. Uniformly spaced bolt holes are on each piece so that every element in the system is interchangeable. Front is plywood, covered with canvas and each section is braced and counter-braced in back. Each piece is strong enough to take whatever structural trim may be required, such as the addition of balconies, over-door trim, paneling, etc.

Wall and door sections are 5'9"x10' in size, with a few filler wall sections measuring 3'8"x10'. Double hung windows, interior arch piece, standard corner posts (1'6" in diameter), header pieces, mantel pieces, French doors, fireplace flat, enter slips, platform step, casement windows and exterior doors are also included in the basic set-up.

Degree of interchangeability is high — units can be turned sidewise to form hotel desks, etc. Corner pillars can be used for cabins. Due to their multiple use, the variety of room settings and backgrounds which can be created are almost unlimited.

While the needs of each station vary, good bet would be to include about 10 to 15 of the widest flats, with possibly 5 to 10 each of the filler sizes. In addition about four columns and six thickness pieces should also be added to the collection.

unit pieces

Platform pieces have innumerable uses, but each section should be scaled for easy combination. Grouped to-

gether, they can give any level needed, can be used as balconies, stairs, doorsteps, etc. Used singly and turned on end, they can double as bars, counters, hotel desks, etc. — with the addition of some paint and molding, of course.

window dressing

Smart idea would be to stock curtains and draperies in sizes to fit the standard window plugs and door openings. Ruffled marquises, tailored ninons, and lace panels, would do for a starter — and would help in creating a feminine, masculine or period influence. Two pairs of draperies — one in a plain color and another in light chintz perhaps — could alternate for window treatments. To this minimum set-up, could be added a pair of heavy velour Victorian draperies, for definite period accent. These drapes could also be hung over archways, set openings, etc.

draperies

Interview formats, choral groups, audience participation shows are just a few of the programs which can be performed against drapes. Three sets should give enough variety — with one in a plain color; another with a large pattern design; and the third a textured fabric with a self pattern. Colors should be on the light side, so that lighting won't be more of a problem than it is. Width and size would again be dependent upon studio space, with a little thought as to the possible programming and camera shooting which will be done in front of them. Whatever the size, they should be ample enough to be hung drapery style, in full folds or stretched.

drops

Drops should be about 10' wide and can be used behind openings or as background for certain types of shows.

Good variety would include a countryside exterior; city rooftop type, both in daylight and at night; straight landscape, with few buildings or none; rural landscape with farm buildings; urban type of landscape, small homes, with stereotyped treatment of trees and bushes. This in particular ought to be in good scale as it may be used in focus.

Special types — such as night club, circus, ballet, modern dance, etc. — can be added as needed to round out the selection. Such background suggestions are usually best depicted by allegorical handling.

Cycloramas — curved background pieces — are often

In scene at left, NBC stock equipment was painted and textured to achieve this street scene. French street cafe set at right, used some of the same units. Redesigned and painted differently, structural members were placed horizontally to include window unit. Awning was made of standard unit with profile edge. N. Ray Kelly is facilities manager of WNBT and Robert Wade is art director.



preferred to drops because the rounded side treatment eliminates any break, which may be discernible when side pieces are added to a drop. At least one plain cyclorama should be included with the basic units. Character for different shows can be gotten by placing flat props such as trees, bushes, benches, street signs, etc. in front of it.

furniture

Undoubtedly rental arrangements can be made with local stores, interior decorating shops, etc., in each community and such sources should be catalogued and a list of what they have to offer set up for easy reference — and quick getting. But economy wise, a studio will be better off to purchase certain basic furnishings, which will have repeated use and a chameleon personality.

Simplicity of line and style which should make for interchangeability of furniture and easy period grouping, should be the determining factor in making the selections. Sectional furniture might be good as a starter — a modern sofa for example could be broken into three chair sections, or regrouped as a love seat and a chair. An overstuffed Charles of London sofa, and an overstuffed chair; a Georgian wood carving, and a set of arm and side chairs, with a slight accent on Georgian, can be interchanged and fit in with almost any period room. A Louis XV type Victorian sofa, and two or three arm chairs in Victorian style with cabriole legs, would round out the selection. To complete the modern set-up, three or four small side chairs with an arm chair to match should be included.

Best trick of all from the "change the look" viewpoint is the use of slip covers for the furniture. Three sets, made up in three different styles, can not only be a tremendous help in disguising the same basic pieces, but can give definite character to a room. One set in large prints, another in stripes, and the third in a textured fabric allows for lots of set tricks.

A desk (for news broadcasts, demonstrations, etc.) and two easels for title cards, maps, charts, etc., are other "musts." Besides the more obvious uses, two standard library tables will come in handy for demonstrations, as pedestals, etc.

End tables and a coffee table are also frequently used pieces. These should be on the small side.

Such a furniture inventory would provide an extremely elastic basis for a combination of the most frequently called for interiors. However for kitchen or bedroom



Drops were used as background in the "Summertime" ballet at CBS. Particularly interesting was the false perspective used in the floor treatment. Sets for the dance program series are designed by Jim McNaughton, art director.

scenes it may be well to set up a rental arrangement for securing these items as needed. Same thing holds true where unusual props, or furniture of a definite period, such as an Early American setting, are necessary.

accessories

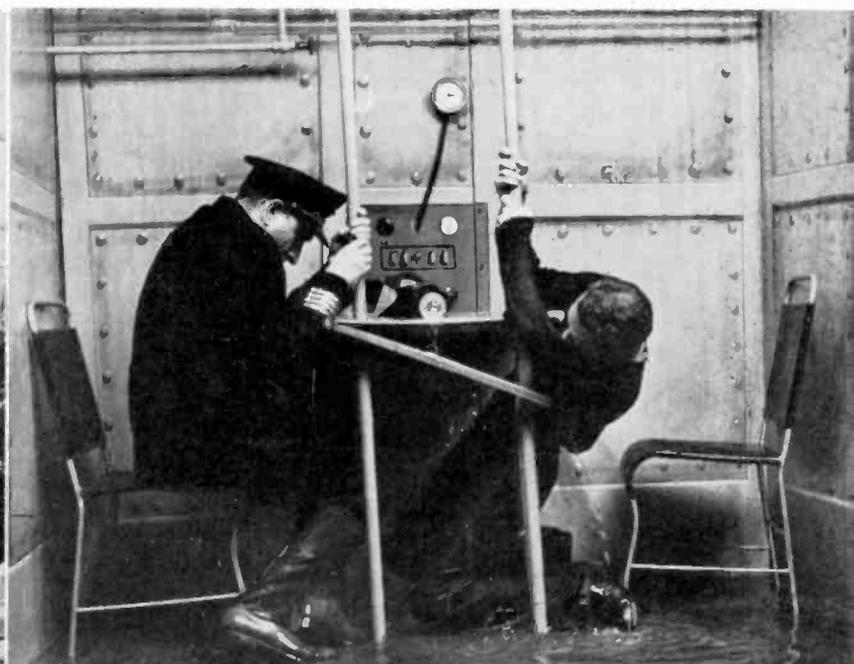
Lamps present something of a problem — and best way to duck it is to buy some of an indefinite period. Four should serve the trick. It's a good idea to have some framed pictures too — perhaps one or two portrait oils of the head and shoulder type. Steer clear of full lengths — they give you too much period flavor. Currier and Ives prints are good for any interior since 1880 to today.

Bric-a-brac, ash trays, and the usual accessories can be bought as needed and catalogued away for handy reference.

According to Bob Wade, Art Director at NBC, good trick to simplify the problems of lighting and color values as picked up by the ike is to classify paints by numbers so that a scene painter instead of receiving instructions for a "warm yellow," which could very easily vary many shades, would receive a definite formula, which had previously been worked out. These are the kinds of files

(continued on page 17)

In the scene at left, drop was used for the background. Foreground island effect was achieved by using a wood frame armature as the base and covering it with real sod and artificial grass mats. Particularly interesting though is the scene at the left. A twenty minute show was done in a 5'x7' set, using 5' and 2' flats. Steel compartment effect was achieved through painting, with the exception of the pipes and gadgets. Bob Bright, art director at Dumont, designed both sets for use over WABD.



*Schools
as a source for
local programming*



ALTHOUGH many independent scholastic groups have appeared on television, the New York and Chicago Boards of Education, in cooperation with WCBW and WBKB were the first to embark on a definite program series.

Of particular interest to television programmers planning to work with school groups or in training their own stock companies as some propose to do, is the experimentation done by CBS with the New York Board of Education under the supervision of Edward Stasheff. This set-up not only supplied CBS with a fertile source of good programs but gave them a wealth of experience in working with amateur groups. Conversely, it provided the Board with an actual workshop for training their students in television techniques.

Mutual cooperation resulted in the students being given studio visits and lectures by the CBS staff, and the station getting a half hour program "There Ought To Be A Law," which was presented fifteen times in nine months. "The All-City Radio and Television Workshop" has thirty-eight students this term, chosen by audition from over two hundred applicants from New York's fifty-four academic and twenty-six vocational high schools. The group reports to WNYE, the Board of Education's own FM station, four days a week for two periods. This training takes the place of the English course and kids get credit for their work.

Youngsters from New York's "All City Radio and Television Workshop" participated in a program dramatizing the work of the Civil Air Patrol over WCBW. Film sequences at the airport were taken and incorporated into the live studio show.



preliminary training

Primary techniques of timing and ad libbing are the first steps in their training. Youngsters are taught to ad lib on a live mike, thus helping them overcome any tendency towards mike fright. Kids act as their own critics, with four going into the control room to listen as four others work out on the mike. Sense of timing is also taught right from the beginning with kids made conscious of just how long sixty seconds really is. Two or three half hour sessions along this line and mike fright is banished early in the game.

Next steps are some of the tricks of video, especially an awareness of the mike boom. They are taught not to look toward the mike but to favor it. With these primary principles drilled into them, youngsters are then considered ready to try their hand at programming.

In the "There Ought To Be A Law" series, format is based on an informal debate, with each speaker limited to a minute's discussion on the pros and cons of the topic. Edward Stasheff acts as moderator, calling on the kids, cutting them short if they start to wander, in keeping with his pre-show instructions, "Make yourself interesting and you can talk longer." Average runs between fifty and seventy seconds.

Subjects range from serious problems of the day, such as compulsory military training, to the more comic "tragedies of youth," such as boys asking girls to dance at school affairs. Keynote of program is one of naturalness, with kids encouraged to heckle each other. But this "naturalness" is as much a part of their training as anything else.

Attention is also paid to video tricks, and some kind of "business" is included as the telecast opens on the kids before the class is called to order. Girls knitting, boys playing jacks — any of the things that high school youngsters do normally hits the right spot.

But even in presenting amateur shows, nothing just happens in television. Things must be planned in advance. Even in this type of show where the kids ad lib, the beginning and end of the program is rigidly set and a rehearsal is held on a dummy script. Because the primary purpose of this program, from the Board of Education's point of view, is to give the students a chance to perform in a television studio and develop the poise and assurance needed, dry (pre-studio) rehearsals are held on a completely crazy subject. In the studio, camera rehearsals for position are held, but the cameramen only know the places of the first two speakers. From then on, Mr. Stasheff signals the cameramen for the next pick-up, as he calls on the different students.

talent source

In addition to this cooperative venture between CBS and the Board, students have been used in three of the CBS produced Encyclopaedia Britannica series "The World We Live In," which combines educational films with live studio parts.

Preliminary work was done at WNYE as part of the students' classwork, with CBS sending a director and assistant director down to the school's studios to hold casting and first two rehearsals. This was incorporated as part of the classwork with the students not cast observing only the first and last rehearsals. The last two rehearsals were held at WCBW.

For this integration of live with film, youngsters rehearse with film and time continuity to it so they will see how television is received. They are trained to ad lib if film goes out, to pick it up when film goes on. Interesting too are the changes made in the format. In one show they used a classroom scene, with the teacher showing the film

as part of the school course. However CBS found that the audience resented the scholastic touch. Next time, format was built around a students' club with the kids delivering their reports and the program received a much better reception.

In all, twenty-five students have worked in shows other than "There Ought To Be A Law," at salaries ranging from \$5 plus \$1 rehearsal hour, to \$30. (This is the same pay scale as other actors receive for equivalent work.)

future plans

Up to now, talent has been drawn from "The All-City Radio and Television Workshop" group, but future plans comprise tapping the talent of all schools in the city. Plans are now in the works for two half-hour shows for ABC and two formats have been tentatively approved.

"One Strike, You're Out" is a quiz show played along the lines of verbal baseball. A miniature diamond will be marked out on the studio floor, with color added by rooters, cheer leaders, etc. The umpire will act as the



The work done by art students in the Chicago schools was demonstrated in the "Young Chicago" program series over WBKB.

quiz master. Two teams of five each from different schools will compete in the quiz which will consist of stunts, guessing ideas from sketches, spelling, pronunciation, pantomime, etc. An animated score board, consisting of a miniature diamond and four players will give the score at all times. Three strikes will retire a side. Four games will probably comprise one half-hour show. This program will be more in the nature of a "brain trust," fostering inter-scholastic competition and getting in a plug for the different schools.

Juke Box Jamboree will be a high school jam session at a Teen Canteen, with the best talent of all schools tapped. Typical format will include jitterbugging to recorded music, singers, magicians, acrobats — any special stunt that will make good television. Continuity will be given to series with theme of kids trying to furnish a poorly equipped canteen. Each week some piece of furniture or equipment will be added. The same three or four kids will carry the dramatic theme throughout the series but the acts will change each week.

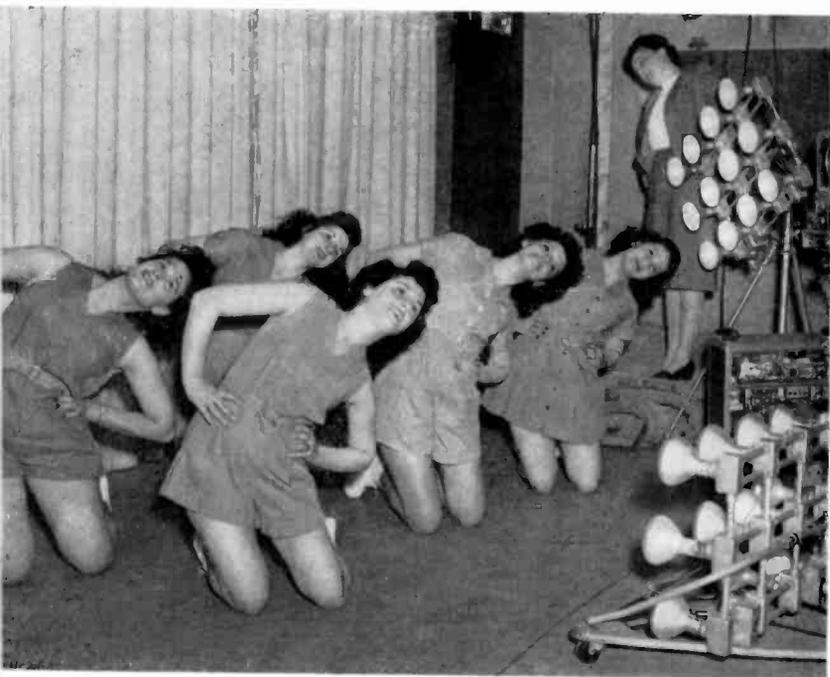
The Workshop has also been asked to cooperate with the U. S. Department of Agriculture, using films supplied by them and set into a dramatic framework, using the "World We Live In" technique.

educational series

An educational series has been scheduled over WNBT. Titled "Your World Tomorrow," the weekly programs will be produced with the cooperation of the NBC University of the Air. Emphasis will be on new scientific developments which will directly affect the viewers. Among the first televised programs will be "The Mighty Atom," an explanation of atomic power; "Jet Propulsion" and "Huff-Duff, the Radio Detective."

Formats will be flexible and will include unusual laboratory demonstrations, dramatization of historical events, outside field pick-ups, including a visit to the Smithsonian Institute in Washington, and extracts from educational motion pictures.

To test their effectiveness, groups of students will view the programs at NBC and answer questionnaires to test their reactions. These will be analyzed and used by NBC



Here a group of Chicago students go through their paces in a physical fitness program over WBKB. This was part of the "Young Chicago" series.

for improving program content and techniques.

chicago experiments

Chicago's Board of Education, under the direction of George Jennings, acting director of Radio Council-Station WBEZ and Elizabeth Marshall, program director, has already completed fourteen experimental telecasts aimed at the child in school and sponsored by the American Gear Company. The series, "A View to Education," covered such subjects as social studies, literature, home mechanics, aviation, health habits, radio and FM, television and radar, fire prevention, commercial art, Christmas art, hobbies, etc. These were planned for different grade levels and in integration with the courses of study for the grade levels scheduled.

Programs were presented in cooperation with WBKB and television receivers were installed in two schools through the courtesy of the station and the Rauland Cor-

poration for in-school viewing. Each week's audience group was carefully chosen so that the program presentation would be suitable for group as well as grade level. Science classes were scheduled to see the science telecasts; boys interested in aviation saw the vocational telecast on aviation, etc. Careful programming made it possible to cover a wide range of subjects.

Some of the programs were close to direct teaching; most of them however supplemented the classroom work and these were felt to be more successful. Still others were of the "assembly" type, of general value and entertainment interest. The demonstration type of program which showed just "how to do it" was also received very well.

In the "Hobbies" show, twenty-six students from seven different schools participated. Kids supplied their own exhibits and they were re-selected for television by the station's producer.

Student emcee opened show with definition of the word hobby and introduced the first youngster who displayed the quilt she had made. Kids introduced each other from scene to scene for continuity, as camera shifted to pick them up either singly or in groups. Lines were kept to a minimum with a few statements about the school subject that may have given them the idea, or tying in specific subjects, such as arithmetic to scaling of plane models. Hobbies for fun were also included with the scientific and educational ones. List included quilt making; floral arrangements of dried plants; diorama-making; miniature playground; model planes; microscope-making; chemistry; taxidermy; wood-carving; coin collecting; stamp collecting and mask making. Entertainment note was added by a singing-accordionist.

While educational theme was stressed throughout, direct application was made in pointing out terms used during the telecast. Emcee pronounced each word slowly, while holding up a card with the word printed on it. Telecast concluded with an invitation to the viewing youngsters to send in their hobby.

"Community Helpers" was a good example of kindergarten teaching techniques and was viewed by a group of boys and girls who were preparing themselves for the teaching field. Six kindergarten kids, a teacher, and a visiting policeman, fireman and mailman comprised the cast.

Format was typically kindergarten, with teacher quizzing group on who helped them cross the street, and kids chorusing their answers. One youngster would point to the picture of a policeman, and then the entire group would sing a song about him. Teacher introduced policeman who talked to the group, as the camera picked up kids' reactions. Same format was followed for the fireman and the mailman.

program evaluation

To test the results, student evaluation forms were prepared with the teacher instructed to query the students on the following:

1. Is television as valuable to you in learning about new things as radio? Motion Pictures? Reading?
2. Were the telecasts helpful? Give the reasons for your answer.
3. Did the television broadcast make you want to do something more about the subject of the broadcast? (Further reading, research, projects, other activities.)
4. State briefly what the program meant to you.

In addition, the teachers filled out an evaluation form, giving their opinions and criticisms on the educational value of television, reception and production techniques. These reports will be used as a basis for future telecasts.

dramatic telecasts

In addition to these educational formats, the Chicago

schools also presented thirteen dramatic shows over WBKB, sponsored by the Admiral Radio Corp. In these "Young Chicago" series, each of the technical, vocational, commercial and regular high schools who participated presented a telecast picture of that school's outstanding activities and talents. Program format, rehearsals and casting were left up to the individual high schools who participated. In some cases, the speech and drama classes "took over" and planned the special program for their high school's performance. In others, it was the debating team, the student council, or talent selected by a student or teacher committee, while still others selected their talent and decided what was to be included by principal's and teachers' choice. Some schools turned their program completely over to students, such as the Christmas program presented by the Goudy Elementary School where the students wrote the script, made their costumes and scenery, planned their rehearsals and presented the program with very little outside help.

For the most part, either the schools or the Radio Council worked out a script. All schools had preliminary rehearsals, even to the timing of the numbers. Beulah Zachery, WBKB producer of the series, had a final studio rehearsal, cutting, arranging for camera angles and television techniques — in short, adapting the whole to studio limitations.

In analyzing the scripts of the "Young Chicago" series, underlying theme seemed to tie in the talents of the youngsters with school activities, either through classroom work, sports or extra-curricular activities.

Typical example was "Art In Our Time," presented by Tuley High School. Using a puppet as an emcee, and with a cast of fourteen kids, format was built around the work of the art department. Program opened with a shot of the school banner and a commentary on the background of the school, then swung to the emcee puppet who introduced the kids at work. Visual interest was sustained by showing the youngsters drawing cartoons, making pottery, designing textiles, drawing posters, lettering, painting and abstract art in relation to music. Kids' scripts were brief, either pointing up their school training along

these lines, their pleasure in it as a hobby, or their hope of making it their life work. Demonstration technique was used in explaining the making of pottery, and at the end the puppet emcee showed how he was made by one of the students.

"Fiesta at Waller," an inter-cultural relations program, followed the variety format and utilized the entertainment talents of their students. Two emcees introduced the carolers, instrument players, soloists, etc. The many nationalities of which the student body was comprised, was pointed up as typical of the democratic character of the school and further visualized by Spanish, Chinese, Hungarian and Hawaiian dancing.

Opener in their series was "The Ring," a straight dramatic presentation, written by George Jennings of the Radio Council, with the cast chosen from the Central Radio Workshop group. Set in ancient times in the Far East, story theme centered around a ring and the effect it had on the lives of the people who came in contact with it. Only two scenes were used — one a street scene and the other a goldsmith's shop. Entire program was kept simple and was well received.

summing it up . . .

With amateur groups being hailed as one of the answers to tele's prayer for good, but easy on the budget talent, such cooperative ventures between the operating stations and the local Boards of Education may well be the answer. But, as the foregoing experiments point out, close attention must be paid to planning the production and rehearsing the cast.

Nothing can make an audience squirm quicker than bungling amateurs. In all types of television programming, a smoothly paced show is still a viewer must, whether produced by amateurs or professionals.

The educational potentialities of television are also slated for much experimentation on the part of stations and Boards of Education. The work being done by the two pioneers should serve as a guide for other cooperative ventures between educators and broadcasters as television studios open around the country.

setting up a production facilities department (continued from page 13)

which stations can develop as they go along and which can be built up with each telecast.

Even starting out with a minimum set-up, a facilities department is bound to grow like Topsy. A good cataloging system — perhaps a card file kept handy for easy reference — will be a time saver. There must be adequate storage space available for the props, plus a large enough shop for painting the scenery, making small hand props, fitting unit pieces together, etc.

summing it up . . .

But there's more to setting the stage for any television show than just putting up a room set and placing the furniture in it. There's a high degree of cooperation and close collaboration necessary between the producer and the art director or production manager. From the moment the script goes into work at the studio, the art director must not only know what is required, but must also be familiar with the theme and action of the play, the camera angles, the placement and costumes of the cast in relation to the set.

The theme dictates the type of settings — elaborate or simple; period or heterogeneous; formal or informal.

The action of the play determines space limitations, exits and entrances, furniture placement, the grouping of sets in the studio for easy camera shifting from scene to scene.

The placement and costuming of the cast bears a relation to the set, in order that light costumes won't fade into light walls, and that set proportions are wide enough for action, compact enough for camera angling.

The camera angles must be plotted and set decoration planned in accordance with the long shots, close-ups and montage effects indicated. This will enable the art director to know what part of the set will be in focus and to plan every tele picture to supplement the action and mood of each scene without competing with it or distracting from it.

Summing it up, these suggestions are intended solely as a guide in setting up a production facilities department. But in the final analysis, the best stocked properties storeroom will be of little value without the imagination and decorative talents of the production managers and art directors, upon whose creative skill depends the successful combination of the many elements involved.

long shots ..and close ups

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

THAT word TELEVISION—“Webster’s” gives it just four lines, quote: “The transmission and reproduction of a view or scene by any device which converts light rays into electrical waves and reconverts these into visible light rays.”

In other words “Webster’s” doesn’t care how you do it—so long as you do it. Boy! Are they smart—get that “by any device” in that there definition. It’s phrases like that that can start small wars. It’s in the same class with the argument de-luxe—they gotta be live shows—they gotta be movies. Again “Webster’s” is smart—stay out of things like that—except to say, quote, “LIVE, alive; not dead.” Thinking back on some live television shows I’ve seen—that definition seems too literal. The only thing that showed any signs of life was the camera. It was always on the move—they just can’t resist pushing ‘em around.

movies vs. live

Now, just for fun—what are some of the claimed advantages for using movies—and for live shows?

The argument for movies are numerous. First, there is the factor of greater flexibility. That should be obvious—but let’s talk about it a little anyhow—even though I’m not paid by the word. The thing that brings millions to the motion picture theatres every week is the *convincing* and *entertaining* manner with which a story is told in pictures. When I say millions it means just that. Gallup says it is anywhere between 68 and 72 million, while Hollywood claims it’s between 92 and 107 million people weekly. Quite a lot of people!

It is this faculty of picture production—that the legitimate stage has to compete with. The stage is definitely handicapped in this respect: It is confined to small space, a limited number of sets, limited action, and it takes two-and-a-half hours to tell a story, also comparatively few people get the opportunity to see it. **BUT IT IS A LIVE SHOW!**

Now, when a stage hit is made into a picture, the same story is played more vividly. Much of the descriptive dialogue or narrative can be elim-

inated because pictures tell the story better. Locations and incidents important to the plot *talked* about on the stage become *actual* on the screen and the whole story is told in half of the stage time and plays to millions instead of thousands. And nobody ever says I’m not going because it’s *not a live show!*

I’ll probably go down for the third and last time gurgling—your living room is your *theatre*, your receiver is your screen and *you’re not* going to dial out a motion picture for a LIVE show—*just because it’s LIVE*—its gotta be more than live, it’s gotta be better. You don’t dial out transcriptions on your radio now just because they’re transcriptions do you? No sir, you dial out any show you don’t like—no matter what it is.

If a live television show is restricted to the space of present studios, they are in about the same spot as the stage, so far as action and variety is concerned. They have, however, one faculty the stage hasn’t—that of combining pictures with live action... a technique that will undoubtedly be developed to some degree. But its use so far as television is concerned has definite limitations from the production angle. It will never equal the present day photoplay technique. Pictures will always have far greater diversity.

repeat performance

Also pictures can *always* assure a *flawless performance*—AND DO IT OVER AND OVER AGAIN—and on as many different stations as a sponsor may want—regardless of *whether or not* they are part of a network. Now, the advocates of live shows have a peculiar slant on this question of flawless performances—and I hasten to add—they may be 100% right. Some of them believe that delayed entrances or exits—the missing of cues—forgetting or “blowing” lines—and the many other “fluffs” that can happen during a performance are going to be the thing that will put live shows away out front—the audience is going to howl at the actors’ embarrassment. They will hardly be able to wait for

the “fluffs and blows” in the next show. Mebbe so—but, before a show hits Broadway for an opening night, it’s rehearsed and rehearsed for three or four weeks to *prevent* that sort of thing. Following this the show is taken out on the road for try-outs and further polishing and possible revisions. And before returning to New York for the opening performance a pretty near flawless show is assured... and even then “fluffs” are made on many an opening night.

takes and retakes

A movie director goes through the same routine rehearsing each scene until it is ready for a “take” and he keeps on making “takes” until he gets a perfect one in the bag. This is probably one of the reasons for Eastman Kodak’s financial success. Think of how much easier a director’s job would be if this flawless performance wasn’t a “must.” And brother, if said director makes one mistake that gets to the screen—does the fan mail tell him about it. By the same token, don’t the dramatic critics light into actors who slip up on opening night. Maybe live shows in television are going to change the actor’s concept of good acting—I wouldn’t know. I can’t imagine an actor barging into the Lambs Club some noon saying, “Boy, did I wow ‘em last night—I muffed my lines four times.” If that is what it’s coming to, (and it can well be with the short rehearsal time allowed for television) God have mercy on movie and stage directors who demand perfect performances.

It reminds me of a classic credited, I believe, to the great playwright, George S. Kaufman. He was attending the performance of one of his plays on the opening night—sitting in the back row, listening and watching every move on the stage and watching every reaction of a critical New York first night audience. An actor in the cast didn’t deliver so well—and after the *first act* curtain, Kaufman went out and sent said actor a telegram, which said—“dear so-and-so! I’m in the back row watching the performance. Wish you were here. George.”

fluffed lines

The business of fluffing lines will cause no consternation when comedians who are great ad-libbers do it, like Fred Allen, Milton Berle and others — as long as it doesn't throw the rest of the cast for a loop. Nor in an audience participation show — where it is expected and doesn't detract from the show. But, in a drama or anything of a serious nature — it would be my guess that flawless performances will be a *must* . . . and that means plenty of rehearsal.

Another thing about pictures. It will undoubtedly be some time before we have networks from coast-to-coast or in all major cities. It seems to me that pictures are the only solution for a sponsor who wants to grow with television. That is, buy time on all the important stations as they go on the air. With his show in a can, he can televise when he wants, where he wants and on any station available. Also as additional stations open up, he can use it on them.

I think it is within the realm of possibility that in the future, the "canned show" will make the rounds of stations pretty much in the same manner that movies make the rounds in the theatres. In other words, if you've got a good show in the can, why not let everybody get a chance to see it. Does it, or will it, have to be restricted to ONE network. If so — why?

multiple use

There's another thing about pictures that I've pointed out in previous articles — and that is a smart advertiser can so plan his television or picture program so that he can obtain additional uses for it. For instance there are about 1,000 associations, clubs, societies, and organizational groups to whom pictures on hun-

dreds of different subjects are to be distributed daily. The members of all these groups constitute a large and important buyers' market. They are constantly being shown pictures on subjects of interest too numerous to mention. But whenever these pictures are run for any group, a visual and lasting impression is made to the sponsor's advantage. There is no reason why good canned television shows cannot be distributed to this market — a great many of whom won't have a television receiver for years, nor a station to serve them, if they did have one. This type of distribution is doing a real job for many of the biggest corporations in the country and there is no reason why the "canned show can't double in brass."

The live show advocates say live shows are cheaper — pictures are too costly for one shot televising. If they're only going to televise it once, I heartily agree with them. Live shows are probably cheaper. But somebody has to explain to me — First, WHY must it only be televised once — and secondly, WHY has it outlived its usefulness after it *has been* televised. Its life can be just beginning! Of course, this does not apply to news reels, spot events, some sport events, although I'd like to own the rights to the World Series baseball films, championship prize fights, the Army and Navy football game and others. Pictures of those games would be great stuff for small school and college coaches to use to teach their aspiring pupils some of the fine points of the game. A lot of use can be found for pictures of the right type after they've been televised — and I think the returns would justify their higher cost, assuming the live show advocates are right.

Assume, for example, that some of large airline companies with service

to many foreign countries sponsor a television show to sell the enchantment of a visit to various historical and interesting spots on the globe. Why couldn't those pictures, *after being televised*, be shown to the public on continuous automatic projectors in travel bureau offices, air line offices and terminals, hotel lobbies. They could also be sent to schools for educational purposes. And many other uses could be found for them — all of which give the sponsor a big plus he couldn't get otherwise.

Take informative and educational subjects which may be filmed and televised, such as: health, nutrition, cooking, care of children, popular science and many more. Certainly none of these should be limited to one performance. There is a very large non-theatrical audience numbering millions for pictures of this type.

Let's take one minute television spots. These can be so written and filmed so that in addition to being televised they *can also* be distributed as minute movies in approximately 10,000 theatres, playing to a weekly attendance of approximately 30,000,000 people. And one thing we can be sure of is that 99 and 44/100 percent (apologies to Ivory Soap) of the people seated in the theatre at the time the *film is shown* will see or hear it — or both.

summing it up . . .

Unquestionably a certain percentage of all television shows will be live and another percentage will be motion pictures. I believe the type of show will determine which it will be. But here's one thing to remember — no matter which it is, live or film, the one to be viewed and listened to will be determined by your audience on the basis of which is the best show.

television outlook in pittsburgh (continued from page 10)

westinghouse radio stations, inc.

Address—1619 Walnut Street, Philadelphia, Pa.
Officers—G. A. Price, President; Walter Evans, Vice-President and General Mgr.; C. W. Pomeroy, Secretary; L. H. Lund, Treasurer
Ownership—100% owned by Westinghouse Electric & Manufacturing Company

Estimated Costs

1. Vis transmitter	\$30,000
2. Aural transmitter plus tubes	15,000
3. Antenna System	18,000
4. Studio Equipment	62,500
5. Studio Lighting	4,000
6. F & M Monitors	1,500
7. Land	40,000
8. Building	
9. Other item	70,000
Estimated Total Costs	\$241,000

Operation Costs per month—\$12,000

Channel—#1

Kilocycles—50-56 mc

Antenna

Height, sea level—1880 feet

Height ground level—718 feet

Transmitter location—Clearview Road, Allison Park, Pa. 9 miles from Pittsburgh

Power, aural & visual—3 kw aural; visual—4 kw

Population—2,421,000

Size of area—4,869 square miles

Location of Studio—310 Grant Street

Engineering Consultant—Ring & Clark, Washington, D. C.

Lawyers—Dow, Lohnes and Albertson, Washington, D. C.

Misc.—Westinghouse has also filed television applications in Philadelphia and Boston. Company operates 6 standard AM stations.

THE PUBLIC SPEAKS...

Color television has now been shown to groups of non-set owners and owners of black-and-white sets. These groups speak for *the audience television must create for itself*. Impartial observers well-known in the fields of research and psychology attended the survey session. One was C. E. Hooper, who said: "I feel that Columbia leaned over backwards in being fair." Here's what the public says:

... GREATLY PREFERS COLOR, AND HERE'S THE EVIDENCE:

Both groups were given a check-list of 22 words to be applied either to color or black-and-white television. The words picked give the predominant reactions to each:

	NON-SET OWNERS	SET OWNERS		NON-SET OWNERS	SET OWNERS
For color	"Beautiful"	"Beautiful"	For black- and- white	"Acceptable"	"Acceptable"
	"Brilliant"	"Brilliant"		"Passable"	"Passable"
	"Exciting"	"Exciting"		"Drab"	"Tame"
	"Clear"	"Magnificent"		"Dull"	"Drab"
	"Magnificent"	"Easy to see"		"Tame"	"Dull"

● Only 1 out of 12 non-set owners (and only 1 out of 8 set owners) agreed with the statement, "I am completely satisfied with the television now being broadcast. Black-and-white is good enough for me."

● Only 1 out of 4 non-set owners and the same percentage of set owners agreed with the statement, "I would rather have a 16x22 inch picture in black-and-white than an 8 x 10 inch picture in color."

overwhelmingly picks color television

- Only 1 out of 8 non-set owners (and 1 out of 7 set owners) agreed with the statement, "It would be better to spend money to improve the quality of programs in black-and-white than to spend it to develop color television."
- Only 1 out of 4 non-set owners (and 1 out of 12 set owners) agreed with the statement, "I would be completely satisfied with the quality of black-and-white television if I could get a larger picture."

... WOULD PAY MUCH MORE FOR COLOR, AND HERE'S THE EVIDENCE:

The question asked: "...if you were buying a new set, what is the most you would pay for one with a black-and-white picture 8x10 inches...or a color picture the same size...?"

The median answer of non-set owners was 49% more for color. The answer of set

owners was 34% more for color.

The same question was asked in connection with a 16 x 22 inch picture.

The median answer of non-set owners was 40% more for color. The median for set owners was 28% more for color.

... WOULD WAIT FOR COLOR, AND HERE'S THE EVIDENCE:

Those who did not already own television sets were asked: "What is the longest time you would wait for color after black-and-

white sets are on the market?" 7 out of 10 gave replies ranging from one year to "indefinitely."

LET US SEND YOU A COPY OF THE STUDY. Its findings are of vital interest to everyone in any way responsible for planning his organization's investment in television. Address, Columbia Broadcasting System, Dept. T, 485 Madison Ave., N. Y. 22, N. Y.

COLUMBIA BROADCASTING SYSTEM



technical opportunities in television

IT is clear that television is an art in which advanced engineering methods play a great part. Further, the detailed operations of television for efficient handling require a clear knowledge of the underlying scientific and engineering principles. Under such circumstances, it is manifest that the television field will require an unprecedented number of technical personnel of many types to enable this remarkable new field to go forward rapidly and on a sound economic basis.

Perhaps it would be well first to sound a note of caution. There are certain types of technically trained men who may not find a full opportunity to be useful in television until they have had further and more highly specialized training. One of these groups is the radio service man of pre-war times and even of today. Many service men, while admirably informed on the methods of sound broadcasting, both for AM and FM receivers, are relatively unacquainted with the many and complex methods and types of equipment used in television receiving sets. They have the advantage of lengthy experience in handling broadcast receivers and in dealing with the public. They have in many cases a sort of "sixth sense" which enables them to find the defective section of a receiver. Such men, with suitable added training, should be useful in the television field.

radar operators

Another group of men who are not ready in many instances for active technical work in television are the workers who handled radar and electronics equipment for the Armed Forces. After receiving the corresponding intensive training necessary to enable him to do so, it might at first sight be assumed that a radar operator would be ready to handle television station equipment or television on receivers, but such is not necessarily the case. Many details in the methods and circuits of radar and other electronic equipment differ from those found in television transmitting and receiving equipment. There are

also major differences in the construction and operation of military equipment on the one hand and commercial apparatus on the other hand. However, the men who had training in the military services along radar and electronic lines will prove useful in the television field after "refresher" courses to bring them up-to-date on the special forms of television circuits now in use and the construction of present-day commercial television equipment.

trained engineers

It may be convenient to list the various groups who will be eventually required in the television field along technical lines when television expands. The demand for such men will be heavy indeed. First and foremost, there will be a continued call for trained radio engineers who have had some video experience. There will also be required many radio technicians, laboratory assistants, designers, draftsmen, production men and the like. The preceding groups will also be required on a large scale on the higher grade television transmitting stations and studios.

Needless to say, men who have had experience in handling microphones in present broadcasting stations will readily learn how to handle a microphone boom under television studio conditions. There will be a demand for such men. A similar comment applies to the technicians who have handled transcription records in existing broadcasting stations. Much background music is used in television, as well as a considerable amount of dubbed sound. Accordingly, men skilled in handling transcriptions will find good opportunities in television.

cinematographers

On the video side it is of course obvious that camera men will be eagerly sought by television station owners, both for studio operations and for outside pick-up work. These men may be cinematographers drawn from the motion-picture field or they may be especially trained television-camera operators.

The control room of a television station is a much more elaborate and complicated arrangement than that of the usual broadcasting station. Nevertheless men who have had broad experience in handling programs in the present broadcasting field should find expanded and lucrative opportunities as television control room operators.

Closely allied to the preceding groups are the effects men. It is already clear that many electrical and optical effects or illusions must be produced on the television screen to maintain interest, to provide proper backgrounds, and to cover over intermissions between scenes. The highly ingenious effects man with an armory of clever gadgets will be welcomed by television station operators.

projectionists

Inasmuch as motion picture film will find a considerable place in the television programs of the future, skilled film projectionists will be needed by every television station. These projectionists may be drawn from the theatre field or they may be especially trained to handle the particular type of projectors used in television. In this connection it is desirable to sound a note of caution. Television projectors are not identical with those used either in the theatre or by amateurs in the home, although they do have a few points in common. Accordingly, a number of labor organizations of theater projectionists have gone so far as to train certain of their membership in the handling of specific forms of projectors most useful for television purposes.

In a sense a television studio contains most of the elements of a motion picture studio. Prominent among these:

1. An efficient and flexible control lighting system. Whether the lights be incandescent, fluorescent, mercury vapor, arc lights, or flash tubes, they will nevertheless require skillful placing and adept manipulation. This emphasizes that there must be lighting experts available who know how to set up the general lighting of a studio and how to add to this foundation lighting the necessary modelling light-

(continued on page 39)

PROGRAMMING

stations getting set now for 28 hour programming schedule . . . changeover period used for planning.

station plans

wor staff training underway at wrgb

WOR has already begun to lay the groundwork for programming over their now-assured Washington station with the formation of a staff of script writers, directors and engineers and the institution of an experimental series over WRGB Schenectady.

Primary idea is to develop the programming formats outlined in their presentation before the FCC for a

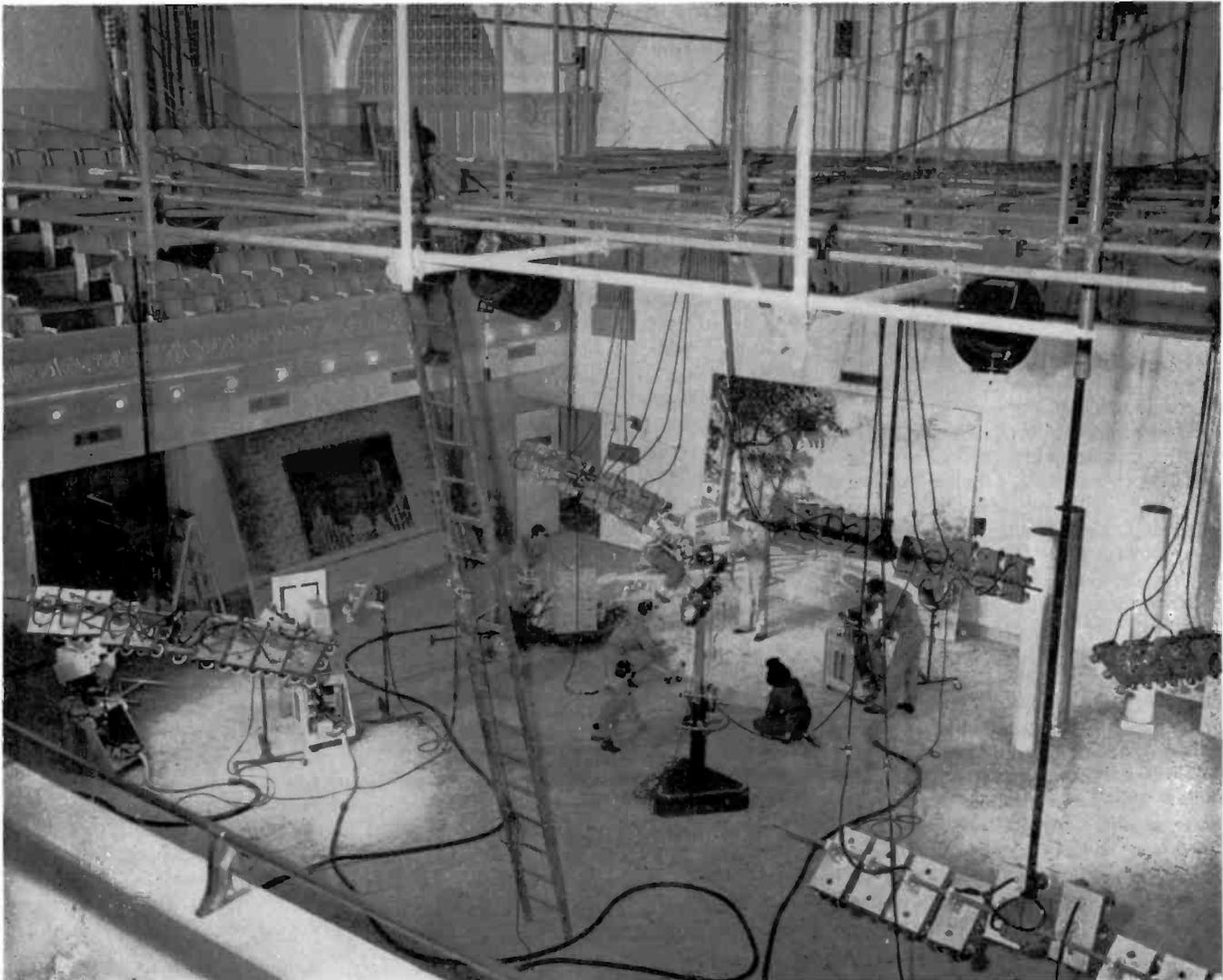
D.C. outlet. (Full schedule was printed in March TELEVISION). Particularly interesting though is the training plan which they have evolved. A director, assistant director and an engineer are assigned to each show. It is the assistant director's job to write up a complete plan, including detailed information on scripting, casting, rehearsal time, costs, etc. The engineer does the same thing, covering floor plan, lighting plan, camera shooting, etc. This information will be filed away against the day when the D.C. station is ready to start programming. Staff alternates in position, with the assistant director ex-

changing places with the director.

Scripts are being written by the staff. Casting of principals will be done in the WOR studios and camera angles plotted. WRGB will receive a prop list and stage plan ahead of time, as well as casting information for the minor roles. Camera rehearsals will be held at WRGB the afternoon of the show.

Two types of formats will be tried for each show. Opener in the half hour series was "It's Up to Youth," an adaptation of WOR's popular juvenile program in which high school and college students give their pro and con views on problems of the

Measuring 50' x 60' in floor space and with a ceiling height of 50', DuMont studio A opened on April 15th. Four cameras and two mike booms will be used on all live programs. More than 100,000 watts of illumination is provided by a series of banks of reflector lights suspended from the light grids, floor lights and powerful spotlights.



day. First topic to be dramatized and discussed was "Alcohol and Adolescence," written and directed by Keith Thompson. Cast of six professionals was selected in New York, but the panel of teen-agers who debated on the dramatized portion and attempted to arrive at a solution to the problem were chosen from local high schools.

Other formats to be developed include "Food Facts," a "what-to-buy," "how to cook it" idea; "Let's Go Shopping," a potential commercial format, presenting merchandise specials; "Women's World," a fashion show and homemaking combination; news formats, for local and world-wide coverage; and film presentations. Experimentation on live dramatic and variety programs will probably come far down on the list as station feels it has a good file of data on this programming from the Bob Emory Brownstone Theatre and Sealed Book series.

Experiments, which are under the supervision of Norman S. Livingston, WOR's Program Director, may run for 26 weeks although no definite schedule has been decided upon as yet. Bob Emory will act as production supervisor to the group, which includes the following WOR men: Roger Bower, Ed Brainard, Dave Driscoll, Dan Ehrenreich, Gene King, Jack MacGregor, Tom Moore and Keith Thompson.

nbc going back on six-day schedule

WNBT's new RCA transmitter and antenna is now being installed on top of the Empire State and a tentative opening date of May 5th has been set — subject to change however. For the experimental days are over and when the station returns, it's going to be on a "here is television" basis, with no excuses for old equipment, etc.

According to Warren Wade, program manager, plans call for a six day a week schedule, moving up to a daily pace within a few weeks after reopening. They will try to come back with as close to 28 hours as possible, so that the July 1st rule will work little hardship. Quite a bit of NBC programming will consist of sports pick-ups as in the past. Surveying of possible spots for remotes in the New York area are being made.

The full length Sunday night shows will be continued, with variety shows, quiz shows and a serial also slated. Serial will be a complete episode, with no cliff-hanging technique employed. In addition, an educational series in cooperation with the New York City Board of Education has also been announced, for afternoon viewing. Carrying out of this project,

however, might depend on whether the May 5th schedule can be met. If reopening date is too close to the end of the school year, project may be tabled until fall.

Broadway Preview, the cooperative venture between the net and the Dramatist's Guild, which is slated for fall, has stirred up a lot of interest and many scripts already submitted.

Plans for use of the Washington to New York coaxial cable line are also being formulated. First definite program will be the televising of the National Spelling Bee, scheduled for 10 a.m. on May 24th. The Image Orthicon will be installed in the National Press Club to pick up the proceedings. Participating youngsters will wear large numbers for identification. To acquaint New York viewers with the long distance daytime telecast, present plans are to send score cards to the NBC list of set owners in the area.

So much for the straight programming. NBC, with their recent bid for agency cooperation and use of WNBT's facilities, have other shows in the works (see Advertising, page 36).

cbs to program wednesday to sunday

CBS's return to the tele waves has also been delayed but when station WCBW does resume it will be on a five night weekly schedule — Wednesday through Sunday. Mobile pick-ups will be featured on the Wednesday, Friday spots, with the station ready to increase this special events coverage to Monday and Tuesday nights when necessary.

While no definite tie-ups have been announced as yet, there's been much testing of race tracks, beaches, ball parks, etc. to determine good pick-up points for mobile transmission and a lot of contact work is being done.

Many of the tried and true CBS formats will return as regular program fare when telecasting is resumed. "Tales By Hoff," a cartoon version of a bedtime story; "See What You Know," a tele-quiz show with publisher-editor-author Bennett Cerf as permanent emcee; "There Ought To Be A Law," informal debate between New York City high school kids, and "You Be the Judge," a re-enactment of famous lawsuits in actual courtroom settings, are all slated for return. In addition the CBS dance programs and music series will be stepped up considerably, with an ice ballet scheduled for the opening week.

No definite program has been determined upon as yet in connection with the proffered use of the Wash-

ington cable two nights a week. Ben Feiner, Jr. is acting director of television programs.

philco to resume on commercial basis

WPTZ, having recently moved into their new studios, has resumed telecasting with one live show a week in addition to their film schedule. However May 1st has been set as the approximate date for resuming their live programming on a more extensive scale and for beginning operations on a permanent commercial basis. Official opening of the studios will probably see debut of series of tele shows by Gimbels, Philadelphia. Philco's mobile pick-ups probably won't be resumed until the football games in the fall, as they need new orthicon tubes for their equipment and delivery is not expected much before that time.

Philco arrangement with DuMont for continuation of their experimental relay system in connection with the DuMont's experimental station in Washington, will probably result in a good deal of D.C. video-granming being transmitted over the Philco relay to Philadelphia. First use of this set-up was made on April 15th, when Philco picked up the special dedicatory program from the Washington studio. Paul Knight is program manager.

don lee to step up remote coverage

W6XAO, who was one of the pioneers on remote pick-ups in the pre-war days, is planning early resumption of mobile telecasting. A special truck has been designed to carry the portable suitcase equipment, developed jointly by RCA-Don Lee. This portable equipment consists of six "suitcase" cameras.

Staff has also been trained to operate 16mm. newsreel film cameras under all weather conditions anywhere on the Pacific coast. Film is rushed to a laboratory for quick processing.

While the station has experimented with every phase of theatrical, film and radio techniques, particular emphasis will be given to educational demonstrations and a policy of "living room education" — a program of providing visual how-to-do instruction in most fields of endeavor — has been developed.

Experimental call letters are slated to be replaced permanently by KTSL (K meaning western station, and TSL being the initials of Thomas S. Lee, station owner). Harry E. Lubcke has been director of television at the station since 1930.

UNO conference is being televised by RCA-NBC for the press overflow. Experimental relay carried opening session to the WNBT studios. Telecasting for the press is being continued with the use of a developmental model of the "one-and-only" Image Orthicon.

abc to program over wabd, wrgb and wptz

ABC, stacking up experience for the day when they will have their own tele outlet — (and keeping their fingers crossed for a favorable decision on their New York application slated for a June hearing) — are resuming their twice-weekly telecasts over WABD. (These will be to the tune of \$625 per half hour, or \$1,250 per week, which DuMont feels is a fair fee for helping a competitor get actual tele experience.) Although their experimentation to date has been largely adaptations of radio shows — and particularly the audience participation formats — to tele, they are now beginning to concentrate on dramatic productions.

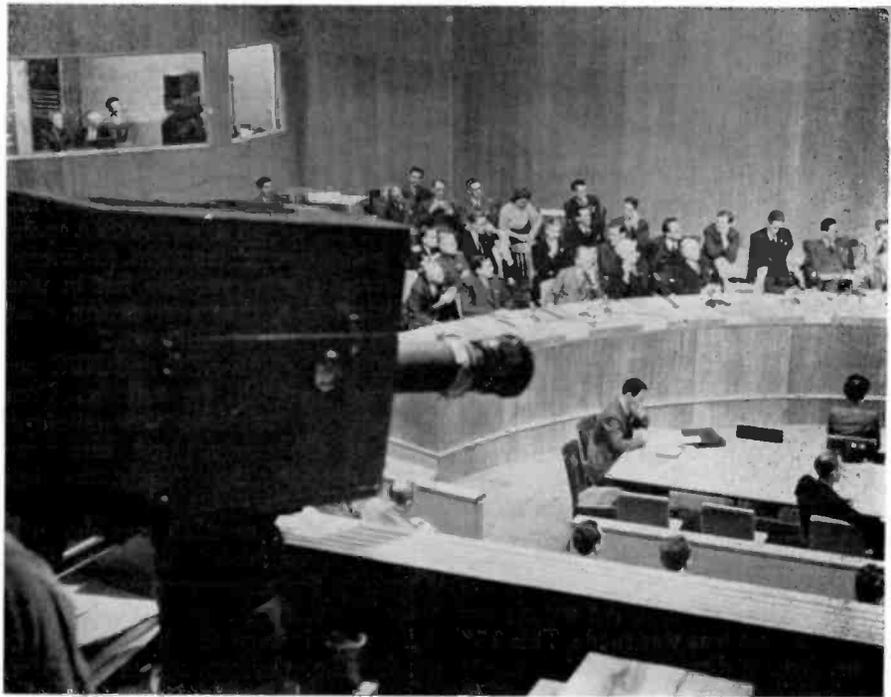
A series of four one-act plays have been produced over WRGB Schenectady and net is also going to adapt radio's "Famous Jury Trials" for televising over WABD. In addition, programming will also be done over WPTZ.

Deal for use of mobile equipment is now in the works but in the meantime, station contents itself with filming important events as they occur. Owing no film equipment, contract is let out to various local motion picture companies. Also interesting is the net's recent step in adding Cheney Johnston to the staff as lighting consultant. Mr. Johnston will work out lighting techniques for ABC productions at WABD, WRGB and WPTZ. This will give ABC some technical know-how on lighting against the day when such problems must be solved in their own studios. Paul Mowery is television director at ABC.

balaban & katz mobile schedule

WBKB's plans for mobile pick-ups are dependent upon the delivery of the equipment which they have ordered. At present they have a $\frac{3}{4}$ ton capacity panel truck; a two camera chain; a 210 mcs. relay transmitter; and two 10 kw, 110 v, 60 cycle AC

Due to return to the WCBW telewaves when the station resumes operations is "See What You Know," a tele-quiz show with Bennett Cerf as emcee. Shot at right shows a recent telecast in which Gypsy Rose Lee took part.



army type mobile gas generators. Plans are to start operating with this set-up within a short time.

Only written contract is with the Chicago Coliseum for such remote televising as boxing, wrestling, bike races, roller derbies and special shows. William C. Eddy is director of television.

dumont reopens with 5-night schedule

WABD, DuMont's New York outlet, was officially christened on April 15th, with a special two way show originating in both Washington and New York. It marked the first time

that coaxial line was used from New York to Washington.

Station plans to be on the air from Monday through Friday, with about 11½ hours of programming per night — most of which at the moment is commercial. However as the pace is stepped up to meet the 28 hours weekly requirements, sustaining programming will be included. Louis A. Sposa is program operations manager.

special events

Immediacy of tele got another shot in the arm last month with the RCA-NBC direct pick-up of the UNO con-



ference. Unfortunately WNBT was off the air so the home viewers didn't get a chance to be ringside witnesses to the diplomatic battling which held the attention of the world.

For the first time too, television was used to facilitate press and radio coverage of the event, with twelve RCA Victor television receivers installed in an adjoining room for the overflow of about 200 news men. An ultra-high frequency radio relay link, a recent RCA development which was being used on an experimental basis, brought the telecast to the NBC viewing rooms at Radio City.

As there is still only one image orthicon tube available, camera shooting was limited to the one camera. Opening with a wide angle shot, which gave a wide range view of the council room, slides were put up in the NBC studio while the switchover to a close-up lens was made. This 15" lens, from a distance of 80', brought each delegate up to practically "the man next to you" view, while the wide angle reduced them all to a group of pigmies. Camera panned slowly from delegate to delegate as the commentator identified them before the meeting opened. Camera held each delegate as he spoke, switching to a shot of the translator and then panning around to pick up other members as the translations were being made.

One camera necessarily limits any television production, no matter what its nature and from the television show angle, there were plenty of flaws in this. Camera motion was

jerky, for with the close-up lens a turn of 1/2" will bring the next delegate into focus. But that's only one angle. To sit miles away and have the feeling that you were there — which this telecast certainly imparted — offsets the production disadvantages. While some may argue that watching a man as he makes a speech is not good entertainment, the intense interest which everyone felt in what this group of men were saying, offset any tendency to dullness.

A crew of 15 RCA and NBC personnel handled the telecast. Commentating technique was employed before the sessions got underway, and during the translations into French.

Interesting reaction was shown in the poll conducted by Radio Daily among the newspapermen covering the Council meetings. 80% indicated their preference for black-and-white television. Correspondents who were seeing tele for the first time in five years were unanimous in praising the "tremendous improvement" in image quality made since 1941. Many felt it was easier to concentrate on what was being said, with the help of the camera close-up of the individual, rather than being 80' away themselves.

ABC filmed the opening day's session of the UNO and edited it into 13 minutes of running time for showing over WPTZ, WRGB and WABD.

Film was an overall coverage of the event — different from usual newsreel coverage in that it told more of the story — and picked up the human

interest elements of the historic gathering. Opening with shots of the building and the crowds milling around, camera picked up the arrival of the delegates, with the commentator identifying them. Inside the council room, close-up shots of the important delegates were taken, then the camera panned around slowly picking up each delegate who was again identified by the commentator. Rather than record all the speeches, Harvey Marlowe, who produced the film, used ABC recordings, dubbing in the salient points of Secretary of State Byrnes and Governor Dewey's speeches. Shots of the delegates leaving the hall and of the United Nations flags closed the telecast.

ABC also filmed the opening of the National Aviation Show. Net tied up all television rights to the show and films were telecast over WABD, WRGB and WPTZ. Same technique of telling the story, instead of the usual newsreel type of coverage, was used by Harvey Marlowe, who produced the film.

Opening shots were a bit tedious in overlong showing of the men behind the show. Another fault was in the commentator's reading of signs which were exposed long enough to be read by the viewer. There were spots here and there where the sound did not synchronize with the film. However film did pick up the important equipment displayed at the show and awakened an interest in the problems of air preparedness.

Emerson York Studios supplied the equipment and crew to make the silent pictures and Reeves Sound Studios cut the platter for the sound. Film was shot and developed in twenty-four hours.

drama

W6XAO's first experiment with a full-length drama "Not Since Eve," ran for an hour and fifteen minutes. Presented by the most experienced members of the Pasadena Community Playhouse, under the direction of John Richard Kerr, production required only two sets. Two orthicon cameras on dollies were used — one close-up and one long shot. Ten hours of rehearsal was conducted at the Playhouse and three hours with cameras at the studio directly before

Latest program in the WRGB "Farm Spotlight" series was on landscaping. Rights and wrongs of shrubbery placing was discussed and demonstrated.



W6XAO's "Surprise Variety Show" featured Mischa Auer playing his "Concerto for Two Grapefruit." Wounded soldiers acted as audience for the telecast.

the show. Immense attention was paid to details, with the floor chalk-marked for placement of the cast and camera angles studied minutely before the studio rehearsals.

WBKB's recent arrangement with Northwestern University for the televising of their major theatre plays resulted in the video screening of "The Far Off Hills." Although cut to an hour's running time for the tele version, production was substantially the same as presented on the University Campus. Set in Ireland, and with a serio-comic theme, play was originally a Broadway hit.

WRGB's cooperative program with high school and collegiate dramatic groups has resulted in three such productions being televised over the station within the past month. As previously reported, usual procedure in working with such groups, is for the studio to assign a staff producer to sit in on a rehearsal at the school, make suggestions and plot his camera angles. A few hours' rehearsal is given in the studio before the telecast.

Recent offerings have included "The Tragedian In Spite of Himself," an early and little known sketch by Anton Chekhov. This 15-minute show was presented by the Yale Drama School under direction of Professor Edward Cole. Russell Sage College produced "The Shadow Passes," a 25 minute show, and the Radio Workshop of Mount Pleasant High School presented "Joint Owners in Spain," a 20 minute program.

public service

WBKB's "Calvacade of Medicine" series produced in cooperation with the American Medical Association and the Bureau of Health education, is designed to take video viewers behind the scenes of modern medicine. Program will feature outstanding AMA physicians who will comprehensively cover the work done in their respective fields.

Brief background dramatizations of high points in the development of various phases of modern medicine will be written into the scripts. Opening number was titled "Evolution of the Stethoscope," in which important steps in the development of this instrument were dramatized. Whole idea behind the series is to prove the efficacy of tele in conveying important messages of health and good



living to the general public. Gladys Lundberg of the WBKB staff is producer-director.

WRGB's "Meet Your Legislator" is a public service feature designed to acquaint citizens with the members and activities of the New York State Legislature. Four programs rounded out the series.

Typical format involved three legislators discussing a particular problem, such as those arising from the selection of the UNO site. Good promotion stunt was the installation of two television receiver sets in the Roof Garden of the Ten Eyck Hotel in Albany so that the program could be viewed by legislators in the Capital City.

variety

W6XAO's "Surprise Variety Show," used a group of wounded soldiers to participate in the telecast as audience for the all-star line-up headed by Mischa Auer. Noted screen comedian played "Concerto for Two Grapefruit," while Doris Day enacted the role of a USO entertainer. Other acts included a comedian, the wonder dog Major, and a singer. Four sets were used, and two cameras — one close-up and one longshot. Program got six hours of rehearsal — three before coming to the studio, and three before the cameras.

WBKB's weekly matinees usually feature one-time shot, novelty programs. Typical were "The Manne-

quins Entertain" which featured the glamour gals of Chicago's new models club out to prove that a gal can be beautiful and smart; and "My How You've Changed" which covered the changes in fashions and foibles which have taken place through the years.

educational

WRGB's most recent "Farm Spotlight" program was a definite educational feature, starring Dr. Joseph Porter an associate professor of ornamental horticulture at N. Y. State College for Agriculture, Cornell University, and Bob Child WGY agricultural program head. Film shots of the Child home, showing present landscaping or lack of it, opened the 15 minute spot. Lead into studio action was given by having Professor Porter drive in and start discussing the pros and cons of house and lawn. Off camera commentation accompanied the film, which was shot by a GE cameraman. As they started to remove some shrubs in the film, action was picked up in the studio with both men moving the shrubbery around in various positions, with explanations of what was good and bad.

A model of the Child home, scaled to 1/3 the actual size was used for studio set. Shrubbery was supplied by local nurseries.

Program ended with Child's announcement of available bulletins on

(continued on page 36)

EQUIPMENT

new lights at CBS . . . federal starts construction of micro-wave tower . . . off the screen projection . . . theatre television . . . airborne tele . . . new patents.

cbs revamping

new lights, control room changes and storage facilities made at WCBW

Taking advantage of the lay-off necessitated by the channel switch, CBS made several changes in their studio set-up. One of the major improvements is the redesigning of the flood lights by E. Carlton Winkler, lighting expert. Row of new-type elliptical incandescent flood lights are equipped with a ventilating chimney which will permit the heat to be drawn off at great rate.

Though most of the changes have been affected to improve the lighting, the old systems and banks have been retained and new types have been added. The projection spots have been redesigned and 6 inch Fresnel Lenses have been added to increase their highlighting ability. Some of these spots have been suspended between a C-clamp fixture which gives them 360 degree mobility.

Compartment strip lights which give a flatter light have been built for a stage which is used mainly for maps, charts, and stills. Background of this stage is painted yellow to give greater reflective value according to CBS's Jim McNaughton. Along these same lines is the technique for painting flats with a silver paint spattering technique which prevents too much light absorption. The floor has been resurfaced in such a manner that it too will give greater reflected light.

A new switching system has been installed which makes it possible to floodlight of all five stages noiselessly by remote control. System can be operated so that lights can be pre-set.

storage facilities

Improvements have also been made in set construction storage. A large new property room has been added with many boomerangs to increase the storage space. Particularly ingenious contraption is the construction of a door high up in the corner of the studio, just under the ceiling, behind which is a large room for storage of hanging flats. A trolley suspended from the ceiling, to which is appended a block and tackle arrangement, makes it easy to swing the flats away.

A new cyclorama has been constructed which has greater mobility. New unit sets have been built so that

all unit platforms and flats are built to scale. CBS does all painting, building and designing of sets right on the premises.

All control room equipment received a thorough going over. But there has been little change or addition in equipment. Interesting is the placement of the director on a raised platform behind the monitoring equipment. Experience has taught them that a position separated from the control desk will allow greater freedom, and cut down on confusion, around the controls. The director's desk has been placed so that he will have a clear view of all the monitoring screens.

A client's booth equipped with a receiver has also been added. Room is placed so that it gives a clear view of the studio operations, as well as the engineering operations.

Dressing rooms have been moved to the fourth floor and they have been equipped with wash rooms. A shower has been installed . . . perhaps to compensate for all those additional lights described in paragraphs 1 to 4!

federal telephone and radio corp.

Federal Telephone and Radio Corporation are constructing a new 300 foot tower for microwave and electronic experiments at the Nutley, New Jersey site of the Federal Tele-communication Laboratories. The tower will be used for experiments in television, FM broadcasting, police radio networks, pulse time modulation, aerial navigation, radar, and mobile communications. To simplify the installation and removal of experimental antennas, special mounts have been devised. Upper decks and roof of the tower will be heated to prevent the formation of ice and snow.

Colonel Behn, head of IT&T, Federal's parent company, foresees the day when all of the manifold broadcasting services of a city will be housed in one great tower, that will be designed for electronics, rather than in the present inadequate and scattered office buildings. Such a tower, he believes, could be built in the best possible location and the burden of financing would be considerably lightened by joint-participation of the numerous companies offering microwave and electronic services. He

points out that there are too few suitable sites in any given community, and the problem would be solved by housing all in one superior location.

In addition to the tower, construction is under way to make a huge addition to Federal's Nutley laboratories. The project will provide a total of 120,000 square feet of floor-space. All buildings will be of ultra-modern design, employing the "dry-wall" type of construction method, aluminum on the exterior, and glass wool insulation and asbestos compound partition interiors. Floors of the building will house cells for electrical wiring. Construction is being handled by the George A. Fuller Company of New York. Architects are Giffels and Vallet, Detroit.

film recording

televising off the screen for studio records, and for theatre projection

In an address before the Society of Motion Picture Engineers, Dr. Allen B. DuMont detailed the progress made in film recording of television programs.

After years of experimentation, a satisfactory system has been evolved whereby television images of a repetitive rate of 30 pictures per second on the cathode-ray screen, can be recorded on movie film at 24 frames per second or any other rate required. DuMont recordings are made on standard 16 mm. film, with sound track included for a completely recorded television program. Biggest problem is synchronizing the 30 frames per second speed of tele to either the 16 frames per second of silent motion pictures or the 24 frames per second of standard sound film.

Two practical solutions to these problems have been worked out:

1. Silent pictures can be recorded at 15 frames per second, using a synchronous motor drive on a standard camera and projecting this film at the standard speed of 16 frames. Since television operates at 30 frames per second, if a standard motion picture camera with a shutter of approximately 180° is driven by a synchronous motor at 15 frames per second half of the alternate 30 television frames will be recorded. The other half will be lost during the pull-down

time of the camera with the result that 15 frames per second will be recorded. In projecting a film taken by this method, at the standard 16 frames per second, no particular speeding up of the subject action is noticeable.

Standard sound speed of 24 frames per second can be recorded by using a specially constructed shutter and pull-down in a camera also driven by a synchronous motor. This will allow the film to be projected at sound speed from a standard projector. Difficulties here have been overcome by using a synchronous motor to drive a standard camera at 24 frames per second. However both the shutter and pull-down mechanism must be altered so that six television frames out of every thirty are lost during the pull-down time of the camera, resulting in a 24 frame per second recording of the 30 frame television picture. As the film travels through the camera at sound speed, sound can be recorded in the usual ways, either on the same film using a single system or by a separate sound camera using a double system.

Practical applications of these systems, as used in the WABD studio, have had a threefold advantage.

1. Handy record for further study by technicians, agencies and program staff.
2. Permanent record of programs, particularly useful to advertisers.
3. For repeat programs, either for use over own station or for syndication.

theatre television

Dr. DuMont also brought his listeners up to date on theatre television.

300' tower for micro-wave and electronic experiments on television, FM, mobile communications, etc., is now under construction by Federal Telephone & Radio Corporation.

High brilliancy tubes and large aperture lenses are steadily being developed for projecting bright television images of adequate detail on full sized theatre screens.

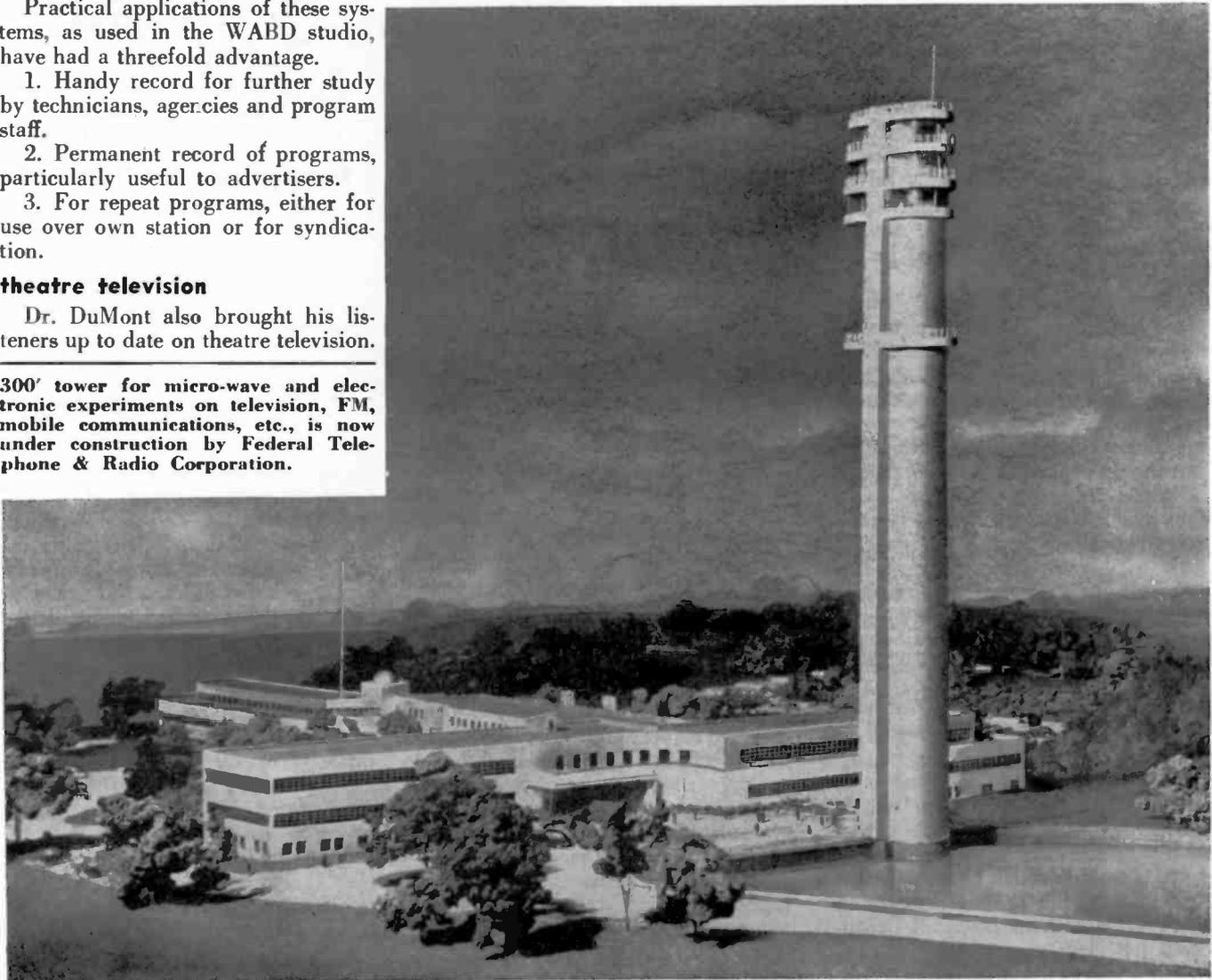
Dr. DuMont also described recording off the screen process which has been developed by Paramount, DuMont and Eastman Kodak. (Akley Camera is building the first three units to specification of NBC, DuMont and Paramount. These are scheduled for summer delivery.)

DuMont equipment for this purpose includes a high brilliancy cathode-ray tube carrying the television image. This image is photographed on movie film and the sound track recorded. Film is then automatically developed, fixed, rinsed and dried, ready for conventional projection — all in a matter of minutes. It can be cut and spliced, titled and edited as necessary. Televised news events, taken off the air or coaxial cable, are on the screen almost as soon as they happen, thus not detracting from the immediacy of tele. Film makes pos-

sible the showing of an event as often as desired — good point for theatre use.

"intra-video" system

Latest entrant offering a solution to the multiple antenna problem is the Telicon Corporation. Company announced the development of a television antenna and distribution system named "Intra-Video" which will be ready for early installation. Antennas coupled with the distribution system are designed especially for apartment buildings. Telicon claims that it has solved the problem of "ghosts," by careful placement of individual antennas for reception of each of the stations in an area. A series of novel antennas have been developed to suit various conditions. Each antenna is connected to a radio frequency booster amplifier, which is built as a plug-in for quick replacement. All amplifiers have an electronically regulated power supply. The system employs a $\frac{1}{4}$ inch coaxial cable to feed any desired number of apartment outlets.





belmont receiver

Belmont Radio Corporation, Division of Raytheon Manufacturing Company, announced that they will have a television receiver on the market in July that will retail for approximately \$150. It is claimed that the set employs a 7 inch tube of sufficient brilliance to be viewed at home during the daylight hours. Receiver is unusually compact in design and is housed in a modern cabinet, 14 inches wide and 16 inches deep.

Set employs two tuning bands which cover the entire spectrum of assigned television channels, making it possible to tune in on all the stations in a given area. Power consumption is no more than that of the average radio receiver, despite the fact that the set contains over 20 standard Raytheon tubes, according to company officials. Circuit design is relatively simple so that all components are available for fast servicing. The speaker used is a new design permanent magnet type which is said to have finer tonal reproduction.

airborne tele

portable equipment will benefit from Navy-RCA-NBC development of "Ring" and "Block" systems.

Switching from its wartime role, the airborne system of television made its bid for future application to a peacetime era in a recent demonstration conducted by the United States Navy, the Radio Corporation of America and the National Broadcasting System.

And the show they put on was con-

vincing evidence that no matter how potent a military weapon such equipment proved to be, the punch and power it will add to "on the spot" coverage boosts the immediacy appeal of tele to top notch place. Almost eerie was the effect of sitting in the Navy Gym at Anacostia and watching planes pick up "targets" over Baltimore. And when one of the planes picked up the building we were sitting in and zoomed right over it, most of the audience ducked in their seats.

Developed during the war by the joint efforts of engineers in the three organizations, the equipment was classified as "Ring" and "Block" for military purposes.

Research on these systems resulted in the development of more stable, smaller size equipment as well as close tolerance critical components. Work which was done on interference problems, various types of automatic gain control, synchronizing, and automatic frequency control circuits for scanning will contribute to better postwar commercial television equipment.

Wartime applications of the system included directing pilotless, explosive-laden bombers, gliders or crash boats against enemy targets; observation of dangerous operations, gun fire, general artillery spotting, gun control, map-making and other urgent reconnaissance work; transmission of messages including maps and charts between ships and aircraft; and obtaining the equivalent of eye witness information of dangerous operations

Scheduled for July delivery, this Belmont television receiver has 7" picture tube and employs two tuning bands which cover all assigned channels. Price will be approximately \$150.

not possible by personal observation.

But particularly interesting is the projected commercial uses of the system, both from an entertainment and programming standpoint as well as an industrial one.

Instantaneous transmission of news coverage from cars, boats, planes and helicopters will play up the immediacy appeal of tele by bringing eye witness pictures of all disasters or events of public interest. In addition, television tours of various parts of the country can stimulate travel.

From an industrial point of view, systems can be used to watch and control certain dangerous scientific experiments; make preliminary investigations of areas for exploration and scientific expeditions; can be used in police traffic control; can substitute for test pilots, as the equipment will not only give "eyes" to the plane but can transmit instrument and testing gear readings back to control headquarters; and can be used in aircraft navigation.

Biggest feather though in the cap of the airborne systems of tele will be the atom bomb coverage!

"ring" system

"Ring" television employs two cameras, one in the nose and the other in the waist of a plane. Its standards are comparable to those for present portable ground equipment. Primary aim was to produce a television system for scouting and observation over fairly long distances and relaying pictures instantly back to a ship or shore-based receiving station. Tests prove it capable of transmitting high quality pictures over a 200-mile radius from an altitude of 15,000 feet. Use of two cameras — which are of a special radio-electronic design — gives coverage from two angles. Two different lenses give telephoto "close up" views or distant pick-ups.

"Ring" uses interlaced scanning such as that in commercial tele. It is claimed that greater resolution is achieved by reducing the field frequency from 60 to 40 and the frames from 30 to 20 a second. This enables production of 567 lines on the receiver screen, as compared with the commercial standard of 525. However the lower frame rate results in a certain amount of flicker (totally absent in commercial standards) but acceptable for military purposes to gain other advantages.

Taken from the television screen, this photo shows the effectiveness of the long range "Ring" system of aerial television developed by Navy and RCA.

The "Ring" transmitter produces a peak output of 1.4 kilowatts at 90 or 102 megacycles and a specially designed antenna gives uniform radiation in all directions from the plane.

Under lighting conditions, such as dawn and dusk flights, the Image Orthicon has produced excellent results. Under good lighting conditions, a modified Orthicon tube has been used for its great resolving power. These two types of pick-up tubes have proved most successful in the "Ring" system, although a third tube, the small model iconoscope, was used in earlier experiments.

"block" system

Block tele employs a lighter, short-range type of equipment with the camera fixed in the nose of the plane. Image can be transmitted from 15 to 20 miles. Panning effect is accomplished by the pilot moving the controls of the aircraft so that the television camera screens the desired target.

The control operator views the picture on the screen of a special kinescope — or electronic receiving "eye" in a monitoring receiver. Kinescope, with a face 7" in diameter, is similar to that used in home tele receivers, except that the phosphor used on the screen produces a green image. Unit produces 40 frames a second in sequential scanning, with 350 lines on the receiving screen. Transmitter has peak power output of 60 watts at 264 to 372 megacycles and special transmitting antennas have been designed for each of its 10 workable channels. Receiver unit has two broad-band antennas.

This equipment was also used in guiding controlled missiles by having a "Block" camera installed in the nose of the missile. Receiving screen was mounted before a television operator, seated beside the control operator in specially adapted Grumman Avengers. In this manner, the missile could be followed and directed.

Problem was to redesign, modify and build to "suitcase" compactness, television pick-up and transmitting equipment which once might have filled a large room. In addition, RCA

Mallory-Ware Inductuner, a standard feature in all DuMont Telesets, covers the entire frequency range from 44 to 216 mg., making it possible to tune in all thirteen channels without adjustment. Device also covers FM.



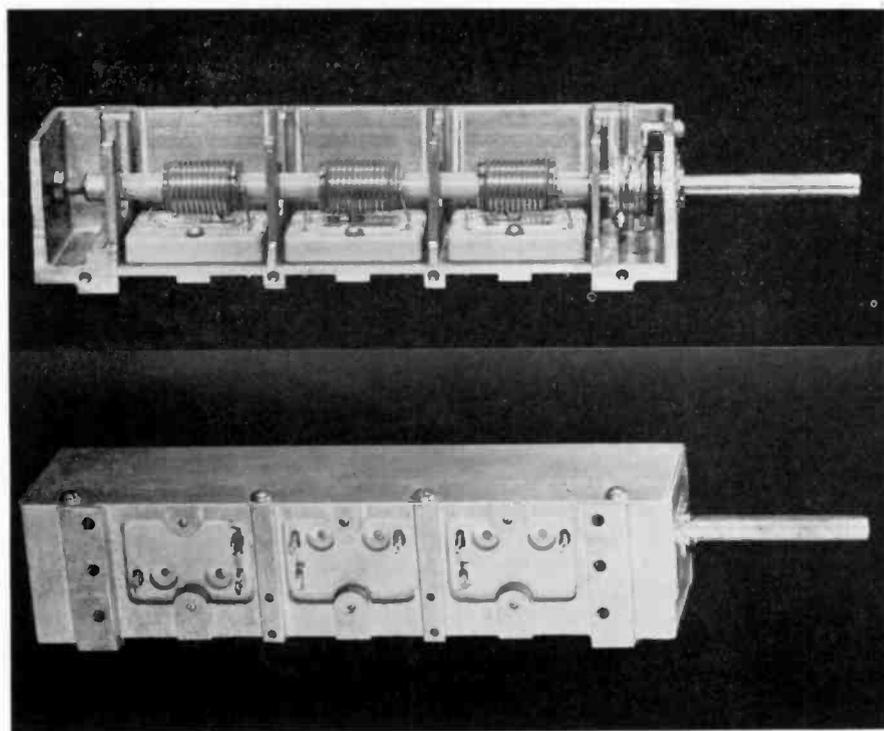
Victor engineers solved other problems such as satisfactory operation with the small antennas practical for airplanes, on airplane power supply, and under unusual handicaps of noise and vibration.

A wide variety of electron tubes for sending and receiving equipment also had to be designed. Portable field equipment iconoscopes, which were 1/3 the size of studio models, had to be further modified to withstand rigors of shock and vibration in planes and bombs. The Image Orthicon was used in some of the latest

airborne system, extending "Block's" usefulness in twilight hours and under difficult light conditions.

mallory-ware inductuner

Interesting development to simplify tuning in the thirteen separated channels is the Mallory-Ware Inductuner, a continuously variable device, which, without switching, will cover the entire frequency range from 44 to 216 megacycles. The band width across which the Inductuner operates covers the 13 television channels as well as the FM section of the spectrum. This



means that the DuMont receiver can be used in any section of the country without adjustment and that if allocations are rearranged within the 44-216 limits, receiver readjustment will not be necessary.

According to Paul Ware, inventor of the system, "The Inductuner is superior in gain, image suppression, uniformity of band width, oscillator stability, operating simplicity and economy. It is pre-adjusted and calibrated in assembly, assuring simplification of tuning and minimum drift in station selection." The Inductuner is standard equipment in all DuMont telesets. Expectations are that these DuMont input systems will be shortly available to other manufacturers of high quality FM and TV receivers.

general electric-rauland
theatre television demonstration uses micro-wave transmission for relaying

General Electric is the latest to demonstrate possibilities of nationwide theatre television. Micro-wave radio relay equipment was used to send a half-hour program from WRGB's television studio to a theatre

in Schenectady. This demonstration was in cooperation with the Rauland Corporation who provided the special theatre television projector used in the test. This projector is capable of transmitting a picture to an 11 by 15 foot screen.

Program, which consisted of live film presentations, was picked-up by the WRGB cameras and fed through coaxial cable to a special low-power microwave FM transmitter located on a tower near the studio. Transmitter output was then beamed by a directional transmitting antenna toward the theatre, where it was picked up by another directional antenna and energized by way of coaxial cable to a special FM picture receiver, which then fed the picture to the Rauland Television projector. Sound was transmitted from the studio by means of a radio link.

Though this was the first time that microwave relay equipment was used to feed tele signals to a large size theatre screen, plans are being formulated to extend the experiments over the radio relay network that connects Schenectady with New York.

Program originating at WRGB was carried by General Electric micro-wave radio relay equipment to the Civic Playhouse. Rauland television projector, at right, flashed the program on an 11 x 15 foot screen.

g-e colorimeter

Another improvement in cathode-ray tube receptivity was announced by General Electric with the development of a Photoelectric Colorimeter which standardizes with infinite accuracy the radiated color values of light. It is said that all G-E television sets equipped with this colorimeter will have absolute standardization of white light.

The device employs a system of color filters linked to photoelectric cells which are faster than the eye in color reception. Each of the color filters transmits the amount of their color value that emanates from the source. The resulting white light would show all colors in their true and related values, because the color white combines all colors in the spectrum.

The photo cells, which can transpose light into current pulses will send them out in proper ratio, which are then registered on an indicator dial. These readings are then checked against a color graph which is used to set the standard.



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patents

Two inventions in the field have won patents recently from the United States Patent Office in Richmond, one relating to a method of reducing undesirable shading signals and the other to a circuit for providing high unidirectional voltages.

signal generating system

Arthur V. Loughren, Great Neck, N. Y., won No. 2,396,865 on a signal-generating system (application for patent March 30, 1943; 15 claims allowed, assigned to Hazeltine Corporation).

By way of background, he explains in his patent that a conventional television system has a camera tube with cathode ray tube, photosensitive mosaic target electrode, electronic gun for focusing an electron beam on the target electrode, and means for scanning the target with the beam. In such an arrangement, an optical system establishes a charge distribution on the target electrode in accordance with an image to be translated, so that during the scanning operation video-frequency signal components corresponding to the image are produced in the output circuit of the tube.

This invention is based upon the fact that undesired spurious signals—the shading components—also are produced during the scanning operation along with the desired video-frequency components. If these are not removed, undesired shading appears in the final image. One component of these signals is caused by the return or rain-back of secondary electrons emitted from the target electrode during scanning operations; elaborate and expensive equipment has been devised to compensate for this rain-back by means of an artificial signal having frequency com-

(continued on page 39)

ADVERTISING

station rates and procedures show variations . . .
package shows in the works . . . commercial formats.

station activities

american broadcasting co.

Prize joker in the advertising rates and procedures being set up by the New York stations is the American Broadcasting Company's use of DuMont facilities.

ABC, actively interested in lining up commercial sponsorship, charges their advertisers only 50% of production costs, with no charge for airtime. On the other hand, the advertiser buying time on DuMont naturally has to pay for airtime plus full production costs. (ABC shouldn't have any trouble selling their time!)

Present ABC arrangements with WABD are for two half hour shows weekly, to the tune of \$1,250 for the hour's time. This special rate for broadcasters was instituted by DuMont last summer on the theory that it was a little too altruistic for one station to bear the costs of helping future competitors get tele experience.

ABC, needing the experience to back up their FCC applications, probably feels that they would have to pay for it anyway. Setting a "bargain" price on their commercial shows, is just that much more gravy from the financial end, plus a chance to line up advertisers at the initial round in the future competitive fight.

At present, Lockheed and Mars Candy Bars are definitely scheduled, with other advertisers reported at the interested if not dotted line stage as yet. According to Paul Mowery, television director at the net, they want agency help and cooperation, and either the agency producer or the ABC producer can call the signals to the WABD crew.

dumont

Although DuMont stated their rates a few months ago, a formal rate card listing contract prices is now being issued. (Schedule is reprinted here.) Particularly interesting is the policy in regard to rehearsals, with a minimum ratio of two to one. However where the ratio exceeds six to one, charges are set at one and half times the regular rate. According to Lou Sposa, program operations manager, higher rate is an attempt to prevent overtaxing of facilities for rehearsal. DuMont feeling is that a

good deal of the preliminary work can be done on the outside without the use of cameras and that the studio ratio of six to one should be sufficient for an hour show.

Present line-up with advertisers scheduled for showings includes Colgate-Palmolive-Peet Super Suds show through William Esty; Mueller Macaroni through Duane Jones; Alexander Smith Magic Carpet through Anderson Davis & Platt; Ben Pulitzer Creations produced by Loewi-Gamble; and time signals by Waltham through N. W. Ayer.

other stations lining up

With NBC and DuMont definitely on the record as to charges and procedures, other stations will soon follow suit. CBS' policies are being worked out but it is understood that the time charges, broken into various categories, will not differ much from the cost under their present policy of charging \$150 per hour for facilities use. Also in the works are package shows. "It's A Gift," which will return as a weekly feature, is a typical format for multiple sponsorship. Specially created set, by Jim McNaughton, is designed to display merchandise. Based on audience participation-stunt idea, program patter gives the emcee a chance to describe each "gift" as he helps the contestant choose what he or she wants.

WPTZ, Philco in Philadelphia, is also working on commercial procedures which will probably be released early in May. WBKB, while feeling that any predictions on purely commercial television in Chicago are a little previous right now, may also set up a rate card within a short time.

NBC readying two multiple sponsored shows

NBC's "Radio City Matinee," an hour show scheduled for Monday, Wednesday and Friday in the 1 to 2 slot, will be divided into six eight-minute entertainment blocks — or a total of 18 spots a week, any of which could be sponsored. Warren Wade, program manager, visualizes its format as that of a woman's magazine — combining sections on charm, home furnishings, beauty, child care, gardening, self-improvement, plus the fiction and entertainment features. A well known personality will play

hostess to the series, furnishing the connecting link between the various spots. Entertainment will be kept separate from the commercial, although some "how to do it's" may be included. Main problem he feels will be to test commercials to see how much the audience can stand and in what spots they should come. Certain products require a straight commercial plugs but they must be well balanced and in proportion to the entertainment.

Capitalizing on the success of the "Christmas Television Shopper," which scored sales of twenty-five \$28 sweaters at Brooks Brothers, and about \$400 of Hoffritz merchandise, to mention a few, NBC is readying a brochure as a come-on for continuance of this format to be retitled "The Shopper."

Original format will be maintained, with plug for each item limited to about 50 seconds. Model pantomimes its use against an appropriate setting — i.e. demonstrating household gadgets in the kitchen, modeling clothes or accessories in the bedroom, etc. — while an off-screen commentator describes the product and gives the store name. Show will probably run for ten minutes, five days a week. Time and talent costs will average around \$500 per show. This would mean that if the program was split up among 8 advertisers, cost to each would be about \$60 a spot, or approximately \$300 a week.

agency activities

Anderson, Davis & Platte's "Television Parade", pegged for the 12 to 1 slot six days a week over WABD, will probably get underway sometime in May. Original deal, as reported in January TELEVISION, is a multiple sponsored program with the agency acting as the production unit and selling 10 1-minute commercial spots during each program. Based on a thirteen week contract, with a minimum of two announcements per week, rate set is \$90 per minute.

Bob Emory, who produced the Brownstone Theatre series for WOR, is in charge of production. Programming format will be divided into ten

five-minute blocks of entertainment, and 10 one-minute commercials. Connecting link between the acts will be provided by one central character, who will, through ad libbing, lead into each commercial. Two sets will be employed — one for the entertainment portion, and the other as background for the commercial. One of Bob Emory's ideas on the sets is to place three 5' flats as in a Japanese screen effect, with a motif painted on front and back.

On the commercial angle, they will accept film or handle the commercial as the advertiser wishes. However, when requested, the sponsor can turn the product over to them for developing the plug, though that other agencies are not too much in favor of placing their tele advertising in the hands of a potential competitor — preferring to work with the station directly.

commercials

H. S. Barney, Schenectady department store, presented "Easter Preview," over WRGB. Fashion show used two sets — a customer's lounge and the models' dressing room. Major set was the lounge, with a scrolled picture frame opening at the left through which the models walked down the ramp to center stage. Sofa, chair and telephone table were the set furnishings before which the models pootered. Two customers and a fashion expert were seated on the sofa and patter between the customers and commentary by the expert was carried on while the model crossed the stage and went to the "mirror" at the right. This was actually another opening with a close-up camera behind it. Model's primping before the "mirror" resulted in good close-ups of the hats and handbags.

Dramatization was worked out to evolve a maximum display of fashion. Three afternoon dresses were shown, then the customers asked to see suits. Scene switched to dressing room showing models going over the racks of suits, holding two or three up to them and then finally selecting one. Action faded back to store with models' appearance. To introduce other fashion numbers, original customers left to try on suits and a mother and daughter entered. This gave the transition for mature and youthful fashions to be modeled. Same fade-out to dressing room and similar selection routine was gone through. Comedy touch was added by having an excited male window



Three television veterans, Johnny Venn, Gimsey Summers (now appearing with Walter Huston in "Apple of His Eye") and Jerry Boyar ride "The Magic Carpet" in the current Alexander Smith program over WABD. Agency is Anderson, Davis & Platte. Bud Gamble is directing and producing the ½ hour spot.

dresser rush into the dressing room — and rush right out again in a more frantic state than when he entered.

Opening and closing techniques were practically the same. At start

of program, credit slides giving the names of the models, writer and producer of the show and credit to H. S. Barney Company were half lapped over a picture of the first model posed in the picture frame. For closing number, model returned to frame and posed there as cameras dollied in on her and end titles were half-lapped over her image.

Commercial was introduced only by credit slides at beginning and end of program. Commentator at no time mentioned Barney's and no prices were given.

Store supplied the clothes, the commentator and the two models. Only five to six hours of rehearsal were given to the show. According to Edith Kelly, WRGB staff producer, this was not sufficient rehearsal as the models were not professional and should have had more time on camera rehearsals.

Famous Features Syndicate, in cooperation with WRGB, put on "The American Look," which tied in the recent Lord & Taylor ad campaign. Dramatization was built around an English war bride, who wanted to look like other American girls. Commercial was introduced at the beginning by showing her reading a Lord & Taylor ad on "The American Look," a still of which was picked up by the cameras. Scene then switched to inside the store and from then on no direct mention of Lord & Taylor was made.

Attempt was made to get away from the usual fashion show technique, by having the war bride try

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35 WEST 45TH STREET
NEW YORK 19, N. Y.
MOTION PICTURES • ANIMATION • SLIDE FILMS

on two of the dresses and examine two others on the hangers. Interesting touch was the insertion of a film sequence, shot by GE cameraman, showing an outdoor scene in which she had purchased. Fifteen minute skit, with a cast of five, was produced by Edith Kelly of the WRGB staff.

Alexander Smith's "Magic Carpet" are starting their third television year over WABD. Clara Dudley, their regular home decorator, will handle the commercial, this time using two miniature rooms, completely furnished, to show the correct and incorrect rug margin and furniture placement. This will come at the end of the show and run for about a minute.

Format combines film and live talent and depicts the adventures of a group of children who use "The magic carpet" to visit far-off lands. Bud Gamble, who is directing and producing the show, has developed some new camera techniques to achieve the cloud effect as the kids travel on their magic carpet over New York. Cut in to travelogue film picks up the story. Agency is Anderson, Davis & Platt.

Ben Pulitzer's creations are back on WABD with a schedule of thirteen shows. Commercial, which

will run a maximum of a minute and a half, will be on film and will be produced by Loewi-Gamble Productions. Titled "Ben Pulitzer Creations on Parade," animated movie will Ottoscreen narrator will describe the various fashion features. Concluding

commercial, also done on film, will show Ben Pulitzer giving a style note.

Opening number will be a variety show, but remainder of series will feature Jerry Jemail, Daily News In-much the same role as he does for the News.

**This rich new
field needs writers
NOW**

Television is no longer just around the corner. It's here—and mushrooming. You can grow with it. Television needs—and will pay large sums to—writers who know specifically how to write for television. *You can be one of them.*

Doug Allan is writer, director and participant on television's oldest and most popular regular show. "Thrills and Chills with Doug Allan." His clear, simple book tells you how to break into television, how to select and develop ideas, how to build programs. It also tells you about studio procedure, makeup, camera angles—every problem in television is made clear. Get this book now and cash in on the writing opportunity of the century. *Illustrated with photographs.*

**HOW TO WRITE
FOR TELEVISION**

by DOUG ALLAN

At all bookstores—\$2.75 or

E. P. DUTTON & CO., N. Y. 10, N. Y.

W A B D

•
air time rate card
•

live or film
(PER WEEK)

ONE HOUR	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS
1-12 weeks	300.	600.	810.	1080.	1350.	1440.
13-25 weeks	285.	570.	769.50	1026.	1282.50	1368.
26-51 weeks	270.	540.	729.	972.	1215.	1296.
52- weeks	255.	510.	688.50	918.	1147.50	1224.

HALF HOUR	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS
1-12 weeks	180.	360.	486.	648.	810.	864.
13-25 weeks	171.	342.	461.70	615.60	769.50	820.80
26-51 weeks	162.	324.	437.40	583.20	729.	777.60
52- weeks	153.	306.	413.10	550.80	688.50	734.40

film only

¼ HOUR	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS
1-12 weeks	90.	180.	243.	324.	405.	432.
13-25 weeks	5.50	171.	230.85	307.80	384.75	410.40
26-51 weeks	81.	162.	218.70	291.60	364.50	388.80
52- weeks	76.50	153.	206.55	275.40	344.25	367.20

NOTE: These rates subject to 15% commission to recognized agents—no cash discount.

participation service announcements using film studio

Less than two minutes.....\$30. each. No discounts except agency.

rehearsal time (minimum—2:1 ratio)

Studio A — 4 cameras and studio audience\$65. per hour (31-60 min.)non commissionable
 Studio B — 3 cameras\$50. per hour (31-60 min.)non commissionable
 Studio C — 2 cameras\$40. per hour (31-60 min.)non commissionable
 Studio D — 3 cameras and studio audience\$50. per hour (31-60 min.)non commissionable

NOTE: Rehearsal time over ratio of 6:1 will be charged at 1½ times the applicable hourly rate. Rehearsal time for fractions of half hours which exceed the scheduled period, will be charged at one-half the applicable hourly rate either straight time or overtime. Audition of film utilizing television system\$25. per half hour or portion thereof. Charge for audition facilities may be obtained from Program Operations Department upon request. Rates for remote origination may be obtained from Program Operations Department upon request.

scenery and properties

Art work\$5. per hournon commissionable
 Construction work\$3. per hournon commissionable
 Rental of flats\$1. per hournon commissionable

Charge rates for other properties may be obtained from Program Operations Department upon request. All programs subject to station program policies. All talks, programs, speeches, contests, continuities, etc., must be submitted in advance for review and are subject to DuMont approval of program content. In all time quotations, "quarter hour" means 14 minutes, "half hour" means 29 minutes and "one hour" means 59 minutes.

programming (Continued from page 27)

the subject and the statement that experts from Cornell could be invited for neighborhood demonstrations of landscaping by individuals or groups contacting local country agricultural agents.

WBKB goes in for education in social graces with their recently inaugurated series of dance lessons conducted by Frank Morgan, director of a leading Chicago dance instruction studio. Tele lessons include the

fine points of the waltz, rhumba, fox-trot and samba. Using one of the school's instructresses as a "novice," the dance master demonstrates each dance from its rudiments to its complications. Pauline Bobrov is producer — director.

NEXT MONTH: How to produce and direct a dance series — an inquiry into the headaches, limitations, surprises and rewards of television ballet . . . by Paul Belanger, CBS Dance Director.

WASHINGTON

cpa ban upsets plans . . . d. c. licensees getting set
. . . 27 tele withdrawals . . . 115,000 tele receivers
due . . . new applications . . . by **dorothy holloway**

cpa hold-up

CPA ban on construction may not have the adverse effect on new tele stations which was first feared. Indications are that freeze is more to relieve a bottleneck which can conceivably loosen up within a few months. Decision will be left up to local boards and the conditions in each community, as well as the effect such a stoppage would have on the reconversion program, will be determining factors in the final decisions. Of course war experience in dealing with local boards was not very satisfactory but general feeling is that, with exception of possibly a few extremely critical areas, freeze will ease off shortly.

Washington's four video permittees are not too concerned. They are confident either that efforts of the TBA and the NAB to get relief for the industry under WHP Order No. 1 will be successful, or that ways and means will be found to get on the air, come what may.

NBC, with all its equipment ready for installation at the Wardman Park Hotel site — and an option, at least, on the No. 4 video channel — is pretty well set to go.

The **Evening Star**, on the other hand, is still fighting for a chance at either the No. 4 or the No. 5 tele slots — tentatively earmarked for DuMont. The **Star** — in view of its newness to the field — was slated to get Channel No. 7.

When briefs went into FCC April 8, on the question of channel assignments, the **Star's** position was made crystal clear. Said company engineer Worthington Lent — "Neither transmitting nor receiving equipment will be available on channels above No. 6." Due to the CPA construction freeze, none of the companies with the possible exception of DuMont, Lent said, would be able to get into operation before fall. What's more, he added, no sets will be on the market before that time. Therefore, the fact that NBC now has equipment on hand should not be the all-important factor in FCC's decision on channel assignments. (Bamberger, tentatively given the No. 9 channel, stood pat and did not protest the FCC assignment.)

The **Star** may have to drop plans to build its own transmitter house on the American University campus and resort to renting a college building for its video equipment. Also out the window for the time being is the **Star's** dream of a new million-dollar Radio City building at 12th and K Streets, in downtown Washington.

Bamberger's plans for Washington television are still pretty much on paper. Given the No. 9 channel, the company faces the same problem as the **Star** — namely, the lack of equipment to operate in this portion of the spectrum.

Bamberger's biggest advantage here — its tower site — is also the company's biggest headache. Conceded one of the best of all possible locations — at 40th and Brandywine Streets, in fashionable uptown Washington — the company is now faced with continued opposition from local citizens' groups.

After the D.C. Zoning Commission approved the Bam-

berger site last month, local property owners grew, if anything, more vocal in their opposition. Result is a bill now pending before the House District Committee to outlaw erection of any radio towers in residential districts. The bill will no doubt die in committee, but is still getting space in the newspapers.

Another citizens' group urged the Zoning Commission to require sharing of tower sites in order to cut down the number of FM and video towers within the city limits.

DuMont — who won out when Philco withdrew from Washington — stands the best chance of getting on the air with commercial programs quickly — perhaps by July 1. DuMont's experimental outlet W3XWT broadcasts now each Wednesday and Thursday at 8 p.m. using government film shorts. And every other week or so, a special live show, featuring an interview with a Congressman or a news feature will travel over the coaxial cable to New York.

Although DuMont plans to go commercial here in July, it will program almost entirely for New York viewers. Reason is, of course, that there are a bare dozen sets in the Capitol — at FCC, the Press Club, some of the larger hotels. And DuMont won't have sets on the market before September 15, it is estimated. RCA or Farnsworth may do somewhat better.

As TELEVISION went to press, it looked like DuMont would get Philco's transmitter site in Arlington Va. — admittedly superior to its own downtown location in the Harrington Hotel. Philco already has approval of the Arlington Zoning Commission on the site. Only "fly in the ointment" under the CPA order was the Virginia Commission's whimsical insistence that the transmitter house be of "colonial architecture" to fit in with the Virginia landscape.

Already on the job for DuMont in Washington are: Leslie Arries, Manager of W3XWT; W. H. Sayer, Chief Engineer, formerly with DuMont Labs, at Passaic; Morris Barton, Assistant Chief Engineer and aides, Bob Harter and Bob Hester, both old-time Washingtonians.

Highlight of the DuMont TV operation here to date was the April 15 dedication of the company's new John Wanamaker studios in Manhattan. Philco, in a cooperative venture, also picked up the W3XWT showing and shot it on to WPTZ, Philadelphia over the Philco radio relay.

withdrawal epidemic

Whatever the reason, the past month has seen a rash of withdrawals from black-and-white television. The high costs of video, the "where and when" of color television, and now the civilian production administration building freeze — all are behind the slow-down in tv.

A few of the video applicants merely withdrew their bids and kept "mum" on the reasons. Still others like Scripps-Howard in Pittsburgh say they have no site and can't get one prior to the FCC's hearing date. Scripps, in pulling out of both Washington and Pittsburgh indi-

cated it might transfer its requests to other cities. Marcus Loew, which dropped out of Washington, gave distance from program and talent sources as reason for its eleventh-hour change of plans.

At press deadline, some 27 applicants had dropped out, with the prospect that a few more mugwumpers still would follow suit.

Still very much in the running, however, are 55 applicants about to come up before FCC in hearings. Another 60 applications are pending in FCC files, and four companies — DuMont, NBC, Bamberger Broadcasting Company and the Evening Star Broadcasting Company (WMAL) already have permits for Washington, D. C.

Here's the count of those who have pulled out:
WWL, Loyola University, New Orleans
Yankee Network, Providence, Hartford, Boston
Bamberger Broadcasting Company, Philadelphia
Scripps-Howard Radio, Inc., Pittsburgh and Washington
WCAE, Inc., Pittsburgh
KQW, Allegheny Broadcasting Company, Pittsburgh
WKY Radiophone Company, Oklahoma City
Unity Corporation, Erie, Pa.
Marcus Loew, Washington, New York
Utah Broadcasting Company, Salt Lake City
International Detroit Company, Detroit
WJR, The Goodwill Station, Detroit
WITH, Maryland Broadcasting Company, Baltimore
Philco Products Company, Washington
WGAR, Cleveland
Hearst Radio, Inc., Milwaukee
Eleanor Patterson, Washington, D. C.
Metropolitan Television, New York
E. Anthony & Sons, Providence
Cincinnati Broadcasting Company, Cincinnati
Filenes Television, Waltham, Mass.
Central Ohio Broadcasting, Columbus
M-G-M, Los Angeles
WHK, United Broadcasting Company, Cleveland, was on the fence at deadline.

fcc roundup

ESTP, Inc., St Paul has amended its bid for a commercial tele station to specify use of channel No. 5, rather than the No. 1 location . . . Warner Brothers Corporation, applying for Channel No. 5 in Hollywood, California, has changed its transmitter location and antenna system to give better coverage of the Los Angeles area.

Cowles Brothers Broadcasting Company now has a construction permit for a new experimental television station in Wheaton and outside the District of Columbia. Purpose is "to demonstrate the practicability of the CBS color" system and to assist in developing acceptable standards for the ultra-highs.

Hearing, originally tabbed for April 15-16 on requests of the Keystone Broadcasting Corporation and of WHP, Inc. for Harrisburg, Pa., has been moved back to May 16. The applicants asked for the postponement. . . . A second hearing on the applications of WGAL, Inc. and the Lancaster Television Corporation, both in Lancaster, Pa. has been moved back from April 18-19 to May 20 — also on request. . . . Meanwhile, a hearing scheduled for April 15 on Pittsburgh tele has been called off since only DuMont Laboratories, Inc. and Westinghouse Radio Stations are still in the market for black-and-white operation there.

The Western Reserve University of Cleveland, O. — moved into the tele picture this month as another college, Loyola University at New Orleans stepped out. Western Reserve's application was skeletal and bare of any details on engineering and program plans. But it was backed

by a sizeable budget and a vote of the College's Board of Directors overwhelmingly in favor of a college video station.

FCC's recent set-up for handling commercial television applications stipulates that conditional grants will not be issued where applications are incomplete. June 11th is the deadline for furnishing the additional information required.

Allowance is made for incomplete data on equipment when the information cannot be obtained from manufacturers, this information to be supplied as soon as available. However financial data or other matters which relate to the qualifications of the licensee, as well as the manner proposed to provide 28 hours a week of programming, must be brought up to date.

Licensees, whose applications are found incomplete at the time of processing, will be given 30 days to bring them up to date under the new Standards of Good Engineering Practice concerning Television Broadcast Stations (adapted December 19, 1945).

In order to give the Commission's Engineering Department an opportunity to study the issues involved in advance of the hearing, it is requested that sections of the application dealing with antennas, transmitter sites and coverage (including radials) be submitted at least ten days in advance of the hearings, using the new standards as a basis for all computations.

85 set makers — 115,000 tele receivers

Around 115,000 television receivers — alone and in combination with AM-FM units — will be turned off the assembly lines of some 85 set manufacturers in 1946, according to a survey released by the FCC. However, four "substantial" producers — including General Electric — did not report their figures.

farnsworth patents

Farnsworth Radio & Television Corporation — following the lead of RCA — has registered its patents with the U. S. Office of Patents and will license them "at reasonable terms." Farnsworth holds several important video patents, notably an image dissector reputedly useful for film pick-ups in the CBS-color system. Another patent is a money-saving gadget used in generating power voltage.

fcc "no comment"

RCA, CBS and DuMont rolled out the red carpet this month to give the FCC Commissioners and staffers a whale of a good time and incidentally to treat them to a "refresher course" in television.

At Princeton, FCC members saw RCA's new high-definition black-and-white and its color tv; at CBS, naturally, color was the staple fare. DuMont showed off its handsome Passaic laboratories but did not put on a tv demonstration for the Commissioners.

Once back in Washington, FCC Chairman Charles R. Denny clamped the lid on any "official" comment on the trip. Naturally, the FCC could not be in the position of plugging for one system over the other.

new applications

CLEVELAND, O.

western reserve university

Address—10940 Euclid Avenue, Cleveland
Officers—President, Winfred Leutner; V. P. Webster Simon; Secretary, Edward Bythin
Financing—University has several million dollar endowment and an annual budget of \$3,000,000

Kilocycles—not given
 Hrs. per wk. of operation—100 percent sustaining programs at outset
 Engineering Consultant—R. Morris Pierce, Consulting Engr.

Misc.—University organized in 1826; decision to file for tele made at a board of directors meeting last month and application prepared and forwarded by Barclay Leathem, Professor of Dramatics and Secretary Edward Blythm. University's balance sheet shows approximately \$23 million.
 Extension plans announced more than a year ago for experimental and educational tele work.

BALTIMORE, MD.

baltimore sun

A. S. Abell Co.

Address—Baltimore and Charles Street, Baltimore, Md.

Officers—Paul Patterson, Pres.; Henry C. Black, Chairman of the Board; Wm. Schmick, V. P.; Frank R. Kent, V. P.; Hamilton Owens, V. P. and Emmott Kavanaugh, Secretary.

Ownership—A. S. Abell Co. and family.

Estimated Costs

1. Vis. transmitter	\$22,500
2. Aural transmitter plus tubes	13,500
3. Antenna System	12,000
4. Studio Equipment	140,000
5. Studio Lighting	75,000

6. F & M Monitors	2,500
7. Land	
8. Building	
9. Other items	5,000

Estimated Total Costs \$203,000
 Estimated Operation Costs per month—\$16,000
 Cost estimate by—pre-war manufacturers' estimates
 Channel—#2

Kilocycles—54-60 megacycles
 Hrs. per wk. of operation—28 hours

Antenna

Height ground level—491 feet

Transmitter location—O'Sullivan Bldg., Baltimore, Md.

Power, aural & visual—5 kw; 5 kw

Population—1,220,691

Size of area—2,380 sq. mi.

Location of Studio—same as transmitter

Engineering Consultant—Worthington Lent

Equipment—RCA type

Lawyers—Hogan & Hartson, Cory Lockwood

Misc.—Co. has been publishers of the Baltimore Sun since 1837 and proposes a service in radio parallel-ing that given in the newspaper. Also has bids for a standard and fm operation in Baltimore pending at the FCC.

Station will service portions of Baltimore, Carroll, Howard and Anne Arundel Counties, Md.

equipment

(continued from page 33)

ponents related to one or both of the scanning frequencies. Other devices also have been developed to solve the problem.

This patent covers an automatic arrangement for effecting shading-component correction which does not require the attention of an operator. Means are provided for periodical interruption of the beam current of a cathode-ray type signal generating tube during the scanning of the target electrode. This interruption frequency is high compared with the highest video-frequency signal component generated.

high voltage generator

Harold T. Lyman, Milford, Conn., won No. 2,397,150 on a circuit for supplying high unidirectional voltages to the anodes of cathode ray tubes used in television apparatus (application for patent Aug. 18, 1943; 7 claims allowed, assigned to General Electric Company).

The high voltage generator covered by this patent may be constructed to occupy an extremely small space, and weighs little since it does not require a heavy iron core transformer. The inventor points out that satisfactory operation of a cathode ray electron discharge tube requires that the anode be supplied with very high unidirectional voltage, of the order of 7500 volts or higher, and this air core induction coil or autotransformer is aimed at doing the job with the least equipment.

one man's reflections (continued from page 22)

ing which gives so much character and interest to a properly illuminated scene. Such experts may be drawn from the motion-picture and theatre fields or again may be trained especially for television.

engineers

At the transmitting station there will be, of course, required the normal transmitter engineer who in most respects will have the same duties that are carried out by them in sound broadcasting transmitting stations.

Last, but by no means least, we come to the television service men. Television equipment will require a certain amount of checking by skilled men in order to maintain it in excellent condition in the home. If defects or trouble in operation develop, the set owners will insist on the prompt repair and restoration of his receiver to service. The competent and dependable service man in the television field is certain to reap a rich harvest in the years to come, both in the installation of the original antenna and receiver and also in the maintenance of a high quality operation.

In all of the preceding comments, mention might be made of the necessity for studying the labor-union situation into which a prospective worker desires to enter.

In some instances there are jurisdictional disagreements which it is hoped will be dissolved in the near

future. In any case, it is necessary for the individual proposing to enter most of the technical fields connected with television to study the labor organizations in that field and to determine which of these have jurisdiction over the particular activities or membership groups with which he desires to be associated. Among the unions that are involved are of course, the International Brotherhood of Electrical Workers (IBEW-AFL), National Association of Broadcast Engineer Technicians (NABET), International Alliance of Theatrical Stage Employees (IATSE), United Scenic Artists of America, the Associated Actors and Artistes of America (parent body of American Federation of Radio Artists, Actors' Equity and Screen Actors' Guild), American Communications Association, American Federation of Musicians (AFL), American Society of Composers, Authors and Publishers (ASCAP) (which is an association rather than a union), and the Motion Picture Film Editors and Screen Cartoonists.

summing it up . . .

To sum up, any individual desiring to enter the television field along technical lines should first take such additional training courses of specialized television nature as are needed to round out his present knowledge and to make him thoroughly capable of handling his selected and specialized field of television operations.

EDITORIAL

tele withdrawals

THERE's been too much coupling of the television industry with the broadcast industry. This has accounted for a good deal of misunderstanding particularly over the lack of enthusiasm of present day broadcasters to get into television and the number of recent withdrawals of television station applications. Television is too big a business for the great majority of broadcasters. An investment of half to a million dollars is a much larger sum than most station operators can afford to lay out for a new business. And an equally important factor is that even if the average station owner could raise the necessary money he probably wouldn't want to put it in television or for that matter any new business. After all it has taken him many years to build up his present profitable broadcast business. His thoughts are probably more on retiring than on pioneering new industries.

It probably would not fall short of the mark to say that with only a handful of exceptions the present applications from broadcasters are in the nature of a protective hedge against the possibility that television might very well some day make serious inroads on radio.

However, there were withdrawals from other groups besides broadcasters. The answer here mainly lies in the fact that it cost them little to file their application and when it came down to "put up or shut up," high costs and industry confusion over color were sufficient to scare them off.

The threat of a possible short obsolescence and the high cost are the two main factors which will continue to cause withdrawals. But then every new industry is faced with obsolescence and capital risk. As some drop out, others with fatter purses and stouter hearts will come up.

cpa construction ban

Discussion of the economic system of the country is usually out of the sphere of a specialized business paper. However when unsound tampering with the nation's economics affects a specific industry, as it has television, it's time for appraisal.

Television is a new industry which is heavily counted on for employment and new production. The heart of our economic system is production. Any artificial disturbance of production, particularly in this reconversion period, is a threat to the welfare of the entire country. Naturally every one is in sympathy with the urgent need for housing but we are even more so aware of the vital need of full employment. No production . . . no employment. No employment . . . no demand, and no demand means no production. It's as simple and obvious as that.

Freezing construction in a new industry, such as television, amounts to holding back production right down the line. That's why the appeal by the Television Broadcasting Association to the CPA for a lifting of the freeze is not that of selfish industry but an important stand which affects our entire national economy.

SALES

THERE'S a bit more to selling than a salesman's call. Obviously salesmen must be backed up. And in a new industry like television, this is doubly true. Each month TELEVISION Magazine follows up your salesman's call with sound, factual material which will aid the broadcaster, manufacturer, and advertiser prepare for television. We use the word *sound* because our editorial policy is to base our material on experience in the field rather than speculations and prophecies. Here's what some of our readers think of our editorial content:

"TELEVISION Magazine, in my opinion, is must reading for any individual striving to maintain contact with the broad television picture. Specifically, I like the effort made to present all phases of the industry. The material on programming is particularly good. The articles pertaining to the economics of the industry are also worthy of commendation. The material is timely, practical and styled for quick reading." — F. C. McPeak, McClatchy Broadcasting Company, Sacramento.

"It is a real pleasure to read such substantial reporting in contrast to the prune whip ballyhoo which — unfortunately! — too often prevails." — John Flory, Grant, Flory & Williams, New York.

"It's the only television magazine that gives straight forward news." — Walter J. Swenson, Paramount Pictures.

"Excellent — keep up the good work. Thought your March issue was tops." — Don McClure, N. W. Ayer & Sons.

"You are doing a fine job." — Jack Stewart, Don Lee, Los Angeles.

"At present it is *the* magazine of the industry." — Lee Cooley, Ruthrauff & Ryan.

"Nothing but favorable comments regarding the magazine come to my ears from members of our organization. The news and editorial contents seem to reflect a considered and informed opinion on the art and progress of television. Too many magazines dealing with that subject seem to be edited by what I call 'passionate pleaders'." — Earle G. Hines, General Precision Equipment Corp.

"I would like you to know that in my opinion, your magazine has, to date, covered an extremely difficult subject in a very commendable manner. I hope that you will keep up the good work." — Robert L. Coe, Radio Station KSD, St. Louis.

"In my opinion TELEVISION Magazine is filling a much felt need in the industry and is informative and interesting." — Garde F. Chambers, United Broadcasting Co., Cleveland.

"The magazine is swell and I read it from cover to cover." — Leonard Satz, Century Circuit, Inc., New York.

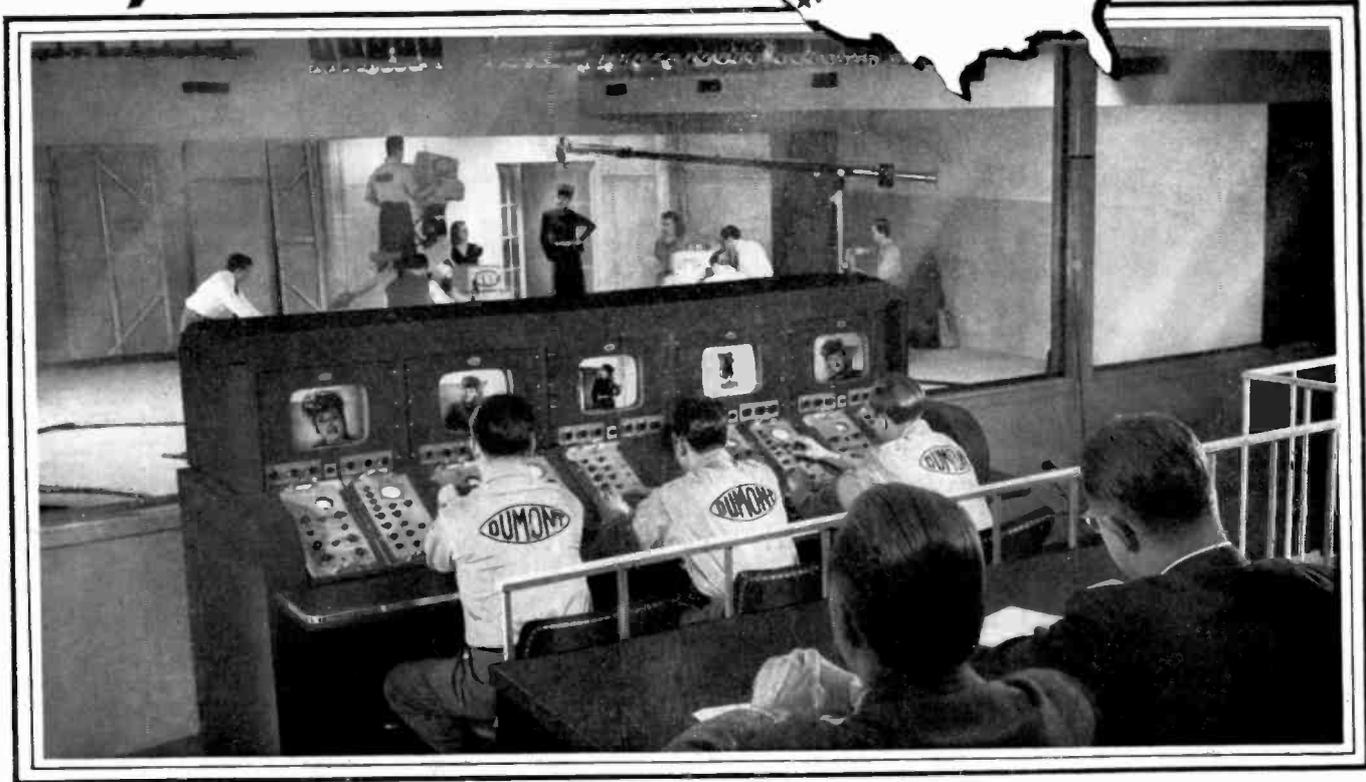
"A magazine such as TELEVISION is most helpful at the present time in order that the industry may be kept abreast of television developments." — L. C. Sigmon, Radio Station KMPC, Los Angeles.

LET TELEVISION Magazine do a sales job for you. Every month TELEVISION reaches the key executives in the industry, whether they be publishers, broadcasters, film companies, department stores, advertisers, agencies or manufacturers.

TELEVISION Magazine — 600 Madison Avenue — New York 22

IT'S DUMONT EQUIPMENT—

4 Out of 10



★ . . . once again in the newest, the largest, the first postwar television installation — Du Mont's John Wanamaker Studios



★ Station W6XYZ, Los Angeles



★ Station WBKB, Chicago



★ Station W3XWT, Washington, D.C.

When you consider television, you must think of Du Mont . . . for 4 of America's 10 operating television stations were designed and built by Allen B. Du Mont Laboratories, Inc. For no other company has pioneered the whole pattern of commercial station operation for the average station owner to follow. No other company offers the full backlog of its experience to prospective station owners.

See Du Mont equipment in action in the world's outstanding television installation, Du Mont's John Wanamaker Studios, in New York. Profit by Du Mont's experience in planning your television station. Write for our brass-tack booklet, "The Economics of Du Mont Television." We shall be very happy to mail it to you . . . please write on your firm's letterhead.

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