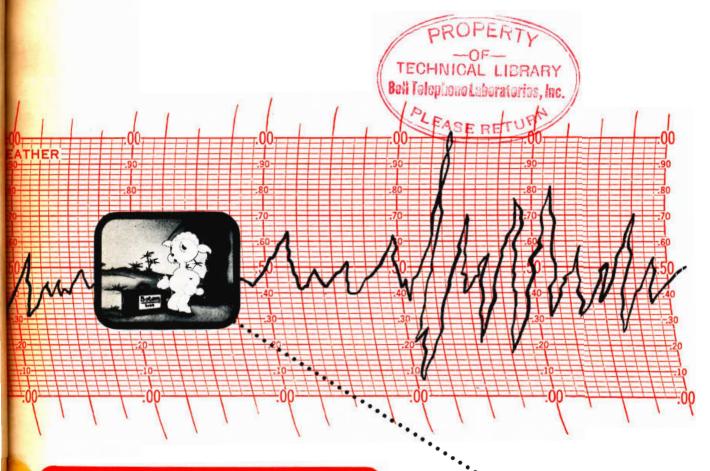
Television

January 50¢

THE BUSINESS MAGAZINE OF THE INDUSTRY



weather reports sell neckties

Who elements which make good television show salesmanship go into animated cartoon weather reports presented regularly on NBC Television.

Botany Worsted Mills.

The of the first advertisers to use television, Botany and its agency, Alfred J.

Werstein-Bert Goldsmith, Inc., have made Wooly Lamb, their weather reporter,

to of the most popular and successful salesmen in television today. Here again

troof that the combining of specialized skills of advertisers and agencies with

to of NBC Television experts, results in the building of successful program

thingues which sell, as well as service, television's rapidly expanding audiences.



$NBC\ Television$

***ITIONAL BROADCASTING COMPANY • 30 ROCKEFELLER PLAZA • NEW YORK

***A Service of Radio Corporation of America



Where buying habits begin . . .

What Hollywood does today, the world will see and imitate tomorrow.

Hollywood's Motion Pictures have made a small group of Hollywood people the most influential and emulated in the world.

Picture-minded Hollywood has its eyes glued on television—the crystal screen in which it hopes to see its future.

The People of Hollywood, these same people, who through purchase and use of an article can influence millions to do the same, are being reached daily by KTLA.

KTLA sells Hollywood
HOLLYWOOD sells the world



Joan Caulfield, who will appear soon in Paramount's "The Sainted Sisters."

Station KTLA 5451 Marathon Street Hollywood Klaus Landsberg — West Coast Dir.



National Sales Representative
George T. Shupert, 1501 Broadway, N. Y.
BRyant 9-8700

A SERVICE OF PARAMOUNT PICTURES Inc.

Television THE BUSINESS MAGAZINE OF THE INDUSTRY

NE CENTUC OF TELEVICION

Volume V, Number 1, Jan. 1948

13

contents

PRESENT STATUS OF TELEVISION	
An analysis of station operations, grants and applications; network progress; advertising; programming and manufacturing—by Mary Gankon	
ON LOCATION	23
A report on CBS' experiment with remote programming— by Worthington C. Miner	
WEWS, WTMJ-TV, WMAR-TV	28
Profiles on these three newspaper-owned stations	
MERCHANDISING	30
A new department giving facts and figures for the retail executive	
DEPARTMENTS	
TELESCOPE	2
Industry news, facts and figures	
TELEVISION MAGAZINE'S AUDIENCE RESEARCH Telephone survey shows audience preference for television over radio	6
WASHINGTON Spurt in to activity new applications—by Dorothy Holloway	8
ONE MAN'S REFLECTIONS by Dr. Alfred N. Goldsmith	22
PROGRAMMING PRIMER by Eddie Sobol	33
ADVERTISING 181 advertisers on television during December	35
PROGRAMMING Children's programs in Chicago, Washington and Detroit	41
TECHNICAL OPERATIONS	46

FREDERICK A. KUGEL Editor and Publisher

MARY GANNON
Managing Editor

DOROTHY HOLLOWAY
Washington Editor

Donald Horton, Ph.D.

Director of Research

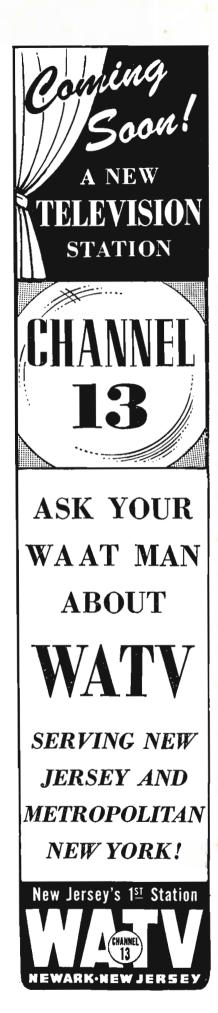
MELVIN A. GOLDBERG News Editor RICHARD ROSE
Art Director

WILLIAM E. MOORE Business Manager

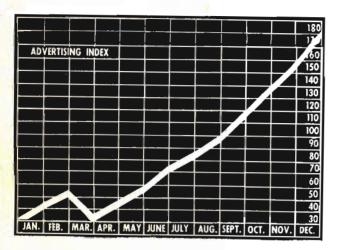
VYBKB's Mid-West Television Relay—by Arch Brolly

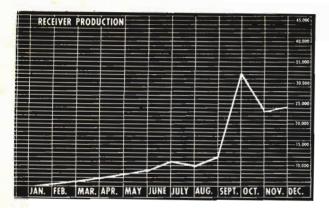
Monroe J. Weintraub Circulation Manager

Published monthly by Frederick Kugel Company, 600 Madison Ave., New York 22, N. Y. Single copy, 50 cents. Yearly subscription in the United States, its possessions and nations of the Pan American Union, \$5.00; in Canada, \$5.50; elsewhere, \$6.00. Entered as second class matter February 20, 1945, at the postoffice at New York, New York, under the act of March 3, 1879. Copyright 1948 by Frederick Kugel Company. All rights reserved. Editorial content may not be reproduced in any form without permission.



TELESCOPE . INDUSTRY NEWS IN BR





Production figures have been steadily rising, with, 15,728 in September, 23,696 in October and 24,134 sets manufactured in November. September production figure was actually 15,728 sets—with 16,991 sets manufactured previously but not reported—included in the total of 32,719 indicated on the chart.



Yankee president Dan Topping has no fear that television will cut down his gate. WABD will televise the games again this year, with P. Ballantine & Sons as sponsor. Signing the contract are (seated): Dan Topping, C. W. Badenhausen, president of Ballantine and Lawrence Phillips, director of the DuMont television notwork. Standing: Leonard Cramer, executive vice president of DuMont Laboratories, Kelsey Denton, vice president and account executive of J. Walter Thompson, Henry Gorski, ad manager of Ballantine.

ADVERTISING

181 advertisers sponsored programs over the 16 commercial st during December. This represents a jump of 22 over the November of 159. (For further details, refer to "Present Status of Television" 13 and "Advertising", page 35.) First of the New York stations to sign up next season's baseball

First of the New York stations to sign up next season's baseball was WABD when Ballantine bought the rights to the Yankee gam Walter Thompson handles the account. . . . Announcements are ex shortly on the Giants games over WNBT and the Dodgers games WCBS-TV.

NBC's rate card which becomes effective April 1st protects adverwho were on the station at the time of the announcement in December six month period. Increases are shown only for the transmitter which jumped from \$500 an hour to \$750. Three separate time clastions have also been set up with discounts allowable after 26 times. differentials apply only to the transmitter charge. Program facility remain the same.

CBS' recently issued rate card lists a charge of \$400 per hour filme and \$125 per hour for film facilities. Rehearsal on films is peg \$100 per hour. A flat charge of \$700 is made for use of remote p facilities.

RECEIVER PRODUCTION

RMA reports show 24,134 sets manufactured during November this number, 14,674 were table models, 4,178 were consoles and 5,2% radio-phonograph combinations. Total production for the first eleventrof the year amounted to 149,226 with estimates placing the total for at 175,000 sets.

Introduction of Emerson's 10" receiver retailing at \$269.50 is of gun in company's plan to eventually market a set for \$150. Emerson, has been maintaining a pilot production line on the first model whit tailed for \$375, is now set for mass production and hopes to be hitting sets a day by the end of '48. According to Dorman Israel, executive president, Emerson has been working on projection sets and a 120s screen, in a smaller package at a lower price is definitely in the for this year.

Philco is set to drop another bombshell in the receiver market they announce a new model to their distributors at the Palm Beach ing, January 19th. Rumor has it that the set will be a projection mode considerably lower price than anything previously offered. (For deta current receiver models, see "Merchandising", page 30.)

CIRCULATION

The number of receiver sets installed in each city has not as yellow are to be considered merely as a guide and not as a verified to

New York—94,000 Philadelphia—18,000 Chicago—12,000 Los Angeles—12,000 Washington—5,500 Baltimore—3,700 Detroit— 4,000
Schenectady— 1,200
Cincinnati— 1,000
St. Louis— 3,000
Milwaukee— 780

STATION STATUS

At press time there were 18 operating stations, 56 grants and 82 cations pending. (For breakdown of present and future stations at the of 1947, see "Present Status of Television", page 13. For details on cations filed last month, see page 9.) . . . Two other NBC affiliates at to open within a month, WBAL-TV, Baltimore and WTVR, Rich Also slated for early openings are WATV, Newark, WCAU-TV, CBS' delphia affiliate and WBZ-TV, NBC's Boston applicant.

Surge of applications means that hearings will have to be held FCC in sixteen cities—where there are more applicants than chavailable. These include: Akron, Allentown-Bethlehem-Easton, B Cleveland, Dallas, Detroit, Fall River-New Bedford, Harrisburg, Hamiami, Philadelphia, Pittsburgh, Providence, Toledo, Waterburg Wilkes-Barre.

(continued on page 4)

Comes to Cleveland!



Scripps-Howard has made Television a reality in Cleveland!

WEWS-Cleveland's first Television station—inaugurated regularly scheduled Television service on December 17th. Television interest, in this rich North Eastern Ohio market is at fever pitch. Sponsors already have seized the oppor-

tunity to convert Television's mighty impact into sales in the Cleveland area. But there are many choice programs available, from news and sports to variety, audience participation and household features. With interest high and introductory rates low there's an extra value for WEWS advertisers who come in early. Rate card available on request.

THE WEWS BUILDING • 1816 EAST 13th STREET • CLEVELAND 14, OHIO • SUperior 6111

SCRIPPS-HOWARD STATIONS

WEWS-TELEVISION, Cleveland WEWS-FM, Cleveland

WCPO, Cincinnati WNOX, Knoxville

FIRST IN CLEVELAND



RICHARD W. HUBBELL AND ASSOCIATES

Television Consultants

The only complete Management Consultant Service for the Operating Station, Licensee, or Applicant

- OVERALL PLANNING
- ECONOMIC AND FINANCIAL ANALYSIS
- ENGINEERING CONSULTATION
- DESIGN AND CONSTRUCTION
- PROGRAMMING
- SALES PROMOTION
- PUBLIC RELATIONS

Industry-wide experience and successful critical judgment brought to bear on your consolidated operating statement and your overall operation, by:

RICHARD W. HUBBELL
ALFRED N. GOLDSMITH
THOMAS H. HUTCHINSON
ROBERT JEROME SMITH
and their staff.

RICHARD W. HUBBELL
AND ASSOCIATES
2101 International Building
Rockefeller Center, New York 20, N. Y.
Circle 6-1750

TELESCOPE

(continued from page 2)

WE QUOTE . . .

Television as a \$500 million dollar industry for 1948 is the forecast of Frank E. Mullen, NBC executive vice-president. Of this amount, \$10 million will probably be spent for television programming alone, by advertisers and telecasters . . . Jack Poppele, WOR's vice-president in charge of engineering and president of TBA, estimates that the public will spend three-quarters of a billion dollars on television sets in the next two years. He foresees at least 2 million receiving sets in use by December, 1949 . . Larry E. Gubb, chairman of the Board of Directors of the Philco Corp. predicted that \$5 billion dollars will be spent for building and equipping television stations and networks and for the purchase of television received during the next few years. He further estimated that receivers produced during 1948 will have a retail value of \$200 million dollars.

SPORTS ATTENDANCE

H. Jamison Swarts, graduate manager of athletics at the University of Pennsylvania and president of the Eastern Intercollegiate Football Association, recently reported to an association meeting that "television seems to have an effect of decreasing the gate." This, in spite of the fact that Pennsylvania has reached one of its highest season attendance figures in its history. Mr. Swarts doubted, though, that a ban on television by the colleges would be the answer. Instead he recommended a study to determine on what basis the colleges would be justified in permitting telecasting of their football games. . . . It's pretty apparent that the buyers—stations and advertisers—will have to check attendance figures quite closely before falling for the great and, in almost all cases, mythical drop in attendance.

In contrast to Mr. Swarts' attitude is that of Dan Topping, whose New York Yankee games are being televised again this season by WABD and sponsored by Ballantine. Mr. Topping flatly stated that he believes television will boost interest in—and consequently attendance at—baseball games.

And further evidence to bolster television as a box office aid to sports was offered by WBKB's Captain Eddy to the National Collegiate Athletic Association. Eddy submitted a letter from Fred Kohler, who stages wrestling matches at Midway and Rainbo arenas, Chicago, stating that attendance records on file with the Illinois State Athletic Commission show a 100% increase in his receipts during 1947 as contrasted with a comparable arena whose non-televised boxing showed a loss during 1947.

STRAWS IN THE WIND

Probably all the press associations and news services, as well as news reels, are singing "Lead Kindly Light" these days. For it's obvious from the new plans and announcements that they are all still groping for a new service that s video-wise and still economically sound.

UP feels that for spot news coverage their telephoto stills on file strips is the answer in view of present economics.... AP have an extensive newsreel service ready but such things as how much the broadcasters are willing to spend and how much AP is willing to shell out will probably be determined at their January Board of Directors meeting.... INS, with their Telenews deal set and their wirephoto service for stills as well at their ticker tape, are making pitches on all services to the advertiser at well as the stations.... Universal and Paramount are well out of the talk stage with their own newsreels. And, of course, many of the stations have their own newsreels for local coverages.

Typical Bill Eddy idea is the new \$40 an hour network offer for WBKI programs utilizing the South Bend to Chicago relay line, which is soon to be extended with Toledo probably the next leg to be added. In the face of past reasoning and experience in network operations, there are many hold in the plan. But then it's a new industry and Eddy, rumor has it, has never heard of such words as conventional.

Significant of things to come as far as Hollywood films are concerned is NBC's tie-up with Jerry Fairbanks. Fairbanks will make all types of open end films exclusively for NBC.



On November 13, the Bell System demonstrated its new experimental radio relay system between New York and Boston, bringing television within reach of vast new audiences.

The tower you see here is part of it. It's one of seven similar structures which relay microwaves between the two cities, carrying television programs with high fidelity. This new system will, of course, be used for the transmission of Long Distance telephone calls and radio programs.

Used in conjunction with the Bell System's coaxial cable, the new radio relay system now makes it

possible to bring television to a potential audience of some 25,000,000 people along the eastern seaboard. And already work is under way on additional Bell System radio relay projects which will link New York and Philadelphia and extend west all the way to Chicago.

The Bell System may be relied upon to provide the most efficient, dependable facilities for the transmission of communications.

BELL TELEPHONE SYSTEM



TELEVISION MAGAZINE AUDIENCE RESEARCH

Television Magazine's Research Bureau is conducting the country's only independent continuing survey of the television audience. It reports the findings of a telephone survey of completed calls to a scientifically controlled sample of 200 home viewers. This sample is selected from the Bureau's file of 10,000 set owners, the only representative cross-section of television receiver owners in the New York viewing area.

ERE are the results of a telephone survey conducted by Television Magazine's Audience Research Bureau. A sample of 200 home viewers was selected from Television Magazine's file of owners in the New York viewing area, and interviews were conducted from December 18th to December 24th. An attempt was made to get an even distribution of men and women. Actually, there were 43% men and 57% women.

As in the previous survey (Television, Nov. 1947), an effort was made to get some indication of program preferences of television audiences in the New York area, and to determine which sponsors of television programs are most readily recalled. In addition, it was thought worthwhile to investigate the degree to which television viewing supersedes radio listening.

Ford and Gillette Most Frequently Mentioned; Kraft and Lucky Strike Next

Once again respondents were asked to name the sponsors that come to mind when they think of television. Not more than three sponsors were recorded and if fewer were mentioned, interviewers were told not to press. (An average of 2.2 sponsors were named by respondents.)

Here is a list of the ten sponsors named most frequently. The figure after each sponsor's name represent the percentage of the 200 respondents who named that sponsor. They will not equal 100% since respondents were allowed to make multiple choices.

Sponsors Most Frequently Mentioned

	% of responde
Ford	43
Gillette	
Kraft	24
Lucky Strike	21
American Stores	
Sanka Coffee	8
Fischer Baking Co.	7
Botany	6
Du Mont	6
Jay Day Dresses	5
041 15	1 1 Ct 1 1

Other advertisers mentioned less often but by at least 2% of the respondents were Borden's, Bulova, Chevrolet, Elgin, Jay Jay Jr., Kelvinator, Knox Hats and Strauss Stores.

Sports and Plays Most Popular

Respondents were asked to name their "favorite television program" and the program they liked "next

Ford and Gillette lead . . . two-third prefer television to radio at all times

best". Sports are the most popular of the programs of television, although plays are not very far behind. A in the last survey, the Kraft show was mentioned mos often specifically as the favorite program. When specific sport such as boxing, football or wrestling was mentioned, the answer was included under the genera term "sports". However, in the case of plays, if a spe cific program was mentioned it was recorded by name if the respondent mentioned "plays" without reference to a particular program, the answer was assigned to the category, "plays, unspecified". Here again, multiple answers were allowed and therefore the figures will not add up to 100%. For the same reason, the addition of the various "drama" categories will not give the true percentage of the respondents who prefer plays Here are the most popular programs in order of frequency.

Favorite Programs

%	of resp
Sports	
Kraft Theater	25
Movies	20
Plays, Unspecified	1:
Guild Theater	15
Small Fry	
News	
Author Meets Critic	
Live Talent and Variety Shows	4
Music	5
Birthday Party	
Travelogues	

More Plays and Movies Wanted

Respondents were asked to name the programs of types of programs they would prefer to see on television if they were given a choice. The answers were for the most part grouped into categories. Multiple choices were accepted and therefore the percentages add up to more than 100%. Here is a list of program types that viewers would prefer to see on television broken down according to the sex of the respondent. It may be noted that respondents want more plays and movies and that many asked for "good" and "better" movies.

Preferred Programs

		Percent of	
	Men	Women	Total
Plays	31	52	43
Movies	43	37	40
Sports	40	14	26
Live talent and variety	23	11	16
Discussions and Forums		15	12
Music	-	7	6
Children's Programs	4	3	3
Travelogues	1	4	3
Book Reviews		3	2
Opera		1	1
Fashions		2	1
Cooking Programs		2	1

Two-Thirds Prefer Television To Radio at All Times

In answer to the question, "Are there any times when there are television programs being broadcast

(continued on page 45)

How KSD-TV Is Promoting Sales for TV Dealers

KSD-TV, the St. Louis Post-Dispatch Television Station, has launched an extensive campaign to help dealers in the St. Louis area sell television receivers.

Media includes direct mail, full pages in local magazines, streetcar and bus cards, KSD courtesy announcements and a minimum of 500 lines of display advertising each week in the Post-Dispatch.

Purpose of the campaign is twofold:

First, to supplement dealers' and distributors' own efforts with copy-theme stressing advantages of television ownership, and urging readers to visit dealers for demonstrations.

Secondly, to keep interest in television at maximum pitch as part of KSD-TV's general plan to maintain the St. Louis area as the nation's NUMBER ONE TEST MARKET FOR SELLING BY TELEVISION.

For details regarding schedules and availabilities, write or call KSD-TV or Free & Peters, Inc.

January, 1948

WASHINGTON

Spurt in TV activity . . . Congressmen eye tele . . . round-up-By Dorothy Holloway

1948 is being widely heralded as the year in which television will prove itself as the radio medium of the future. But, judging by the swell of new television applications -reaching FCC at the rate of almost two a day as the old year rang out-tv's sales job, so far as the broadcasters themselves were concerned, was a "fait accompli" in the closing months of '47.

When pinned down, FCC men here are wont to ascribe the recent boon in television applications to

four things:

1. RCA President David Sarnoff's demonstration of tv at Atlantic City and his grim warning that broadcasters should get into tele here and now-if, for no other reason, than for "life insurance" protection.

2. The proposal to nip off the No. 1 video channel roused some broadcasters who were "making haste slowly."

3. Influx of tele-minded newcomers like Empire Coil Company, New England Television Co., etc. It is pointed out, for example, that Herbert Mayer, President of Empire Coil with his four bids in Hartford-Waterbury, Pittsburgh, Cleveland and Boston, sparked a total of 18 other applications in these four communities. How? Simply by applying as an out-of-towner and rousing the local broadcasters to the realization that a single channel remained in their markets. Result was all of the hometown broadcasters-each of whom had been waiting for the other to make the first move-rushed to get a bid on file. (Empire has filed its fifth bid for Niagara Falls.)

4. Bullishness of Washington lawyers and engineers is playing a large role in stimulating applications, just as their concern a year ago during the CBS color battle was responsible for many ty withdraw-

Providence In Arms

Meanwhile, competition for spectrum has fomented a real battle in Providence, R. I. Cherry & Webb Broadcasting Co., licensee of local WPRO, last month called on the FCC to set aside a grant or the town's only channel to the Outlet

Company, which has held a permit for WJAR-TV for more than a year, and according to Cherry & Webb, done little else. WPRO claims it is ready to move ahead immediately, will get its station on the air within the authorized construction period.

In the Public Eve

It was a warm, drowsy afternoon in the old Senate caucus room. Members of the Senate Foreign Relations Committee drooped in their chairs as they listened to Secretary of State George Marshall make his first urgent appeal for interim aid to Europe.

Senator Tom Connally, senior solon from the Lone Star State, began to nod and finally, following an age-old tradition in the upper House, dropped his head on his chest and began to snore gently. But this time his slumbers did not go undisturbed. On his left, Senator Arthur Vandenberg roughly jostled his elbow and pointed a warning finger to the television camera.

The days of napping were over. No longer could Senators take their ease at important committee hearings. For this time, television was covering the news. The Marshall hearing was a landmark in television-the first Congressional Committee session ever to be telecast live. It was also a milestone for the Senators who began to realize for the first time a few of the obligations of what lawyers would undoubtedly call "televisees."

Since that historic date, televising of Congressional sessions-both on film and live pickups-has come to occupy an important place in Washington originations. With the coming year, television is expected to play an even more important role in reporting and perhaps, even shaping, the politics of Capitol Hill.

For example, this month The Evening Star station WMAL-TV has arranged live telecasts of the House Labor Committee sessions with James C. Petrillo and movie mogul Cecil B. DeMille. The same station has an informal commitment from the House Committee on Un-American Activities when the hearings on Communism resume this month. The telecasts will be networked out of Washington and seen via the coax over WMAR-TV, Baltimore, WFIL-TV, Philadelphia and WCBS-TV, New York City.

Solons Eye Tele . . .
The legislators frankly admit they are intrigued with television. Walter Compton newscaster for DuMont's WTTG; Bryson Rash, special events director for WMAL-TV and Bob McCormick, newsman for WNBW-NBC say an increasing number of them are actually soliciting time on the air.

For example, when a Senator has been given some fancy charts which prove his favorite thesis, his first thought now is to get them-and himself-on television. And that, with only 5,000 sets in the Washington area. Significantly, a large share of the House and Senate members are listed among D.C. setowners and they confess to getting a great kick out of seeing each other on video.

Cooperation Or Else?

Whether to pool or not to pool? This is a big question now worrying Washington video stations in covering the Congress. All telecasts from the White House are handled cooperatively, but on Capitol Hill, the problem is slightly more complicated.

Some tele producers believe all "public service" shows of this kind should be automatically pooled and handled by stations on a rotating basis. They point out each pickup costs several hundred dollars and diverts cameras and crews from other uses. However, when an enterprising tv newsman digs around for hot news and gets first call to cover a top hearing, he is not always too happy about letting the other stations reap the benefits.

The Congressmen themselves prefer pooling and may make it at least permissive if and when they get around to laying down rules for tele coverage. That way they get the widest possible coverage and at the same time are not annoyed by too many cameras and trailing wires in the committee rooms.

Right now, WMAL-TV is the only station in town with a power generator — an absolute must in handling live pickups from the House or Senate. If, as some tv men are suggesting, only those stations be permitted to get in on a pooled telecast who have equipment on hand to handle it themselves, the other stations in town will have to get hold of gasoline generators, or let WMAL-TV call the plays on coverage of Congressional hearings.

On the FCC Front

Several problems are delaying FCC's decision shifting the No. 1 television channel to non-broadcast users. For one thing, the Commission is seriously concerned about providing some low-band tele channels to the smaller towns. Its allocation plan now earmarks spectrum only for the top 140 markets. A half-dozen requests are on file for the lesser cities.

The Communications Act provides specifically that FCC shall make an equitable distribution of radio service among the several states. With a limited number of

video channels this is a tough assignment, and one which becomes more difficult with the loss of the No. 1 channel.

Then too, FCC is dickering with Canada on assignment of border tv stations. It is also desperately searching for channels for Trenton and Bridgeport but is pessimistic on this score.

Postscripts

Paramount lawyers have asked for and obtained postponement to March 1 of FCC's scheduled hearing on Paramount's ownership and management interest in the Allen B. DuMont Laboratories, Inc. Issue of Paramount control of DuMont will be aired in consolidated hearing with other applicants for Boston, Cleveland and Detroit. Paramount subsidiaries—New England Theatres—is bidding in Boston; United Detroit Theatres for Detroit and DuMont is in the race for Cleveland.

APPLICATIONS

If there was any doubt who were to be top dogs in television that doubt has been definitely dispelled by the latest batch of tv bidders. For newspapers are outnumbering other applicants in a ratio of three to one.

Here's the count and it's an impressive one: Of the 18 stations actually on the air, seven are newspaper-owned. At press time, 48 powerful newspapers are represented among tv bidders. Publishers are going into television with an enthusiasm that has outdistanced any mustered earlier for FM.

Among the new newspaper applicants are: the Buffalo Courier-Express; the Boston Herald-Traveler; the Kansas City Star; the South Bend (Ind.) Tribune; the Dallas Morning News: the Akron Beacon-Journal; the Cincinnati Times-Star; the Cox papers in Dayton, Miami and Atlanta: the Atlanta Constitution: the New Orleans Times Picayune; the Allentown (Pa.) Morning Call & Chronicle; and the Reading (Pa.) Eagle, etc. Most of the large-town papers, including subsidiaries of the Hearst and Scripps-Howard chains, are now within the tv fold.

TV Applicants

As 1947 drew to a close, new station applications were reaching the FCC at the rate of eight to 12 a week. Recent bids include:

Akron, O.: Allen T. Simmons, owner of WADC put in a bid for

the no. 11 channel, earmarked a \$197,000 for plant and another \$15,000 a month to deliver a program service. His bid was immediately followed by a mutally-exclusive request from WAKR for the same channel in Akron. WAKR is partially owned by the Akron Beacon-Journal.

Allentown, Pa.: WSAN, in which the Allentown Morning Call & Chronicle holds a minority interest, entered the first bid in the town. Philco Corporation has also filed an application, stating that this "represents a logical extension of the service offered by WPTZ in the Philadelphia area to neighboring communities." These two bids, with the one from Easton (see page 40), means a hearing to determine the licensee for the one channel assigned to the Allentown-Bethlehem-Easton area.

Bakersfield, Calif.: Pearl Lemert, former secretary to radio pioneer Lee DeForest and widow of electronics engineer Lt. Comdr. Ralph D. Lemert, seeks the No. 10 channel. She expects to get the station on the air at a rock-bottom cost of only \$68,000, to spend no more than \$3,000 a month on operating costs. Since town is not in 140 top markets, FCC has made no specific allocation, but indicates a channel is available.

Binghamton: Clark Associates, Inc., operators of WNBF, a CBS (continued on page 40)



Washington Television Set Owners.

BEGINNING
JANUARY 1st

THE EVENING STAR TELEVISION STATION

WMALTV

Washington's most powerful television station

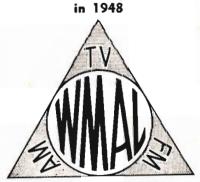
CHANNEL 7

becomes Washington's FIRST and ONLY

DAY-A-WEEK STATION

telecasting

TOP TELEVISION ATTRACTIONS EVERY NIGHT



EVENING STAR STATIONS WASHINGTON 5, D. C.



NBC NETWORK TELEVISION IS OPEN FOR BUSINESS.

This is NBC's report to the nation, published in 39 newspapers of nineteen cities from coast to coast, early in January.

1948 is the year when NBC sets out to duplicate in the television field its widely known superiorities in sound broadcasting: the finest affiliates and facilities, most popular programs, and greatest audiences.

We reproduce the ad's message here, with an invitation to advertisers, agencies, and stations to join us in this development of the world's greatest means of mass communication—and the most effective sales medium yet devised.

1948 Television's Year

Television becomes a widening reality in 1948. An exciting promise is now an actual service to the American home. After twenty years of preparation, NBC Network Television is open for business... When the Radio Corporation of America formed the National Broadcasting Company in 1926, its purpose was to broadcast better programs in the public interest—and that purpose continues to be its guiding policy.

Today, twenty-two years later, NBC has the most popular programs in radio. Outstanding in its contribution to the public welfare, the National Broadcasting Company has served the nation in war and in peace. Now, it has added a new service—Network Television—in the same spirit as that which first moved its parent company: public interest. NBC, in pioneering and developing this great new medium of information, news, entertainment, and education, is fully aware of its responsibility... In 1948, NBC offers to the public the greatest medium of mass communication in the world—Network Television.

NBC's TELEVISION NETWORK

In the East, four stations now make up the new NBC Television Network: WNBT, New York; WNBW, Washington; WPTZ, Philadelphia; and WRGB, Schenectady. WBAL-TV, Baltimore, and WBZ-TV, Boston, will be on the air shortly as NBC's fifth and sixth television affiliates.

In the Midwest, three NBC affiliates are independently engaged in telecasting operations: KSD-TV, St. Louis; WTMJ-TV, Milwaukee; and WWJ-TV, Detroit. It is anticipated that within the year these stations will be carrying network television programs originating in Chicago, where NBC will open its station. In addition, NBC will construct a station in Cleveland.

On the West Coast an NBC station is under construction in Los Angeles. It will serve as a focal point for the establishment of a western regional network.

The plan for 1948 and 1949: To add ever-increasing numbers of affiliates to these three regional networks, culminating in a coast-to-coast television network.

TELEVISION STATIONS

Today, nineteen stations are engaged in television operations throughout the country.

In addition to the stations now telecasting fifty-four have received licenses and sixty-four more have applications pending.

Total: 137 stations in actual television operation, being constructed, or waiting for efficial approval from the Federal Communications Commission.

We confidently expect that the same NBC-affiliated stations which pioneered sound broadcasting will take the lead in bringing this great new medium of sight and sound to their communities.

THE TELEVISION AUDIENCE

One year ago there were 8,000 television receiving sets in the country. Today there are 170,000. Estimate for December, 1948: 750,000 sets. With multiple viewers per set, NBC Network Television programs will be available to an audience of millions.

TELEVISION PROGRAMMING

Hundreds of thousands of viewers will remember these recent NBC Television programs among many others equally outstanding.

N DRAMA .

Kraft Television Theater is the first regularly sponsored dramatic series on NBC Television.

The Theatre Guild series brings the greatest art of the New York theatre to viewers distant from Broadway.

On the American National Theatre and Academy series, comedy, drama, farce—the whole scale of the theatre—is brought to viewers as it is played.

IN SPORTS .

NBC Network Television has pioneered in bringing major sports events to its audience—from the exclusive broadcasts of the Joe Louis championship fights against Conn and Walcott to the World Series games of 1947. Today, one-quarter of NBC's current television schedule is devoted to sports.

N SPECIAL EVENTS .

The Presidential Conventions in Philadelphia this coming summer will be comprehensively covered by mobile units of NBC's Television Network, bringing the faces and voices of political speakers into thousands of American homes. The campaigns that follow will receive equally emphatic coverage.

Since the televising of President Roosevelt's speech at the World's Fair in 1939, special events television has risen from the status of a novelty to the position of a significant communications reality.

NBC's PROGRAM SCHEDULE . . .

In addition to extra hours for news and special events, a wide variety of programs can now he viewed on the new television network. Here is the current breakdown of each week's programming: 7 hours for women's programs

7 hours for sports events

31/2 hours for variety shows

3 hours for dramatic presentation-

3 hours for children's shows

2 hours for educational programs 1½ hours for quiz and round-table shows

Two months from now the number of telecast hours will jump from twenty-seven to thirty-five a week. Still more hours will be added as the number of receiving sets increases and more stations join the network.

TELEVISION AND THE AMERICAN ECONOMY

ADVERTISING

Like standard radio broadcasting, network television will depend for the expansion of its facilities and programs on advertising. As advertising has built the wide range of radio's broadcasting schedule, so it will make possible an increasing wealth of fine programs on television.

Today, 18 of the country's large advertisers are sponsoring NBC television programs—about half of them on the entire television network. Some two hundred other advertisers are currently sponsoring programs on the twenty-odd individual stations throughout the country.

ECONOMIC FORCE

It is NBC's belief that, within a few years, more than a quarter of a million people will be employed in the manufacturing and telecasting operations of the husiness alone. Available estimates point to television as a half-billion-dollar business by the end of this year. This new industry will grow in size and service with the years.

THE FUTURE

NBC's new eastern television network is only the beginning. But it is the beginning of a working reality. 1947 marks the end of television's interim period. 1948 signifies the appearance of television as a new force in the United States. The greatest means of mass communication in the world is with us.

NBC Television

NATIONAL BROADCASTING COMPANY, 30 ROCKEFELLER PLAZA NEW YORK A Service of Radio Corporation of America

"Mr. Chairman...we report Progress!"



RIGHT NOW, before we get any deeper into 1948, we're going to sit down, catch our breath and take a look at the 12 months just passed.

Commercial sponsors being one of the nicest things about television, we're very happy to pass on the Sales Department's report that a year ago we had six customers and as of December 1st the number stood at 32. Since then, Barbey's, Inc. on Friday evenings, the new Heinel Motors Sunday night show, Snellenburgs Mummers Parade, Bulova and Schaffer time signals bring the total to 37. If you'll let us cheat a little and include Gretz Brewing who will

Scrap Januar that n

take over "Sports Scrapbook" on January 15th . . . that makes 38!

Skipping around during the year, last April the WPTZ mobile unit pitched

their tents at Shibe Park for both the A's and Phillies' home baseball games. Six months and 138 games (all sponsored) later they came out with more

experience in pro ball telecasting than any other broadcaster.

We didn't do too badly in football either—all the Penn home games for the eighth consecutive year . . . the



home games of the Philadelphia Eagles . . . the Dobbins Vocational games at Shibe Park . . . the Frankford-Northeast Homecoming Game. In fact, one weekend

WPTZ brought to the Philadelphia audience the Penn-Cornell game, the Army-Navy classic and the all-important Eagles-Steelers battle. Incidentally, all but three games during the season were sponsored.

Also in November we defied the Law of Gravity and a few established principles of engineering by successfully taking the television cameras up in a plane to cover a Naval Aviation Air Show.

Maybe in some small measure we helped establish television as an advertising medium during 1947 by develop-

ing \$12,000 worth of direct sales from six budget programs for Rusoff Furriers . . . by pulling close to 2500 letters and cards from a single bubble gum offer ... by selling Gimbels out of stock on various houseware items time after time . . . by coming up with one success story after another throughout the year. Somehow we have the feeling that this is tied pretty closely to the last industry report we saw which showed WPTZ with more program hours on the air... more commercial sponsors and a higher percentage of commercialto-sustaining time than any other television station in operation.



This not only is most encouraging to us but, even more important, we think it should be most indicative to advertising men who are considering television for 1948.

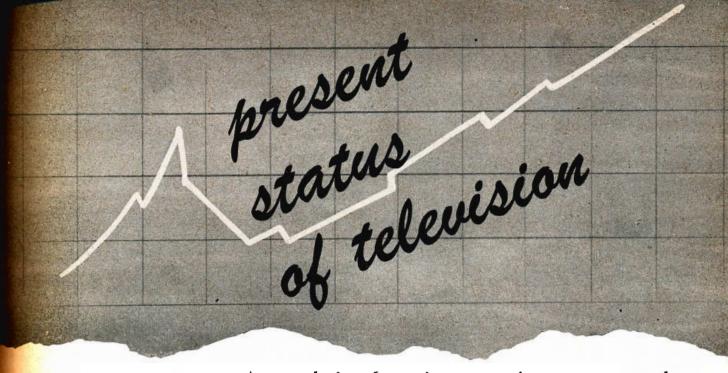
PHILCO TELEVISION BROADCASTING CORP.

1800 Architects Building

Philadelphia 3, Pennsylvania



FIRST IN TELEVISION IN PHILADELPHIA!



An analysis of station operations, grants and applications, network progress, advertising, programming and manufacturing—by Mary Gannon

TEAR-END box score reads eighteen operating stations in twelve cities, fifty-six grants and eighty applications pendingas of December 31st, 1947. Compare this with the nine operating stations in six cities, forty-six grants and nineteen applications pending at the end of 1946. Interest in television has accelerated to an unprecedented pace, particularly in the last quarter, with some 56 applications filed in the last three months. Geographically speaking, sixty-two marketing areas, thirtyone states and the District of Columbia are in the television picture, compared with thirty-seven cities and twenty-five states listed at the close of '46.

Nine new stations came on the air last year. In St. Louis, KSD-TV opened in February; in June, WWJ-TV, Detroit and WNBW, Washington took to the pix-waves; in September, WFIL-TV, Philadelphia and WMAL-TV, Washington started operating, along with Cincinnati's W8XCT; in October, Baltimore got its first station, WMAR-TV, and during December, Milwaukee's WTMJ-TV and Cleveland's WEWS began programming. According to the licensees' own timetable, another thirty stations should be on the air by mid-summer.

Crowded Spectrum

With a belated eye open for the best markets, applications have poured into the FCC, with the result that hearings will now have to be held in fourteen cities, where there are more applications than channels available, to determine the final allocations. These include:

Akron: 1 channel; 2 pending

Boston: 5 channels; 3 grants, 8 pending

Cleveland: 5 channels; 1 operating; 2 grants; 4 pending

Dallas: 3 channels; 2 grants; 3 pending

Detroit: 4 channels; 1 operating; 2 grants; 2 pending

Fall River-New Bedford: 1 channel; 2 pending

Harrisburg: 1 channel; 2 pending Hartford: 2 channels; 4 pending

Miami: 4 channels; 1 grant; 4 pending

Philadelphia: 4 channels; 2 operating; 1 grant; 2 pending

Pittsburgh: 4 channels; 1 grant;
5 pending

Providence: 1 channel; 1 grant; 1 pending

Waterbury: 1 channel; 3 pending Wilkes-Barre: 1 channel; 2 pending

In New York, Baltimore, Washington, New Haven, Wilmington, Toledo, and Los Angeles, grants for all allocations have been made. In fifteen other cities, the full number of channels have been spoken for, although there's no assurance that a last minute bidder won't file and upset the balance. These cities are Allentown, Chicago, Dayton, Erie, Johnstown, Lancaster, Louisville,

Reading, San Francisco, South Bend, Stockton, Cincinnati, Youngstown, Binghamton and Trenton.

Interests Represented

Of the total 154, breakdown shows 118 AM broadcasters now in the television picture. Of these 72 operate radio stations only; 42 own newspapers and radio stations, and four have department stores along with their AM operation. Of the remaining, there are five newspapers, one department store and 30 miscellaneous interests represented. Newspapers are strongly represented as a group, with 47 publications now in the ty field.

Of the networks, NBC ranks first with 41 (five company owned and 36 affiliates); ABC has 21 (five owned stations and 16 affiliates); CBS has 20 (three company owned and 17 affiliates); MBS has twelve (two company owned and 10 affiliates). There are 47 with no network affiliation, to which can be added one applicant with a joint NBC-MBS radio affiliation, WMAR-TV in Baltimore who are currently affiliated with DuMont and CBS for television programs, and WMAL-TV, an ABC radio affiliate, who have a working arrangement with CBS television. Paramount have two operating stations and three pending applications, while DuMont have two operating, one grant and two applications pending. (Paramount-DuMont stock issue is to be determined at a consolidated hearing called for March 1st.)

Potential Market

Population - wise, television is available to a potential audience of over 31 millions in the twelve cities where there are operating stations. In the 62 market areas where there will be television eventually—probably within the next eighteen months to two years—approximately 36% of the population will be reached or over 50 million people.

Right now, network television along the east coast reaches a potential audience of over 16½ million people in New York, Philadelphia, Baltimore and Washington. When WRGB is added in on the NBC net, the potential jumps to nearly 17 million, and with the scheduled March opening of WBZ-TV, Boston, also on the NBC net, the total potential audience totals nearly 19 million.

Imminent openings are on the calendar for WTVR, Richmond, WBAL-TV, Baltimore and WATV, Newark. Richmond and Baltimore stations will tie into the NBC net. WCAU-TV, CBS' Philadelphia affiliate is also slated for a February opening.

service of \$40 a program hour. Figuring this on a 40-hour week, cost would be \$1600 weekly. (Application for a station in South Bend was subsequently filed by the South Bend Tribune.) Definite plans for extension of the relay are now in the works, with Toledo probably scheduled to be the next point reached.

Rates

Matter of rate charges is still up in the air. Last June, A.T. & T. filed a rate schedule with the FCC, asking \$40 per circuit mile per month for eight hour daily use on the cable between New York and Washington -totaling the rather staggering figure of \$10,980 monthly. For occasional use, rates were set at \$825.25 for the first hour; \$326 for the second consecutive hour; \$1805 for four consecutive hours: \$4415 for twelve hours; \$8,300 for 24 hours and \$10,940 for 32 hours, with anything over 32 hours billed at the monthly rate. There was wide industry protest, with the result that the A.T. & T. withdrew the charges for further study. In the meantime, the stations have been using it on a share-basis, with no charge from the phone company.

Facilities Timetable

Briefly, A.T. & T. has about 7,000 miles of coaxial cable either completed or under construction. Construction planned for the next few years will about double the mileage. As an addition to the one circuit between New York, Philadelphia, Baltimore and Washington which is now operating, another line is due to be opened before summer, thus permitting a two network service instead of the present over-crowded one.

1948 Timetable

New York-Washington route extended to Charlotte, N. C. with connecting equipment at Richmond. (WTVR, Richmond, is scheduled to open this month. Station is an NBC radio affiliate.)

New York to Chicago route, westward from Philadelphia. This will include connections to Pittsburgh, Cleveland and St. Louis.

New York to Los Angeles completed.

1949 Timetable

Radio relay facilities on the New York-Chicago route will be completed in 1949—and will include such cities as Pittsburgh and Cleveland.

Additional television equipment will be made available to such cities as Detroit, Dayton, Cincinnati and Indianapolis.

STATUS OF TELEVISION—January 1st, 1948

Operating Stations—18

Grants-56

Applications Pending—80

Market Areas-62

NETWORKS

Present network picture shows three privately owned radio relay links—Philco's, connecting New York and Philadelphia; General Electric between New York and Schenectady, and WBKB's (Paramount) between Chicago and South Bend. There's also the A.T. & T. coaxial cable line connecting New York-Philadelphia-Baltimore and Washington, and the recently opened A.T. & T. radio relay link between New York and Boston.

NBC is now completing a radio relay link between Philadelphia and Baltimore. This, with the Philco and G-E relays, will give NBC fulltime use of a four station network.

While only the tried-and-true method of actual operating experience can give the answers as to whether coaxial cable or radio relay is best suited to television networking, radio relay seems to be gaining

in favor due to its lower initial cost and its cheaper maintenance and operation. Furthermore, radio relay is looked upon as a more immediate answer to regional networks.

For example, Crosley, with an experimental station in Cincinnati which is scheduled for commercial operation next month, and grants in Columbus and Dayton, are also planning on developing a regional network, probably linking Columbus, Cincinnati, Dayton and Indianapolis.

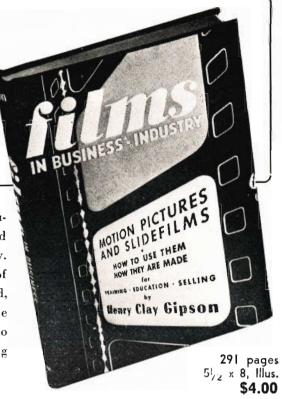
Forerunner of a possible Paramount network is the Chicago to South Bend link, constructed by WBKB, which started operations last fall by bringing the Notre Dame games to Chicagoans. At the recent TBA convention, Captain Bill Eddy, skipper of the Chicago station, announced commercial plans for the network involving a C.O.D. program

HOW TO USE

MOVIES

TO TRAIN WORKERS SELL GOODS

Here is a detailed and non-technical manual for business executives, sales managers, personnel managers, and others concerned with the application of visual aids to the problems of industry. The book is a practical guide to modern practices in the use of the non-theatrical motion picture and slidefilm. Fully illustrated, and containing numerous case histories, the book discusses the various ways in which visual aids can be profitably applied to your individual business needs—training personnel, advertising products, promoting safety campaigns, etc.



FILMS BUSINESS AND INDUSTRY

By HENRY CLAY GIPSON

President, FILMFAX, Productions; Formerly Production Director, Education Department, FILMS, Inc.

Covering in detail the developments of the past fifty years in the non-theatrical film field, the book brings out much new material on the use of motion pictures as vital means of communication. The advantages of the motion picture over the printed and spoken word are carefully weighed, as well as the disadvantages.

Note the broad scope of these 19 chapters—they quickly give you the facts you need for the more effective application of visual aids to your own business or industry

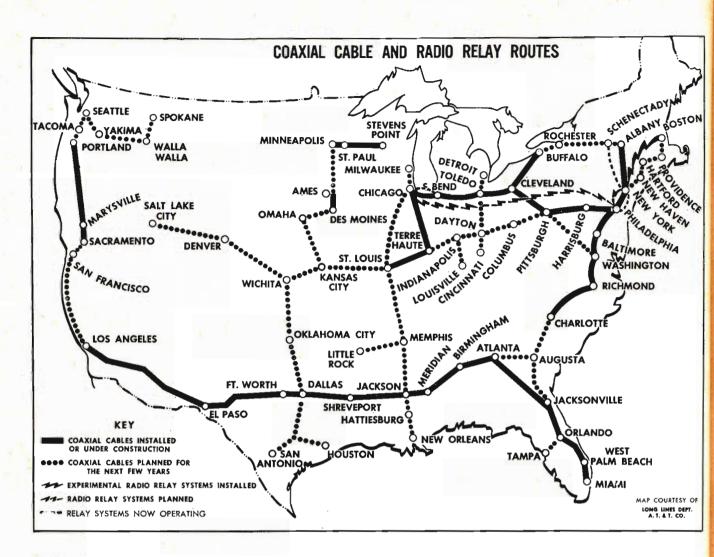
- 1. Half a Century of Progress
- 2. A New Language for Indus- 10. The Script trial Communication
- 3. How Industry is Using Films
- 4. Using Films within an Organization
- 5. The Motion Picture as a Salesman
- 6. Film Distribution to a Mass
- 7. Selecting a Producer
- Cost?

- 9. Supervising a Producer
- 11. How a Film is Photographed
- 12. Animating the Invisible
- 13. Sound on Film
- 14. The Laboratory
- 15. The Film is Edited
- 16. Slidefilm Production
- 17. Screening Films
- 18. Films for Foreign Use
- 8. How Much Should a Film 19. Television and the Motion Picture

The author, from his years of experience in this field, warns against the more common faults made in using visual aids for industrial purposes, and shows you how to avoid them. Special sections devoted to the use of films in television and related fields, make the book of paramount interest to television producers, script writers, educators, religious teachers, and others.

SEE IT 10 DAYS FREE . MAIL COUPON

Please send me a copy AND INDUSTRY for 1	Inc., 330 W. 42nd Street, N.Y. 18 of Gipson's FILMS IN BUSINESS 10 days' examination on approval. 1 \$4.00, plus few cents postage, or
Name	
Address	
City and State	
Company	
Position	TV-1-48
	write McGraw-Hill Company of Richmond Street E., Toronto 1



Both the coaxial cable and radio relay links are used for telephone service, with television a by-product.

Another possibility in the radio relay picture is Western Union where again dual use of the equipment will tie in with their telegraph service. Towers are now in between New York and Philadelphia and between New York, Washington and Pittsburgh, but are not as yet equipped for television.

New York to Chicago link is now under construction, via Albany, Cleveland and Detroit; via Pittsburgh, Cleveland and Detroit, and via Pittsburgh, Cincinnati and St. Louis.

Stratovision is now undergoing some final testing prior to actual demonstration. Under the proposed system, signal would be relayed from a reconverted B-29, flying in fixed circles over a given area. Westinghouse and Glenn Martin are collaborating on the project.

Overcrowding

Rapid expansion of television service has caused terrific conges-

tion on the Washington to New York link. At present, there's WNBT, WCBS-TV, WABD, New York; WPTZ. WFIL-TV, Philadelphia; WMAR-TV, Baltimore; WTTG, WNBW and WMAL-TV in Washington. In the meeting held last month, battle waxed hot and heavy over the sharing problem. Up to now, sharing has been on a per day basis with two nights a week assigned to NBC, CBS and DuMont, with alternate use each week of the 7th day. New arrangement, on a 90-day trial basis, breaks the programming up into segments for each night, based on current programming schedules.

Summing It Up . . .

New elements in the network picture will probably cause a deviation from the old guard radio line. In addition to the Paramount relay, and the proposed DuMont net, newspaper interests are also lining up. At the moment, this has taken the form of newsreel exchanges now currently in effect between WMARTV, WFIL-TV and the N. Y. News and to be extended to other news-

paper-owned stations as they get underway. Whether this will take the form of an electronic net, or stay within the realm of program exchanges of various types, is unpredictable at the moment.

Another interesting angle is the fluid state of network arrangements at the present time. Good case in point is Baltimore's WMAR-TV, which picks up CBS and DuMont, along with WMAL-TV in Washington and WFIL-TV in Philadelphia. In the case of WMAL-TV and WFIL-TV, both ABC radio affiliates, working agreements have been worked out between CBS and the Washington station and DuMont with the Philadelphia station.

General thinking at this time seems to be against definite tie-ups, with stations angling for the best programming they can get off the line before making any definite commitments.

As for cross-country networking, the coaxial cable between New York and Los Angeles will be completed this year. As to when program service will start, A.T. & T. is not saying—and we are not guessing!

ADVERTISING

181 sponsors bought time on television during December, 1947, as compared with 31 who were advertising via video in December, 1946 -a 584% jump in commercial activities. Part of this increase, of course, is due to the new stations in new market areas, but the main reason is the growing interest in, and awareness of television as an effective advertising medium.

Monthly breakdown for the year shows 31 advertisers in January, 42 in February, 23 in March, 36 in April, 44 in May, 62 in June, 75 in July, 89 in August, 107 in September, 139 in October and 159 in No-

An analysis of these advertisers shows that retailers of all types, particularly specialty shops, such as appliance dealers, are among the highest classification represented. Local and regional accounts form the bulk of sponsors, with some 30 national advertisers now regularly on the pix waves.

Recognizing that good programming and adequate program schedules wield a big influence on set sales, television receiver manufacturers and their local distributors are also sponsoring large program blocks. Typical example of this is Philco who, through a cooperative arrangement with their local distributors, sponsors 9 different programs over KTLA; five half-hour children's programs and four halfhour women's shows over WWJ-TV, as well as sports and spot programs over WPTZ, WMAL-TV, WMAR-TV and KSD-TV. RCA sponsors the hour-long "Junior Jamboree" five times weekly over WBKB, has a 1/4 hour children's show five times weekly over WWJ-TV, spots and Man-on-the-Street over KSD-TV, as well as two studio shows over WNBT, four daytime shows over WNBW and spots over WMAR-TV. General Electric is sponsoring boxing over WWJ-TV and news over WTTG. Crosley and Motorola are advertising via WBKB and Crosley and Emerson over WMAR-TV. DuMont has spots over WABD and WTTG.

National Advertisers

Among the national advertisers represented are Alexander Smith Carpet Co., American Tobacco Co., B.V.D. Corp., B. T. Babbitt, Inc., Botany, Bulova, Chevrolet, Coburn Farm Products, Dad's Root Beer. Dry Imperato Champagne, Elgin,

Evervess, F. W. Fitch Co., Ford, Gillette, Gulf, Hat Research Foundation, General Foods, Oldsmobile, Cluett-Peabody, Kelvinator, Knox, Kraft, Longines-Wittnauer, Manhattan Soap Co., Mouquin Wines, C. F. Mueller, Norge, Pabst, Pepsi-Cola, Springs Mills, Swift, U. S. Rubber.

Facts and Figures

While television cannot be considered a mass advertising medium yet, even in New York with some 94,000 sets, trend nevertheless is to sell it on its advertising meritsand on the basis of sales returns, some of which have been phenomenal.

On a recent telecast over WABD. Jay Jay Junior, which sponsors the weekly 1/4 hour "Mary Kay and Johnny" show, offered a mirror to the first 200 viewers who wrote in their comments on the program. To play it safe, the company ordered an extra 200 prizes so as not to disappoint anyone, just in case the offer pulled. 8,960 letters were received!

Perhaps best proof of the serious

consideration being given television though is the recently conducted survey by General Foods Corporation through Benton & Bowles and Young & Rubicam. Survey was conducted among home set owners in the New York area and company spent close to \$10,000 in an effort to evaluate their video-gramming.

Main points brought out by the survey were that the advantages over and above circulation and the comparatively high per-thousand figures are sufficient to warrant General Foods continuation as a television advertiser.

Backing up their belief in television, General Foods started sponsorship last month of 25 Madison Square Garden events over WCBS-TV for the 1947-48 season, in addition to the 1/2 hour program on WNBT and the Sanka spots on WABD. (For full report see page

Survey conducted on the Lucky Strike football telecasts, placed through N. W. Ayer, showed that on an average Saturday afternoon, 42.5% of all home television set owners were tuned to the games, with an average audience of 6.5 people per set. Particularly significant was the high sponsor identifi-

now COMMERCIAL TELEVISION

in the CAPITAL DISTRICT AREA of the

Empire State

- **★ National Television Service**
- **★ Modern Studio Facilities**
- * Experienced Personnel
- ★ 8 Years of Program Origination
- ★ Over 40 Package Shows Immediately Available
- ★ Special introductory rates until April 1st, 1948

Rates on Request

Represented Nationally by NBC Spot Sales

SCHENECTADY 5, NEW YORK

GENERAL ELECTRIC

cation which ranged between 80 and 88%.

Promotion

Also interesting from a promotional angle is the current "Missus Goes-A Shopping" program jointly sponsored by Mueller's Macaroni, Sweetheart Soap and Bab-O through Duane Jones and Coburn Farm Products through the Modern Merchandising Bureau. Half-hour program is telecast every Wednesday (1:30 to 2:00) from a different super market in the metropolitan New York area. Idea is a twopronged promotion - distributordealer and dealer-customer. Salesmen go into the stores to build mass displays of all four products every week. One product gets specific mention but program is arranged so that certain stunts take place in front of the other displays in order to put the silent but potent visual plug across.

Stores report sales increases for the day ranging from 10% to 30%. On one Sweetheart Soap program, store manager reported that he had sold three times as much of the product that day as he had ever sold before, while another store reported that he sold more Mueller's Macaroni in that one day than was usually sold in one week. On the Coburn

products distribution had formerly been limited to the higher type food specialty stores. Company has found the television series a good means of introducing the product into super markets.

Rates

To date, 13 of the 16 commercial stations have issued definite rate cards. Of these, 11 — WNBT, WABD, WPTZ, WRGB, WWJ-TV, KSD-TV, WEWS, WTTG, WCBS-TV, WTMJ-TV and KTLA—have issued a standard rate card. Two—WFIL-TV and WBKB—have based their charges on circulation, thus insuring an automatic sliding scale.

With increase in circulation, particularly in the New York area, rate cards are on the increase. WNBT issued a new set of charges for the first 13 weeks of '48 (November Television), and has now followed it up with another hike effective April 1st. WABD's upped schedule took effect last September and no increase is contemplated before April at the earliest. WCBS-TV has set separate charges for air time and for film and remote pick-up facilities. Film and airtime are broken down into eight time segments, with a standard charge of \$700, irrespective of time, for use of remote pickup facilities.

One time offer of a mirror to the first 200 women who wrote in their opinion of the "Mary Kay and Johnny" program swamped the sponsor, Jay Jay Junior, when come-on drew 8,960 letters. 1/4 hour show is telecast over WABD.



WNBT and WTMJ-TV (an NBC affiliate) have broken their charges down into a separate transmitter cost and use of facilities with rehearsal ratio of about 5 to 1 included. WABD also includes a 6 to 1 ratio in their charges. Two to one ratio is included by WBKB, WFIL-TV, WEWS and KSD-TV, with charges between two and four (two to five for KSD-TV), and penalty charges above that amount. Others such as KTLA, WPTZ, WRGB and WWJ-TV have a flat rate per hour or portion thereof. The WCBS-TV rate of \$100 per hour applies to films requiring rehearsals.

WABD was the first station with three different time classes. Highest rating goes to the 7 to 11 pm segment, with the 6 to 7 in second place, followed by the 12 noon to 6 pm slots. WNBT's latest rate card (effective April 1st) also lists three separate charges for use of the transmitter. Full rate applies Monday through Friday, 7-11 p.m. and Saturday and Sunday, 1-11 p.m. Three-fourths the base charge is made for the 5-7 p.m. period, Monday through Friday; with one-half the base rate charged for all other periods. Program facilities charges remain the same.

KSD-TV, WWJ-TV, WTTG and WRGB have the same charges for both film and live; WABD allows a 20% discount off the regular rates; all others have separate classifications.

In stations where no rate cards have been issued — WMAL-TV, WMAR-TV, WNBW—programs are sold as a package to advertisers and each one is figured separately, based on the production and facilities costs involved.

PROGRAMMING

With FCC postponement of the 28 hour weekly schedule until April 1st, 1948, stations are nevertheless working toward the goal, with the majority of schedules averaging about 25 hours and a few reaching over thirty hours.

As for regularly scheduled afternoon programming, (excluding sports or special events) New York seems to be the lagger. Only day time programs on a weekly basis are WNBT's "Swift's Home Service Club" on Friday in the 1 to 1:30 slot, "Luncheon at the Waldorf", on Thursday, 1 to 1:30 and WCBS. TV's "Missus Goes A-Shopping' telecast direct from a different super market each Wednesday from

CONSULTING **TELEVISION ENGINEERS**

FRANK H. McINTOSH

Consulting Radio Engineers 710 14th St., NW, MEtropolitan 4477 WASHINGTON, D. C. Laboratory: 910 King Street,

Silver Spring, Maryland

McNARY & WRATHALL

Consulting Radio Engineers

National Press Bldg.

D1. 1205

WASHINGTON, D. C.

WELDON & CARR

1605 Connecticut Ave., NW. MI 4151 WASHINGTON, D. C.

1728 Wood Street Riverside 3611 Dallas, Texas

WORTHINGTON C. LENT

Consulting Engineers

Ring Building Washington, D. C. 1200 18th St., NW. District 4127

A. D. RING & CO.

25 Years' Experience in Radio Engineering

MUNSEY BLDG. REPUBLIC 2347 WASHINGTON 4, D. C.

GEORGE C. DAVIS

Consulting Radio Engineer Munsey Bldg. District 8456

WASHINGTON, D. C.

JOHN CREUTZ

Consulting Radio Engineer

319 Bond Bldg. REpublic 2151

WASHINGTON, D. C.

ANSKY & BAILEY

An Organization of Qualified Radio Engineers DEDICATED TO THE

Service of Broadcasting National Press Bldg., Wash., D. C.

DIXIE B. McKEY & ASSOCIATES

1730 Connecticut Avenue N.W. Washington 9, D. C. Telephone: Adams 37I1 Dixie B. McKey Dabney T. Waring, Jr.

JOHN BARRON

Consulting Radio Engineers

Specializing in Broadcast and Allocation Engineering

Warner Building, Washington 4, D. C.

Telephone NAtional 7757

PAUL GODLEY CO.

Consulting Radio Engineers Upper Montclair, N. J. Labs: Great Notch, N. J.

Phone: LITTLE FALLS 4-1000

BROADCASTING STUDIOS

Design and Construction Television, also F.M. and A.M. THE AUSTIN COMPANY Cleveland

A Nation-Wide CD Organization

JOHN J. KEEL

Consulting Radio Engineers

Warner Bldg., Washington, D. C. 13th & E Sts., N. W.

NAtional 6513-6515

WINFIELD SCOTT McCACHREN AND ASSOCIATES

Consulting Radio Engineers TELEVISION SPECIALISTS

410 Bond Bldg. 809B Windemere Ave. Washington 5, D. C. Drexel Hill, Pa. District 6923 Sunset 2537W

E. C. PAGE CONSULTING RADIO **ENGINEERS**

Bond Bldg. EXecutive 5670 WASHINGTON 5, D. C.

KEAR & KENNEDY

Consulting Radio Engineers

1703 K St. N.W. REpublic 1951

WASHINGTON. D. C.

There is no substitute for experience GLENN D. GILLETT AND ASSOCIATES

Consulting Radio Engineers 982 National Press Bldg. Washington, D. C.

CHAMBERS & GARRISON

Consulting Radio Engineers 1519 CONNECTICUT AVENUE

> Washington 6, D. C. MIchigan 2261

New York Was Washington (ago Hollywood Cincinnati

RICHARD W. HUBBELL and ASSOCIATES 2101 INTERNATIONAL BUILDING Rockefeller Center, New York 20, N. Y.

Planning, Building, Programming, Development of Video Stations. Management Consultants.

HAROLD B. ROTHROCK

Consulting Radio Engineer

1909 Eve St., N.W. NAtional 0196 Washington 6, D. C.

HOYLAND BETTINGER

Television Consultant

Studio Design, Lighting, Personnel Training 595 Fifth Avenue PLaza 8-2000

PROFESSIONAL DIRECTORY

Open to Engineers and Consultants only

Rates \$108 per 12 insertions



... with ingenuity and production facility to make your product as appealing as popcorn at the circus.

SPRINGER PICTURES, INC.

blends the visual arts to enable you to sell . . . with a whisper.

TELEVISION

Gainsborough Associates (N. Y.) prefer Springer video quality.

Detroit New York
Fisher Building 341 E. 43rd Street
TRinity 1-6220 MUrray Hill 7-6577

television personnel

for Advertising Agencies and Television Stations.

announcing

the opening of a new department specializing in the placement of experienced personnel for

station management, programming, technical operation, sales and advertising.

UNDER THE PERSONAL SUPERVISION OF LEE K. BENDHEIM

Write, phone or wire for complete information

CAREER BUILDERS AGENCY

35 WEST 53rd ST., NEW YORK PLaza 7-6385 1:30 to 2. "Playtime" at 5 on Wednesday is also relayed from WNBW to WNBT.

Along the East Coast

New York schedules show WNBT on a six day schedule (Tuesday off). Station goes on the air at 8 (7:25 on Wednesday night) and signs off between 9:30 and 10, with the exception of Mondays and Fridays when boxing bouts are telecast.

WCBS-TV on a five day—Wednesday through Sunday—schedule, starts telecasting at 6:30 on Sunday night, and at 8 the other four nights. Film and news shows usually precede the basketball and hockey pick-ups from Madison Square Garden. Friday night only films are shown.

WABD runs Monday through Friday, with evening sign-on at 6:35. Boxing is telecast Monday and Tuesday, and wrestling on Thursday and Friday.

In Philadelphia, WFIL-TV operates 7 days a week with an 8 o'clock sign-on. With sports pickups five nights a week, station is usually on the air until about 11 o'clock. Two hour children's matinee on Sunday, from 2 to 4 p.m. is the only daytime programming. Station picks up boxing from WABD, New York, on Monday night.

WPTZ, which is part of the NBC net, is also on a 7-day schedule, with average evening's programming beginning at 7:30. Daytime programming is a regular feature three days a week, with the hourlong "Television Matinee", sponsored by Philadelphia Electric, from 2 to 3 on Monday, Wednesday and Friday, preceded by a 15 minute news segment. Saturday afternoon there's a feature motion picture.

In Washington, WMAL-TV, while without their studios, had operated on a remote and film basis. However a 7-day program schedule started January 1st. WNBW, also feeding from WNBT, operates six days per week, with Tuesday off the air. Programming periods begin at 3:30 or 4 and extend to 6, usually resuming at 7:30 or 8 until closing. On studio nights, this is about 9—remotes, naturally, run until conclusion. In addition, the two WNBT daytime shows are relayed.

WTTG is on a 6-day schedule, Sunday excluded, and exchanges programs with WABD, New York. Occasional daytime events are picked up, such as pre-Christmas toyland stunts, but main programming is concentrated from 6:30 in the evening on.

Baltimore's WMAR-TV has been averaging about 25 hours a week for five days. With studios not yet completed, programming operations have concentrated on sports and special events, network programs from WABD, WCBS-TV, WMAL-TV and WFIL-TV, with news and newsreels getting particular emphasis.

WRGB, Schenectady, with approximately 60% of its programming relayed from WNBT, is off the air on Saturday. With the exception of the Wednesday "Playtime" program (from WNBW), station signs on at 7 or 7:15 each night, with about 2½ hours of programming nightly. (Monday and Friday boxing bouts from WNBT extend the time.)

In the Mid-West

Chicago's WBKB also operates on a 7-day schedule, with afternoon programming from 3 to 5 every Monday through Friday. Evening programming begins at 7:30 four nights a week and 8 the other three. Friday night sign-off is 9, with hockey, wrestling, boxing and basketball on the other six nights.

On a 6-day schedule, WWJ-TV, Detroit, programs from 2:30 to 5:30 Monday through Saturday. Monday and Saturday night programs are remotes, with studio shows beginning at 7:20 or 7:30 the other four nights.

Milwaukee's WTMJ-TV has been operating on a 5-day week—Wednesday through Sunday basis. Schedule includes regular afternoon programming from 2 to 3, with evening shows devoted to remote pickups.

KSD-TV operates on a 5-day schedule, Thursday through Monday—with no programming on Tuesday or Wednesday. Afternoon schedule which runs from 3 to 4:30, includes news and films, occasionally an interview, fashion segment, choir, etc. Nighttime programming starts about 8 and runs approximately two hours. Regular features are Friday night wrestling and Saturday night basketball.

Cincinnati's experimental station W8XCT, programs about 18 hours a week on a 5 or 6 day basis. There's an hour of afternoon programming—1:30 to 2:30 four afternoons a week, with the evening segment beginning at 7:30, running to about 10 on studio nights, and lasting until the conclusion of wrestling and bas-

(continued on page 34)

"... Television magazine is establishing an enviable record for reliability ..."



"The excellent job which your staff is performing in reporting and recording the development of television is a service which everyone interested in the industry should recognize.

"Not only is the editorial content of your publication comprehensive and interestingly presented, it is establishing an enviable record for reliability."

George M. Burbach

General Manager, St. Louis Post-Dispatch Stations KSD-TV, KSD, KSD-FM

More and more advertisers and broadcasters like George M. Burbach of KSD-TV are depending on TELEVISION magazine for the factual information which will help them in their television plans and work.

Each month TELEVISION is read by 4,000 key executives in broadcasting, advertising, manufacturing, film production, publishing, department stores, and other closely allied fields.

Whether you are selling equipment, station time, programs, film—in fact whatever you are selling in television you'll find TELEVISION magazine, the industry's only monthly publication, the most effective medium to reach the men who buy.

TELEVISION magazine, 600 Madison Avenue, New York 22.

Reasonable Expectations for Local Stations

WHEN a major broadcasting network elects to enter the television field, its path lies reasonably clear before it. Being already engaged in large-scale radio broadcasting activities, having at its disposal abundant stores of program and acting talent, being well acquainted with the possibilities of program syndication, and having in general an adequate financial backlog, such network organizations naturally feel called upon to operate in television on a correspondingly broad basis. Indeed, the requirements of their multi-station affiliations are such that nothing less than this type of operation should be given consideration by them. Accordingly there has been relatively little doubt among the forward-looking networks as to the part which they must play in the establishment of great central television studios and elaborate programming facilities, together with the acquisition of the necessary staff.

Local Stations

The position and plans of the smaller station, located in a town or city some distance from such entertainment centers as New York, Los Angeles, and Chicago, present other and difficult problems. The owner of a local station wonders whether he will find the funds necessary for an elaborate installation, not to mention the financial support requisite for the continuance of adequate programming over the period during which he is establishing his audience and acquiring his advertising commercial support.

Probably much of the worriment of the local station owner results from the fact that some may expect far too much from him, whereas his natural tendency, if conservative, might be to offer too little. The acceptable compromise between tremendously large and costly operations, on the one hand, and inacceptably cramped and inadequate operations, on the other hand, must be

sought and found. It is easy enough to determine what would be too much to expect from the local station (though it is more difficult to specify what would be too little to ask). As a matter of comparison, consider for a moment the motionpicture theaters in a town of moderate size. It is certain that the patrons know that each theater does not produce theater films for its own use. As for stage shows, few metropolitan theaters could afford to produce worth-while live-talent shows for their own purposes and yet satisfy their accountants. And, as far as the smaller theaters are concerned, stage shows have increasingly fallen outside of the realm of financial possibility.

Live Programming

Such considerations show clearly that the local station in the smaller centers of population cannot initially at least undertake to present any considerable amounts of livetalent programs on a steady or continuing basis. Here and there. modest live-talent productions based on locally available actors and writers might be possible. However, the costs of such production could be more reasonably defrayed by additional local presentation to the public in an auditorium or theater rather than producing such shows solely for television transmission.

Again, it would be too much to expect the local station to produce feature films, or even films of the "short" variety. Those acquainted with motion-picture methods will realize clearly why film production requires considerable patience, major facilities, and a long purse. Exempted from these restrictions would be occasional films showing local events of considerable interest to television audiences in a particular community. These films would be in the nature of a local "television newspaper" and might, with ingenuity and a utilization of local cinematic talent, be acquired on an economically sound basis.

Considering the preceding limitations, it appears out of the question in general, for the local station to expect to produce 100% of its programs for its own purposes. Ever in the less demanding field of standard broadcasting, an increasing number of stations have found it desirable and satisfactory to affiliate themselves with networks in order to acquire an adequate backlog of programs.

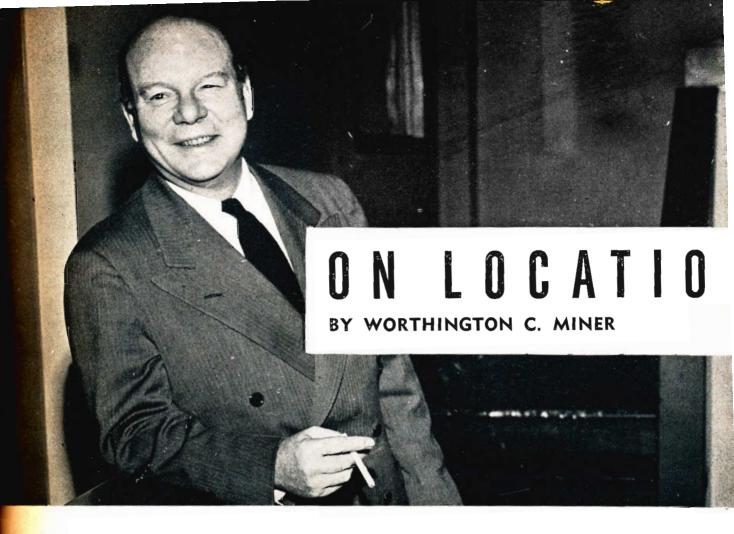
Network

It is somewhat more difficult to specify what would be too little to expect from a local station. Assuming that the station was connected to a network providing high-quality programs on a reasonably constant basis, there is a natural inclination for the station owner to operate 100% on the network and to refrain from originating any program material. If there were gaps in the network programming time, the trend of such an owner would be to endeavor to obtain film from outside agencies and to use it in such gaps as "filler" material with commercial sponsorship. In this case the revenue to the station owner would come from the commercial sponsorship of such film programs to which might be added various "hitch-hike" and "cow-catcher" announcements between network programs.

Such procedures might not be consistent with the calls of community pride. Suburban communities may, in some cases, be content to receive their programs exclusively from the great city stations in their neighborhood. But the more isolated community would probably wish to see its habits, thoughts, and tastes in entertainment, as well as its affairs of local interest, represented to a modest extent in the television programs.

These considerations naturally lead to the suggestion that a compromise might be made between the extremes that have been set forth Initially, it is to be expected that

(continued on page 45)



A provocative evaluation by Tony Miner, CBS's Director of Television, of WCBS-TV's "studioless" operation. Of primary importance for local stations, it also is significant for network operation for decisions on which programs should be remote or in studio.

THE following is a quote from a television review, datelined Wednesday, December 3, 1947:

"John Reed King's 'Missus Goes a'Shopping' offers the best proof to date of the feasibility of staging certain types of television shows 'on location' . . . It certainly added plenty of color and authenticity . . . to the King opus . . . Response from potential sponsors was evidently tremendous, since CBS succeeded in signing four of them to a year's contract on a rotating basis."

This is testimony to the impact of a continuing experiment conducted by Columbia over the last six to seven months. What follows is an interim report on that experiment

On May 15 of last year, we discontinued the production of programs in our studios at 15 Vanderbilt Avenue, concentrating primarily on remote pick-ups as the backbone of our program schedule. Over the ensuing months we have made certain broad observations.

- A television studio is not essential to the production of a television schedule. Widely varying types of programs, previously thought to demand studio facilities, can be produced on location.
- Per unit of effectiveness, remote production tends to be more economical than studio production.
- A high percentage of television programs can be produced, not alone more inexpensively—they can be produced better on location, than in a studio.

The compulsive observation is contained in that final statement. Had we found the impact on the audience reduced, any benefits deriving from a simplification in production would have been of meagre and purely temporary significance. But impact was not reduced; in any number of cases it was profoundly increased. Witness the case of the "Missus Goes a'Shopping."

Let us review in somewhat greater detail the case history of that program. The Missus was first produced on television in the summer of 1944, and ran for over a year and a half. Its longevity was not due to complaisance, however. Quite the reverse. No one, including John Reed King, was satisfied. Conference after conference began with the question, "What's wrong?" In the end,-and this is most significant-we took it off, because of a consensus that, without the injection of some vitalizing new element, the Missus was not good television. In the latter part of October of this year, we produced this program again from the Queen's Food Exchange in Rego Park, Long Island. Nothing fundamental had been changed-nothing, that is, except its locale. And yet after one performance, the program was sold to four separate sponsors-Mueller's Macaroni, Sweetheart Soap and Bab-O, through Duane Jones, and Coburn Farm Products, through



split-second selection of all television program material

New RCA Camera Switching Unit provides convenient, push-button control at your video console

FADING CONTROL

MONITOR SWITCH
3-position: program line,
either of two remotes

GAIN FOR REMOTE INPUT (#6)

REMOTE INPUTS

RELEASE BUTTONS

TALLY LIGHTS
and switches for remote sync

CAMERA SWITCHES

(2 rows) handle 4 inputs from studio and film cameras and 2 remotes to permit fading, instantaneous switching, special effects.

TALLY LIGHTS

GAIN FOR REMOTE INPUT (#5) HERE, in one compact unit, is a control center for your television programs. Into it can be brought as many as six video inputs—from studio cameras, film cameras, relays, and network. One operator can handle the lot!

Twelve different types of switching are your assurance of a smooth, dramatic presentation, whatever the program. Look at the possibilities:

Your operator can instantly switch:
(1) between two local camera signals;
(2) between two remote signals; (3) from local to remote; (4) from remote to local;
(5) from local to black screen (no signal); (6) from remote to black (screen);
(7) from black to remote. With the special manual fader control he can, at any desired speed: (9) fade out local to black;
(10) fade in local from black; (11) lap-dissolve between any two locals; (12) superimpose two locals and adjust the level of each. All sorts of trick effects are possible by moving the two levers that make up the fader control.

Tally lights provide an instant check on which input is being used and whether a remote signal is being received. If remote sync fails for any reason, local sync automatically takes over.

The monitor in the top of the console section allows the operator to either view the on-the-air signal or preview one of the two remote signals.

An unusually flexible intercom switching system (not shown) is included to permit private, special-group, or conference communication between practically all personnel. All have access to program sound through one earpiece of their headsets.

Here, we believe, is a switching system that represents the most advanced engineering in television station techniques. It will help you simplify television station routine—bring new possibilities to television programming. Be sure to get the complete story. Write Dept. 90-A, Radio Corporation of America, Engineering Products Department, Camden, N. J.

PROGRAM SOURCES



RCA Studio Comera (Switching Unit handles up to four)



RCA's Mobile Studio (Switching Unit can handle two remotes)



RCA Film Camera (Switching Unit handles two with 2 studio comeras)



TELEVISION BROADCAST EQUIPMENT

RADIO CORPORATION OF AMERICA

ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N.J.

In Canada: RCA VICTOR Company Limited, Montreal



To guard against any fluffing on the commercial, copy is printed in large type and the assistant director holds it up out of camera range for easy reading. Here John Reed King, emcee, scans the commercials prior to airtime.

Modern Merchandising Bureau. (We had never before had a serious nibble.) Why? What "vitalizing new element" had been added?

The answer is contained in the basic reasoning that impelled us to attempt this experiment. It began nearly two years before Columbia put its first television program on the air. In the fall of 1939 some of us prepared a report on television, which began with this statement: "Television is potentially the greatest reporting medium ever known. It is as a reporter that it will make its initial impact on the public." How was it that something, so palpably evident in those early days, got so curiously obscured over the years? Despite recurrent substantiation of the pull of television in its reportorial function, the major share of television producers, including ourselves, followed the Hollywood bell-weather; we continued to assume, without adequate analysis, that the backbone of a week's television schedule must originate in a studio. Why?

In part the answer lay in the illogical chronology of technical development; studio equipment was both developed and delivered before mobile equipment. Moreover, early mobile units were unsatisfactory in performance, with the result that people began by habit to assume that the four walls of a television studio were the natural habitat of

everything but sports and a joint session of Congress.

Fashions

The seed of awakening occurred by sheerest accident. We had been struggling for many months to produce a fashion show in the studio; despite specially designed scenery, specially selected models, etc., we had met with only partial success. One evening our remote crew was picking up a twin-bill of basketball from Madison Square Garden; between the games we found ourselves. totally without warning, presented with an unscheduled fashion show. It wasn't a very elaborate production pattern; ten or twelve models in fur coats walked out into the center of the Garden, turned, and walked back again. Director and cameramen had no difficulty in winging so simple a pick-up. But was it good television? Unfortunately (as I thought at the time) it was. It was certainly better and more effective, than anything we'd achieved in the studio. The clothes were no better, the girls were no prettier, the camera work was no more imaginative; and yet the entertainment value was notably greater.

This was too critical an observation to be tucked away beneath a blush and forgotten. We had demonstrated again and again that our mobile units could do an outstanding job of reporting sports and special events. But what if we were to remove the straight-jacket? What if we threw away our routine concept of mobile unit limitations? What if we used these units, not only for reporting assignments, but for remote production? What if we had no studio?

On Location Programs

Now that the experiment is six months old, let us review a few of the program types we have tested on location, comparing results with studio production of the same, or similar, types.

Sports: Remote is obviously the better method of pick-up. Studio sports are pale and emasculated in comparison.

Audience Participation: At least as good on remote; often better. For example, King's "Party Line" was quite as effective; the "Missus" has been immeasurably improved.

Documentary: Mostly better on remote; certainly better whenever authentic backgrounds are required. For example, the "This Is New York" series (No. 9). It is not easy, perhaps impossible, to reproduce a complete telephone exchange in a studio.

Fashions: Better on location.

Educational: In the field of art on location production is obviously better. This is partly due to practical considerations. The Metropolitan will object strenuously to moving a collection of sculpture to the studio; it can't move the Cloisters, whether it chose to or not. Certainly our flying-school program from Teterboro Airport would tax studio facilities even in Culver City. In general, educational subjects lend themselves better to remote, than to studio production.

Domestic Science: Certainly no loss on remote; probably an added authority. For example, our present series with Mrs. Dione Lucas from The Cordon Bleu has no close competitor in its field. On the other hand, the measure of its success lies in large part in Mrs. Lucas. She would be effective anywhere.

Dramatic: Inconclusive. Our one test, so far, was a full length play by Phillip Barry from the Hunter College playhouse. It appeared to me to have certain moments more exciting than any studio production I have seen. On the other hand, it was not staged for, nor adopted to, television. With more time and facilities a great improvement might have been made. In short, stage production might be built into most

effective television. "On-location" dramatics, on the other hand, are well-nigh impossible because of the practical difficulty of finding surroundings fully to meet script requirements.

The belief among most of us at CBS at this time is that a studio is probably the natural home for most dramatic productions. This cannot be stated didactically, however, until further tests have been made.

Dancing: No apparent loss in the specific case we have tried. With present limitations in studio space and light, remote pick-up appears to add a vital amount of dramatic impact. It is not certain that this will obtain with improved studio equipment and facilities.

Variety: Vastly better on remote. The audience is a critical component of good comedy, not alone for its effect on the home viewer, but because all comedians need an audience. They wither on a cold stage. No variety show, staged in a studio has come close to matching the audience impact of "The Show of Shows" from Madison Square Garden,—and many of those performers (or many of their counterparts in salary scale) have at times appeared in studio production.

This does not cover the whole field; it does cover an important part of it. It is substantiation of our belief that a wide variety of programs can be produced, and highly effectively produced, on location. In fact, remote production, in our experience to date, is generally more effective, always more economical, than a similar quality of studio production.

Contributing Factors

What are the elements contributing to this increased effectiveness? How far might these elements now, or in the future, be duplicated in studio production?

Authority: Obviously, if you want to spend the money, you can build a complete replica of the Queen's Food Exchange in a studio. But, even were you to do so, you would still not achieve the full authenticity you will gain with remote pick-up. What you can not reproduce with any paid talent in the world is the storekeeper, and the delivery boy, and the shoppers, and the kids. And you would almost certainly forget to make some little, awkward mistake, that so often gives the stamp of validity to the whole.

Color: Authenticity derives from the recognizable elements in the scene; color derives from the unexpected. You might conceivably reproduce all of Times Square in a Hollywood-style set; but ten to one you'd forget the smoke rings from the cigarette sign blowing across from the right, or the unscheduled flock of birds above Father Duffy's statue, or the little girl who had gone to sleep in the window across the way. These colorful minutiae add excitement.

Space: During the fall of 1946 we produced a dance program with Talley Beatty, using a better than average amount of studio space,—an area approximately twenty-five by twenty feet. In spite of my great respect for Mr. Beatty, I realized that his dance routines were but moderately effective under these conditions.

A few weeks after the close-down of the studio we again asked Mr. Beatty to appear for us; this time, however, we had arranged to stage his dances in the Mestrovic collection at the Metropolitan Museum. One of the cameras was placed on a balcony twenty feet above the floor; the other worked on the level. It was, in my judgment, the most exciting dance performance I had seen on television up to that time. It was exciting, because the director could, for the first time, cut from a wide angle shot of a tiny figure in a vast pool of space, to a sudden closeup of intense concentration in the dancer's eves, or a movement of the hand,

or a droop of the shoulders. The luxury of extravagant, unnecessary, unused space surrounding a single, lonely figure is a vitally important dramatic contribution. You can have space in a studio, but at a staggering price.

Light: This is a comment on the present quality of studio light. In general it has done little more than produce enough illumination to see. I know of no good example of dramatic lighting in any studio production; certainly nothing to compare with the Ice Follies. Possibly the use of new studio equipment will help; it will not, however, completely solve the problem. Television will eventually have as good light as Hollywood; but, as a practical problem in this year 1947-48, it is unlikely that it will even approach it. Its closest approximation will occur on remote location.

Audience: Eventually a television studio, or arena, or theatre will be designed to house a full-scale audience. Until it does, remote pick-up holds a top-heavy advantage in being able to accommodate a full-scale audience. And I may add a word of warning; I am far from certain that an audience, admitted free, will ever serve the purpose as well for television, as an audience that has paid from \$4.80 to \$25.00 a seat to get in.

(continued on page 32)

Starting off on the weekly trek to a super market in the New York area are (in the usual order), James Brown, "Uncle Jim" on the "Missus" show, Frances Buss, CBS director, Lela Swift, assistant director, Walter Ware, television director and Chet Gierlach, both of Duane Jones, agency for three sponsors.





James C. Hanrahan, vice president and general manager; Joseph B. Epperson, chief engineer; and J. Harrison Hartley, director of television, at Scripps-Howard (WEWS), are shown above in a pre-opening conference.



Walter J. Damm, vice president and general manager of radio for the Journal Company examines some of WTJM-TV's equipment with Frank Mullen, executive vice president, NBC.





Left: Neil Swanson, "as executive editor of the Baltimore Sun papers never expected to haul coaxial cable over stable roofs at Pimlico and come back smelling like . . .", is responsible for coordination of radiotelevision operations. Right: Ewell K. Jett, former FCC commissioner, who has recently taken over as vice president and director of the radio division.

TELEVISION service was extended to a potential audience of over 3,000,000 people the past two months when WMAR-TV, Baltimore, WTMJ-TV, Milwaukee and WEWS, Cleveland started operations. All three stations are newspaper owned.

WMAR-TV

One of the most interesting operations to watch will be that of the Baltimore Sun station WMAR-TV. Like WEWS it is run by a newspaperman. Neil Swanson, Executive Editor of the Sun papers, is supervising their television operation.

Using the yardstick that the success of a newspaper can be measured by its role as an intimate part of the community, Swanson has some pretty definite ideas on

WEWS

WTMJ-TV

W M A R - T V

Programming structure, commercial policies, facilities and personnel of these newspaper-owned stations.

WMAR programming. An attempt is being made to emulate as closely as feasible the editorial content of the Sun Sunday Magazine, which is of, for and about people, and mostly Baltimore people. Bob Cochrane, Program Manager, is a newspaperman. Philip Heisler, Film Department Manager, is a newspaperman. Ernest Lang, Sales Manager, has been with the Sun for fifteen years. Superficially it would seem that there's a lack of showmanship background. But regardless of what some of the publishers might think, or at least publicly state, a newspaper is more or less showmanship in print. And if there are still some skeptics it might be a good idea to point out that Neil Swanson has a pretty good idea what the public wants not only from his newspaper background but as author of "Unconquered", a

best seller, and one of Paramount's major releases of the year.

Programming

Concentrating on sports and news-as studios are not yet completed-WMAR-TV has three film crews and its own film processing department. Station shoots its own local newsreel, as well as special events, sports, etc., which the mobile crew does not pick up. Initially there was one "news night" a week, but this has now been expanded to three nights and will shortly be a daily feature. In addition to the film which they take themselves. WMAR-TV has an exchange agreement for 16 mm. newsreel with two other newspaper-owned tele stations-WFIL-TV, Philadelphia and the Daily News in New York. The 96-year old masthead design of the Baltimore Sun has been animated and is used as an introduction to the newsreel covering Baltimore events. In addition, Associated Press News, an hour of sports review, and an international newsreel obtained from A. F. Films round out the program.

Sports coverage includes basketball, boxing and wrestling, with hockey relayed from Madison Square Garden through CBS. Football and racing from Pimlico were also included during the season.

Commercial Activity

Commercially the station got off to a flying start, with the majority of sporting events and remote pickups sponsored. Numbered among the accounts were the Philco, RCA, Emerson and Crosley distributors and dealers, Gunther Brewing, Globe Brewing Company, National Brewing Co., the Equitable Trust Company and such local accounts as the Cloverland Dairies, "Diamond Jim" Brady Jewelers and the Hub.

A rate card is now being formulated and will be issued early this year. In the meantime, the station has been working on a package basis, with all costs for a remote or film show included in the price made to the advertiser.

WMAR-TV has been averaging 25 hours weekly since its late October opening. Station is on a minimum 5-day schedule which is expanded to the full 7 days when special events warrant. Particularly interesting is the Sun's policy as regards networks, with the station currently picking up CBS and DuMont, as well as putting into effect the talked about "newspaper network". Reciprocal arrangements are now being undertaken with WMAL-TV, Evening Star Washington outlet and WFIL-TV, the Philadelphia Inquirer's station, as well as the film exchange with the New York Daily News.

WEWS

There will be little happening in Cleveland that won't be telecast by WEWS. James Hanrahan, General Manager, is first and foremost a newspaperman. And as is the case with WMAR-TV, the emphasis will be on television as a reportorial medium. In line with this policy Jack Hartley, WEWS director of television, was formerly head of special events for NBC television.

Cleveland's first station, WEWS, owned by Scripps-Howard Radio, Inc., can take its place as one of the best equipped and designed television stations in the country. Station started operating last month with six image orthicon cameras which are used in either studio or field operation and an iconoscope camera chain for 16 mm. film work. Mobile unit, specially designed and built to WEWS' specifications by the Spartan Aircraft Company, is capable of handling all the station's cameras, with the exception of the iconoscope chain.

There are two studios: A, which is 55x70x23 feet, and B, measuring 10x14 feet, for interview types of programs. Studio A will be equipped with a completely installed modern kitchen as a permanent set.

Program plans emphasize news coverage, utilizing film and stills from all sources. Station also plans to shoot their own special news releases for local news coverage, where the mobile unit does not make the actual pick-up. Like WMAR and WFIL, WEWS has a film department complete with a processor, printer, cameras, in fact the works for a very adequate film production unit. Naturally, there will be coverage of sporting events, public affairs and programming of general public interest to Clevelanders, plus the usual variety of studio shows.

In addition to Hanrahan and Hartley, other key personnel are J. Epperson, Chief Engineer; Garth A. Coleman, Studio Supervisor; Patrick H. Crafton, Program Manager; Helen Lott, Musical Director and Ernest Sindelar, Field Technical Supervisor.

WTMJ-TV

It would be difficult to find a better planned station than WTMJ-TV. Before the Milwaukee Journal station went on the air last December 3rd they had months of experimental remote operation and a complete pre-air promotion campaign behind them. Every prospective station operator should write for a copy of their plan of operation.

Prior to the opening, three-way promotional campaign aimed at the dealer, the public and the advertisers and agencies was intensely pushed. Clinics were held to familiarize the dealers and the advertisers with television, while stories, posters, displays, etc., were aimed at the public.

In formulating their commercial policy, WTMJ-TV's policy is closely allied to NBC's, with separate charges for transmitter and program facilities. Specific number of rehearsal hours are included in with each time segment

Station is headed by Walter Damm, Vice President and General Manager of the Milwaukee Journal radio stations. L. W. Herzog is Assistant General Manager, R. G. Winnie is Station Manager, James Robertson is Program Manager and Philip Lawser is Chief Engineer.

Facilities

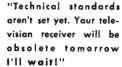
As proof of this pre-planning, although the Milwaukee Journal built Radio City in 1942, it was designed to house all three types of broadcasting—AM, FM and Television. Its largest studio, especially plan-

(continued on page 45)

WEWS' crew includes Russell K. Olsen, transmitter technical supervisor, Reginald B. Sanderson, Robert Pettus, and John Dietrich, transmitter operators (from left to right.)



The Man Who Said The Auto Would Never Replace The Horse









MERCHANDISING



"Manufacturers are always making improvements. Sets may be good now, but when those improvements come along, yours will become obsolete. I'll wait!"





A new department to aid the retail executive in planning for an estimated \$200,000,000 business in television receiver sales.

AS IN the 1920's when the retailer had a virgin market for the sale of radio receivers and properly cashed in on the then new radio industry, so will the radio dealer have the same opportunity with television. But there will be one important difference. In the early days of radio a retailer didn't have to be too smart to turn a profit in set sales.

But this will not hold true in television. Discounts are lower. Space demands are greater. Operations will have to be on a much more efficient basis. Because the television receiver is an expensive investment for the consumer, reliability and service will be important factors in set sales. After the cream market has been skimmed off, the matter of proper viewing facilities and the possibility of different store hours will become increasingly important. In spite of gradual increase in daytime programming many customers will have to be sold on the strength and appeal of evening programs. This will mean evening hours. Evening hours under present operations means overtime. And overtime might well be out of the question for efficient economical operation. This might mean later opening hours so that stores can stay open evenings economically.

There will be many problems confronting the television retailer. Smart merchandising and efficient operation, however, will mean many years of lucrative business. It will be the objective of this department, in fact the whole magazine, to help in every way possible to keep the retailing executives posted on all developments important in planning and selling television.

Shopping reports we have made still show an inadequacy on the part of the retail salesman. In most cases this is no longer the fault of the manufacturer or distributor as it was last year. Except in quality stores, salesmen have sold little but table model radios and inexpensive appliances. They have never bothered to really learn about the product they have been selling. And the inadequacy of this calibre salesman is emphasized by the many questions purchasers of television sets ask. It's a new industry and a pretty fascinating one and people will want to know all about it. Salesmen must

know such basic information as the number of stations operating in their area and the dates when other stations will go on the air. They must know what kind of shows are being telecast; the network story; the number of stations that can be received; the effective signal range and a host of other questions.

As of January 1948 here is the latest information we have on television receivers.

ADMIRAL

Has innovated matching television consoles, radio-phonograph combinations and record cabinets which may be purchased separately and matched at any time.

Television console section has a 10" screen and 28-tube circuit for approximately \$299.95. The radiophonograph combination, including FM, is also priced at \$299.95.

ANDREA RADIO

T-VJ12 table model, 12" picture tube, 27 tubes and 3 rectifiers, AM-FM reception, \$695.—C-VJ12 console type, 12" tube, 27 tubes and 3 rectifiers, AM-FM receiver, \$795.—CO-VJ12 console combination, 12" tube, 27 tubes and 3 rectifiers, AM-FM receiver, phonograph with auto-



General, Electric, 803 table model, \$465.



Du Mont, Chatham table model, \$445.



Stewart-Warner, T 711 Console, \$682.



Stromberg-Carlson, Model TV 10L,



RCA's five-in-one console, placed

matic record changer, \$995. All models available now.

CROSLEY

307 TA table model, 10" tube, 27 tubes, 3 rectifiers, \$375, now available.—348CP console featuring "Swing-a-view" picture tube, 23 television tubes plus 3 rectifiers, AM-FM radio, automatic record changer, \$795. Due the early part of '48.

DU MONT

Chatham table model has 12" tube, and separate FM band, \$445.—
Sherwood console, 15" tube, \$795, now available. (Plymouth, Devenshire same specifications, different cabinet).—Westminster console has 20" tube, automatic record player, \$2,495 complete. (Hampshire has same specifications, another cabinet). All models available now.

EMERSON

Table model with 10" tube, retailing for \$275. Introduced in mid-January.

FARNSWORTH

GV-260 table model, 10" tube, \$375, now available.—GVK-370 console, 10" tube, AM-FM radio and phonograph, price to be set, available within two months.

GAROD

42FMPT2 "Royal" console with 12" tube, 34 tubes and 4 rectifiers, includes AM-FM shortwave, automatic record changer, \$695, delivery after first of the year.

GENERAL ELECTRIC

803 table model, 10" tube, 22 tubes and 3 rectifiers, AM-FM radio, \$465, delivery beginning in '48.—801 console, 10" tube, 20 tubes and 3 rectifiers, AM radio, \$625, immediate delivery.—802 console, 10" tube, AM-FM radio and automatic record player, \$750, delivery immediately.—901 console, 5" projection type, 35 tubes plus 7 rectifiers, AM-FM-shortwave, automatic record player, \$2,250, immediate delivery.

MOTOROLA

VT71 table model has 15 tubes



Crosley, Model 348 CP Console, \$795.

and 2 rectifiers, 7" picture tube, \$179.95, now available.—VK101 console model has 10" cathode tube, 25 tubes and 3 rectifiers, AM-FM radio, \$495, now available.

PHILCO

48-1000 table model has a 10" picture tube, 23 tubes, \$395, available.
—48-1050 console, 10" tube, 23 tubes, \$499.50, available.—48-2500 console, 4" projection tube, (15"x 20" screen), 24 tubes, \$795, available.

RCA

721TS table model, 10" cathode ray tube, 18 tubes and 2 rectifiers, \$325.—730 TV1 console, AM-FM, automatic record changer, 10" picture tube, 21 tubes, 9 radio tubes, \$595.-730TV2 same as above with different cabinets and record storage space, \$675.-648 PTK, 5" tube (projection type), (15"x20" screen), 48 tubes in all, AM-FM-shortwave, \$1,195. All models are available.— 8TS30, table model taking the place of the old 630, 10" tube, \$375, out the middle of January.-721TCS console, 10" picture tube, 21 tubes in all, \$450, shipping in January.



An idea of things to come is this television lounge in Detroit set up by the Television Soles Corporation. The idea is to duplicate as closely as possible a living room atmosphere. Salesmen must take a special indoctrination course.

SONORA

Table model, 10" cathode tube plus 23 tubes, \$350, deliveries commencing in January.

STEWART-WARNER

T711 console, 10" tube, 21 tubes and 2 rectifiers, AM radio, \$682, being delivered.—T712 console, 10" tube, 21 tubes plus 2 rectifiers, AM radio, \$703, now being delivered.—TCR721 console, 10" tube, 21 tubes plus 2 rectifiers, AM radio, intermix record changer, \$794, available.

STROMBERG-CARLSON

TV10L and TV10P, both with 10" picture tubes. The former retails for \$495 and the latter which also has AM-FM radio is \$985.

TELICOR

Teluxe model has 5" projection tube (15" x 20" screen), 42 tubes, \$1495, available.—Telechamp model has 5" projection tube, (21" x 28" screen), \$1895, available.

U. S. TELEVISION

T502 console has 10" picture tube, 29 tubes plus 4 rectifiers, AM-FM-shortwave, automatic phonograph changer, \$745, now available.—
T621 console has 5" projection type picture tube, 36 tubes, AM-FM-shortwave, automatic phonograph changer, \$1,795, available end of January.—T525 "Tavern Tele-Symphonic" (in wood or leatherette) has 5" tube, projection type, 30 tubes plus 6 rectifiers, AM-FM-shortwave, \$1,595, now available.

WESTINGHOUSE

The first Westinghouse television receiver to be introduced features a 10" tube and is housed in an authentic Chinese Chippendale cabinet. *Model 181* will sell for \$485, available middle of January.



Motorola, VT 71 table model, \$179.95.

OTHER MANUFACTURERS

Brunswick, Bendix, Belmont, Hallicrafters, Cleervue, Majestic are a few of the other major manufacturers who should start deliveries in the first quarter of 1948. Then there are a host of other companies, like Bace, Colonial (not the Sylvania-Colonial family), Templetone, Sightmaster, Rembrandt, Industrial, etc., some of whom specialize in commercial installations.

TELEVISION ACCESSORIES

During radio's early history, in the '20's, radio gadgets came in for a field day. The gadgeteers are back again—in television. There are magnifying lenses which will increase the size of the picture, plastic filters to cut down on glare.

Transmirra puts out an image definer (glare reducer) and Walco and RCA, a picture magnifier. The RCA lens is $14\frac{1}{2}$ " high, $17\frac{1}{2}$ " wide with one flat and one spherical surface and an optical aperture 12x15 inches. The RCA picture magnifier is a transparent plastic lens filled with a clear oil having the same optical properties as the plastic material, transforming it into a true optical lens.



Admiral, 3-Way "Television Optional", Console section \$299.95.

ON LOCATION

(continued from page 27)

imply an economy in production. Space, good lighting, masses of extras, vast, realistic scenery-all these can be had, but at tremendous cost. The reproduction of realism does not involve a choice between \$50 per production or \$500, nor even between \$500 and \$5,000. To reproduce the Mestrovic room for four dancers in a half-hour program would cost \$50,000 minimum. To reproduce the Queen's Food Exchange would run in the same category. You may ask why this degree (or any degree) of realism is important. My answer goes back to the basic principle;—television is primarily a reporting medium; it is most effective, therefore, when it makes use, in whole or in part, of valid atmosphere and valid backgrounds.

Let us momentarily put aside this argument about realism; let us assume that painted canvas flats would be acceptable to the audience. What other economics derive from remote operations, as opposed to studio production? The most important is the reduction in rehearsal time. We have found, for example, that rehearsal ratios on remote have dropped from an average of 5:1 in the studio to approximately 1.5:1 on remote. Many productions have no rehearsal. In addition, for every hour of rehearsal a mobile crew uses an average of eight men, against a minimum of sixteen in the studio. Add that up in terms of hourly rates that obtain in any given community. The economic implications are self-evident.

Summing It Up

What does it mean? Does it mean that all television should operate in remote location, that a studio has no place in the television picture? No,-that is overstating the case. It does mean that CBS believes it has discovered a better balance between the effectiveness and the economy of a wide range of television programs. This is a salient factor in the future planning of any broadcaster. It forces him to a reappraisal of the relative importance of the studio, as the focal center of his production scheme. It forces him, moreover, to reconsider what kind of studio will best be suited to television production, how many studios, what percentage of mobile to studio equipment for any given number of hours on the air. It is to these broadcasters, present and future, that this report is directed.

programming primer



By Eddie Sobol

NBC Producer

AT FIRST glance casting a television production would not seem to present many problems. With the hundreds of unemployed actors haunting the halls of broadcasting studios and pounding on the doors of producers' offices, it should be a cinch to get together the five, six or a dozen actors necessary to cast your play. Unfortunately that is exactly what so often happens in television casting, with disastrous results.

The cast is second in importance only to the script. The director who thinks that his deft handling of a play, together with trick camera shots, lighting effects and scenery will overcome the handicap of a weak cast is certainly inviting trouble.

The way I start is to lay out on paper what I think would be the perfect cast. Sure I'm shooting at the moon. Certainly I know I won't get them all. But it sets a pattern for me. Very often I hit the moon. I did in "George Apley." I was able to get all but three (out of a cast of ten) of the actors who had played Apley on Broadway or on the road, and believe me they, together with the great script by Marquand and Kaufman, made it the successful television show it was. It is amazing how many good reputable actors are anxious to try television if approached properly. And that doesn't necessarily mean exhorbitant fees.

Theatre Experience

This brings up the point which is so often heard in television. Where are the good actors for television coming from-theatre, movies or radio? They are coming from exactly where all the good actors in the other new mediums come fromthe theatre. The theatre, with its tributary summer stock little theatre, experimental and laboratory groups, furnishes the actor with the only field for thorough grounding and development. Here and here alone does he rehearse for weeks before he is permitted to go on. Not like the movies, learning his lines the night before and forgetting them after the scene is shot. Not like the radio with its minimum of rehearsals and superficial reading of scripts. He learns the part. He gets an opportunity thru weeks of rehearsals to create character and

The theatre is the only medium in which an actor is in direct conflict or accord with an audience. It is through this direct touch with the audience that he learns timing, projection, etc. From the audience, if he is an intelligent actor, he soon learns what is right or wrong. If he has been in a few Broadway productions he has had the guidance of excellent directors and more experienced fellow actors who are constantly helping him. He has had the further advantage of being judged,

praised or belayed by metropolitan critics and the trade press. He develops the knack of memorizing quickly which is so necessary in television. He knows how to "stay in" a scene even when he has nothing else to do but sit or stand still. He knows how to play with and to his fellow actors. He is willing to submerge himself and consider the play as a whole rather than the part.

Because of his experience with audiences he can time and judge laughs. He can move around with natural grace and ease. He is accustomed to working with furniture and scenery and knows how to use them to advantage. Of course in television he must learn that he no longer has to project his voice to the last row of the gallery. He must learn to restrain his gestures and other exaggerations so necessary in the theatre. He must learn to work closer to the person he is "in scene" with particularly in tight two or three people shots.

In other words he must learn something about the television camera technique.

Little Theatre Groups

Of course the station operators in the smaller cities will say "That's great for New York, Chicago, and Los Angeles" and then ask "But what about us?" I believe that television will give great impetus to the development of little theatre groups in the smaller cities. I believe that these groups should and will be supported to some extent by the network with which the local station is affiliated and that these little theatre groups and local stations will be used in the same manner in which the Minor League Baseball Clubs are being used by the Majors. That is as a training ground to which the larger stations can come for new faces and fresh. well trained personalities. Not only will these groups be training actors but they will be developing writers, scenic artists, directors, etc.

Casting

But back to the actual routine of casting.

Having laid out your perfect cast you soon find it necessary to compromise because the people you had hoped to get are unavailable. Of course you make necessary compromises in the smaller parts first.

In casting your leads, use actors whose work you are familiar with and sure of. If you are at all in doubt, even though the actor is one of reputation, ask him, diplomatic-

ally of course, to read for you. In most cases they will cooperate. Have first, second and third choices when necessary. Have them each read if necessary. But above all avoid general auditions. It will be a great waste of time for you, a great disappointment to numbers of actors and will make casting very difficult for you in the future. The good actor won't come to see you even when you call him.

But above all, you must be convinced the actor is right, for the part. Don't take anybody's word for it. And don't cast anybody in any part against your better judgment.

I believe in giving "unknowns" a break wherever possible but not at the expense of the play. The thrill that comes when "A star is born" is great but the disappointment that comes with a poor performance is too great to risk. Remember in television you are constantly in a battle against time. You don't have, you can't afford, in measure of time, the luxurious probationary period of the theatre. That's why you must make

doubly certain your actors are right for their parts when you start your rehearsals.

Cast to Type

I find in television it is advantageous to cast to type. While there are some very good make up men, such as Dick Smith at NBC, in television, the lighting and camera limitations at present make it dangerous and at times impossible to work the changes you would like. In casting I place ability far above looks. True if I can get the combination I take advantage of it but your television audiences at present are not looking for "glamour pusses" as much as they are for good shows. Good acting and not beauty will help to get you a good show. Be careful of size of people in selecting your cast. Television being a close up medium you will find yourself in difficulties if you have cast a 6' 3" juvenile alongside a 5' 2" ingenue.

In casting foreign plays or characters try to get actors with authentic accents for dialects. The same holds true of plays of certain Amer-

ican locales where the accent is characteristic of that locale. In "The Late George Apley" which, as you know, is a play about a Boston Brahmin and his family, everything was going great guns when suddenly one of the actors dropped his recently acquired Boston accent and talked about the "goil." And don't think that everyone in the control room didn't catch it. So be very careful in casting.

As soon as you decide an actor is right for the part, give him a script. which I hope is ready. Let him get acquainted with it. Tell him to do that and no more because if he memorizes it before rehearsals he might find it difficult when cuts and changes are made. As soon as your cast is complete, get them all together for a general first reading of the play. At this time, before the reading really, give them all the final cuts and revisions and then have them read the play. This leads us directly into my next article which will be on off camera or dry rehearsals.

PRESENT STATUS OF TELEVISION

ketball. Station will become commercial in February.

On the West Coast

In Los Angeles, KTLA also telecasts a 7-day week, usually with a two hour block of studio programming starting at 7 every evening. Boxing, wrestling and hockey follow the studio shows three nights a week. World Wide News and music are featured Monday through Saturday from 3 to 5 p.m. W6XAO, operating experimentally, picks up "Queen For A Day", simultaneously with the radio broadcast and rounds out the schedule with films.

Programming Breakdown

While sports of all types get the feature play, and judging from surveys are the most popular current television fare, viewer preference as indicated by Television Magazine's Research Bureau surveys and the General Foods survey (page 36), show dramatic production leading in popularity for studio fare, combined with a desire to see more of that type of programming.

Foremost among the dramatic offerings are the Kraft Theatre, the Theatre Guild and the ANTA plays, produced over WNBT. Recap of breakdown from December TELE-VISION shows the following allocations of programming time.

Remotes: WABD, 40%; WCBS-TV, 77%; WNBT, 54%; WPTZ, 22%; WFIL-TV, 50%; WNBW, 23%; WTTG, 40%; WBKB, 65%; KSD-TV, 37%; WWJ-TV, 50%; KTLA, 34%; W6XAO, 85½%; W8XCT, 40%.

Studio: WABD, 30%; WCBS-TV, 13%; WNBT, 15%; WPTZ, 11%; WFIL-TV, 16%; WNBW, 19%; WTTG, 16%; WBKB, 20%; KSD-TV, 28%; WWJ-TV, 25%; WRGB, 13%; KTLA, 50%; W8XCT, 50%.

Film: WABD, 26%; WCBS-TV, 10%; WNBT, 15%; WPTZ, 27%; WFIL-TV, 16%; WNBW, 12%; WTTG, 12%; WBKB, 15%; KSD-TV, 35%; WWJ-TV, 25%; WRGB, 24%; KTLA, 16%, W6XAO, 15%; W8XCT, 10%.

Network: WABD, 4%; WNBT, 16%; WPTZ, 40%; WFIL-TV, 18%; WNBW, 46%; WTTG, 32%; WRGB, 63%.

(continued from page 20)

MANUFACTURING

Production bottleneck seems broken at last, with delivery on transmitters, and studio equipment now being made by RCA, General Electric and DuMont.

The receiver story is also an encouraging one, with total production for the first 11 months of the year, as reported to RMA, amounting to 149,226. November figure alone was 24,135 of which 14,674 were table models, 4,178 were consoles and 5.285 were radio-phonograph combinations. Monthly breakdown for 1947 is as follows: January-5,437; February—6,235; March—6,639; April-7,886; May-8,690; June-11,484; July-10,007; August-12,-283: September-32,719 (includes 16,991 sets previously unreported); October—23,696; November—24,-135.

Almost every radio manufacturer is or will shortly be in television production. 50% of the dollar volume of RCA for 1947 was in television. Industry estimates are that by mid 1948 50% of the dollar volume of production of the entire radio industry will be in television. (For complete details on receivers, see "Merchandising", page 30).

ADVERTISING

181 sponsors on television during December . . . tear sheet on General Foods survey

WHY U. S. RUBBER CO. IS USING TELEVISION

How one of the biggest advertisers in the country appraises television was detailed in a recent speech by C. J. Durban, assistant director of advertising for U. S. Rubber.

"We think television can be one of the best advertising media that has vet come along because it offers the opportunity to show and demonstrate merchandise actually in use. Apart from that generalization, we see values in television which might very well be beyond those of other media from the standpoint of public relations. Much of the work we have already done in television has had good public relations or good customer relations as its target rather than product selling. One of our programs featuring aviation and using aviation personnel opened doors for us in that field hitherto closed. Another got us high commendation from the oil industry which includes some of our largest single accounts. Still another brought us closer relationships with important buyers in the agricultural chemical field. All of these values accrued to us pretty much without regard to whether or not anyone looked at or viewed our program out on the air. The job was done in the studio.

We have built friendly relations for the company as a whole with many of our programs—sometimes all of it done at the point of origination, particularly in remotes; sometimes based on the result of a public service effort such as our televising of the seating of Bishop Sherrill in Washington, or the Grace Church Candlelight Christmas Eve ceremonies.

Selling the Sales Managers

But now, let's look at another side of this television picture from the advertiser's viewpoint. There are some obstacles. My own company, which is highly divisionalized by product or lines of merchandise with each division largely autonomous in running its own business, has put me personally largely in the same position as the man who actu-



C. J. DurbanAssistant Director of AdvertisingU. S. Rubber Co.

ally sells television time for the broadcasters. For the ideas which are developed by us or for us and the opportunities which are presented to my company to do something in television invariably have to be sold-so to speak-to one of our company divisions. And right here I ran into what I believe was to be expected, namely, that the sales managers—the top men who are held responsible for the sales of a given product or line-rather "obstinately" insist on ringing up cash on the sales register in sufficient volume to compensate for every dollar they spend in advertising. These gentlemen have been pretty hard to convince so far that television is a paying proposition in terms of product sales-and I have had to agree with them to such an extent that our objectives have swung more and more to public and customer relations. I have found that my best argument, in any event, is to induce the men who control the sales policies of the company to have television sets in their homes. One of the most convincing things about television—is television.'

SELLING THE ADVERTISER

With television becoming more and more a competitive advertising medium, the television commercial manager and time salesman must have the necessary data to sell it with facts and figures. Jim McLean, commercial manager of WPTZ, detailed his method of handling the situation at the last TBA clinic—a formula which could well be followed by soon-to-be-opened stations for attracting the sponsors' dollars.

Initial phase of operations are the opening months, particularly if a station is the first in the area and the number of receivers is low. As Jim McLean puts it:

"You have probably signed up a couple of surefire sports events as the backbone of your programming schedule. Your rate card is tentative; your program and commercial policies have not been set and you need some studio and remote shows to fill out your program schedule. You need sponsors to help pay part of the bill but you have little to offer them as a competitive merchandising medium. In looking for a sponsor you turn, naturally, to those organizations who want to build circulation just as much as you do. Public utilities, local department stores, home appliance dealers and brewers, who are interested in sports programs are your logical prospects.

"These sponsors will not be sold programs in the general sense of the word. Your sales will probably be informal arrangements with sponsors involving the setting up of working agreements whereby they will participate in the cost of producing the programming which is needed. It may be a cooperative arrangement with the station and the sponsor both contributing time, talent, facilities and ideas.

"However, in some cities, the audiences are fairly large and growing faster every month. There competition between stations is keen and the television salesman must be equipped to do a good selling job. Since the salesman's job, particularly in television, consists of doing a great deal of education of prospects, the salesman, himself, must have a well-grounded knowledge of the medium.

"Prospective sponsors want to know about the audience—How many receivers are there in your area? How many in homes? How many in public places? What income groups do you reach? What age groups do you reach? What programs do they like? What kind of geographical distribution do you have? Having the answers to these questions helps immeasurably in making a sale. And to get these answers means a planned program

(continued on page 39)

Facts and figures which convinced General Foods to continue in television

ABOUT two years ago General Foods management authorized an appropriation for the study of television as an advertising medium. At this time a committee taken from the sales and advertising staff was formed. A few months ago a study was inaugurated on the character of television, of listening preferences, and the reactions of television audiences to television programs. Diary, personal interviews and coincidental techniques were used and the survey was conducted by Benton & Bowles and Young & Rubicam.

The following are excerpts from the actual report (slightly edited) which was given to the General Foods Advertising Committee.

Why Did We Do It?

- 1. To secure and hold time franchises.
- 2. To secure first rights to specific programs.
- 3. To provide for widest affordable experimentation with program and commercial production.
- 4. To allow broad participation by many GF products.

Programming

We participated on the three New York stations for nine months.

We sponsored 14 different types of programs: "Open House" with Harriet Van Horne and James Beard, (personality spots and cookery); "Allen Prescott—Wifesaver" (comedy and home economics); "Hobby Lobby" (novelty, public participation); "Friend of the Family" (documentary films); "R.C.A. Exhibit" (remote pickup); "If I Had A Chance" (variety); "Author Meets The Critics" (discussion); "Juvenile Jury" quiz); "Leave It To The Girls" (comedy quiz); "Seven Lively Arts Quiz" (panel quiz); "Meet The Press" (interview roundtable); "Brooklyn Dodgers" (on-the-spot sports); "Weather Reports".

Commercials

Commercials were produced for Birds Eye, La France, Satina, Gaines, Maxwell House, Certo, Jell-O, Post Cereals, and Instant Sanka.

Our commercial experience:

- 1. Proved that television can tell an advertising story quickly and attractively.
- 2. Showed that length of commercial copy should be dictated by

the inherent interest of the idea and the ingenuity and quality of its execution.

- 3. Demonstrated the usefulness in television of both the live and filmed commercial. Film commercials offer high production quality and a guarantee of performance. Live commercials offer lower cost, better integration and flexibility of last-minute copy changes.
- 4. Verified our belief that the dramatized, demonstration, comedy, animated jingle and bulletin types of commercials all have practical applications in this new medium.

In the light of the experience we have gained and the contributions we have made we can only conclude that the expenditure was worthwhile in achieving our initial objectives. But recognizing that our continuation in television will depend on its commercial value we determined to measure it as an advertising medium.

Audience Characteristics

We went to many sources for information. We set up a sufficiently large and scientific cross-section of viewers to get a reliable and acceptable current picture of television. Since 64% of all sets are in the New York area, and since this is the area where major television practices and policies are being shaped, we made both a quantitative and a qualitative study of this audience.

What is the character of the New York audience? An average New York television family:

Owns a television set with a 7-inch or 10-inch screen.

Has owned the set 4 to 12 months. The family is composed of 3.3 persons, they invite friends to drop in to see television three times a week—or more often.

They have a telephone and pay more than 75 dollars a month for rent.

The head of the household was graduated from high school and attended some college, he is an executive, professional man or owns his own business.

They can tune in to all 3 N. Y. stations.

Tele average evening audience is 3.47 persons per viewing set; 1.42 men, 1.11 women, .94 children (under 17).

During the survey period there were 42 hours of television available per week.

Average tune-in per wk.—17 hrs. Today's television audience does sufficient viewing to warrant our considering its reactions as indicative.

We believe the television audience shows itself to be enthusiastic (sets tuned in), super-sensitive to programming (tuning for programs—not for stations), almost devoid of viewing habits (with a few exceptions).

Program Preferences

Here are the types of programs particularly enjoyed as revealed by the questionnaires:

Live Drama—31% women; Feature Films—15% women; Baseball—11% women; Boxing—9% women.

Baseball—27% men; Boxing—27% men; Live Drama—21% men.

Western Films—20% children; Feature Films—17% children; Kid Shows—14% children. (children, 11 through 16).

Sponsor Identification

Average correct Sponsor Identification for 7 programs checked by the coincidental method was 68%. Of those correctly identifying the sponsor, an average of 36% could state one or more of the sales points actually made in the commercial.

For the same seven programs, of those who could correctly identify the sponsor, an average of 41% could name one or more things actually seen during the commercial.

Recall checks made 4 to 7 days after broadcast on the same programs showed an average for sponsor identification of 38-4/5%.

By coincidental and recall checks, we find indications that the television audience pays attention to commercials, a high percentage of this audience remembers the sponsor, and a substantial percentage of viewers retains specific sales points made in the commercials.

Recommendations — All things considered, we recommend General Foods' continued use of television in 1948 as an effective supplementary medium for commercial sponsorship in the New York Metropolitan Market.

CURRENT ADVERTISERS ON ALL STATIONS

Alexander Smith—"Magic Carpet". WABD, Friday. Fifteen minute studio show. Bi-weekly. Anderson, Davis & Platt. Harry Alter Company (Crosley and Launderall Distributors)—Wrestling. WBKB. Mondays. Malcolm-Howard Agency.

American Oil Company (Amoco)—Home games of Baltimore Colts. WNBW. Washington Redskin's pro football. WMAL-TV. Spots. WMAR-TV. Joseph Katz Agency.

American Packing Co.—Live spots. KSD-TV. Anfenger Advertising.

American Safety Razor Co.—5 one-min. film spots. WCBS-TV. Agency, Federal Advertising.

American Shops — Boxing bouts, Tuesday; wrestling matches, Friday. WABD. Agency, Scheer Advertising Co.

American Tobacco Company—Spot announcements. WWJ-TV, WCBS-TV, WABD, WTTG, WBKB, KTLA, KSD-TV. Agency, Foote, Cone & Belding.

Arcade-Pontiac—"Illustrated News". WNBW. Thursday. Ten minute news format. Spot aunouncements, once weekly. Kal, Ehrlich and Merrick Agency.

Artophone Corp. (Philco Distributors) — Sports. KSD-TV. Marjorie Wilten Advertising Agency.

Atlantic Refining Co.—Penn football games and basketball games. WPTZ. Agency, N. W. Ayer.

Atlas Prager Brewing Co.—Wrestling and boxing. WBKB. Wednesday and Friday. Olian Advertising.

Automobile Club of Michigan — Spots, four times weekly. WWJ-TV. Agency, Stockwell and Marcuse.

B. T. Babbitt, Inc.—"Missus Goes-A Shopping". WCBS-TV. Participation in half hour shopping program originating from a different grocery store each Wednesday. Agency, Dnane Jones Co.

B. V. D. Corporation—Weather reports. WNBT, Sunday and Thursday nights. Spots. KTLA, WFIL-TV and WBKB. Grey Advertising Agency.

Barbey's, Inc.—"Sportsman's Show". WPTZ. 15 min. studio show. Fridays. Agency, Gray & Rogers.

Barnart, Inc.—Participation in "Doorway to Fame". WABD. ½ hr. amateur show. Friday.

Barr's Jewelers — Time spots. WPTZ, Prager Advertising Agency.

Bartel's—"Let's Pop the Question" WFIL-TV. Half hour quiz show. Sundays. Shapiro Advertising Agency.

Beneficial Saving Fund Soc.—Spots following collegiate sports. WPTZ. Agency, Richard A. Foley.

F. W. Berens-Spots preceding boxing bouts. WTTG. Agency, James S. Beattie.

Bonded Auto Sales—"Know Your New York", WABD. Wednesday. ¼ hr. quiz show of famous landmarks in New York. Agency, William Warren.

The Boston Store—"Life at the Boston Store". WTMJ-TV. Sundays. 15 min. show based on a "how to do it" theme. Agency, Mark-Mauntner-Berman.

Botany Worsted Mills-Weather reports. WABD, WNBT, WPTZ, KTLA, WBKB,

KSD-TV. Alfred Silberstein, Bert Goldsmith.

Brentwood Sportswear—Weather spots. WPTZ, WNBT. Agency, John Faulkner Arndt.

Broadway Fashions—Participation in "Doorway to Fame". WABD ½ hr. amateur show. Friday.

Broadway House of Music-High school basketball games. WTMJ-TV.

Broadwood Hotel—Time signals. WPTZ, Philadelphia Eagles football games. Agency, Deane, Klein & Davidson.

Brown and Williamson Tobacco Co.—Collegiate basketball doubleheaders. WBKB. Agency, R. M. Seeds.

Buchanan Company — "Tele-Newsreel". KTLA. Tuesday, Friday. Ten minute news program. Agency, Buchanan & Co. Bucknell Shirts—Participation in "Doorway to Fame". WABD. ½ hr. amateur show. Friday.

Bulova Watch Co.—Time signals. WNBT, WNBW, WCBS-TV, WTTG, WWJ-TV, WPTZ. Agency, Biow Co.

Canadian Ace Brewing Company—Bears' home games. WBKB.

Chevrolet—Western film. WABD. "Telenews." 20 min. film. WBKB. "Telenews Digest". WWJ-TV. 20 minute weekly program. Agency, Campbell-Ewald.

Chex Candy Company—Weather signals. WPTZ. Agency, Solis S. Cantor.

Cloverland Dairy—Spots. WMAR-TV. Cluett-Peabody—"What's New in the Stores". KSD-TV. 15 minutes. Agency,

Young & Rubicam.

Coburn Farm Products—"Missus Goes A-Shopping". WCBS-TV. Participation in half hour shopping program originating from a different grocery store each Wednesday. Modern Merchandising Bureau.

Columbia Wholesalers (Philco Distributors)—Georgetown and George Washington football games. WMAL-TV. Spots preceding hockey and following basketball games. WTTG. Kal, Ehrlich & Merrick, Agency.

Commonwealth Edison — "Jane Foster Comes to Call". WBKB. ½ hr. cooking and home management format. Tuesday, 3:00 to 3:30. Agency, J. R. Pershall Co.

Copa Cafe-Spots. WMAR-TV.

Crosley Dealers (St. Louis) — Sports. KSD-TV. Sonja Henie Hollywood Ice Revue. One shot. Agency, Maurice L. Hirsch.

Dad's Root Beer Co. — Spots. WBKB. Three times weekly. Malcolm-Howard Advertising Agency.

Elizabeth Davidson Furniture—Time spots twice weekly. WPTZ. Agency, Solis S. Cantor.

C. H. Davis & Co.—INS news. WPTZ. Five times weekly. Agency, Solis S. Cantor.

Detroit Edison Co.—Two fifteen minute newscasts weekly. WWJ-TV, Wednesday and Friday. Agency, Campbell-Ewald.

Dewco Tire Service Company—Time signals. WPTZ, preceding football games. Agency Raymond E. Nelson.

Diener's Rug Company—Spots twice weekly. WTTG. Art Ads Agency.
D'Orsay Jewelers—Spots. KTLA.

Dry Imperato Champagne (Robinson &

Lloyds Ltd.) — Spots, WABD. Twice weekly.

DuMont Marine Service, Inc.—Participation in "Swing Into Sports". WABD. Sports instruction program.

DuMont Telesets—Spots. WABD, WTTG. Five times weekly. Direct.

Dushoff Distributing Co.—Three spots weekly. WFIL-TV. Agency, Paekard.

E. Z. Thread Co.—Joint sponsorship of "Stars Dressing Room". WNBT. Wednesday. 15 min. demonstration and entertainment. Agency, Redfield-Johnstone, Inc.

Electrical Center - Station breaks. WNBW. Once weekly. Friday. Agency, Kal, Ehrlich & Merrick.

Elgin-Time spots. WNBT, WCBS-TV, WPTZ, WBKB, KTLA. Agency, J. Walter Thompson.

Emergency Radio & Appliance—Split sponsorship of Blackhawks Hockey. WBKB. Direct.

Evervess—Spots over WFIL-TV, WABD, WCBS-TV. Agency, Young & Rubicam. The Fair Store—"Tele-Chats". WBKB. Friday. Fifteen minute news program. Agency, Ivan Hill, Inc.

Mort Farr—Sports and football scores. WFIL-TV. Sundays. Shapiro Advertising. Fischer Baking Co.—"Small Fry Club." WABD. Thursday. Half hour children's program. Scheck Advertising Agency.

Fischer Body Division (General Motors)
—Films. WMAL-TV, WMAR-TV and
WFIL-TV. Once weekly for four weeks.
F. W. Fitch Co.—Spot. Once weekly.
WABD. L. W. Ramsey Agency.

Ford Motor Co.—Madison Square Garden "Parade of Sports". WCBS-TV. Boxing and wrestling over KTLA. Wrestling matches, WWJ-TV. J. Walter Thompson. Galvin Mfg. Co. (Motorola)—Boxing. WBKB. Tuesdays. Agency, Malcolm-Howard.

General Electric Supply Corp. (Detroit) Basketball. WWJ-TV. Agency, Simons-Michelson.

General Electric Supply Corp. (Washington)—"Walter Compton and the News". WTTG. 15 minute news analysis, 5 times weekly. Agency, Belmont Ver Standig.

General Foods—"Author Meets the Critics". WNBT. Agency, Young & Rubicam. Georges Radio & Television Stores—"Let's Learn To Dance". Friday. 15 min. dance instruction program. Spots, Wednesday. WNBW. Spots following hockey games and participation in "Small Fry Club". Four times weekly. WTTG. 15 min. man on the street program outside stadium following football games. WMALTV. Agency, Robert J. Enders.

A. Gettelman Brewing Co.—"Sports Parade". WTMJ-TV. 15 min. film preceding Saturday night basketball games. Wrestling, Thursdays. Agency, Scott-Telander. Gillette Safety Razor Co.—"Cavalcade of Sports". WNBT, Monday and Friday. Boxing bouts. Relayed to WRGB, WPTZ, WNBW. Maxon, Inc.

Gimbels, Philadelphia—"The Handy Man". WPTZ, Friday. Fifteen minute demonstration. "Eavesdropping on Santa". WPTZ. 15 min. children's show direct from store. Monday, Wednesday and Friday.

Gimbels, Milwaukee — "Gimbels Views the News. WTMJ-TV. Sundays. 15 min. newsreel.

Globe Brewing Co.—"Preview to Sports". WNBW. 15 minute interview preceding sporting events. Saturday. Spots and boxing. WMAR-TV. Boxing, Mondays. WMAL-TV. Agency, Joseph Katz.

Gough Industries (Philco Distributors)—Nine programs over KTLA. "Al Jarvis", half hour disc jockey show. Monday, Wednesday and Friday. "Uncle Phil", ten minute children's show. Every night except Sunday. "Adventure Serial", twenty minute film show. Monday, Wednesday, Friday and Saturday. "You'll Be Sorry", half hour audience participation show. Tuesday. "Tele-Beauty", fifteen minute woman's program. Thursday. "Star Views", fifteen minute gossip, personalities format. Tuesday and Thursday. "Meet the Dons", fifteen minute pre-football program. Thursday. "Football Scoreboard", fifteen minutes of scores. Saturday and Sunday. Dons pro football games. Grinnell Bros.—"Television Party", WWJ-TV, Thursday. Half hour audience participation show originating at store. Agency, Simons-Michelson.

Gulf Refining Company—"Television News." WCBS-TV. Thursday. Fifteen minute film program. "You Are An Artist." WNBT. Thursday. Ten minute art lesson format. Relayed to WRGB, WPTZ. Young & Rubicam.

Gunther Brewing Company—"Sports School". WNBW. Friday. Fifteen minute sports clinic format. Wrestling, WMAR. Agency, Booth, Vickery and Schwinn.

Hamilton Hotel—Spots preceding wrestling and following boxing. WTTG. Agency, James S. Beattie.

Hamilton Watch Co.—Holiday programs. WNBT. Hour Christmas Day show at St. Albans Naval Hospital and on-the-spot telecast of Times Square celebration New Year's Eve. Also carried by WNBW, WPTZ and WRGB. Agency, Batten, Barton, Durstine and Osborne.

Hat Research Foundation—Spots. WFIL-TV, WCBS-TV, KSD-TV, KTLA and WWJ-TV. Grey Advertising Agency.

Havens Electric Co.—News show. WRGB. Fridays.

The Hecht Co.—Golden Gloves boxing bouts. WTTG. Agency, Harwood, Martin.

Heinel Motors (Dodge & Plymouth Dealers)—"Going Places With Heinel Motors". WPTZ. Sunday. Half hour film. Agency, Solis S. Cantor.

Holt-De Land, Inc.—3 five min. programs. WNBT. Slides and commentary on WNBT's evening programs. Agency, Miller Advertising.

Hot 'N Kold Shops — Spots, five times weekly. WWJ-TV. Agency, Gabriels Advertising.

Hub Department Store—Spots. WMAR-TV. Agency, Joseph Katz.

The J. L. Hudson Co.—"Sketchbook", WWJ-TV, Wednesday. Quarter hour demonstration type program. Agency, Wolfe, Jickling, Dow & Conckey.

Hyde Park Breweries Association, Inc.—Boxing, wrestling, sports. KSD-TV. Agency, Gardner Advertising Co.

Ida's Dent. Store — Spots preceding basketball games. WTTG. Agency, 1. T. Coben.

International Dress Co.—Joint sponsorship of "Stars Dressing Room". WNBT. Wednesday. 15 min. demonstration and entertainment. Agency, Redfield-Johnstone, Inc.

Jay Day Dress Company — Participation in "Birthday Party". WABD. Thursday. Half hour children's format. Direct.

Jay Jay Junior Inc.—"Mary Kay and Johnny". WABD. 15 min. domestic comedy series. Friday.

Jiffy Products, Inc.—Weather signals at network station break Sunday. WPTZ. Agency, Martin & Andrews.

Johnson Bros.-Spots. WMAR-TV. Agency, Harry J. Patz.

Kaiser-Frazer — "A Christmas Carol". WABD. 1 hr. adaptation of Dickens' famous Christmas story.

Kelvinator—"In the Kelvinator Kitchen". WNBT, Wednesday. Fifteen minute cooking program. Relayed to WPTZ, WNBW. Geyer, Newell and Ganger.

Philip Klein Advertising Agency—"Philadelphia—A Great City". WFIL-TV. Tuesday. 15 min. public interest program featuring the cultural treasures of Philadelphia. Agency, Philip Klein.

Knox the Hatter—Joint sponsorship of sporting events at Madison Square Garden. WCBS-TV. Agency, Geyer, Newell & Ganger.

Krast Food—"The Krast Television Theatre". WNBT, Wednesday. Hour dramatic show. Relayed to WNBW and WRGB. Agency, J. Walter Thompson.

Lacy's--15 min. man on the street program outside stadium preceding football games. WMAL-TV. Agencies, Kal, Ehrlich & Merrick and Henry J. Kaufmann & Assoc.

La Pointe Plascomold - Spots 5 times weekly. WABD. Direct.

Lektrolite—Spots. Tuesday, and five minutes before Yankee football games. WABD. Spots. WBKB. Agency, Donahue

Lit Brothers — Three 15 min. holiday shows featuring Santa Claus, WFIL-TV. Agency, Al Paul Lefton.

Longines-Wittnauer—Time spots. WABD. Agency, Arthur Rosenberg Co.

Manhattan Soap Co. (Sweetheart Soap)— "Missus Goes A-Shopping". WCBS-TV. Participation in half hour shopping program originating from a different grocery store each Wednesday. Agency, Duane Jones.

Maxwell House Coffee—"Meet the Press". WNBW. Relayed to WNBT. Half hour panel of noted newspapermen with prominent national figures as guests. Wednesday. Joint sponsorship of sporting events at Madison Square Garden. WCBS-TV. Agency, Benton & Bowles.

James McCreery & Co.—"A Glamorous Christmas Morning". WNBT. Once weekly. 15 min. pre-Christmas shopping show. McKee-Pontiac Co. (Pontiac dealer)—One min. spot weekly. WMAL-TV. Agency, Kal, Ehrlich & Merrick.

Meadow Gold Ice Cream — One spot weekly. WTTG. Agency, James S. Beattie. Michael Bros. — ½ hr. amateur show. WABD. Friday. Agency, Advertising Trade Service, Inc.

Modern Radio & Appliances-Spots. WBKB. Direct.

Mouquin Wines (Austin Nichols Co.)—
"Sports Names to Remember". WABD.
5 min. program on sports figures preceding pick-up of boxing and wrestling.
Monday and Thursday. Agency, Alfred Lilly Co.

C. F. Mueller—"Missus Goes A-Shopping". WCBS-TV. Participation in half hour shopping program originating from a different grocery store each Wednesday. Agency, Duane Jones Co.

National Brewing Co.—Washington Capitol basketball games. WTTG. Baltimore Bullets basketball games. WMAR-TV. Agency, Owen & Chappell.

Ned's Auto Supply—Children's program. WWJ-TV. Fifteen minute program, 5 times weekly at 4:45. Agency, Gerrish Albert.

P. J. Nee Furniture Co.—Station breaks. WNBW. Twice weekly. Agency, Harwood Martin, Washington.

New Era Potato Chips Sales Corp.—Participation in "Barn Dance". WBKB. Mondays. Agency, Tom Schroeder.

Norge—Fifteen minute newscast, WWJ-TV, Thursday. Agency, Campbell-Ewald. Norge Dealers (Greater Detroit)—Hockey games. WWJ-TV. Agency, Campbell-Ewald.

Norma Pencil-2 spots weekly. WABD.

Onyx Novelty Co.—Participation in "Doorway to Fame". WABD. Half hour amateur show.

Pabst Blue Ribbon Beer—Giant pro foothall. WNBT. Agency, Warwick & Legler. Peake Motor Co.—"News in Review". WNBW. Friday. 5 min. news format. Agency, Henry J. Kaufmann & Associates. Pelta Furs, Inc. — Spot. Once weekly. KTLA. Direct.

Pep Boys—"Shopping at Home". KTLA. Sunday. Split sponsorship quarter hour shopping program.

Pepsi-Cola Bottling Co.—Station breaks. WNBW. Twice weekly, Wednesday and Sunday. Agency, Henry J. Kaufmann & Assoc.

Perma-Stone Corp.—Boxing. WTMJ-TV. Philadelphia Electric Co.—"Television Matinee". WPTZ. Hour fashion and home economics program, Monday and Wednesday afternoons. Direct.

Philco Dealers (St. Louis)—Sports. KSD-TV. Agency, Marjorie Wilten.

Philco Distributors, Inc. (Chicago)—Split sponsorship Blackhawks Hockey. WBKB. Direct.

Philco Distributors, Inc. (Detroit)—WWJ-TV. "Fun and Fables". ½ hr. children's program, 5 times weekly. "Television Matinee". ½ hr. program, 4 times weekly, alternating between cooking demonstrations and charm hints. Agency, William I. Denman, Inc.

Philco Distributors, Inc. (Philadelphia)—Philadelphia Eagles football games. WPTZ. Agency, Julian Pollock.

Phillip's Radio and Appliance—Spots twice weekly. WTTG. Agency, I. T. Cohen. Pontiac Dealers Assn. of Philadelphia— High school football games. WPTZ.

Powers, Inc. — Spots. Twice weekly on appliances. WABD. A. W. Lewin Agency. Purified Pillows—Participation in "Birthday Party". WABD. ½ hr. children's variety program. Once weekly. Direct.

RCA Distributing Corp. (Chicago)— "Junior Jamboree". WBKB. Hour children's program, 5 times weekly. Agency, J. Walter Thompson.

RCA Distributors (Baltimore) - Spots. WMAR-TV. Agency, Joseph Katz.

RCA Victor—"World in Your Home". WNBT, Friday night. Fifteen minute film program. Relayed to WRGB, WNBW. "Eye Witness". WNBT. Thursday. J. Walter Thompson Agency.

RCA Victor Dealers (St. Louis)—2 min. spots, 10 times weekly. KSD-TV. 15 min. man on the street twice weekly, afternoon and evening. Direct. Hockey.

RCA Victor Distributing Co. (Detroit)—
"Junior Jamboree". WWJ-TV. ¼ hr. children's program, 5 times weekly. Agency,
J. Walter Thompson.

Radio Specialty Co. (Philco)—"Philco News and Views". WTMJ-TV. Ten min. news program. Agency, Gus Marx.

Reardon Paint—Cartoon quiz. KSD-TV. 15 minute show. Agency, Oakleigh R. French.

Reed Candy Co. -"Today's World Picture". WBKB. 10 to 15 min. news show. Direct.

Ruppert Brewery, Inc.—All-America Football Conference, WABD, WTTG. Agency, Lennen & Mitchell.

Sam's, Inc.—"Meet Your Neighbor". WWJ-TV, Friday. Half hour show from store. Stockwell & Marcuse.

Sanka Coffee—Weather reports. WABD, five nights a week. Young & Rubicam.

Schuster's Dept. Store—"Schuster's Open House". WTMJ·TV. Wednesdays. 15 min. feature of current events and interesting personalities. Agency, Cramer-Krasselt.

Schwabacher, Frey--"Shopping at Home". KTLA, Sunday. Split sponsorship, quarter hour shopping program.

Scott & Grauer (Ballantine Distributors)

—Wrestling bouts. WFIL-TV. Mondays.

J. Walter Thompson Agency.

Sears—"Santa Palace". WRGB. Juvenile participation show. Three nights weekly.

Sears Roebuck—"Shopping at Home". KTLA, Sundays. Split sponsorship, quarter hour shopping program.

Seven-Up Bottling Co.—Film spots. KSD-TV. Agency, Oakleigh R. French.

Southern Venetian Blind—"The Bob Wolff Show", WTTG. 15 minute sports program. Direct.

Southern Wholesalers Inc. (RCA Dis-

tributors)—"RCA Victor Varieties". WNBW. 4 daytime programs. "The Local Crowd", Tuesday; "Film Features", Wednesday; "Fun at Four", Thursday; "Football", Friday. Agency, Henry J. Kaufmann & Asso.

Springs Mills—Yankee football. WABD. Stern & Company—"Your Television Shopper". WPTZ. Direct from store.

Stoumen Rug Company—Spots twice weekly. WFIL-TV. Agency, Ralph A. Hart. Strauss Stores—"Small Fry Club". WABD. Monday. Half hour children's program. Agency, William Warren.

Superfine Appliances Company—INS news. WPTZ. 5 times weekly preceding evening programs. Solis S. Cantor.

Superfine Fuels Company—Weather spots. WPTZ, Wednesday evening at station break. Agency, Solis S. Cantor.

Sulft—"The Swift Home Service Club". WNBT, Friday, 1 to 1:30. Half hour entertainment, decorating and cooking format. Relayed to WNBW, WPTZ, WRGB. Agency, McCann-Erickson.

Teldisco-Wrestling and basketball. WABD. Thursday. Raymond Agency.

Telecast Program—Spots, WABD.
Telestores Corp. of America — Spots.
WABD. Direct.

Television News — Spot. Once weekly. KTLA. Direct.

Television Specialists—"Today's World Picture". WBKB. 10 to 15 min. news show. Direct.

Terman Television Sales — "The Singing Smiths." WBKB, Friday. Fifteen minute show. Spots. Direct.

Tom's (Chrysler Plymouth Dealers)— Spots. WMAL-TV, WTTG. Agency, Henry J. Kaufmann & Asso.

Transmirra Products Corp.—Participation in "Swing Into Sports". WABD. Sports instruction program. 5 spots weekly over WABD and WTTG. Participation in "Small Fry Club". WABD.

Transvision-Spots. WABD.

Trilling and Montague (Norge Distributors)—Philadelphia Warriors basketball games. WFIL-TV. Agency, Campbell-Ewald.

Union Electric Company—"Telequizicalls". KSD-TV, Monday. Half-hour viewer participation show. Gardner Advertising Agency.

U. S. Rubber Company—"Campus Hoopla". WNBT. Friday. Fifteen minute sports-variety format. Replaced by "The American Home". "Candlelight Service of Carols". WABD. One shot. Our Lady's Juggler". WNBT. One shot. Relayed to WNBW, WPTZ. Campbell-Ewald Agency. Universal Pictures Co.—Trailer on "The Scnator Was Indiscreet". WNBT, WCBSTV.

Wadham's Division Socony-Vacuum Oil Co.—Marquette University home basketball games. WTMJ-TV. Agency, Compton Advertising.

Walco (Tele-Vue Lens)—Spots. KSD-TV, WABD and WMAR-TV,

Ward Radio Company - Station break. WNBW. Once weekly. Friday. Agency, Kal, Ehrlich & Merrick.

Wheeler, Inc. (Chrysler Dealer)—Spots. WTTG and WNBW. Agency, James S. Beattie.

Wilf Bros.—INS news tape. WPTZ, preceding football games. Agency, Philip Klein.

Winston Radio & Television Co. -Amateur boxing. WABD, Monday.

Zamoiski Co. (Philco Distributors) — Spots. WMAR-TV. Harry J. Patz, Agency.

FILM EQUITIES CORPORATION

Television Film Programs

Features

Westerns

•

Serials

Sports

a

Travelogues

Cartoons, etc.

A complete service for the station and agency

1948 catalogue available

Film Equities Corporation

Television Director—Jay Williams 1600 Broadway New York 19, New York Tel.: CIrcle 7-5850

Selling The Advertiser

(continued from page 35)

of audience research has to be established. In Philadelphia, for example, the Electrical Association, composed of the major manufacturers and distributors of electrical appliances, are setting up to poll the television distributors each quarter and to obtain, on an anonymous basis, the number of sets installed. These figures will be released by months for each quarter—in effect, an audited summary of receiver installations.

"WPTZ maintains an active file of names and addresses of television set owners who are regularly polled for their program preferences. Each program is rated, as relative program ratings are important to every sponsor."

In addition to the local picture, a salesman must also be prepared to answer questions about the national status of television. To help answer the prospects' questions visually,

Jim McLean has developed a factbook on television, made in looseleaf form so that it can be brought up to date easily. This includes such essential information as television stations on the air and under construction, the national receiver story-not only the number of receivers, but translated into dollars -which result in a very impressive picture. This is followed by a page on WPTZ itself-the coverage and the number broken down by receivers and audience, both in public places and in homes. Another important section contains "success stories"-successful selling jobs which the station has done for products and sponsors, followed by an outline of their network operation and short write-ups covering several types of shows that are selling for sponsors right now; program packages which are available; their own facilities story and finally, their rates.

affiliate, filed for the town's only channel.

Birmingham, Ala.: WBRC has applied for the No. 4 channel here. Eloise Hanna, President of WBRC, will run the tv station, spend \$186,-000 on plant.

Boston: Presents the most competitive situation to date, with eight applicants vying for the town's two remaining tele channels. CBS, E. Anthony & Sons (Basil Brewer's New Bedford Times-Standard) and WHDH, jointly owned with the Boston Herald-Traveler, have entered eleventh-hour bids to compete in hearing March 1st for a Hub City station.

It is Columbia's third try for a tv station to bulwark its video operations in New York and Chicago. CBS-WEEI station manager Harold Fellowes will manage the video station. Net is applying for the No. 9 spot, will spend \$437,325 on plant, \$30-35,000 a month for operating costs, locate studios at 182 Tremont St. Harold Doschue is technical manager. Initially, bulk of shows will be network originations from WCBS-TV.

The Boston Herald-Traveler station WHDH asks for Ch. 13, will plow a healthy \$319,399 into plant and \$17,500 a month on operation. Herald-Traveler is lending the radio company \$750,000 to underwrite television. Paper claims that since it purchased WHDH a few years back, station's share of the overall audience has climbed from less than 5 percent to over 23 percent—the largest bloc of listeners tuned to any Boston station. Station inaugurated policy of carrying the uninterrupted games of Red Sox and Braves and intends to telecast them in same fashion. William B. Mc-Grath will direct the tv operation.

E. Anthony & Sons, with another bid in the hopper for New Bedford, Mass., is vying with CBS for ch. 9. Mayhew Hitch is President. Station will cost approximately \$227,500 and locate at Park Square.

Buffalo: Buffalo Courier-Express (WEBR) put in a bid for the No. 7 channel to compete with the Buffalo Evening News (WBEN). News hopes to have WBEN-TV on the air with an NBC contract by April '48. Empire Coil Co. has also entered its fifth bid, with the proposed station to be located at Niagara Falls.

Canton, Ohio: Brush Moore Newspapers, Inc., publishers of the Canton Repository and operators of WHBC, an MBS affiliate, have applied for channel 7.

Charlotte, N. C.: CBS affiliate, WBT, owned by the wealthy Jefferson Standard Life Insurance Company, is seeking ch. 3 for the first video station in the town.

Cincinnati: Scripps-Howard, operator of WCPO, filed for the last remaining channel. Company also operates WEWS, the first tv station to open in Cleveland. Crosley's W8XCT is now operating, and bids are pending from DuMont and WKRC.

Cleveland: WJW, Inc.: William O'Neil, sole owner of WJW, has commitment from his family (General Tire & Rubber Company and affiliated operations) for a loan up to \$500,000 to underwrite a tele operation. General Tire controls the Yankee Network. WJW will locate its video studios at Playhouse Square.

Dallas: Dallas Morning News station WFAA is bidding for ch. 10 as is newcomer L. F. Corrigan, trading as the Texas Television Co. WFAA boasts it was first newspaper-radio operation to win a 50kilowatt franchise. Corrigan, whose net worth is listed at over \$7,000,-000, will spend \$350,000 on his station; the News, \$107,000. Hearing is inevitable unless death of Rogers Lacy results in suspension of construction of KBTV, licensed to the Lacy-Potter Television Co., or Interstate Circuit, Inc., Paramount subsidiary, drops out of the race.

Dayton: WHIO, jointly owned with the Dayton Daily News (a James M. Cox newspaper), bidding for channel 13. Dayton's other channel is spoken for by Crosley station WLWD which expects to be on the air in late '48.

Easton: The Easton Publishing Company has also entered a bid for channel 8, only spectrum space assigned to the Allentown-Bethlehem-Easton area.

Erie, Pa.: Dispatch, Inc., another newspaper bidder for the No. 12 channel in Erie. Competition is expected.

Kansas City: The Kansas City Star wants the no. 4 channel, will put out \$323,031 and \$16,000 a month to get the station going.

Miami: WIOD, jointly owned with the Miami News (a James M. Cox paper) is applying for ch. 5. WTVJ, (Southern Radio & Television Co.), already holds one of Miami's four channels. Four other bidders—WKAT, WQAM (Miami Herald), WGBS and WIOD—are contending for the remaining three slots, so hearing appears imminent.

Omaha: WOW, NBC affiliate, placed the first application in the state of Nebraska. Company has been operating experimentally.

Pittsburgh: WPIT and WWSW filed bids to get in on the hearing. DuMont holds permit for WDTV there. Empire Coil Co., KDKA, KQV, WWSW and WPIT will battle it out for the three other slots allocated.

Reading, Pa.: WEEU, jointly owned with the Reading Eagle, has an uncontested bid for Reading, will put up a community-sized station costing \$135,340 and specialize on news, sports and special events during early months on the air.

Rochester: WHAM filed the first bid for one of Rochester's three channels. Outlet, an NBC affiliate, is owned by Stromberg-Carlson.

San Diego: Donroy Broadcasting Co. is the third applicant for one of the city's four channels. Bids are pending from Balboa Radio Corp. and KFMB.

San Francisco: KROW, Oakland, bidding for ch. 11 for a \$213,000 operation. This bid exhausts the six channels assigned Frisco.

South Bend: South Bend Tribune (WSBT) wants the no. 13 slot. Franklin Shurz is handling the two peration.

Toledo: Toledo Blade has filed for Toledo's only channel in a move to contest the grant of Fort Industry for the city's No. 10 slot. Fort Industry recently ordered equipment, with opening date set for summer.

Wilkes-Barre, Pa.: WILK is asking for the no. 11 position, will probably go to hearing with Louis G. Baltimore's WBRE for right to town's single assignment.

Youngstown: Youngstown Vindicator station WFMJ is asking for channel 13, the only one assigned to the city. Station is an ABC affiliate.

PROGRAMMING

Receiver manufacturers sponsoring children's programs ... programming digest.

CHILDREN'S PROGRAMS

Digest of current program fare for the young set

Never underestimating the power of a child, RCA, Philco and other advertisers are now paying the check on programs aimed directly for the younger set. In the case of the distributors, switch on promotional emphasis literally went from the bars to the nursery now that the saturation point for bars and grills is in sight in many cities. Whole idea is that the little ones will consider a television set a necessity and tease one out of the family budget.

Most extensive of these juve segs is RCA's "Junior Jamboree" staged over WBKB on Monday through Friday from four to five. Promotional angle was utilized to the fullest with signs on the windows of RCA dealers inviting the youngsters to stop in and see the program.

Kukla and Ollie

Star of the show is Burr Tillstrom's puppet creation Kukla, who rates a D for deportment but has earned an S for sales appeal with Chicago's RCA Victor dealers. Besides Tillstrom who manipulates his cotton-headed creations, humans who lend a hand to the show are Fran Allison, network radio actress who presides over the Jamboree Room and Rae Stewart, one of the camera operators, who is frequently included in the act. On the WBKB staff, Beulah Zachary produces the show and Lewis D. Gomavitz directs it. On the sponsor's side are Lee Atwood, RCA-Victor promotion chief in Chicago and Ross Littig, representing J. Walter Thompson advertising agency.

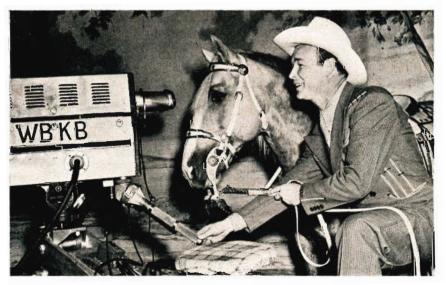
"Junior Jamboree" depends on ad libbing for its spontaneity. Only the opening and closing titles remain constant. When titles have rolled, a long-shot shows the puppet theatre, a mammoth duplicate of the RCA-Victor television receiver. Curtains draw back from the screen section to reveal Kukla and the muchabused dragon, Ollie, intent on some

activity. As the camera dollies in, Kukla suddenly acknowledges it with a "Oh there you are. Hello kids". Parents and dealers claim the pause which follows is necessary, for the youngsters invariably answer with a "Hello Kukla".

Ollie, Kukla's fall guy, claims to be the gentlest dragon who ever flapped a red-velvet mouth. Kukla with his white felt mittens and Ollie with his facile mouth are deft in their manipulations. They can hold a broom, sweep a floor, swing a hammer, build a ship or run a permanent wave machine. When Kukla experimented with the permanent wave machine, he scalped Ollie clean



Burr Tillstrom's cotton-headed puppets have won the fan mail crown at WBKB with their Monday-through-Friday capers on RCA-Victor's "Junior Jamboree". Kukla (at left) is the star, while Mercedes, a typical little smart-aleck, appears for an occasional insult. In the "live" portion of the show, stars of interest to the juvenile audience make their bow, like Roy Rogers and his horse (shown below). Hour-long show is placed through J. Walter Thompson, Chicago.





"Playtime", planned and produced by the Junior League of Washington over WNBW, uses "Popit", the telegenic pixie on the left, as the femcee to introduce each segment. Show, an hour feature every week, is relayed to WNBT.

as a whistle and the kids swamped the station with suggestions for restoring Ollie's hair.

Companion puppets who occasionally play bit-parts are Madame Oglepuss, a slightly devastated diva who makes up in acidity what she has lost in voice; Mercedes, the epitome of all smart-alec little girls, Fletcher the rabbit, and Mrs. Witch who makes regular visits on her broomstick.

Jamboree Room

The second set of the show is the Jamboree Room, aimed at the older portion of the audience. There Fran Allison entertains representatives of the Girl Scouts. Boy Scouts, the Public Library and other civic organizations. The Radio Council of the Chicago Board of Education has a regular 15-minute guest spot on Tuesdays, on which representatives from a grammar or high school present miniature dramas, engage in a book quiz or present school athletic heroes and cheerleaders. Scouts display their craftsmanship, the Librarian story-teller entertains with a folk tale, and the YWCA 'teen age group gives bobby-soxers fashion tips. "Name" stars of particular favor with children-such as Roy Rogers and Trigger, and Rin Tin Tin III-have also bowed to the youngsters.

Commercial

Mid-show commercial is smoothly worked in, with Kukla handing Fran an RCA-Victor children's album. She takes it to the Jamboree Room where an RCA Victor record player is set up, places the records, and talks about the attachment and the

album. Kukla and his cohorts pantomime the story as the records are played. Thus a five-minute commercial becomes an entertainment feature. Another subtle commercial point is worked in by paying tribute to the trade-marked pooch who listens perpetually to "His Master's Voice". To the child who, with his parent's consent, writes most eloquently on why he needs a dog, RCA-Victor awards a thoroughbred puppy each week, with pet presented to the beaming youngster on the Friday show.

Program closes with a birthday party. Fran brings a birthday cake bearing a candle for each youngster celebrating on that day to the puppet theatre. She lights the candles, pauses while the kids make a wish, and then Ollie blows them out with a flap of his wide jaws.

Kukla rates the fan-mail crown, having received more letters than any other performer at WBKB.

WNBW's Playtime

Another interesting experiment is "Playtime", hour long weekly children's program, planned and produced by the Junior League of Washington. League's interest is to develop a pattern for children's programs which will provide good entertainment and at the same time meet requirements for good taste. Present Washington set-up is probably the fore-runner for expansion of League television activities in other cities.

Staged primarily for the 7 to 11 age group, program is divided into four or five regular features tied together by a telegenic pixie called

"Popit". "Popit" introduces the show and bursts a balloon between each of the episodes to fade in the new stanzas... an inexpensive and effective technique. Regular features include a handicraft demonstration, special events, guessing games based on children's books, sports interludes and a marionette show.

Under the chairmanship of Mrs. George Wheeler, eighty volunteers work on the program each week, handling publicity, script writing, props, costumes, make-up, etc. Besides the initial publicity which consisted of newspaper stories and posters. League members contacted television dealers and asked them to invite youngsters into their stores to view the program. In addition, they arranged for twelve people with sets to invite a group of twelve to fifteen children to view the show each week. At WNBW studios there's another group of sixty youngsters. League observers are present to watch the children's reactions to various segments of the program. At the present time League members are working with the U.S. Office of Education in preparing a questionnaire for an evaluation study.

Initial Results

Particularly interesting result of these preliminary observations, was the children's reactions to the news segment. Originally, this was devoted to current news angles visualized mainly by stills and placed near the end of the program. A look-around at the youngsters showed that this was the least popular part of the program. Placement was shifted forward and the format has now evolved itself into a background treatment of news. For example, on the recent aid to China bill, the discussion centered around China and was visualized with the appearance of a Chinese youngster and such props as chopsticks, back scratchers, fingernail protectors, etc. Increase in interest has been the result.

In the handicraft section, idea is to get the youngsters interested in doing things themselves and carry-over note is injected. Youngsters are told a week ahead of time what next week's handicraft will be, so they can work along with the instructor. WNBW is advisor on the technical end with producer Charles Kelly and technical director Charles Colledge handling it for the station.

Show gets adequate rehearsal with League rehearsing all Monday afternoon and setting-up at 11 o'- clock on Wednesday and rehearsing through to show-time at 5 o'clock. On the question of sponsorship, the Junior League programs would be open for certain types of industry advertisers such as banks, public utilities, etc., rather than a specific product.

Detroit's Programming

RCA sponsors the first fifteen minutes of the half-hour "Junior Jamboree" over WWJ-TV, with the second half carried sustaining by the station. Show is telecast in the 5 to 5:30 spot, Monday through Friday and is followed by Philco's "Fun and Fables" from 5:30 to 6.

"Junior Jamboree" uses a puppet of Nipper, the RCA-Victor dog, as mascot at the opening. Nipper welcomes the youngsters, reads a short commercial, barks a few times and turns the program over to femcee Fran Harris. Program is run on a club basis, with the youngsters sending in their photographs and asking to be made members. Photographs are shown and new members welcomed.

Commercial treatment is similar

to that on the Chicago show. On each program an RCA-Victor record from a children's album is played and a visual accompaniment presented. This is usually an on-the-spot series of drawings although puppets have also been used occasionally.

Daily feature is a "Quick Quiz", consisting of remembrance tests, categories, anagrams, etc. which are shown on a card. First three contestants, whose letters contain the correct answers, receive a copy of the RCA-Victor album being played that week. Answers are shown two days after the initial quiz. This winds up the sponsored half of the program, with a specialty spot, such as magicians, puppets, marionettes, simple drawing lessons or "how to do it" demonstrations, used as a bridge to the next segment. Another novel feature is the "I Want to See ... " spot. Youngsters are asked to write in their suggestions with the promise that anything or anyone, within reason, will be brought to the station and televised. Requests, so far, have been for real, live Indians, a fireman, etc. Live puppy is given away on the Saturday show

to the most eager letter writer, with the youngster showing up in person to receive the dog.

Closing business has Fran Harris re-emphasizing that this is a show for the kids and asking them to write in their comments. J. Walter Thompson is the agency.

Philco's "Fun and Fables" featuring Jane Durelle is also divided into two fifteen minute segments. First half, called "Our Story Book" features standard children's stories such as Cinderella, Jack and the Beanstalk, Red Riding Hood, etc. Stories are read to a musical background, with Miss Durelle using different voices for each character. Visual interest is given with illustrations made especially for the program, two afternoons a week, and pictures on slide film used the other three afternoons. Second half is made up of film cartoons, travel pictures and novelties of appeal to a juvenile audience. Commercial is read between the two parts, with gist of the copy urging children to have their parents visit the Philco dealers for demonstrations of Philco products. Agency is William I. Denman Inc.

PROGRAMMING DIGEST

"Children's Matinee" WPTZ—90 minutes

"Junior Jamboree"
KSD-TV—30 minutes

Cartoons
KSD-TY—10 to 12 minutes
"Children's Matinee"
WFIL-TY—2 hours

"Kid's Carnival"
WRGB—

"Small Fry"
WABD—30 minutes

"Junior Scrapbook" WCBS-TV—30 minutes A Friday afternoon feature, the show is all film, featuring cartoons, a Clyde Beatty animal picture in serial form and a western feature motion picture.

Show is built around talented children who dance, sing or play musical instruments. Interesting angle here is that as a result of these telecasts, several children have received offers to participate as professional entertainers.

Cartoon films of such nursery stories as "The King's Tailor", "The Three Bears", etc., are a regular daily feature over the station.

Presented every Sunday from 2 to 4 p.m., the matinee consists of 30 minutes of cartoon comic strips, 30 minutes of live entertainment, film cartoons and shorts, and a feature film. Mounted comic strips are read to recorded musical background by the mc; songs to guitar music comprise the variety segment; and a Western is usually selected for the film feature.

A light musical show built around talented youngsters who vie for prizes. A record album is given as an award for the best performance and all participants become members of the TV Club.

Comprised of cartoons, shorts, stills, Big Brother (Bob Emory) also features birthday announcements, runs contests, shows the youngsters' pictures—and now has nearly 15,000 members of the "Small Fry" club.

A Saturday evening show from 7 to 7:30. Format consists of contests, stories and "sing alongs". The contest now running is one in which part of the story is projected via slides and kids are asked to send in the finish of the story. The winning finish each week is shown over the air. Like the "Small Fry" program, "Scrapbook" has its own club called the "Jets", complete with membership cards and their own secret code which is also worked into a contest every week.



G. Emerson Markham Station Manager, WRGB

Local Television Station Programming

UR experiences at WRGB are perhaps unique in certain respects. The station has been functioning for over eight years without benefit of either mobile equipment or facilities for projecting 16 mm. sound film. Most stations would consider these items of fundamental importance. We have survived without them, although our programming has not been improved by their lack.

"We have survived, too, without benefit of a large metropolitan area on which we may draw for program talent. Because we have insisted that there is no justification today for the prices being

asked for most of the theatrical film that is available, we have used relatively little of it. . . .

"It seems to me that in our effort to reconcile prospective station operators to the inevitably higher costs of television programming, we have oversold that idea. It manifests itself by a complacence towards almost any bill that may be thrown at us . . . Actually, the scales of payment for film, for salaries, for talent, and for television broadcasting rights will be set by the networks and the metropolitan stations. Continued open-handedness on the part of the large or metropolitan station operators with respect to costs puts the local station with limited resources in an awkward if not difficult position. . . .

Film Costs

"When I first was assigned some responsibility for WRGB's operation, I found that the station was paying from \$125 to \$200 for feature-length theatrical films. This seemed altogether out of line with what the operators of community theatres in our area were paying for far better and more recent material which they were showing, incidentally, about six times to a paying audience. So, we cut our film feature price down to \$75 and so far as we could tell, were fed equally good pictures from an equally abundant supply. "We next ran into trouble with one film

"We next ran into trouble with one film dealer who was able to get around \$400 to \$500 per feature in New York. Why should he give us the same thing for \$75? We lost one source of films right there. This incident is offered to support what was said a minute ago about network and metropolitan stations setting the scale for local stations. . . . This is not an attack on the film-makers and distributors. You can't, in the vernacular, blame a guy for trying. But it is an area where costs bear watching.

Network Operation

"At Schenectady, we are starting commercial operation with a single program and engineering shift. Whatever we carry will have to come within an eight-hour span, special events being an exception, of course.

Also, by taking one day completely off and running on relayed programs exclusively on another, we can accept local business on five days only. . . . If the network supplier will only fill the evening hours fully before he begins offering odd programs in the afternoon or morning, he will simplify things a lot for the local station. The local station may then gradually build its staff as conditions warrant instead of being forced to be prepared to operate at all conceivable hours of the day and night before he has an audience to justify the greater expense involved. . . .

Script Exchange

"Not long ago, I was talking with a group of programming people about setting up a script exchange . . . At Schenectady, we have hundreds of scripts and show ideas which are used once, and then filed. We paid \$1.00 a minute for much of this material. Any station in the country which does not reach our area-and that is all of them-is welcome to those scripts at that price. And we would like to have available to us scripts from other cities on that same basis. If local stations would only develop television writers by using their output at \$1.00 per minute, and would then help place those scripts with other stations at the same price, we would be getting a lot of material we sorely need and would be collectively keeping able writers busy without incurring costs we ought not individually assume. . .

"I do not know how it will be elsewhere, but between national spot business and the limited advertising budgets of firms in the Capital District, we foresee in Schenectady some future difficulty in finding a place for a raft of small commercials. Between the innings of baseball games, the quarters of football games, the rounds of prizefights, etc., is a part answer. The variety show is another. For that matter, network shows with cut-in spots for local commercials will help a lot

of stations along the line."

WTMJ-TV

(continued from page 29)

ned and built for television, is 30x54 feet and 29 feet high. Also built at the same time was a large television control room, a transmitter building and a 300-foot tower for television. Using an RCA 5kw transmitter and an RCA 3-element super turnstyle antenna, WTMJ-TV operates with 5 kw video power and 2½ kw audio. With a gain of four afforded by the antenna, station sends out an equivalent power of 16 kw video and 8 kw audio.

Operating with two remote cameras (which double in the studio) and a film chain, station is on the air five days a week-Wednesday through Sunday-with approximately twenty hours of afternoon and evening programming. Emphasis is on sports, which is all commercially sponsored. Collegiate basketball is sponsored by the Wadham's Division of the Socony-Vacuum Oil Company; high school games by the Broadway House of Music; wrestling by A. Gettelman Brewing Company and boxing by Perma-Stone Corporation. News shows are sponsored by Gimbels and Radio Specialty Company (Philco). Sponsored studio shows include, "Schuster's Open House", a weekly 15-minute program built around personalities, and "Life at the Boston Store", another quarter-hour show based on the "how to do it" theme. Gettelman also sponsors a sportsreel film immediately preceding the Saturday night basketball games.

Programming

Among the sustaining shows being presented as regular features are "Meet Your Neighbor", an interview and audience participation show broadcast direct from the Radio City lobby; a "Surprise Package" variety show; "Paul Skinner's Music Room", with songs by vocalist Paul Skinner and his guests; "Teenage Canteen" on Saturday afternoon, presented by the WTMJ-TV Teenage Council, composed of high school students from eight youth groups in Milwaukee. Time is also set aside every Saturday afternoon for public service programs. Films are used to round out the schedule.

Television Magazine's Audience Research

(continued from page 6)

that you prefer to listen to the radio?" 68% of the respondents said "No". 28% said "Yes" (that there were times that they preferred to listen to the radio). 22% of the 200 respondents said they liked to listen to specific radio shows—usually the "big name" shows such as Jack Benny, Fred Allen, Bing Crosby, etc. Only 6% said "Yes" and gave either no reason or that they did not like the television program being shown.

Here are the results, broken down for sex.

"Are there any times when there are television programs being broadcast that you prefer to listen to the radio?"

		rercent ot		
	Men	Women	Total	
Yes	22	33	28	
No	74	63	68	
Don't Know or No Answer	4	4	4	
	100%	100%	100%	

One Man's Reflections

(continued from page 22)

the local-station owner will particularly desire to draw on the networks for program material. The high costs of television during that period, not to mention the heavy drains on his financial resources, might prompt him to economize on the percentage of locally-originated programs. It is assumed that such network programs would be available to him by coaxial cable or radiorelay systems. During the earliest stages, therefore, it would be feasible to present some 80 or 90% of programs on a network basis and to fill in with some 10-20% of simple locally-originated and sponsored programs. These might be interviews or simple performances at the studios or, more likely, remote pickups of interest to the audience. (It may be mentioned parenthetically that one network has confined itself of late to a combination of film and remote pick ups). Given ingenuity in station management it is not too much to expect that a similar procedure would meet the local audience requirements for quite a time.

Local Programming

Ultimately it is to be expected that the local station will find that it can handle a higher percentage of its programs locally. Perhaps as much as 30 or 40% of the total program might originate from the immediate locality once the industrial organizations, as well as civic groups, come to the aid of the local television stations. In every town or city there are numerous enterprises, such as department stores, which can use television to great advantage and, conversely, can offer material of considerable interest to the audience on a program basis. Thus it is clear that a department store can help to please at least the feminine contingent by much of the material which it can bring to the television cameras and microphones in studios in the store itself. Ingenuity along these lines will doubtless uncover many similar and profitable prospects.

This would still leave the back-

bone of the program to the network and the national advertisers, comprising, as it would, 60-70% of the total program time. It should be noted, however, that in this stage of television the total program time may well have risen from 28 to 56 hours a week. Accordingly the network may be called upon to furnish not 24 hours a week, but perhaps nearly twice that amount. It is logical to expect that, as television expands, the program hours per week will correspondingly increase. From the viewpoint of the station owner. this is financially desirable since it gives him added prospects for income from several sources.

It is thought that, as usual, "the middle road is safest". If the local station steers a thoughtful and prudent course between excessive expectations and inadequate offerings, it can hope confidentally to expand through the formative period into a thoroughly successful and profitable enterprise of civic merit and high standing.

TECHNICAL OPERATIONS

WBKB'S MID-WEST RELAY CIRCUIT by A. H. BROLLY, Chief Engineer

URING the past year television station WBKB has established the first station-owned inter-city relay circuit in the Midwest. Its primary purpose, which has now been successfully fulfilled, was to enable the broadcasting in Chicago of the Notre Dame University football games played at the University Stadium in South Bend, Indiana.

The facilities of this circuit are, of course, suitable for extended future services, but plans for such utilization are not sufficiently complete to be described at this time. However, most of the problems of setup and operation have been met in the work done to date, and it is thought that some of these problems and their solution may be of interest to the operators of other stations.

Where the actual transmitting and receiving radio equipment is purchased, as it was in this instance, the remaining problems to be met are of a widely varied sort. They involve geography, utilities, construction, personnel training, and operation.

Terrain

The first thing to be considered in any project of this kind is the route of the circuit, distance, and character of terrain. A very helpful reference in the basic planning is found in the paper entitled "Radio Relay System Developments by

Radio Corporation of America" by C. W. Hansell*. This publication gives useful data on power requirements and transmission paths. As a result of our experience at WBKB with local relaying of television on frequencies of 1300 megacycles and 6900 megacycles we were impressed with the importance of unobstructed line-of-sight transmission paths. We determined not to compromise this point in planning the South Bend to Chicago circuit, and we believe this precaution has been responsible in considerable measure for the reliability and success of the circuit.

Some formulas for computation of line-of-sight distances with respect to the earth's curvature make allowance for refraction of the microwave beam as it passes near the surface of the earth. This has the same effect as if the radius of the earth were greater than it actually is. We did not take advantage of this, but based our plans on purely optical line-of-sight conditions. Applying the formulas, one finds that line-of-sight paths in relatively flat country with reasonable heights at the two ends will result at distances of 35 to 50 miles. With this as a basis, compromises have to be worked out to fit the particular conditions for each hop.

In the case of the South Bend to Chicago relay, assuming a reasonably direct route, the distance on *Proceedings of the I.R.E., March 1945.

the map looks like about 71 miles. Normally it would be assumed that this could be divided into two 351/2 mile hops with ease, but the terrain conditions make quite a difference in this situation. Taking first the section from Chicago toward Michigan City, we noted that the lake shore is bounded by sand dunes ranging in heights up to 100 feet, and the only major gap in these is at Michigan City, Indiana. Since the dunes do not furnish good footings for tower construction, power is not available on most of them, and as roads are not conveniently situated to most of them, it was deemed advisable to take advantage of this gap. Fortunately, it is not far off the direct route. The distance across the lake to this town is 41 miles. But since we could depend upon considerable height on a tall building in Chicago, it was possible to get line-of-sight, with something to spare, using a modest height of structure at Michigan City, namely 135 feet. (See illus.) Those were the factors which led to the choice of Michigan City as the site of the first relay from Chicago.

Aeronautical Charts

In preliminary planning of this kind the sectional aeronautical charts are useful. Below a very convenient type of plot is shown which takes account of the earth's curvature and heights of radiators

Profile of the micro-wave beam path across Lake Michigan.



at the two ends of a transmission path. It is seen in this figure that conditions which we finally chose for the Chicago-Michigan City path gave us a clearance of 65 feet over Lake Michigan.

It has been shown in several investigations that decided fading of micro-waves can occur, particularly over bodies of water. Because of this we felt fortunate in being able to have the 65 foot clearance for our transmission path over the Lake. Also this data on fading caused us to approach the project with caution, testing the conditions with prolonged tests and recordings of signal strengths at 1300 and 1900 megacycles. We found fading to be present but evidently it is not so severe in this inland body of water as has been found by other investigators in tests over portions of the ocean.* We observed fading of less than 15 db which we felt confident could be taken care of by limiter action in a receiver if FM was used. and so it worked out in our operations.

Charting

With 41 miles covered across the Lake, the remaining 30 miles could ordinarily be covered in one hop. However, it was apparent that there was high terrain along the way. This prompted a careful investigation. Such an investigation can usually be made simply with topographic maps of the U.S. Geological Survey. However, it was found that no such maps were available for Northern Indiana, Other means had to be devised, and the following scheme was followed. First, the terrain was inspected from a low flying plane to spot ridges and prominences. Then it was checked with a radio altimeter in a plane flying at a constant altitude as determined by the barometric altimeter. This gave an approximate profile and enabled choice of a route to fair accuracy.

Next the route was traversed by car carrying an altimeter. This meant considerable driving on byways to reach points on the chosen route. Data from this survey was checked with the plane measurements and supplemented with several elevations obtained from the county surveyor and the state highway department. In this way a profile was plotted and revealed that a ridge 300 feet higher than the average terrain crossed the route 18 miles east of Michigan City. Add-

"Space Diversity Beception at Super-High frequencles" by G. H. Huber Bell Laboratories Record, September 1947.



Relay equipment towers at Michigan City, Ind. A 6 foot parabolic reflector is seen being hoisted to its location on west wall of penthouse.

ing the curvature of the earth to this height would require unreasonable heights of towers at Michigan City and South Bend to clear.

It was impractical to bypass Michigan City and work direct between Chicago and this ridge as the distance was too great to permit line-of-sight. There was no other solution than to put a relay point on top of the ridge. Fortunately the ridge was crossed at a convenient location by a major highway and an intersecting byway. (Illus. above.) Also electric power services were near by. Telephone lines were not so convenient, but that was ultimately solved. The location of a relay station on the ridge is not without advantage as its height permitted relaying from the top of the Stadium at Notre Dame without need of any special structure for height. Also if at some future time it is desired to reach beyond South Bend the height of this point will be a real asset.

Towers

In Michigan City it was necessary, as previously stated, to have a radiator (antenna) height of the order of 135 feet to achieve the line-of-sight to Chicago. Also at the relay point toward South Bend (near the town of New Carlisle) it was necessary to have a height of the same order to clear trees and other local obstructions. In other words

towers were required. Towers are likely to be a necessity in any relay circuit and pose a good share of the problems. Several points of general nature which came to our attention are worthy of mention.

First of all, provided a tower top is outside the glide path for planes in proximity to airports, they need not be lighted if less than 150 feet in height. Consideration of that fact can permit a saving on installation and maintenance cost. We were fortunate enough to secure for WBKB a number of light steel towers from the War Surplus sales which are 135 feet in height. This permitted an appreciable saving on the South Bend to Chicago project.

Losses in coaxial lines at 1900 m.c. are of the order of 6 db per 100 feet. Wave guides for this frequency, while more efficient, are inconvenient and expensive due to their size. Hence, it is desirable to have transmitters and receivers close to the radiators. This leads to the plan of housing the transmitting and receiving gear on top of the tower. Present equipment is not adapted to remote control so far as occasional adjustments are concerned, hence space must be great enough for an operator to get at the equipment. Wind resistance at the top of the tower adds seriously to the stresses in the structure so it is necessary to keep the size of a penthouse as small as possible. The houses constructed for the WBKB relay circuit were made 6 feet square by 7 feet high and that is just about as small as it is practicable to use.

Penthouses

Some equipment now requires temperature control and this is made easier if the apparatus house is warmed to at least above freezing temperatures in severe winter weather. Our penthouses were assembled of a thick structural board composed of fibre material sandwiched between hard asbestos boards. This provides fair insulation and enables temperatures to be kept out of the sub-freezing range with a small electric heater, thermostat controlled.

One of the towers which were secured for our project was too light to support a 6x6 ft. house on top, so a design was developed using 3 towers spaced 15 ft. in a triangular arrangement. (See illustration.) They are cross braced and framed together at the top to support the house and a narrow platform from which to get at the radiators.

Reflectors

The towers are so orientated that two opposite sides of the house face approximately in the directions of the transmission paths. Each six foot parabolic reflector is mounted on four large lead screws threaded through lugs near the four corners of one wall of the house. These screws permit a reflector dish to be tilted in the horizontal plane through an angle of plus or minus about 10 degrees for accurate lineup. This matter of lining up reflectors is worthy of considerable care as an error of 3 or 4 degrees will cause a serious loss of signal at a distance of 30 or 40 miles. A little careful surveying with reference to good maps can save a lot of trouble when the equipment is ready to op-

Michigan City was made the base of field operations so a small house was provided at the base of the towers. It contains a stock of spare parts, a work bench, and bunks for two men. A smaller house at the New Carlisle site serves mainly as a shelter for personnel when servicing gear in the winter months.

G-E Equipment

After considerable study of the subject we chose equipment newly developed by the General Electric Co. It operates in the frequency band 1850 to 2000 recently allocated by the FCC for television relaying. The heart of each transmitter is a reflex klystron oscillator which produces about 10 watts of R.F. energy. This is fed through a short length of flexible coaxial line to a dipole antenna located at the focus of a parabolic reflector six feet in diameter. Both vertical and horizontal polarization have been tried and no marked difference of performance has been noted between them.

Modulation is FM, modulating voltage being applied to the reflex or repeller electrode of the klystron producing a frequency deviation of about 15 megacycles. When carefully adjusted the modulation characteristic is so close to linear that no compression of either synchronizing pulses or picture highlights is observable.

The complete microwave equipment at a repeater station requires approximately 2 KW at 115 volts 60 cycles. Providing for monitoring oscilloscope, receiver, lights, fans, etc., we had 5 KW 110/220 volt 3 wire services installed.

Parabola

At the repeater stations, such as

Michigan City, the receiving parabola is mounted on the opposite wall of the tower penthouse from the transmitter, thus placing the backs of the parabolas about 7 feet apart. A dipole antenna is used which is identical to that employed for the transmitter. A short length of coaxial line leads to the receiver. The receiver uses a superheterodyne circuit in which the local oscillator is a klystron of the same type used in the transmitter. The intermediate frequency amplifier passes a band of about 15 megacycles and the discriminator has an excellently linear characteristic.

It will be apparent from the foregoing that the video signal is demodulated and re-modulated at the repeater stations. This has proved to have no disadvantages in our experience and as a matter of fact provides for easy monitoring with both an oscilloscope and a picture monitor.

The transmitter klystron and modulators are enclosed in a temperature controlled cabinet; likewise the receiver klystron and I.F. amplifier. Temperature is regulated by thermostatically controlled ventilation.

The composite video signal out of the receiver and the input to the transmitter is approximately 2 volts, peak to peak.

Chicago Link

The long lap of the relay circuit across Lake Michigan is received at the top of the Lincoln Tower Building approximately 500 feet above street level in Chicago. This point was chosen for its elevation as the building in which WBKB is situated is not high enough to provide a line-of-sight for the 41 mile distance. The final link in the circuit from the Lincoln Tower Building to the WBKB control room is a low power (about 1/10 watt) 1300 megacycle beam. It is transmitted by amplitude modulation of a class "C" lighthouse-tube amplifier. The receiver output of the composite video signal in the station control room is approximately 2 volts peak-topeak which corresponds to signals from other remote pickups and to signals from studios at the station. This permits convenient switching of signals to the WBKB transmitter from the relay network and studios with negligible disturbance of receivers.

Band Widths

The station was granted temporary authorizations by the FCC for

3 channels, each 25 megacycles wide, extending from 1850 to 1925 megacycles. These proved adequate for the three hops, South Bend to New Carlisle, New Carlisle to Michigan City, and Michigan City to Chicago. Consecutive channels were used into and out of each repeater setup (New Carlisle and Michigan City) and no trouble was experienced with feedback from transmitter to receiver.

There was sufficient change of direction at each repeater point so that there was no tendency for the signal to skip a repeater, i.e., to receive the South Bend signal direct at Michigan City.

When all equipment was carefully tuned, a video frequency band of 5 megacycles was passed with negligible loss. This permitted reproduction, through the whole circuit, of a monoscope resolution chart pattern resolving 400 lines. Noise added in the relay network was less than that originating in the image orthicon cameras used in the broadcasts. We were unable to measure the noise level with any facilities at our disposal, but the results in this regard may be described as excellent.

Testing

Throughout three football games and several prolonged test runs there was never any interruption of service due to fading or any other cause. A variety of weather conditions were encountered ranging from clear skies to heavy rain and light snow; also from calm to strong winds. During the 2-week intervals between football games the apparatus was idle until tests were run two days before each game. When turned on at these times only minor adjustments had to be made.

Operators were posted at each repeater point and at the South Bend terminal, but it is believed that in regular operation this precaution could be dispensed with if frequent service checks and inspections were made by a capable operator covering two or more stations.

Telephones at all apparatus locations along the relay network were found to be almost a necessity in lining up and adjusting the equipment. They may also be of considerable value in future maintenance and service work.

Experience with this relay network has been very encouraging, and it is felt that it paves the way for further relay developments which will contribute materially to the economic success and public service of television.