



# PUPPETS OR PRODUCTS everything springs to life in living color television

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# IMPROVEMENTS IN COLOR TV EQUIPMENT

Increase Reliability, Cut Cost of Operation, Make Programming More Versatile and Assure a Higher Quality Color TV Picture

by JOHN H. ROE, Broadcast Television Engineering

he increasing importance of color in television programming is placing a great deal of emphasis on improvements in equipment to permit easier, more flexible, more reliable operation and at the same time bring about a reduction in cost of producing programs. Engineers working in the many branches of the electronics industry are rapidly breaking down barriers which confined the designers of television equipment only ten short years ago when color television was in its infancy. Utilization of new techniques, materials, and components has had a significant effect on the cameras and other gear used in television stations in the direction of simplification and stabilization.

The idea of improvement is being applied basically toward easier and less costly operation. In some cases the equipment itself may be much simpler, but in others it may be more complex in order to assure greater stability with consequent lessening of attention from operators. Another result of this trend is better reliability; therefore, less cost in operation and maintenance.

In the period since the previous *color tclcvision* issue of "Broadcast News"<sup>1</sup> in early 1954, there have been numerous significant changes and additions in the color studio product line. Many of these are described here.

<sup>1</sup> "Broadcast News", Vol. No. 77, Jan.-Feb. 1954.

### **Color Studio Camera**

The TK-41C Color Studio Camera is an embodiment of the most modern construction and features in live color cameras. It is the third generation from the TK-40A, the first practical color studio camera made available for the compatible color system. It is interesting to trace the transitions from this early model to the present modern TK-41C to illustrate the character of the modernization which has appeared throughout the line.

All versions of the color studio camera are alike in the use of three 3-inch image orthicon tubes, with color-separating optics, to generate the three primary color signals required in the compatible color system. Also, basic electronic functions performed in the circuits are the same. The differences lie in details of execution, details which represent a tremendous simplification in the rack and console-mounted portions of the chain. In the TK-40A, three and a half racks and two 13-inch console sections were required to house the control and processing equipment assocated with each camera. Two of the racks were nearly filled with 11 regulated power supplies, a total of 1361/2 inches of rack space, while a third rack was filled with signal-processing and cable terminal units.

### **Processing Amplifier Introduced**

The transition to the TK-41A camera chain involved a series of very significant



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changes in both signal processing techniques and power supply design which resulted in reducing space requirements to one 13-inch console, one 22-inch console. and about one half of one cabinet rack. All of the signal processing circuits, formerly occupying a full rack plus a console section, were compressed into a single unit. called a processing amplifier. This amplifier occupies only 101/2 inches of space in a console. Not only has space been reduced, but performance is greatly improved. Application of highly stabilized circuits removed some of the drift problems in the TK-40A that required constant attention from operators. A reduction of about 50 percent in power required for the camera chain led to reduced air-conditioning costs.

### Electro-Optical and Stability Improvements

The succeeding transitions, now embodied in the TK-41C, have introduced important features into the camera itself. These include precision yokes for assuring accurate image registration, and new color splitting optics (prisms instead of flat plates) which eliminate spurious reflections in the received pictures.

Very significant improvements in electrical stability of the amplifiers and image orthicon control circuits have been developed recently, and are incorporated in the TK-41C. They have eliminated much of the daily setup routine and warm-up period formerly required to put a color camera on the air.

### Precision Image Orthicons for Color

An associated improvement in camera tubes was made available at the same time as the precision deflecting yokes. This was the RCA-7513 precision image orthicon for color which also contributes to better image registration and picture quality. More recently, the sensitivity of precision color image orthicons has been increased to a point where it is now possible to make color telecasts in studios where lighting is only

FIG. 1. RCA advanced Color TV Tape recorders are designed from the ground up for color. This equipment meets the demands for negligible distortion, interchangeability of tapes and recording heads, and simplicity and reliability of operation. slightly greater than what is needed for monochrome cameras. The greater sensitivity is available in the RCA-4415 and 4416 image orthicons, the latter being especially designed for use in the blue channel.

### **Color Film Chain**

The introduction of the RCA TK-26 3-Vidicon Film Camera Chain in 1954 brought a practical solution to color ty programming from film. Since this time the 3-V system has consistently outperformed any other experimental approaches employing flying-spot scanners and special projectors. Its two great virtues are the ability to function with standard intermittent types of TV film projectors as well as the ability to produce pictures of excellent quality from film having a wide range of densities. The appearance of this equipment on the market coincided with that of the processing amplifier described earlier. The film chain performance correspondingly benefited from the characteristic stability of the new processing equipment.

### **Optical and Camera Tube Advances**

Important and more recent improvements in the TK-26 equipment include a prism type of color-splitter designed along the same principles as the similar parts of the studio camera (TK-41C), and having the same beneficial effects in eliminating unwanted reflections. Improved camera tubes have also become available. The RCA 7038 vidicon (announced in 1958) is especially useful in the TK-26 camera because of its precision face plate (helping optical accuracy and registration) and its freedom from spurious edge flare and resultant freedom from unnatural color shading.

### **Projectors and Multiplexers**

The steadily growing importance of film as a program source indicates the need for providing the very best in projectors. To meet this need, the TP-6A 16mm professional projector was introduced in 1953. establishing an unmatched level of excellence, long life, and reliability. A special feature for color was added in the later model, TP-6CC, in the form of a remotely controlled neutral-density disk for adjusting the light output. This feature may be used with either manual or automatic control to aid in handling wide variations in film density without disturbing color fidelity. The current TP-6EC model features greater light efficiency (longer application time) and a new and improved driving motor.

One of the most important pieces of equipment in many stations is a projector for handling 2 by 2-inch slides, color or monochrome, which constitute a large portion of the material for station breaks and commercials. The announcement of the TP-7A dual-drum slide projector in 1956 solved a prolonged problem of inadequate performance in the previous types of slide projectors used in stations. This new projector not only provides the convenience, slide-holding capacity, ruggedness, and reliability needed, but it fulfills the requirement for consistent color balance in color programming. The companion TP-8A model goes beyond the flexible remote control features of the TP-7A by providing for random selection of slides.

Flexible programming for either monochrome or color, or for combined operation, in the film room is now easily accomplished with the TP-15 multiplexer. This rugged equipment provides for remote switching of the light paths from as many as four projectors into either of two film cameras. It is especially tailored for use with the TK-26 color film camera chain and RCA film and slide projectors.

### **Television Tape Recording**

The advent of magnetic tape recording as a medium for television programming took place after the establishment of the compatible color system. The necessity for including color recording within the capabilities of the new medium was accepted from the very first. In that it was essentially born in full color, tv tape recording is distinct from the earlier techniques in telecasting which grew up in drab hues of gray before acquiring colorful garb.

The advantage, inherent in magnetic recording, of immediate play-back has brought about much more effective use of the most desirable program hours in all the time zones by permitting repetition of important programs on an hourly basis. Also, the pre-recording of many of the bigname shows has become almost a universal practice through the use of TV tape. The ability of tape systems to record compatible color has been an important factor in the wide acceptance of both delayed broadcasts and pre-recording.

The comprehensiveness of RCA's TRT-1 TV Tape recording equipment in meeting the demands for negligible distortion, interchangeability of tapes and recording heads, and simplicity and reliability of operation is establishing the highest standards in this important phase of the industry.





### **Color Monitor**

The studio color monitor is the "yardstick" by which final performance of cameras and other studio equipment is judged. The TM-21B color monitor is an outgrowth of experience with earlier monitors such as the TM-10 and the whole line of color studio equipment. It was designed from the beginning to serve as a precise measuring instrument with unusual accuracy and stability. It contains built-in features for selfchecking and calibration, which provide ease in rechecking its accuracy quickly requiring no external equipment other than a source of color bar signal.

### **All-Glass Color Kine**

The earlier TM-21A was designed to use a specially selected 21-inch metal cone kinescope. The more modern version, TM-21B. uses the newer all-glass color kinescope without special selection. This is the same type of tube that is used in all new color receivers. Its use provides increased brightness and clarity of color.

### **Program Switching Equipment**

Continuing growth in the art of television programming has dictated steadily increasing flexibility, variety, and sophistication in the means for assembling the desired sequence of events in a program. The TS-40 is a new studio switching system which handles color and monochrome signals with equal ease. It produces negligible distortion and provides for a wide variety of applications from the simplest to the most complex. Precise control with minimum operating effort and versatility of switching modes and effects enable the programmer to enhance the attractiveness of both programs and commercials.

The TS-40 is a transistor switching system where the new solid-state devices are used to carry out the actual switching function with accuracy and simplicity impossible with mechanical relays. This feature alone greatly reduces the space requirements. It also permits handling color signals with so little distortion that several trips through the system do not produce noticeable degradation.

### **Special Effects System**

4

Transitional fades and wipes have been standard devices in motion pictures for adding atmosphere and relieving monotony in changing from one scene to another. The possibilities for producing a large variety of special effects by electronic means are FIG. 5. Transistor switching and special effects equipment handle color and monochrome signals with equal ease, maximum quality.

almost unlimited. One of the most intriguing aspects of the electronic approach is the ease and speed with which selection and execution can be accomplished.

The RCA Special Effects System provides electronic circuitry and controls capable of selecting over 150 different kinds of picture transitions. This system is especially designed to be integrated with the TS-40 switching equipment to provide the most flexible and complete facility for the program assembly function. It works equally well with monochrome or color signals, or with switching from monochrome to color signals and vice versa. It also permits the production of composite scenes using the travelling-matte technique.

### Microwave Relay Equipment

The characteristics of color TV signals are much more demanding on the transmission capabilities of station equipment than the simpler monochrome signals. Critical evaluation of such capabilities is especially important in intermediate links where it is important that no appreciable degradation be added no matter how many links are involved. While the early TTR/ TRR 0.1 watt microwave equipment did an excellent job with monochrome signals, it fell short of the distortionless performance required for color. This is not surprising when it is remembered that it was designed in the mid-1940's when monochrome equipment was undergoing its early growing pains.

The arrival of color in the early 1950's made undeniable demands for improved relay systems, and the TVM-1A 1.0 watt system was announced in 1955 to meet these needs. The fundamental soundness of its design has been demonstrated in wide usage by both broadcasters and common carriers, and by constant improvement leading to broader applications in multiplehop systems. It is presently in use in systems as large as eight hops where it is delivering color signals so nearly like the originals that it is difficult to measure the difference.

### **Transmitters and Antennas**

Because of the large amounts of power involved, the television broadcast transmitter is probably the most difficult link in the system with respect to keeping distortion within reasonable limits. It is interesting to note, therefore, that advances in the art of tube and circuit design have permitted the power of transmitters to advance from about 5 to 100 kilowatts with no sacrifice in quality of performance and with increasing reliability. The demands of color are even more difficult to neet than in other parts of the system. particularly with respect to differential

> FIG. 6. TK-26 3-Vidicon Film Camera chain brings a practical solution to color TV film programming.

phase and gain, characteristics which largely determine color fidelity. However, the color years have witnessed the development of a complete line of transmitters for UHF and VHF bands. VHF transmitters providing up to 100 kw of actual power and ERP of 316 kw, the maximum permitted by the FCC, and UHF transmitters providing up to 25 kw of actual power and the maximum allowed ERP of 1000 kw, are standard products. Simple air-cooled tubes are used throughout the VHF line.

In the field of transmitting antennas great strides have been made in new types which provide simple, rugged construction, reliability over long periods of time regardless of climatic conditions, and ability to accommodate the large amounts of input power delivered by modern transmitters. The familiar superturnstile or "batwing" antenna has become a "hallmark" of the VHF station. It is available for both upper and lower bands with power gains as high as 17.5, and power input capacity up to 100 kw. The sleek looking travelling wave antenna is also available for high band VHF stations with gains up to 18 and input ratings up to 50 kw. For UHF stations the pylon antenna is available for all channels with input ratings up to 60 kw and power gains up to 60.

### Matched Color TV System

The contribution of a matched system of quality equipment to the successful operation of a TV station is inestimable. At RCA, the developments which have lead to improved color TV equipment have progressed hand-in-hand, each contributing to the success of the other. By setting the matched system as the goal, all of the improvements in studio and film cameras. projectors, control and monitoring equipment, switching and special effects systems, TV tape recorders. microwave. transmitters and antennas. have been completely integrated to produce a color TV system for easiest, most flexible, most reliable operation.





FIG. 1. Station WGN-TV, Chicago led 1960 color baseball telecasts with 120 games, uses new RCA I.O.'s in eight TK-41 color cameras, lour in Comiskey Park and lour in Wrigley Field.

### NEW LOW-LIGHT-LEVEL CAMERA TUBE EXPANDS INDOOR AND OUTDOOR COLOR PROGRAMMING

One of the most spectacular of color TV developments in the past year is the highsensitivity RCA 4401 camera tube. This is the image orthicon that changes every studio into a color studio and makes night outdoor telecasts as easy to do in color as in black-and-white.

The phenomenal sensitivity of the 4401 as broadcasting's long awaited answer to outdoor color pickups at low light levels was proved last year in night baseball color telecasts, by WHDH-TV, Boston. Then WGN-TV in Chicago covered 120 daytime home games in color during 1960 season.

Indoor tests of the new tube immediately prompted switch of several major studio programs to color. NBC, for example, increased its weekly color schedule 12 hours simply by picking up in color three studio shows previously broadcast in black-andwhite. NBC also plans to use the new tubes for nighttime sports events.

### Ease of Night Colorcasting

Broadcasters of baseball in color agree that night color pickups are considerably easier than handling daytime games. The light source is steady and more dependable, making the pickup simpler. WHDH-TV (using two cameras behind the plate, another at first base and a fourth in the center field stands successfully fed by 1000 feet of cable) reports that, even in daytime, their color pickups are easier than black-and-white because of an automatic shader and iris control in the video truck. Between telecasts, color cameras are left where they are set up and covered for protection against the elements.

### Advantages of New Tube for Studio Use

Although the RCA 4401 was especially designed for colorcasts of night sporting events, it has important advantages in studio color work as many broadcasters have found. Because of its extremely high sensitivity, making possible operation under



FIG. 2. Directly interchangeable with RCA 6474 and RCA 7513 color camera tubes, the RCA 4401 requires no greater lighting for color than for black-andwhite telecasting.

low-level light conditions, the tube operates efficiently at a fraction of the light necessary for conventional color tubes. This substantially reduces power requirements for studio lighting and air conditioning.

The RCA 4401 color image orthicon features a high gain multiplier, high sensitivity photocathode, and dynodes which permit higher voltage operation. Tests indicate that incandescent illumination as low as 40 foot-candles can be used with a lens stop of f/5.6, which is well below the "knee" of the tubes characteristic curve. Excellent color originations can be made with light levels of 150 to 200 foot-candles normally used for black-and-white studio telecasts.











# COLOR PROGRAMMING ON NBC 1960-61

An Entire Spectrum of Programming, From Chemistry to Comedy—

### by DAVE LEVY

Vice-President in Charge, TV Network Programming, National Broadcasting Company

FIG. 1. Opera, "Deseret."

**B**ack in 1954 NBC carried a total of 68 hours of color for the entire year. Beginning with the 1960-61 season, we are carrying more color in two weeks than we did in the entire year of 1954.

As the totals have increased geometrically, the content of our color schedule has changed, keeping pace with the dynamics of the color audience.

Back in 1954 color was something very special and very selective. Only a handful of people owned color sets. The least expensive color set cost over a thousand dollars. A typical week's schedule in these early days consisted of a few minutes of color in the daytime and a very occasional special.

Today color sets retail at prices within the reach of many. Color set circulation is nearing the million mark. NBC, aware of this dynamic growing group, then designed a color schedule for the 1960-61 season that offers programming of diverse description for people with every kind of taste.

This 1960-61 season is carrying a full 32 hour color schedule weekly. We have color from sign-on, with NBC's first network program "Continental Classroom," to sign-off, with Jack Paar. And in between,

FIG. 2. Opera, "Don Giovanni."



an average of five regularly scheduled color shows daily, a total of seven programs daily—a dramatic change compared with six short years ago when we carried seven programs a month.

This change is much more than in quantity alone. As we have consistently added more and more color to our schedule, and as the importance of color has grown, we have tried to construct a color schedule of maximum diversity and the best in quality. Careful thought has gone into the selection of each color show in order to provide a well-balanced schedule.

Balanced color programming means a schedule with color throughout the day, big color every night and color throughout the weekend. It means a color schedule which will satisfy the myriad tastes of the present color owners (and the people they invite in to see color). It means a color schedule that provides the large and small budget advertisers with a color vehicle for their product. A balanced color schedule must provide tv set dealers with plenty of opportunity for demonstration and, finally, color tv like all television must fulfill its potential by enlightening and educating as well as entertaining.



FIG. 3. "The Price Is Right."

FIG. 4. "Jan Murray Show,"





FIG. 5. "Bonanza."

Starting off, every weekday NBC is presenting "Continental Classroom" in color. For the first time the entire hour will be in color. Last year's "Continental Classroom"course was followed by some 543,000 students. Color does more than increase entertainment value. It makes the teaching of difficult subjects easier by vitalizing the graphic demonstrations.

This season "Meet The Press," one of broadcasting's most outstanding public affairs programs, will be added to the color schedule.

The NBC Opera Company is again presenting its distinguished series in color with the premiere of a new opera on January 1 entitled "Deseret," followed by later productions of "Boris Godounov" and "Fidelio." Last year's "Don Giovanni" was acclaimed by critics as "a memorable afternoon for TV and for art ... a triumph ... a soaring production."

On the daytime entertainment side this season we are putting four game shows in color rather than two as in previous years. The old favorites "Price Is Right" and "It Could Be You" will continue in color, plus "Play Your Hunch" and "The Jan Murray Show" which started in color in September. These daytime shows will provide color owners with delightful diversion while dealers can utilize four separate opportunities for set demonstration.

Old favorites in the musical variety category are remaining: Dinah Shore, Tennessee Ernie and Perry Como. These shows have always been excellent showcases for color. This year on a regular basis each of these shows will be a "special" in its own right, with bigger guests and more production numbers. The combined years of color experience of the three advertisers of these three shows (Chevrolet, Ford and Kraft) add up to 16 years, attesting to the effectiveness of color for these clients.

Starting in October, 1960 NBC scheduled two new children shows in color each Saturday morning: Shari Lewis and her delightful hand puppets and King Leonardo, a new cartoon series. These are two new up-to-date programs with the timeless appeal all fine children's entertainment should have.

For all family appeal there is the new "Shirley Temple Show" in color with such wonderful stories as the Land of Oz, the story of Tom Sawyer and Huckleberry Finn, Winnie-The-Pooh and The Prince and the Pauper.



FIG. 6. "Jack Paar Show."

For western-adventure fans, "Bonanza" is being seen in color. This series, set in the magnificent West, emphasizes the exciting difference color makes.

And for the first time, the program that defies categorization, the "Jack Paar Show," is now in color Monday through Thursday for a total of seven hours a week. The combination appeal of sophisticated wit in the casual setting is perfect for today's color audience, and the millions of Jack Paar's loyal fans will especially want to see their favorite in color.

NBC will present top calibre color events in the sports world and in the entertainment world: all the World Series, the best in college football, top bowl games, the Parade of Roses, the Donald O'Connor Show, Astaire Time, the Dean Martin Show, a two-hour filmed version of Macbeth and many, many more.

The impressive total for 1960 is well over 1,000 color hours, 50 per cent more than the previous year. And the increase this season is even more dramatic, almost double what we carried last season. We have made, and will continue to make, every effort to keep not only the quantity of color high but also to present the finest quality and a well balanced schedule.



FIG. 7. "Play Your Hunch."



FIG. 8. "Macbeth."

# WALT DISNEY'S GENIUS AND ARTISTRY WILL BE UTILIZED BY NBC FOR COLOR TV PRODUCTION AND PLANNING

Walt Disney and the National Broadcasting Company have concluded an agreement by which the unique genius and artistry of Mr. Disney will be utilized by NBC in a broad area of creativity for color television production and programming.

Under the agreement, Walt Disney will introduce to television a whole new world of color with the programs to be produced for NBC. Specifically, he will produce and host a weekly series of full-hour programs, all to be broadcast in color; will create a number of special programs in color, and will be active in a variety of special projects to be announced later.

Walt Disney will bring to the new series of full-hour color programs the wizardry which characterizes the Disney production of color motion pictures. These programs will be produced especially for color tele-

> "We hope to weave a magic carpet of color to include people, places, nature, music, dancing, cartoons, the human and the fantastic drama of the universe."

vision and will range over a wide field of subjects and treatments, from true-to-life nature stories to animated cartoons, from tales of adventure to adventures in the world of space. The special programs will reflect a number of spectacular themes and treatments which Mr. Disney has been developing for color television over the past several years.

Commenting on the agreement, Walt Disney said: "I look forward to the association with the National Broadcasting Company as a challenging path in our career, opening up, as it does, a new exciting world of color, which we pioneered in the motion picture cartoon field.

"This is a breakthrough that I have anticipated for vears because I feel that color adds an all-important dimension for which we are thoroughly equipped. "Planning our entrance into this broader field of television, we have had camera crews traveling extensively for many months photographing shows around the globe.





The wings of the living color peacock will soon transport all the breathless wonders of Walt Disney's color creations into homes across the nation.



### IMPROVING TELEVISION TAPES OF COLOR SHOWS

RCA Color Tape Recorders Exhibit the Quality, Stability, and Reproducibility Required for Editing of Pre-recorded Shows

> by RUSSELL A. NIES Recording Engineer, NBC, Burbank, Calif.

The recent completion of the installation of the ten new RCA Color Television Tape Recorders at NBC Burbank provides the network with the facilities to handle the increasing tape recorded program load with better quality in monochrome as well as color. The RCA Recorders, having superior quality head assemblies and increased stability characteristics circuit-wise, provide the network with the ability to originate tape recorded programs with greater dispatch and efficiency. This is particularly the case of those shows requiring only delay broadcast due to time zone requirements.

### Superior Quality Head Assemblies

Although the advantages provided by RCA TRT-IAC relative to the time zone problems are very significant, it is in another area that greater contributions are made toward network production problems.

A large portion of the network business at the west coast plant in Burbank is concerned with the pre-recording of programs for later release. Many of the Class "A" time productions originating from the west coast fall into this classification. Typical of these productions are: The Shirley Temple Series, The Bob Hope Show Series. The Fred Astaire Shows and the Donald O'Connor Show, Projected schedules indicate approximately fifty of this type of high budget complex production shows will be pre-recorded and released this season.

Color TV Tape Recorders at NBC, Burbank, Calif. Shown in this cubicle are two RCA Recorders with color monitors and controls. Five of these cubicles contain a total of 10 recorders.

### **Excellent Reproducibility Factor**

The high quality and stability performance characteristics of the RCA tape recorder are most readily appreciated by pointing out the fact that almost all the pre-recorded shows, of the type aforementioned, are planned, produced and recorded to take advantage of the ability to edit video tape. Due to talent availability or production or set problems, the recording sessions may be spaced out over several days or even with lapses of up to several months between sessions. To be able to satisfy the demands of such conditions, yet maintain the utmost in release quality. it is necessary that the video tape recorders have characteristics both of initial and long term high quality and stability. This is to say that the recorder must be able to record on the tape, tomorrow or the next day, as it does today. This reproducibility factor must be met by many characteristics of the tape recorder. Some of these items are: Deviation, frequency response, phase and amplitude of the control track, position of the edit pulse, phase of the headwheel, audio level and response, and for color, chroma level, head to head chroma response and phase modulation.

The RCA Television Tape Recorder has the capability of very tight control with respect to these characteristics. Methods and procedures have been devised to monitor, control and reset the tape recorders to specific test conditions at the start of each recording session. Thus the stage is set for consistent performance.

### **Double System Editing**

The complexity of network color shows insofar as the tape recording and subsequent editing are concerned is indicated by some of the following factors:

1. The number of tape splices in a production, for one copy, may vary from 25 or 30 to as many as 200. Most productions require cutting accuracy of one frame or less error. The splices must not result in rolls, loss of tracking or lurches during playback, Material for the reel of final "release" tape may come from up to 10 or 12 reels of original recorded tapes.

2. Most pre-recorded productions require that specific work be done with the sound track as a separate item from the picture information. For this reason all pre-records of this nature are recorded "double system" (i.e., separate sound and picture tapes) or are recorded in such a manner as to permit conversion to double system by transferring the sound track and the sound track sync information to a separate sound track tape prior to the editorial and sound dubbing work. The additional work done on the sound track involves such items as adding background music, musical bridges, sound effects, applause re-enforcement, etc.

In addition to special techniques and procedures used in setting up and standardizing the tape recorders, the NBC Burbank Recording Department has also devised many methods and equipments to facilitate tape editing. This produces prerecorded edited tape productions in an economical method yet maintaining the best consistent quality.



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# HOW ENTERPRISING TV RETAILERS CAN OPEN AN AVENUE TO NEW SALES . . .

FIG. 1. Home Demonstration by Al Rawlins, Jr.—Rawlins-Kincade, Wilmingtom, Delaware.



FIG. 2. Use of Point-of-Sale Material as discussed by Distributor Sales Manager to Joe Murphy—Murphy's, Philadelphia, Pennsylvania.



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### by THOMAS F. JOYCE

President, Raymond Rosen & Company, Philadelphia Distributor, RCA Victor

> President-elect John F. Kennedy in his nomination acceptance speech spoke about the necessity of the nation moving forward into new frontiers of missiles, space, foreign policy, pensions, medical plans for its senior citizens and the development of the nation's resources.

> One of the nation's most valuable resources it its mass communications system —television.

> Enterprising appliance and TV retailers, in ever-growing numbers, have been and are pushing back the frontiers of television by selling color sets in ever-growing numbers.

### **Dedicated Dealers Hit the Jackpot**

From its introduction, color TV has had the unwaivering belief and support of certain dealers who would not be discouraged by negative viewpoints. These believers were also immune to the apparent obstructionist tactics of those who seemed to be doing their best to prevent the forward movement of color TV. These pioneering retailers have, through their color TV sales performance and unshakable belief, been winning more and more dealers to the cause.

Many of this ever-increasing number of dedicated dealers have found their dollar sales of color sets approaching and even exceeding their dollar sales of black-andwhite.

In one weekend (November 11, 12 and 13, 1960) RCA Victor color TV dealers, in a nationwide campaign sponsored by RCA Victor distributors tieing in with NBC's Color Day, U.S.A., sold at retail 5,716 color TV sets. This is an indication of the retail sales momentum that is being built for color TV.

FIG. 3. Color Demonstration Room—Gerhards, Glenside, Pennsylvania,

### MINIO NO LA DIA INT



FIG. 4. TV Theatre-Auto Boys, Bristol, Pa.

What are the chief characteristics of a color TV dealer?

- Is it size?
- Is it location?
- Is it technical competence?
- Is it financial ability?
- Is it management skill?

No—not one of these valuable attributes —all of which, of course, have influence is the controlling factor.

#### Faith In Color Is Essential

Of utmost importance in the success of a retailer in selling color TV is his unshakable belief in the tint medium. First, he believes and he knows from his satisfied set owners, that color TV is here now not next year—not even next week. Color TV is here today—giving a new dimension to home entertainment—exciting, living color. Second, he is confident that an allcolor TV system, broadcasting and reception, is destined to replace the present outmoded black-and-white TV system.

Dealers who believe that the future of TV is synonymous with the future of Color are using all of the ingenuity and resourcefulness of effective specialty selling to implement this belief. They have extensive service and sales training programs; adequate color TV theatre display areas; effective tie-in with program highlights as they are broadcast; free home demonstration and "Use-the-user" program; advertising in every established medium; sometimes offering valuable premiums for coming in to see color demonstrations; in short, no way of reaching color TV prospects is overlooked!

Those who have studied the progress of new inventions and new ideas from their inception, have noted the reluctance with which they are generally accepted. It takes specialty salesmanship of a high order to break the resistance to new ideas and new products.

The owners of these new products become disciples for them in the appliance and TV field, their homes become demonstration arenas, with enthusiastic owners helping to do the selling to their neighbors, friends and relatives.

#### Parallel In Home Appliances

The inventor of the automatic washing machine, brought it to every washing machine manufacturer in the United States. They all turned it down as impractical. It was, in their opinion, an improvement not wanted by the housewives of America.

It was the late Vincent Bendix, of aviation fame, who saw the possibilities of the automatic washer and backed it with his money. Introduced in 1936, only 380,000 were sold before World War II shut down production. The number sold, was accomplished only by skilled specialty salesmanship, under the direction of one of our country's real masters of specialty selling. Judson Sayre, now president of Norge Home Appliances.

In 1959, automatic washer sales totaled 3.015.000 units with a retail value of \$884.200.000—compared to 995.000 conventional washers with a retail value of \$156.215.000.

The washer-dryer combination, now in its infancy (200,000 being sold in 1959) is destined during the next decade to replace the automatic washer as a leader in unit sales and dollar volume.

#### Parallel In Monochrome TV

Few people recall the fight to gain acceptance for black-and-white TV before World War II and immediately thereafter. In one year of intensive pre-war selling, only about 5.000 TV sets were sold in the areas served by TV broadcasting stations in New York, Philadelphia, Schenectady, Chicago and Los Angeles. These were sold by a handful of retailers who believed in the ultimate destiny of television—dealers, who were not discouraged by the opposition of most radio manufacturers of those days.

### **Circulation Agents for Broadcasters**

Color TV broadcasters, unquestionably, believe in the ultimate destiny of color TV to assume the dominant role in TV broadcasting. They have demonstrated this by the investments they have made to date. These color broadcasters have strong allies in their individual markets in the dealers who are actually the circulation agents for the colorcasting stations.

If I were a color TV broadcasting station manager, I would be doing all that I could to supply information to my "color TV circulation department" to the end that the sales enthusiasm of these dealer members would be maintained at a high pitch. I would make extensive use of "public service" type announcements to encourage my viewers to witness demonstrations in the stores of Color TV retailers.

Earlier I wrote about the amazing results stemming from Color Day U.S.A. In another color TV selling activity, organized by RCA Victor distributors, RCA color dealers have pledged the sale of over 50,000 RCA Victor Color TV sets during November and December 1960 and January and February 1961.\* These sales pledges are in the form of a tribute by RCA Victor Color TV dealers to

RCA's unconquerable faith in color TV's ultimate destiny of replacing the present black-and-white TV system.

It is the firm belief of these retail dealers that the RCA investment in color television is now beginning to hit the jackpot for enterprising color TV dealers.

Editor's Note: The dealers actually exceeded these quotas.

FIG. 5. Mr. Al Rawlins, Sr., and Mr. Al Rawlins, Jr. of Rawlins-Kincade, Wilmington, Delaware — Color Demonstration Room.





FIG. 1. For development of commercials, J. Walter Thompson has established a complete TV studio, permitting closed circuit transmission of pictures to offices of agency's creative people.

### J. WALTER THOMPSON SETS PATTERN FOR SUCCESS IN COLOR TV ADVERTISING

by R. E. BUCHANAN, J. Walter Thompson Company

With a break-through in color television imminent, there will open a brand new dimension of selling in a totally different and dynamic fashion.

This belief is hardly new to the agency, which also holds leadership in radio and television billing, because the company has been an exponent of color since 1953. At that time the agency took a hard look at the future of color television for its clients and decided that it would immediately learn everything possible about the use of color both for its programs and its client's products. And J. Walter Thompson recommended that its clients support color because, in the long run, they had the most to gain from the selling advantages color would bring.

"An agency can either wait until television ideas are brought to it. or it can, in concert with its clients, determine what it would like to see in television and then make it happen." comments Dan Seymour, director of the Thompson radio and television department. "We decided, years ago, to make things happen in color and we've been at it ever since."

In the 1959-60 television season the agency created and produced more than 600 minutes of color commercials, the time equivalent of seven full-length motion picture features.

The agency looks upon its present leadership in the color field as a natural consequence of its pioneer efforts in color years ago. In midsummer of 1953 J. Walter Thompson joined with NBC to produce the first full color Kraft Television Theatre. Three months went into the planning and preparation of this production. The result was a most beautiful color production.

In 1955, the J. Walter Thompson Company implemented Ford's intense interest in color as a means of bringing to the whole family group in its living room the high style of the Ford line with sponsorship of FORD STAR JUBILEE. Later for Ford, the agency employed color as a requisite for the every-week special STAR-TIME series. The agency believes that color for th's program and its well-received commercials is essential to the objective of the entire series: To reach with the greatest possible impact every segment of the car-buying public, even those who seldom or never watch television.

The present line-up of clients' programming sponsorship with all commercials in color is:

- THE SHIRLEY TEMPLE SHOW. Beechnut and Nabisco.
- THE PERRY COMO SHOW. Kraft Foods Company. 6 minutes per week
- THE FORD SHOW. Ford Division of the Ford Motor Company. 3 minutes per week

BONANZA. RCA. 2 minutes per week These account for four of the nine evening color programs regularly scheduled by NBC. In addition, other Thompson clients are represented in special color programs throughout the year, such as the Brewers Foundation hour-long musicals, "Summer on Ice." "The Esther Williams Show," and "The Donald O'Connor Show."

Other clients who have done color commercials in connection with color programs are Lever Brothers, Chesebrough-Pond's, Chase & Sanborn, and Red Cross.

In the development of color commercials. J. Walter Thompson maintains a complete television studio of its own which transmits by closed circuit to monitors in offices of the agency's creative personnel. In this fashion a true perspective of transmission in color and reception on an individual screen is gained.

For more than four years clients' products, ranging from Kodak film packages to an Aunt Jemima pancake, have been tested in color. Particularly valuable has been the experimentation with packages against varying backgrounds so that when it comes time to actually put the product on camera—television or film—the agency producers know exactly what color and texture of background best complement the true colors of the package.

The seven fulltime technicians of the TV Workshop are available to work each day with a different set of copywriters, art directors and account men from any of the six domestic Thompson offices or its international offices to find the best way to take advantage of color to advertise the product. J. Walter Thompson has a Fashion Coordination Department which is responsible for maintaining a consistent level of good taste in clothes, set decorations and props, locations and backgrounds.

During the past six years, the Fashion Coordination Department has been active in the color planning and coordination of color commercials for such clients as Ford Motor Company, Scott Paper Company, Eastman Kodak and Chesebrough-Pond's.

During the past year for Ford alone, the department has worked on 23 color spectaculars being closely involved, and in many cases completely responsible for color planning, selection, and coordination between the car. the backgrounds, and the people.

It has been responsible for working with

color both in a studio and on location, including most recently the Rome series of television and print advertising.

The personnel of the department are familiar with many areas of color television and its advantages as well as problems. This wide experience has resulted in some important lessons in the use of color:

1. Color can be used to implement the telling of a story or to emphasize a product message or theme. The choice of a color can suggest warmth or coolness, laughter, or beauty. For example, Ford did a commercial in which the first half was a terrace scene with cool modern music and the latter half hot jazz. In the first half cool colors were planned—pale blues and greens with a white undertone against a black and white modern setting; in the jazz half bright clashes of color against a

FIG. 3. "The Perry Como Show"







FIG. 4. "The Ford Show"



FIG. 5. "Bonanza"

Japanese lantern-lit warm brick terrace were used.

2. Some colors bleed: an Eastman Kodak baby will look healthier on a pale warm toned blanket than on, for example, a green blanket; a Pond's beauty's skin tones may not benefit from the reflected color of a bright cerise dress.

3. Undertone colors must be watched; they sometimes come up strongly on color film or live television. A man's grey flannel suit may become a color-blinding blue; faded blue jeans may intensify to a brilliant shade of royal.

4. Colors vary with texture; satins or shiny surfaces often reflect light and intensify colors more than a light-absorbent texture or surface.

5. Too wide a value range between background and foreground colors can be dangerous. On screen, in color or black and white, the full skirted white hostess gown will probably flare against a Christmas tree or dark-toned room.

At this point there is no definitive criterion by which the advertiser can determine the degree of importance of color to his commercials. For certain products, however, the agency and its clients agree that the effect of color greatly enhances the sales message.

For instance, Kraft with its food preparation commercials has employed color for all its commercials since August, 1956. The agency has a special staff, highly skilled in all phases of "appetite appeal," which spends its full time on the creation and production of these commercials.

Kraft's firm belief in the importance of color for food advertising led the company last summer to use color commercials in two black and white shows. TATE and HAPPY. The effect on home color sets of full-scale food commercials suddenly appearing in color was startling and highly effective.

After early experimentation with color. Ford for three television seasons has produced most of its automobile commercials in color. In addition to its contribution to backgrounds — highway foliage. private driveways, resort marquees — color highlights automobile styling, both exterior and interior.

Thus, color, at J. Walter Thompson has become an integral part of its day-to-day operation. The agency looks upon its seven year experience and leadership in color, both for programming and commercials, as an investment which it believes will pay great dividends to its clients in the dynamic selling techniques made possible by color television.

# **KGW-TV** PUSHES COLOR IN PORTLAND

 ${f S}$ tation KGW-TV, Channel 8 in Portland, Oregon, has been colorcasting live studio programs since first going on the air in December, 1956. And the color tv programming has expanded continuously. Now in conjunction with NBC network color and RCA promotion efforts the station is pressing vigorously forward.

Owner and operator, behind the pioneering effort in Portland is the King Broadcasting Company. Headquarters offices are in Seattle, Washington.

Station KGW-TV has traditionally pioneered in areas of effort pertaining to broadcasting. It was the first to employ the technique of high transmitter power combined with low antenna gain-for other than low-channel operation. A 100-kw television transmitter. Type TT-100AH, is

transmitter, film, and studio. There are two live color cameras, Type TK-41, in the studio area. There is a complete color film chain, consisting of TK-26 Three-Vidicon Color Film Camera, together with multiplexer, slide projector, and 16mm ty film projectors. (All color equipment is RCA.) The transmitter was designed for color operation

Personnel are fully trained for color. Studio lighting was constructed to the requirements of color and sets have been constructed to make the most of color (which, incidently, also makes sets better for monochrome productions). Station ID slides are all prepared in color as well as other art.

### **Color Programming**

Insofar as local live color is concerned. the station puts on a daily program, week-

> FIG. 1. "Pioneer Club" is KGW·TV color program telecast live in color 5 to 5:30 p.m., Monday through Friday. This is a children's show, featuring Heck Harper,

Last year, when the NBC program "Truth or Consequences" paid a visit to Portland, KGW-TV originated the show for transmission to the full network of stations, from its own studios. This was done for a period of one month. The shows were all completely done in color.

In addition to the foregoing, all live and film color programming of the National Broadcasting Company is broadcast for the entertainment of Portland area viewers.

### **Color** Promotion

In promoting color television, the station has a three-fold program. First, KGW-TV has its own series of mailing pieces and color schedules that are distributed regularly to all the press, and its own mailing list of advertisers, agencies, dealers, set owners, and local prospects.

Second, KGW-TV cooperates with the local RCA distributor and color set dealers in "Color Contests," closed circuit color ty demonstrations, and other ways of advertising the medium.

Third, the station participates in Color Dav, Color Weekend. Color Week, and other national promotions of RCA and the NBC network.

used in combination with a Superturnstile antenna, with gain of only 3.6, to produce

the maximum effective radiated power of 316 kw.

Using this technique the station produces a broad vertical-plane radiation pattern. This has successfully coped with the problem created by the two radically different types of terrain encountered: predominantly flat in East Portland but high hills with steep-sided ravines in West Portland.

Likewise with its colorcasting. The station is broadcasting the kind of signal-in both urban and suburban areas-that brings excellent reception to viewers.

### **Color Facilities**

The station is fully equipped for color in all three areas as proposed by RCA:

FIG. 2. Shown on set of 'Pioneer Club" are (l. to r.) Norris Oleson, cameraman: Heck Harper, star of show; and Don Rickle, floor director.

days-Monday through Friday-from 5 to 5:30 p.m. This is a children's show that features Heck Harper. It has been running for several years.

For sports fans, there is a weekly Thursday evening color program entitled, "Outdoor Sportsman." This is a combined studio and film show. It features hunting and fishing in the Pacific Northwest.

In the color film area the station has been treating its viewers to the entertainment featured by the "Best of the Post."

In the area of specials, the station remotely picks up the annual Portland Rose Festival Parade in color. This a two hour extravaganza. It is the highlight of the many local specials during the twelve months

### **Results of Color Effort**

The efforts expended on broadcasting the KGW-TV program of color constitute. in the minds of station management, a service on behalf of the viewer, to inform him of the educational value and to let him enjoy the beauty of, color television.

Furthermore, the station has by this means also prepared itself-both in equipment and in personnel-to face the future with the utmost confidence in color television. In this way it is rendering a service to advertisers and to agencies. It is fully prepared to serve their needs in the use of the color television medium.

Most significantly, by programming color and by telling people about color, the station has gained new stature in the eyes of. as well as a share of, a totally new and important audience.



KSTP-TV, television broadcasting pioneer and a recognized leader in the industry, has launched a broad range expansion program to give Minneapolis-St. Paul viewers more color television in the form of locally produced programs.

Stanley E. Hubbard, KSTP President, has announced that KSTP-TV plans call for an RCA "package" of the most advanced television broadcasting equipment. This includes a station break automation system, TV tape recorders, complete color facilities, transistorized switching equipment and mobile production facilities capable of handling both color or black-andwhite remote programs.

### Centralization of Equipment for Operations Efficiency

Working closely with the KSTP-TV engineering staff, RCA engineers helped draw up plans for an integrated layout which features the centralization of all equipment, including master control, studio, film and transmitter, in one area for greater operating efficiency.

### Move to Live Color

Addition of two TK-41 live color cameras will implement KSTP-TV's film and network color schedule. The cameras will be equipped with new high-sensitivity image orthicons. These make possible fine color pictures with less studio lighting than heretofore possible.

# KSTP-TV IS BRINGING MORE COLOR TV TO THE TWIN CITIES

Most Advanced Television Equipment, Including Full Color Facilities, Promises New Era of Locally Originated Color Television Programs for Area Viewers

Already equipped with film and slide units plus facilities to relay network colorcasts, KSTP-TV will use the new cameras to engage in all forms of color TV programming. In addition, TV Tape Recorders at the station are equipped to handle color.

### Color TV Mobile Units

Two KSTP-TV color cruisers are the latest design in mobile units. Equipped to accommodate four monochrome and two color cameras, the units are 35 feet long, 8 feet wide with full 7-foot 2-inch head room inside. Built-in microwave facilities, for color or monochrome, will relay remote pickups back to the station.

### **Finest Service to Viewing Audience**

The KSTP-TV expansion program calls for an extensive equipment package installed under the master plan prepared by station engineers and RCA. With this latest and most advanced equipment, KSTP-TV will be in a position to provide dramatic new tv broadcasting service to its viewing audience.



Color TV will take to the road in this fully equipped color cruiser.



FIG. 1. Three Skelton RED-EO-TAPE Mobile Units. Control room bus is at left foreground, and the recording unit directly behind. The power and equipment storage bus is at right.



FIG. 2. Setting up for Cinderellas Castle sequence of "Bell Telephone Hour." Two color tv cameras are employed to permit "live editing" in the production unit during recording of the sequence on color tape. Hence, when they return from location Skelton Studios will bring back a finished tape—complete with special effects! Color television captures all the natural realism of the fire department in action on the main street of Disneyland. This will enable people all over the nation (and the television world) to enjoy for themselves the colorful combination of fantasy and history that comprises Disneyland.

# RED-EO-TAPE FEATURES "LOCATION EDITING" OF COLOR TV PRODUCTIONS



FIG. 3. Skelton Studios three mobile color tv units on location at Disneyland. One unit houses control and switching equipment, including special effects—this is the production center. Second unit houses tv tape recorders and film system. Third unit houses power generating equipment—to operate the system on location space for storage, and a machine shop.

FIG. 4. Mr. Cobler, chief engineer. Skelton Studios, seated at technical director's desk in the production unit. It is here that "live editing" is achieved. The director can switch cameras, insert film and slides, and put special effects on tape—while the tv cameras are shooting the action.



### Skelton Studios Shoots Color Tapes of Disneyland for NBC Series

FIG. 6. The genial comedian himself. Red is at his very best on color television. He is also one of the foresighted pioneers of the lint medium. At right is Hal Maag, RCA vicepresident, Western Distributor and Commercial Relations. At left is Adron Miller, manager, RCA Film Recording and TV Service Center, Hollywood. FIG. 5. Hydraulic lift gate enables one man to handle a TK-41 Color TV Camera by himself. Watching the demonstration are: Gibson Scott, director of transportation, Robert Cobler, chief engineer, and Edward Hilley, studio manager of Skelton Studios.

One of the most unique, as well as useful, features of the Skelton RED-EO-TAPE system is the speed in set-up and striking of locations. For example, during production of a show or commercial it is normal to have power on the equipment not more than 7 minutes after arrival at the location. Within 30 minutes, color cameras are warmed up, ready to go to work.

In a specific case, moving from Hollywood and Vine to a drugstore location some three miles distant, only 45 minutes elapsed from the order to strike until the crew was ready to start shooting again.

At Disneyland, upon completion of shooting a Bell Telephone show, all three color cameras, cranes, cables, etc., were loaded and the caravan ready to roll in 35 minutes!

### New Camera Technique Saves Time

Mr. Robert Cobler, chief engineer, reports that considerable crew time has been saved by employing a color camera balancing technique developed at Skelton Studios. The tv cameras are first balanced under studo lighting conditions, and by use of color correcting filters can be moved outdoors for back-to-back shooting. This eliminates the normal rebalancing time occasioned by the change of color temperature.

### Location Editing Helps Production

This technique permits completion of a tape on location. Two or more cameras are used for shooting. The control desk is designed to permit switching of live camera inputs to the tape recorder.

There is a film and slide system installed and the control desk can switch these inputs to the tape recorder also.

As the control desk switches any of the inputs to the recorder, the audio follows the video automatically. A specially designed RCA transistor system handles switching with fast, clean breaks and no rollover. Switching time is of the order of a millionth of a second.

A special effects control panel is built into the control desk—adjacent to the switching panel.

The director has a choice of over 150 effects that can be programmed into the tape production, and inserted upon cue by the movement of a lever, when switching inputs to the recorder. Upon completion of shooting, therefore, a finished tape is ready to be put into the container, and eminently suitable for telecasting!



# 1960 COLOR DRIVE BREAKS ALL COLOR SET SALES RECORDS

In November and December of 1960 many color TV stations, RCA's Consumer Product distributors, and more than 10,000 key dealers throughout the nation joined the RCA Sales Corporation and NBC in the most spectacular series of color promotions ever staged to the largest color TV audience in history.

The purpose was to demonstrate the quality of color TV reception on today's advanced color receivers. The rewards in set sales—exceeded all original expectations.

### COLOR TV DAY - U.S.A.

The promotion was originally set as "Color Day—U.S.A." for Friday, November 11—a holiday for many persons— when NBC beamed across the country more than nine hours of color TV network programming, spotted during the day and early evening when stores were open.

### Color TV Weekend

Dealers' and customers' enthusiasm was so great, the network extended the increased color schedule to cover Saturday and Sunday, bringing the "Color TV Weekend" total to ten shows and 18 hours of color. RCA ran 1100-line advertisements announcing the event in 127 major daily newspapers and made special mats available to distributors. Many stations increased their locally originated colorcasts.

### Most Colorful Night

This was only the beginning. NBC then announced plans for a December 8 "Most Colorful Night of the Year," presenting for the first time in color four hit shows including a two-hour production of the highly successful "Peter Pan" starring Mary Martin.

### Most Colorful Weekend

Overwhelmed by sales successes from the November promotion, RCA distributors and dealers went to work to expand the "Colorful Night" into a second and even more promising "Most Colorful Weekend." NBC added almost five hours of color programming. Bright posters turned stores into eye-catching display centers: there were "color parties." tie-ins with local colorequipped stations: direct mail and tele-





FIG. 1. A fat olive! But seemingly optimistic pledge of 5000 color sets was actually exceeded by color set sales totaling half again as many during November 11-12, Color TV Weekend.

FIG. 2. Mayor W. Ralson Westlake of Columbus, Ohio, (second from right) presents proclamation declaring November 11-18 as "Color TV Week" to W. Walter Watts (center). Board Chairman and President of RCA Sales Corporation. Looking on are Walter E. Bartlett, General Manager, WLW-C, Columbus; John Murphy, Vice President for Television, Crosley Broadcasting Corp., and Edward L. Foster, President, Ohio Appliances, Inc., RCA Victor distributor. FIG. 3. Kickoff for color TV promotions started with RCA Victor distributors' "Indiana. Here We Come" party at exclusive Columbia Club for members of RCA first team captained by Wally Watts. Some 200 distributor principals. RCA executives, and press people attended. Distributors pledged record number of color TV set sales during a two-day period.

phone campaigns—all designed to make certain as many people as possible saw color during that weekend.

### Largest Mass Color Demonstration

So extensive and complete was the color promotion that practically any time a person walked into a dealer's store he could see a demonstration of color TV. With more than 50,000 color sets operating in stores and in public places, it is estimated that nearly a million persons saw color TV for the first time during the two "Color TV Weekends." Not only did dealers seize an unprecedented opportunity to show consumers how good color really is, but results proved the readiness of the public to buy color sets, particularly once they have seen color programs.

### How It All Started

The spark that set off the series of color promotions was a testimonial dinner given by RCA Victor distributors as a tribute to RCA personnel, and commemorating RCA's shipment of \$6 billion in consumer merchandise in the 15 years since the end of World War II. At this meeting in Indianapolis' Columbia Club, RCA distributors, headed by Thomas F. Joyce, President of Raymond Rosen & Company, Inc., Philadelphia RCA Victor distributor, pledged a goal of 5000 color set sales in the November 11-12 Weekend as evidence of their confidence in color TV. Actual color set sales in this period went well over the goal. and several thousand additional color sets were placed in homes on demonstration, resulting in later sales.

### Color TV Achievement Club

Last August, 70 leading RCA color TV dealers and retail salesmen were given membership in RCA's "Color TV Achievement Club," a new distinction to be awarded annually by RCA to those with outstanding sales records. Club members are the guests at a dinner party in their honor and also receive an expense-free trip to the modern RCA color TV receiver plant in Bloomington. Indiana, as well as a ring with a special club crest.

FIG, 4. Lester A. Hamburg. President of Hamburg Brothers, Inc., RCA Victor distributor in Pittsburgh, Youngslown and Wheeling areas, makes his pledge. Seated are RCA's Wally Watts and Raymond Rosen & Company's Tom Joyce.





FIG. 1. Mobile TV on location—getting ready to operate—note ladder on door. Camera hoist on roof, which is reinforced to support cameras and operators—ready for color or monochrome operation.



FIG. 2. Two RCA Color Tape Recorders and a complete RCA Color film system are installed in studio unit. Both 16mm and 35mm film projectors are included. Thus, stock footage may be inserted in TV tapes.



# Glenn-Armistead Mobile TV Units Speed Production of Color TV Tapes

Facilitate Shooting at Edwards AFB for NBC Color Tape Production of the "Ernie Ford Show"

The Glenn-Armistead trailers were parked at Edwards Air Force Base and NBC finished shooting of the "Ernie Ford Show" on schedule at 1:30 Thursday afternoon. The finished tapes, complete with special effects, were rushed some 150 miles to Burbank color studios. Here they were aired at 6 p.m., same day, for East Coast viewing.

### Live Editing

Everything went off without a hitch. There was even 40 minutes to spare, in getting the tape to the studio. But only with a tape production system such as this could you live so dangerously! The RCA-designed system made it possible to "edit live," while shooting the sequences, and end up with a finished tape complete with special effects—ready for broadcasting.

### **Time-Saving Device**

One of the time-saving modifications incorporated into the RCA color TV cameras is the result of a suggestion by Dr. Kozanowski. RCA expert in electron optics. This enables the output from the RCA special effects switcher to be fed back to the camera viewfinder. This greatly improves the accuracy and speed with which matte, chroma key, and other special effects can be accomplished.

### **Color and Monochrome System**

The mobile system is equipped to make monochrome or color TV tapes. The tractor mounts a 25-kw generator to supply sufficient power for both the camera and the tape trailers. Film and slide inserts can be accommodated, since a complete film system is also included. Switching and special effects equipment enable Glenn-Armistead to accomplish the most intricate wipes, fades, and inserts for the appropriate final touches, so that a finished tape can be produced by the mobile system.

FIG. 3. Control area in Glenn-Armistead mobile production unit. Video operators sit on lower level (in background of picture) near monitors. Director and technical director sit in chairs at control desk (center) to handle switching and effects. Client and audio operator sit immediately behind director (in foreground).



FIG. 4. Cutaway view of TV Tape and film studio. Facilities of Unit No. 1—Television Tape and Film Equipment. Function of Unit No. 1—TV Tape Recording; Tape, Film and Slide Originations.



FIG. 5. Making Color TV tape sequence at Edwards AFB for "Ernie Ford Show" on NBC.



FIG. 6. Glenn-Armistead Color Mobile Units parked at Edwards Air Force Base for on location production of color TV tapes.

FIG. 7. Mr. Joseph Bluth, Vice-President in Charge of Technical Operations, seated at chief control position. Foth tape recorders and film projectors can be controllec from his position. Live cameras are switched: sequences from tape, film, and slides inserted. Specia, effects can be executed as production rolls on. This is live eciting.

FIG. 8. Tractor and two trailers that comprise the complete Glenn-Armistead color TV production system. Normally, these units are parked at Glen Glenn Studios, where they function as fixed studios to produce color or monochrome TV tapes for clients. One unit contains the control, switching, and effects equipment. The other unit contains a film system and two color TV tape recorders.



### SPORTS, GREAT MUSIC, CHURCH PROGRAMS HIGHLIGHT WGN-TV HEAVY LIVE COLOR SCHEDULE



FIG. 1. The Chicago Symphony orchestra is heard each Sunday evening, 9 to 10 p.m., on "Great Music from Chicago," which is televised live and in living color over WGN Television.

FIG. 2. WGN-TV covered 120 Cubs and White Sox daytime home baseball games during 1960.



www.americanradionistory.com

WGN-TV, Chicago's first post-war television station marked another milestone in 1960 when it became the first outlet to televise an entire schedule of major league baseball games in full color. All home games of the Cubs and White Sox were telecast from Wrigley Field and Comiskey Park.

Another feature of WGN-TV's live color programming, and winner of the Peabody Award for television entertainment (musical), is "Great Music from Chicago," a series of hour-long concerts by the Chicago Symphony Orchestra in prime Sunday evening time. This was the second consecutive Peabody Award for WGN-TV, the first being in 1958 for "The Blue Fairy," a colorful children's fantasy.

WGN-TV presents "Chicagoland Church Hour," a series of remotes telecast in full color direct from Chicago area churches. With other live, film and network spectaculars, WGN-TV's color schedule has totaled on occasions more than 37 hours in a single week of programming.

Now in its fifth year of colorcasting, the Chicago Tribune station is completing a new Radio-TV studio and office building on Chicago's north side. The TV portion will be an all-color operation.

Commenting on the success of their color programming, Ward L. Quaal, Vice President and General Manager of WGN, Inc., said color TV is beginning to achieve mass awareness. "Color is exciting—it adds a fourth dimension to the other three of sight, sound and motion."



FIG. 3. WGN-TV's four-camera RCA color mobile unit parked outside of Comiskey Park, (Color illustration at left shows one of the RCA color cameras in Comiskey Park.)



### COLOR TAPE CAPTURES 8 OF 9 NBC AWARDS AT 1960 COMMERCIALS FESTIVAL

Newly Organized TeleSales Department Produces Outstanding TV Tape Commercials for Outside Clients

by JERRY MADDEN, Director of TeleSales, NBC

With the advent of video tape, there came a new dimension to broadcast production. At last, we had a vehicle to transcribe sound and picture that was developed specifically for electronic transmission. It retained all of the editorial advantages of "live," instantaneous switching, built-in optical effects, the ability to see what you have as you record. In addition, it gave us the one magic ingredient that had hampered our live production techniques from the outset-margin for error. Now, we could strive for absolute perfection, for were it not acheived in "take one," we now could go on until we did the job--without compromise.

Tape usage grew, and with it the demand for a new type of business became evident. NBC TeleSales became a department within the company to service the needs of clients in video tape production. Acceptance was almost immediate. In the few short years that NBC has offered its tape facilities to outside clients, we have experienced a most impressive record.

Let us examine why the tape commercial business has grown from literally zero

to an estimated national gross of over ten million. At the outset, most agencies used tape for one of two reasons: one---it was faster; two-it was cheaper. Gradually, as they became more familiar with tape techniques, they realized that they now had tools to achieve exceptional artistic quality. At this point, tape commercials really started to come into their own. For example, at the 1960 Commercials Festival where commercials were judged on their artistic merit, and not on the recording technique employed, NBC won nine awards out of fifteen submitted. An interesting note on the nine awards that were woneight were tape recorded in color.

Practically every major commodity has had dramatic success with color commercials. The Kraft Food Company last summer used color commercials, even though the film shows that they sponsored were in black and white. One critic made the comment. "When the commercials came on, it was like turning up the audio." Clients have found that in taping their color commercials, they retain the production ease of black and white, plus a chroma fidelity that is far superior to any chemical process. Color commercials have not approached their ultimate. Every day we are finding new methods through color to increase impact.

NBC has done extensive experimenting in color correction to assure absolute fidelity. The product must be seen exactly as it is in the supermarket, or on the showroom floor. The development of chromakey by NBC marked another significant gain in attracting more clients into color. Chroma-key is a matting device whereby logos, miniature sets or films may be inserted into the main scene, thereby saving a great deal in scenery construction, and giving almost unlimited artistic dimension.

Certainly, in the next year, and thereafter, the use of color in commercials will increase. There are impressive statistics on its impact by independent survey organizations. One advertising executive said to me that color TV commercials were, in his opinion, "Perfect Advertising." And so they are. In no other media can you have all of the artistic tools to assure consumer acceptance.

# REEVES OFFERS FULL COLOR TV TAPE SERVICES AT NEW YORK STUDIOS

Includes Facilities for Live Color Originations,

Color Film and Slide Inserts, and Special Effects

Color TV equipment is playing an important role at the recently established Reeves Television Recording and Playback Service Center. Using all new RCA TV tape, film, studio camera, control, switching and special effects facilities for both color and monochrome, Reeves is offering complete TV tape recording and playback



services to television producers, advertisers and agencies. Key color services include film to tape transfer, off-line TV recording and integration of live, slide or film inserts into taped programs and commercials.

#### Film to Tape Transfer

A fully equipped TV film room, makes possible the transfer to tape of 16mm and 35mm color films. These materials may be thoroughly integrated with live and slide inserts and processed via switching and special effects equipment to produce a complete color TV tape program or commercial.

Film room facilities include two complete RCA color/monochrome film systems. Each system is multiplexed to handle a TP-6 16mm Film Projector, TP-35 35mm Film Projector, TP-7 2-by-2 Slide Projector, TK-21 Monochrome Vidicon Film Chain and a TK-26 3-V Color Film Chain.

### Color TV Recording and Playback

Two of the eight RCA TV Tape Recorders at Reeves are equipped for color. These equipments allow simultaneous offline recording of two color tapes. Video lines can be provided to Reeves Studios from the various color TV production studios in New York City, as well as from advertising agencies preparing test color TV commercials. Immediate playback is provided over these same lines.

### Live, Film and Slide Inserts

Unique among the Reeves color services is the ability to mix in live, film and slide inserts to provide clients with a package program or commercial on color tape. In addition to film facilities previously described, the studios are also equipped with a TK-41 Live Color Studio Camera chain. The picture outputs of the film, slide and live studio equipment are fed to the mixing room, where inserts are professionally handled using latest design TS-40 Transistor Switching equipment. Special picture effects, wipes, inserts, letter and trademark insets, etc., can also be created electronically by means of an RCA Special Effects System. This provides push button selection of more than 150 effects.

### Advanced Equipment Permits New Techniques

Use of a completely matched RCA color TV system—live and film cameras, projectors, switching, special effects and TV tape—is helping Reeves Tape Studios introduce new concepts in TV recording. Designed to work together as a system, the equipment is providing the production flexibility, picture quality, color fidelity, and operational performance necessary for topnotch, color TV tape service.



FIG. 1. This fully equipped tv film room facilitates film and slide inserts in color tapes. Color film to color tape transfers can also be handled.

FIG. 2. Mixing room. Here signals from various tape, film, slide and live camera can be mixed and processed to produce a composite tape program or commercial. Special electronic effects can be integrated at this point.





FIG. 3. Commentary for commercials and programs may be accommodated on Reeves premises using a live color camera in a simple television studio.

FIG. 4. Product and feature inserts can also be integrated live from the Reeves color studio.



Our color television programming should be divided into three broad phases:

- 1. To get the dealer actively into the color television business,
- 2. To encourage the television stations to program more color,
- 3. To merchandise color programming.

It is difficult to separate the first two phases, by their nature they must go hand in hand creating, as they do, the supply and demand at the same time. However, of major interest throughout all three phases was our cooperation with the television stations, so I shall confine my remarks in this report to that area, presenting a few specialized campaigns that might be of particular interest.

### Planning Increases Programming

It was obvious at the outset of color television that to successfully merchandise this new product we must solicit all possible aid and color program hours from the local television stations. This in turn required us to show one hundred per cent backing of a long range color sales program. Plans were laid and activities were started until currently there are two stations in Indianapolis actively engaged in color telecasting, the NBC outlet, WFBM, and the ABC outlet, WLW-I, a Crosley station. The CBS station, WISH, carries all CBS network color plus running a film schedule in color on their own.

COLORFUL WEEKEND!

RCA VICTOR

T'PETER PAN"

\* WIZARD OF 07

OPEN HOUSE AT

### Distributor Cooperation With TV Stations Pushes Color Set Sales to 10 Per Cent of Industry Total in Central Indiana

### by L. E. RANDLE, JR.

Manager, Market Development. Associated Distributors. Inc., Indianapolis, Ind.



FIG. 1. The Color Day U.S.A. dealer kickoff meeting with 250 in attendance. This meeting set the theme of our merchandising effort to our dealer organization and the advertising media involved.

FIG. 2. A portion of the color display maintained at all times by the top color sales dealer over the Color Day U.S.A. weekend. This dealer, H. H. Gregg Appliances, Indianapolis, sold 22 RCA Victor Color sets over the three day period.





Phase one of our program grew steadily with phase two, with result that in the Fall of 1959 we accurately advertised that more hours of color television emanated from Indianapolis than any place in the country. This consumer appeal plus a solid dealer organization resulted in a sales figure in December of 1959 that gave RCA Victor Color Television 10 per cent of the total television industry sales in central Indiana.

### Color Assured, Color Insured

Our first major effort in 1959 and one of the most successful long term programs we entered into with WFBM was our "Color Assured, Color Insured" promotion. With the advent of the fifth anniversary color model early in 1959, we felt the time was ripe for spectacular promotional effort. The main feature would be a plan whereby the color set price would include a years free service.

At a meeting with Eldon Campbell and John Hurlbut of WFBM a campaign built around the slogan "Color Assured, Color Insured" was built up. The station offered strong editorial support with daily reports on color in newscasts, plugs by air personalities, frequent promotion announcements, etc., all designed to whet more interest in color by pointing out the number of hours of color programming, specific color programs on the air and the excitement and reliability of color television.

Our part of the program was dealer participation and advertising coordination to publicize the slogan "Color Assured, Color Insured," assurance of five years of manufacture, dealer's confidence and color programming, insurance of satisfaction guaranteed with free service for one year. Advertising was set up for a months program on television, radio, and in newspapers, Point of sale, window banners, mail stickers, displays and bumper strips were created.

The "Color Assured . . ." program lead directly into another WFBM activity built around the 500 Mile Race –a contest beginning the first of May that featured a fifth anniversary color set as grand prize. This contest helped prolong our Color Assured theme, aiding hard sell dealer tie-in, into June.

WLW-I was also a major part of our May campaign with a dealer tour of their colorcasting facilities and cocktail party. Outstanding attendance of 150 prompted another successful party a week later. With the large amount of publicity from two TV stations and local newspapers plus excellent sales results, dealer enthusiasm was at an all time high.

The last two weeks in May saw WLW-I promote color programming, color TV ownership and "Color Assured, Color Insured" all around 500 Mile Race coverage in color. This promotion included press releases, celebrities, bus and taxi advertising, sky balloons, sandwich boards, newspaper ads and TV promos.

### **Prosper With The Peacock**

Our fall, 1959, program started with dealer teasers using the theme of "Prosper With The Peacock." This was kept up throughout the fall while at the retail level we revitalized the "Color Assured . . ." program and featured the guarantee of a years free service, parts and labor. Dealer sales training, newspaper layouts, merchandising techniques and tie-in possibilities were a constant program. It was December of this year that our 10 per cent penetration figure was achieved.

### **Color Set Rental**

One of the programs that was outside the realm of station cooperation was our color TV rental plan inaugurated early in 1960. Free home demonstrations were always a good sales tool but we felt many prospects were reticent because of the implicit obligation to buy, whereas a rental plan relieved them of that obligation. Rental was advertised at \$1.00 per day (on approved credit) with a maximum rental of ten days. Dealer follow-up for instruction in tuning and set performance was essential. The tenth day closing effort was 80 per cent successful and the whole program was in effect two months. It was revived again during January, 1961.

#### 500 Festival

In the spring of 1960, we cooperated with WFBM on a Miss Springtime contest that awarded a color set a week for five weeks in conjunction with a contest put on by one of the stations leading personalities—Miss Francis Farmer. This promotion was unusually successful because of territory wide dealer participation that resulted in excellent prospect lists and dealer traffic.

This event ran until the first week in May. At that time WFBM began telecasting in color various events of our 500 festival including a professional golf tournament, celebrities, and general activities around the Speedway. The local impact here was tremendous because of the excitement created by all 500 Festival activities.

#### Merchandising Color

With the introduction of the 1961 color line plus the successful experience our dealers had in selling color television and public interest which had been so well demonstrated, we determined. WFBM in September agreed, that the best approach for us to take during the fourth quarter of 1960 was an even stronger phase three. This involved every possible means of merchandising color programming to the consumer. Naturally, this also included an effort to increase color programming from all sources.

We held with local dealers a meeting concerning our plans and made general mailings to build up enthusiasm for our first full scale promotion for the fall— Color Day U.S.A. A dinner meeting attended by 250 dealers, newspaper and television station personnel, was held in October, to introduce our total color program with an immediate project of Color Day U.S.A. Sample live commercials were given by WFBM personalities along with a run down of WFBM's programming merchandising activities. Sample taped spots to be used on radio were also given.

The meeting was generally carried through by our personnel with a complete wrap-up for the immediate promotion given at the conclusion to all dealers. Vaughn Monroe, who was appearing in town, taped more television and radio spots for Color Day U.S.A. and the whole effort resulted in 19 hours of color television on the day of Color Dav U.S.A. Actual sales figures, against a quota of 90, were 174 sets plus 120 out on home demonstration which should result, at our present ratio of closing, in an additional 100 units. We anticipate direct results of Color Day U.S.A. week-end to be in excess of 250 color television sets sold to consumers.

On the basis of this success we are stepping up our phase three activity—the Most Colorful Week-end of the Year will receive as much effort as Color Day U.S.A. with the emphasis on entertainment for the whole family. Each spectacular and the weekly color shows will also be heavily merchandised.

Future projects currently being worked on with WFBM include a live colorcast of the Indiana High School Association's Regional. Semi-final and Final Basketball Tourneys and a more extended color coverage of the 500 Mile Race festivities during May. 1961.

### **Excellent Sales**

The long term cooperation between distributor and television stations has resulted in an outstanding dealer organization devoted to the sale of color television. This has manifested itself in excellent sales records and public acknowledgement that a television station actively engaged in color casting is identified with quality and progress in all of its programming whether color or black and white.

### TVB INSTALLS COLOR TV TAPE FACILITIES TO ACCOMMODATE THE BROADENING USE OF COLOR

by FRANK MERKLEIN, Television Bureau of Advertising, New York City

When the Television Bureau of Advertising moved to expanded headquarters at No. 1 Rockefeller Plaza, New York City, a new service was added: an RCA color television tape recorder. Mr. Norman E. Cash, president of the Bureau, and Mr. George Huntington. vice-president and general manager, planned this significant addition in order to bring TvB's facilities up-to-the-minute and abreast of its members needs.

Though the recorder will never be applied as an originating point of an actual broadcast, a high degree of broadcast quality is maintained to feed five color monitors placed throughout the offices.

The first is a TM-21 high-fidelity directfeed monitor that provides the usual tactical service for the operator of the tape machine. In the case of the TvB, this professional quality monitor is also seen from the reception room. It is separated from the tape room by a glass partition, providing a full view of all tape operations.

A Conrac tuner affords one application that few tape recorders in the U.S. are

called upon to provide. An r-f feed of Channel 4 in New York City, for example, permits direct recordings in color on the TvB machine. Upon playback, Bureau staff people view the program at their convenience. This may be necessary for: research, sales, promotion, etc. Members, too, may view these tapes as a visual aid.

Equally successful was the transfer of a TvB 16mm color film production to color tape. This service was provided by Reeves Inc., on their RCA machines. As a result the Bureau now has in its library a color tape copy of its highly successful promotional film "The Exponential."

With this new service, a potential client for television may view at TvB's office a color commercial as it might appear on the air. He is able to draw significant conclusions from the visual presentation, lessening the risk of not being satisfied after a broadcast. The staff of the Bureau is now able to employ the medium itself, instead of merely the printed or oral exposition to tell a story. The Television Bureau as an association of 250 station members, the three networks, and 17 station representation firms, has not only a color tape recorder to enhance its function, but has become a focal point for color and tape activity. A library is being compiled for reference and is in constant exchange of ideas and methods with its members. These are passed on to advertisers as part of a program for familiarization designed for those considering the purchase of television time.

The RCA installation at TvB has been notably successful in all its varied applications. Technically dependable, the machine is daily pressed into use. Service, through a local representative. assures parts and routine maintenance as needed.

Fifteen of TvB's members are now equipped with color taping facilities. The broadening tape medium places the Bureau in the center of the activity. This enables TvB to spearhead the widespread use of color tape as an essential tool of the broadcaster and the television advertiser.



FIG. 1. Seen, behind a plate glass wall, from the TvB reception room is its newest acquisition: An RCA Color TV Tape Recorder. Left to right are: Norman Cash, President of TvB; Howard Abrahams, Vice-President Retail Sales; and Frank Merklein, Director, Member Station Presentations.

FIG. 2. Promotional tapes being examined by tv executives in TvB's viewing room. The new equipment enables member stations to show tapes of commercials, programs, and services to advertisers and agency personnel in the New York area.



# CELANESE CORPORATION USES CLOSED CIRCUIT COLOR TV TO INTRODUCE NEW PRODUCT

In introducing Fortrel—a new polyester fiber—to retailers of women's, men's and children's apparel all over the nation, the Celanese Fibers Co. chose Closed Circuit Color Television to do the job.

The decision made by Celanese was obvious. Closed Circuit TV would get the Fortrel story to the retailers quickly and color would present the new fiber to its dazzling best advantage.

### **Competitive Market**

The synthetic fiber industry is highly competitive. Dozens of these man-made fibers have found their way from the laboratory into the homes and onto the backs of millions of Americans in the last few years. In its search for a different and highly effective means of introducing yet another new fiber to retailers, Celanese chose Closed Circuit Television—in color —as having what it takes to launch Fortrel.

### Nationwide Program

To kick off the Fortrel campaign, bigscreen ( $4\frac{1}{2}$  feet  $\times$  6 feet) projection color television was used for the first time on a commercial scale. In a series of meetings extending from October 24 through November 2, more than 10,000 top personnel of the nation's retail stores in 34 cities viewed the 45-minute Fortrel presentation.

The program gave the retailers complete facts about wrinkle-resistant, easy-care Fortrel, its development and its outstanding characteristics and special consumer advantages. It also reviewed Celanese plans for advertising and merchandising the new product.

According to Mr. Louis Laun, Celanese marketing vice president, the big-screen color television program served dramatically to highlight fabric colors, patterns and textures for the national retailer audience. After the first showing alone, at least three major stores made commitments for storewide Celanese promotions featuring Fortrel.

NBC's Telesales Division was responsible for color production of the Closed Circuit offering and Theatre Network Television, Inc. arranged the projection facilities.



FIG. 1. Executives of retail stores in 34 cities viewed the Celanese presentation of "Fortrel" via closed-circuit Color TV on large screens.



FIG. 2. Professional production treatment went into the taping of Celanese show at NBC.



FIG. 3. Forty-five minute presentation included close-up demonstration of new product's outstanding characteristics.



FIG. 4. Actor-executive. Louis Laun, Vicz-President and Director of Marketing for Celanese Corp., personally participated in presentation of new fabric.



FIG. 1. All of WHDH-TV's local live colorcasts originate from two similarly equipped tv studios. Here "Bozo the Clown" performs for two TK-41 studio color cameras.

### WHDH-TV FINDS ALL-COLOR TV A PROFITABLE MEDIUM

Completely color equipped with live, film and TV tape facilities, WHDH-TV, Channel 5, Boston has been carrying a regular schedule of locally originated color TV programs since its on-air date in November, 1957. With a move to new studios early last year, programming received a color boost to the point where the entire studio originated schedule is now telecast in color.

### Modern New Plant

WHDH-TV is New England's most modern and complete color television facility and is equipped with a completely matched RCA Color Television System. Photos on these pages show the major equipment areas—studio, master control, tape and film room. Included are the latest and most advanced color TV equipments.

Two large studios, each measuring 24 by 50 by 80 feet, house a complete color TV lighting system and four TK-41 Color Studio Cameras, see Fig. 1. Both studio control rooms feature a custom-built provision for color special effects. Master control is integrated into the TS-40 System; the area which also includes color camera control, is pictured in Fig. 2. TV tape and film operation share the same area, Fig. 3. Two TRT-1AC advanced Color TV Tape Recorders and two TK-26 3-V Color Film Chains comprise the equipment complement here.

### **Color** Programs

WHDH-TV now telecasts an average of four hours daily of local color programming. Highlighted among local commercial offerings are "Bozo the Clown," "Breakfast with Captain Bob," "Romper Room," "New England Farm and Food Program," and news and weather shows.

Unique among the programfare is "Dateline Boston," a one half hour, across-theboard color documentary. This is a locally produced TV public service program presented in association with the Massachusetts Department of Education. The programs explore the many areas that reflect Boston's unique position in New England and the world community and deal with a variety of topics—education, medicine, hobbies, sports, travel, science, civics and government and the arts.

### **Color Commercials**

All commercials are produced in color at no extra charge to advertiser. In discussing experiences with color commercials, Director of Television, Leslie G. Arries, Jr., reports: "Color commercials irighten everyone until they try them. Then, it has been our experience at WHDH-TV, clients and agencies alike become so impressed with how well their products appear in color, that only the lack of sufficient color TV sets prevents them from switching over completely.

"We have not found a single product or its packaging that has required color correction. This doesn't mean we don't expect to sometime. The point is that this is not a problem. Contrary to early beliefs, most products can go into color television without expensive repackaging."

### **Color** Exposure

"New Englanders are now probably seeing as much, if not more, color television than nearly any other market in the United States." reports William B. McGrath, Vice President and Managing Director, WHDH-TV. He adds "Color television set sales in the area are reflecting the tremendous interest in color television.

"There is now a broad base of television dealers who have become 'color conscious' and are merchandising color television sets to the fullest extent. There are now more than 170 dealers in our area with a minimum of four color television sets in their showroom displays. These dealers have seen their color business dramatically increased as a result, we feel, of the activity and effort that WHDH-TV. Channel 5, has placed behind color television.

"The very fact that WHDH-TV has had a regular daytime schedule of color programming has enabled thousands of prospective customers to see color demonstrated in the dealer's place of business during the hours when the dealer is normally open. This daytime exposure of color has extended the base of consumer prospects immeasurably."



FIG. 2. Master and camera control areas are grouped for production efficiency. Control positions for all four color cameras face a line of color monitors at the front of the room. Master control with its custom built TS40 Switcher is shown at the right.



FIG. 3. Tape and film area. Many of the station's local commercials and programs are produced on color tv tape. All locally produced program material is in color. Two complete TK-25 3-vidicon color film chains complete this area's equipment complement.

## COMMERCIALS IN COLOR SELL 69 PER CENT More Prospects\*

 ${f A}$  color commercial will sell 69 per cent

more prospects than the same commercial

That is one of the most impressive con-

clusions reached in the second color study

completed in 1960 for the Crosley Broad-

casting Corp. by Burke Marketing Re-

The Crosley research also showed:

is twice that of b&w-set owners.

1. Color-set owners' interest in viewing

2. The over-all persuasiveness of color

3. Commercial points recalled from color

commercials are three times those from

commercials is two-and-one-half times that

in black-and-white.

search of Cincinnati.

of b&w.

b&w.

80%

15% of b&w viewers would buy Hallmark cards 27% of color viewers would buy Hallmark cards Persuasiveness of color over b&w, 80%

The first Crosley survey, reported exclusively in TV Age Feb. 23, 1959, showed interest of color-set viewers in tv programs was double that of b&w. These facts helped spur the nationwide color surge reported for the last half of 1959. The second study was set up to delve deeper into color viewing, with particular emphasis on the impact of commercials telecast in color.

### **Balanced Groups**

For the second survey an average group of color-set owners in the Cincinnati area was selected with a balancing group of

A/1119

		Average of 3 Shows			
ATING	B/W Sets	Color Sets	% Difference		
CATING 6 of b&w/color sets in homes contacted					
hat were tuned to test program	24	44	+83		
ETS-IN-USE					
6 of b&w/color sets in homes contacted	54	62	+15		
hat were turned on during test period	54	02	415		
HARE OF SETS-IN-USE					
6 of b&w/color sets turned on in homes ontacted that were tuned to test program	43	71	+65		
PERSUASIVENESS					
werage % of respondents who said each ommercial made them want to buy product	13	22	+69		
AMOUNT OF VIEWING					
Average % of respondents saying they saw:					
All of show	42	60	+43		
More than half of show	19	.19	45		
Less than half of show	38	21	45		
COMMERCIAL RECALL					
Average % of respondents who correctly	. 44	59	+34		
ecalled each commercial	. 44	37			

black-and-white-set viewers. Care was taken to balance the two as exactly as possible so that the b&w owners and the color-set owners came from comparable strata of society, many from the same neighborhoods, similar income groups, family size, education, etc.

The survey was by the personal interview method and was guided by standard research techniques.

Studies were undertaken of three national network programs—*The Perry Como Show, The Dinah Shore Show* and the *Hallmark Hall of Fame.* A widely viewed local color program, the Ruth Lyons 50-50 *Club,* was also studied.

Results of the study of network programs were combined (see Table: Crosley Television Study) to come up with over-all totals for b&w and color viewing which can be compared to reach a percentage of difference. Rather surprisingly, color came out ahead in every category which was tested.

A total of 639 color viewers and 507 black-and-white viewers was interviewed during the surveys of the three shows.

### **Difference** in Use

In the sets-in-use category there was 15 per cent difference, with 54 per cent of b&w sets in use in the homes contacted, as compared with 62 per cent in the color homes.

The share of sets-in-use showed a big plus for color, with 43 per cent of the b&w sets turned on in the homes contacted that were tuned to the test program and 71 per cent of the color sets. The difference is 65 per cent,

\* Reprinted from TELEVISION AGE, May 16, 1960.

### Persuasiveness of Color

Biggest point in favor of color was that which measured the persuasiveness of the color commercials shown during the program. Of the respondents 13 per cent of the b&w viewers said each commercial made them want to buy the product advertised, while 22 per cent had that favorable reaction when the commercial was shown in color.

This is a 69-per-cent difference in favor of color commercials—a most convincing argument for the tint medium.

### **Color Viewers View More**

The amount of viewing also showed a major difference, 34 per cent, in favor of color-set viewers. While only 42 per cent of the b&w set owners said they watched "all of the show," 60 per cent of the color viewers stayed with it until the finish.

### **Como Show Studied**

Study of persuasiveness for commercials on this program was on Parkay margarine and Kraft spaghetti dinner. For these two commercials viewers who said the sponsor's message made them want to buy was 16 per cent for b&w sets and 28 per cent for color sets, or an advantage for color of 75 per cent.

The average of seven commercials showed a recall of 59 per cent for color and 42 for b&w, and of the average of all six color commercials 62 per cent for color and 44 per cent for b&w.

### Shore Show Studied

Commercials selected for the persuasiveness study—those saying the messages made them want to buy— were for Corvair, which showed 14 per cent of the color-set viewers giving an affirmative answer and nine per cent of the b&w-set viewers. For OK Used Cars, 10 per cent of both the color-set and the b&w viewers expressed an interest in buying. This was the only commercial surveyed which showed no difference in persuasiveness between color and black-and-white.

The last commercial was for the Chevrolet Impala, which showed six per cent of the color-set owners expressing an interest in a purchase, as compared to five per cent of the b&w. The average for the three commercials was 10 per cent for color and eight per cent for b&w. The difference, then, between color and b&w commercials for this show was 25 per cent.

On the basis of total recall of each commercial, percentages were: Corvair 67 c, 51 b&w; OK Used Cars 64 c, 51 b&w; Chevrolet Impala 35 c, 30 b&w. The average of the three commercials showed a total recollection of 55 per cent for color and 44 per cent for b&w.

### Hallmark Hall of Fame

Three commercials were studied for persuasiveness-the percentage saying the commercial made them want to buy. On the Hallmark children's Easter card commercial 32 per cent of the color-set owners were persuaded by the commercial and 23 per cent of the b&w viewers, a difference in favor of color of 39 per cent. For the Hallmark adult Easter card commercial the comparison showed 27 per cent for color and 10 per cent for b&w, or a favoring percentage for color of 170 per cent. This was the largest percentage in favor of color of any of the commercials studied. The variety of Hallmark greeting cards for different occasions aroused a buying urge in 22 per cent of the color viewers.

Average for persuasiveness of the three commercials was 27 per cent for color-set viewers, as compared with 15 per cent for b&w viewers, or a difference of 80 per cent.

#### Ruth Lyons 50-50 Club

Persuasiveness of three commercials was studied, two of which were for two products. The first, for Foulds noodles and Kahn's wieners, showed that 24 per cent of the color-viewing housewives wanted to buy, while 14 per cent of the b&w viewers had the same reaction. The percentage favoring color was 71. Second commercial was for Marzetti's salad dressing and Fisher's chef's delight and showed 20 per cent of the color viewers favorable to buying, as compared with 12 per cent of b&w viewers, a margin for color of 66 per cent.

Third commercial studied was for Swansdown Cake Mix, and the difference in persuasiveness between color and blackand-white proved slight, with only 39 per cent of color viewers showing a preference, as compared with 38 per cent of b&w viewers. Both, however, showed a notable high interest in purchasing the product.

#### Conclusion

As shown in the Table: "Crosley TV Study," in about 130, or 13 per cent of the black-and-white homes, viewers were persuaded by the commercials to want to buy the product.

Of the color homes, 220 were "sold" by the color commercials. Since the number of viewers per set is larger for color than for black-and-white, and the percentage of homes with color sets viewing a particular program is twice the percentage of homes with b&w sets, an advertising sponsor may be assured two-and-one-half times as much impact as he has with black-and-white.

75%

16% of b&w viewers would buy Kraft products 28% of color viewers would buy Kraft products Persuasiveness of color over b&w, 75%



# WKY-TV ORIGINATES COLOR IN OKLAHOMA

by NORMAN P. BAGWELL, Vice-President and Station Manager, WKY Television System, Incorporated



FIG. 1. "Foreman Scotty," a Color TV program for children.

FIG. 2. "Tom Paxon Show," 35-minute, variety type, color program.



In connection with "Color Day—U.S.A." all of our local live programming was telecast in color. Additionally, all of our locally produced promotion announcements were telecast in color and all station breaks were also in color.

Our live color programs on Color Day included our 15-minute Noon News and 10-minute Noon Weather shows, the 35minute "Tom Paxton Show" which is a variety type program, our 20-minute 6:00 p.m. News and 10-minute Weather shows and the 10-minute 10 p.m. News and 10minute Weather and 5-minute Sports programs.

Both our 6 p.m. and 10 p.m. news programs had the days top news stories on color film. For example, the Armistice Day Parade, a Fairview, Okłahoma Fly-in of Flying Farmers, and the Governor's Press Conference were shot in color and the film was flown to Dallas at noon by charter plane for color processing and returned in time for our two later newscasts. Two feature news films also were shot in color.

A total of 300 lines advertising Color Day was used in the Oklahoma City Times and The Daily Oklahoman newspapers. The week preceding Color Day—U.S.A., it was our pleasure to speak at the RCA Dealer Meeting on behalf of color and what WKY-TV and NBC were doing to promote color.

The Sunday before Color Day, November 6. we premiered our "Cavalcade of Color" movie 10:30-12 Midnight. This full length movie is sponsored by the local RCA Distributor, Dulaneys. The color movie will continue, under present plans, through January 8, 1961.

We have received several letters and numerous telephone calls complimenting us on Color Day and the color movies.

Our immediate future color plans will continue along the same pattern of the past two years. During this time, we have telecast programs which lend themselves to color. These usually are in the form of local specials and we of course hope to continue our color movies.


FIG. 1. "The Sounds of America" color program on Bell Telephone Hour, February, 1961. Color Tape sequences are edited to produce one continuous tape. Use of advanced RCA Color Recorders eliminates problem of shipping heads with tapes.

## N. W. AYER ACCELERATES PACE OF COLOR TV

by JAMES E. HANNA, Vice-President, N. W. Ayer & Son, Inc., New York City

N. W. Ayer finds advanced RCA Recorders effect high degree of interchangeability, eliminating necessity of using same head for recording and playing.

No advertising agency and no advertiser can doubt the psychological impact of a color image as contrasted with black and white. This impact should be greater in television than in print. Because of its firm



FIG. 2. Science Series color program "About Time" for Fall 1961. Perfected methods of lighting and shading produce this strikingly beautiful effect.



belief, Ayer has consistently encouraged its clients, wherever possible, to use color.

Both the "Science Series" and the "Bell Telephone Hour" for AT&T have been telecast in color since they started. When Whitman's candies decided to sponsor the "Wizard of Oz" a year ago, we urged CBS to present it in color. It was so highly successful that it will be repeated for the second year—again in color. In Chicago. United Air Lines is presenting color programs under Ayer's supervision.

#### **Color TV Testing for Clients**

This interest and belief in color telecasting is no new development with Ayer. Three years ago, Ayer looked to the future and initiated a research program in cooperation with NBC color engineers. Client products, from towels to telephone, from dog food to dress goods, from coffee to cottage cheese were subjected to testing.

In addition to the initial question of what colors really transmit best alone and in combination with other colors, Ayer and NBC engineers were soon asking themselves several other questions—How could we control various factors so that program and commercial segments, taped at different times and different places, would eventually come together with complete fidelity? What lighting was necessary to accomplish this? Did different recording heads affect playback? In other words, how could colors be consistently duplicated time after time, month after month?

The fruits of this long research were seen on January, 1961, in "The Bell Telephone Hour" when old, not-so-old, almost-current, current and almost-future taped segments were joined to make a program titled "The Best of the Bell Telephone Hour." While this is not a new or novel programming idea, it does mark a distinct milestone in color television because of the complex technicalities involved. Tapes Play Better on RCA Recorder

In mid-November 1960, executives of NBC and Ayer, AT&T's agency, met and examined tapes of past Bell Telephone Hour Programs to determine the replay quality of each show and further to determine the ability of various color heads to deliver true color. At that time it was generally believed that color tape had to be replayed on the air using the head on which it was recorded. It was found, however, that some earlier program tapes delivered better quality when played on one of the newly-developed RCA color heads.

Some programs replayed faithfully whether used on new or old heads. With this high degree of interchangeability of heads and tapes, the problem then became one of finding a reasonable way to combine past, present and future color segments into a single program.

#### Cuts Down on Number of Recorders Required

With such a large number of taped segments to be unified, it was first thought that possibly eight or more tape machines would be required on each coast to televise this program acceptably. Because of the three year research, and the careful original production to insure consistent color quality, and because of the newly found ability of the newest RCA heads to transmit, with fidelity, the old material, it has now been found possible to cut the number of tape machines down to four on each coast and still retain full color values.

This achievement of joining past, present and future color tapings into a smoothlyrunning, technically-acceptable "Bell Telephone Hour" represents a big step forward for color television. Without the basic studies, initiated by Ayer and NBC three years ago, it is doubtful that it could have been accomplished.

FIG. 3. Scene from Science Series color tv programs produced by the Ayer Agency. "The Thread of Life" was colorcast December 9, 1960. As a result of joint NBC-Ayer engineering research, color reproduction was flawless.



## JAPAN JOINS HANDS WITH USA TO CULTIVATE COLOR TELEVISION

Nippon TV Network Initiates Eastern Hemisphere Swing to Tint Medium Featuring Live Colorcasts and Taped NBC Programs

The Japanese people have always taken a strong and lively interest in television as an educational and entertainment medium. There are more TV receivers in Japan than in any other overseas nation—except Britain—including the USSR. Moreover, the Japanese lead the world in color television . . . with the exception of the United States.

The first color-tv equipment brought into Japan was an RCA 3-vidicon colorfilm camera chain, in 1957. The Nippon Television Network Corporation (NTV) initiated the movement to color TV and has continued to develop color broadcasting. Live-color cameras were added, then two color-tv tape recorders. Color receivers were subsequently installed at railway sta-

FIGS. 1—3. Typical studio shots in Japanese color tv programming.



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FIG. 4. Mr. Fukui, Managing Director NTV, Mr. Shoriki, Chairman, NTV, Mr. Shibata, Managing Director, NTV. (Above) Mr. Shimizu, President, NTV.



FIG. 5. Mr. Shirokura, Manager, Mr. Kazami, Chief, Transmitting Department, NTV, at RCA 10 kw TV Transmitter.



FIG. 6. RCA color monitors and master monitor at NTV sub-control room.

tions, public halls and parks to arouse consumer interest.

Other tv stations began experimental colorcasting during 1958. The Japanese Government, after three years' study, approved commercial color-casting in September, 1960. Licenses were issued to NTV, NHK, JOKR in Yokyo and to YTV and ABC in Osaka.

#### Five Hours of Color Every Day

The Japanese people have shown great interest in color tv—particularly since NTV began its series of regularly-scheduled color programming. They devote several hours each evening to color programming in the Tokyo area. NTV's color programning averages two to three hours daily; NHK and JOKR augment this schedule with one hour of color programming per station per day.

The programming includes dramatic, musical and variety shows as well as broad coverage of sporting events because the Japanese are avid sports fans. Baseball, iceskating events, skiing and soccer—picked up with a battery of RCA Color Cameras —are the more-important sports colorcasts.

#### Public Enjoys Color TV

As a public service, NTV has installed 50 color receivers at strategic points along Tokyo's "main street," the *Ginza* and in other places, including the Tokyo railroad station. During color telecasts, these receivers draw overflow crowds.

Although several hundred RCA Color-TV Sets have been imported by the stations for their promotional activities, the energetic Japanese TV industry now produces color sets, most of which use RCA picture tubes. Nine manufacturers now make color

FIG. 7. A bird's-eye view of Nippon Television Network Corp.



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FIG. 8. Mr. Iwamoto, Mr. Nagata, Mr. Fukui, Mr. Nomura, Mr. Ikeda, Mr. Wada, Mr. Tanaka, Mr. Iso, Mr. Shirakura, Mr. Yoshikawa.



FIG. 9. RCA TV Tape Equipment at NTV. Mr. Harazaki, Engineer, Mr. Iso, Manager, Engineering Department at NTV.



receivers in Japan. Sales are gradually gaining in volume.

#### NTV Adds Color-TV Tape

The Nippon TV Network installed Japan's first color-TV tape recorder during 1959. This equipment was one of RCA's earliest units. It was shipped via air so that it could immediately be placed in service to augment the network's experimental color-programming schedule. The results were so spectacular that NTV has installed a second RCA Color-TV Tape Recorder in its Tokyo station.

One of NTV's earliest color-programming efforts was to rebroadcast an NBC tape of the Perry Como Show. This was the result of an agreement between the two networks that ironed out the legal aspects of the rebroadcast. Now, NTV can offer a unique variety of colorful programming including an extraordinary amount of American as well as Japanese talent.

### Complete Compatibility with U.S. TV Standards

NBC and NTV found that the RCA TV Tape Recorder offered an important program-exchange advantage in that its design does *not* require that the headwheel assembly used to record a program—say, in New York—be sent with the recorded tape to assure high-quality playback at the distant location. The design and manufacturing precision in the RCA headwheel assemblies, combined with electronic quadrature-control, affords a playback-picture precision thought impossible only a short while ago.

Of course, the reverse is also true . . . tapes recorded in Japan may be rebroadcast in the United States with great precision and high program quality. When this takes place, American TV viewers will have the pleasure of seeing the exquisite beauty in programming that only the aesthetic Japanese talent can create.

FIG. 10. Mr. Yoshikawa, Manager, Engineering Division at NTV.

FIG. 11. Deep interest by the Japanese in color television is reflected by the size and attention of this throng viewing color programs of an outdoor demonstration.



# WTMJ-TV PAVES WAY FOR COLOR IN WISCONSIN

Among the WTMJ-TV programs which have been broadcast in color are "What's New in the Kitchen" (right) and "The Woman's World" (above). "What's New in the Kitchen" is a hall-hour cooking show telecast Monday through Friday at 9 a.m. Now in its 12th year on the air, it is the nation's oldest television cooking show. "The Woman's World," telecast weekdays at 2 p.m., is a 30-minute program dealing with a wide variety of topics—fashion, travel, landscaping, art and the theatre—that are particularly effective when presented in color.

WTMJ-TV, Milwaukee, presented its first color telecast in December of 1953 the first Wisconsin station to broadcast color. To this day it remains the state's leading color station—as well as one of the nation's leading color stations.

#### **More Tint Programming**

As a basic affiliate of the National Broadcasting Company, WTMJ-TV consistently has broadcast more hours per week in color than any other Wisconsin station. Since its first telecast of a local color program in July of 1954. The Milwaukee Journal Television Station also has led state stations in hours-per-week of local color.

Significant WTMJ-TV color activities over the past seven years have included:

Development of a color balopticon system, in the Fall of 1955;

Construction of a specially-designed color studio, which went into operation in October, 1956.

Cooperation with RCA in conducting a special five-week test color promotion in the Spring of 1957, during which WTMJ-TV telecast a total of more than 200 hours of color;

Participation in the RCA-NBC "Color Day, USA" promotion in November, 1960, during which WTMJ-TV presented more than 12 hours of color;

Presentation of numerous special color programs, including feature films and live telecasts.

#### **Special Presentations**

Milwaukee was chosen by RCA for its 1957 "Color Carnival" test campaign because of WTMJ-TV's prominence in the field of color as well as its general prominence in television in the midwest. During the 40-day campaign, which RCA officials termed a "smash-hit," virtually all WTMJ-TV local, live programs were telecast in color. In addition, the station scheduled numerous special color programs and broadcast several feature films in color.

On "Color Day," November 11, 1960, WTMJ-TV telecast every live program on its schedule in color and presented a color feature film on its late-afternoon movie program . . . about four and one-half hours of local programming.

In December, 1960, WTMJ-TV broadcast an hour-long colorcast of the Marquette University Players production of "Ludus Conventriae." The production is presented annually by the Marquette group under the direction of Father John Walsh, an internationally-recognized dramatic scholar. In "Ludus Coventriae" Father Walsh has developed the ancient version of the traditional Christmas story for the modern theatre.

Other special color presentations on The Journal Television Station have included a live presentation of a television adaptation of the Gilbert and Sullivan operetta, "The Gondoliers"; a full-length presenta-





tion of Sir Laurence Olivier's film version of Shakespeare's "Richard 111"; two telecasts of representation paintings from major Milwaukee art shows; numerous fashion shows; and special, hour-long "Circus Review" which initiated WTMJ-TV local color broadcasting in 1954.

#### **Feature Films**

WTMJ-TV also periodically schedules color feature films on its major film programs on Saturday evening and Sunday afternoon. The station's "Saturday Night Theatre" presented color features each week during the last three months of 1959. The station has telecast numerous color news films in recent years and regularly schedules 15- and 30-minute color film programs.

WTMJ-TV currently broadcasts color from two of its three indoor TV studios, employing three RCA Image Orthicon cameras. Other color equipment in use at WTMJ-TV includes one 3V color film chain, one 16mm color film projector, one 2 by 2 color slide projector, one color kaleidoscope and one dual colorbal projector.

#### Long Range Plans

With the number of families able to receive color television in their homes increasing steadily, WTMJ-TV now is forming long-range plans for continued increases in the amount and variety of color programs to be offered to its audience.

## KMTV INVESTMENT IN COLOR TV IS PAYING

#### by OWEN L. SADDLER

Vice-President and General Manager. May Broadcasting Co., Omaha, Neb.

We know that our investment in color equipment has already paid off, in establishing KMTV as Omaha's first and only full color television station, and all signs indicate that we will reap a substantial harvest in the future. After five full years of local color-casting we have proved that an audience can be built. Omaha's national reputation as a color television center is due almost entirely to KMTV's promotions and efforts in the field. Color set sales indicate that more color exposure is building a pyramiding sales curve. And now that we can chart it, we know our investment is safe.

#### Pioneering and Progressing

At the present time, KMTV is originating about 50 percent of its locally produced programming in color. Add these hours to the number of network originated shows and KMTV may very well be the most colorful station in the world.

Actually KMTV began broadcasting network color in December of 1953. The first local live color-casts began in September of 1955. Color film and slide facilities were added in January of 1956.

KMTU's local color production is complete multi-camera operation. Its experienced technicians are therefore able to maintain quality of production that is indistinguishable from black and white on a monochrome receiver.

#### Maintain Production Quality

It was all or nothing right from the beginning—under no conditions did we want the public to get the idea that we were going backward in production quality as we went forward into color. Since the great majority of our audience still had black and white sets, it was basic that we keep our color shows at least equal in quality to regular monochrome shows. So. pioneering in color was much more difficult and much more expensive than pioneering in black and white. KMTV was among the first in Omaha with television going on the air in September of 1949. It has maintained an enviable position in the industry ever since.

As it worked out, had we not mentioned it, I doubt that our monochrome audience would have been aware that the television programs it was viewing were being transmitted in color.

#### **Comprehensive Programming**

We have now, or have had, virtually every type of show on the air in color. We have color-cast cooking shows, childrens shows, news, quiz shows—everything.

At the present, the entire programming at the noon hour is in full color. This includes "Conversations" featuring MC Marianne Peters, "Noon Edition," a news, weather and livestock markets show; "Over the Garden Fence" featuring seedman Frank Fields, informal discussion of gardening and "Name and Claim," a quiz show. The sets for these shows are naturally very colorful and decorative.

Commercials that are originated live are in color. The entire segment is sponsored. "Over the Garden Fence" is sponsored in its entirety by the May Seed Company. The other three are participating.

KMTV telecasts the "World's Greatest Cartoons" in color every afternoon from five to five-thirty. The station also recently began a new series of "Popeye" cartoons, telecast in color at 11:00 a.m. Saturdays.

#### **Remarkable Remotes**

About three years ago the station brought to Omaha for the first time the color remote units of RCA. Programs originated from location included a visit to the home of a well known commercial artist and the telecast in full color of the outstanding social event of the Omaha season, the crowning of the king and queen of Ak-Sar-Ben.

At every opportunity since 1955, KMTV has broadcast special shows which are en-

hanced by color. Numerous style shows have been aired. Christmas and other holiday programming has been fashioned into color-casts.

On Palm Sunday, April 10 of 1960, KMTV set a precedent, staging a full 17 hour color day to climax a week long "Spring Into Color" drive.

In order to stage the sign-on to sign-off color marathon, several scheduled network black and white shows were pre-empted by local color productions. NBC supplied seven hours of color, while KMTV produced the other ten.

#### **Dealer Promotion**

Fifty Omaha area RCA dealers were open from noon until midnight the day of the colorcast and each had an estimated 250 to 600 visitors to see programs in color. While most dealers did not accept orders on Sunday, all reported a brisk followup business. Message of congratulations were received by the station from Robert W. Sarnoff. NBC chairman of the board. John Burns. RCA president, White House special assistant Frederick Fox and numerous other representatives of the industry.

We were pleased and surprised at the enthusiastic reaction of the color audience. It seemed that everyone who owned a color set, as well as thousands of monochrome set owners, wanted to write or telephone in their congratulations and comments for our all-day promotion. It was equally gratifying that advertisers shared our faith in color so that the entire day was sold out on KMTV.

#### **Color Commercials**

Color commercials are scheduled throughout the day. While there is no increase in the rate card for color spots, if the commercial is scheduled during the regular color-casting time period, extra production charges sometimes must be made.



FIG. 1. KMTV Identification Slide.



FIG. 2. "Captain Ben."



FIG. 3. "The Hawk."

KMTV has pioneered in color for two reasons. The first was to bring color to this area. We felt that Eastern Nebraska and Western fowa were entitled to local color production and we were capable of providing it for them.

Secondly, we know that color will soon be in great demand by advertisers as well as the growing audience. Therefore, by pioneering, we have gained valuable experience and we will gain additional business as the trend to color really grows.

#### Advertisers and Audience

Without doubt, we have expended considerable time and effort integrating color



FIG. 4. A Color Commercial.



FIG. 5. "Name and Claim."

operations into the normal routine of the station. People had to be taught: engineers, artists, production and program personnel. All this has taken time and money. But we feel that it was a good plan to have this under our belts before time runs out on the color timetable.

Now when advertisers want color, KMTV is ready. There's no last minute rush for equipment . . . we have it . . and we know how to use it.



FIG. 6. "Conversations."



FIG. 7. "Over the Garden Fence."



FIG. E. "KMTV News."

We have a working system. We are able to produce. Our station is a color authority as well as a color pioneer.

And with the color television audience growing apace...it is an enviable position to tell the world, that KMTV is the only full color channel in this whole section of the middle west.



FIGS. 9. and 10. "Day of Color" — SPRING MUSIC FESTIVAL Featuring Omaha Symphony Orchestra and local Dancing Talent. Aired at 8 p.m. Sunday. April 10 on KMTV.



### KOMO-TV CONCENTRATES ON COLOR CLINICS

On the theory that an informed advertiser is a better advertiser, KOMO-TV in Seattle, Washington, has for more than four years conducted color clinics for area advertising agencies and sponsors.

Each month, KOMO-TV invites these local advertising people into its studios for practical sessions via a closed circuit arrangement, demonstrating what color television can do for specific products and how to present products in the medium.

According to W. W. Warren, Executive Vice President and General Manager of KOMO, after more than four years of conducting clinics, KOMO notes a growing interest in color TV especially in the packaging of products for best effect in the medium. Attendees return time and again for clinic sessions to try out films and art designs they have prepared. Artists, copywriters, account executives, clients—all are most intrigued by the increased impact a product can have on the public via color television.

#### **Typical Clinic Session**

A KOMO Color TV clinic begins at 8 a.m. with an informal get acquainted breakfast in a nearby restaurant. At nine o'clock the audience is seated in the studio, listening to three minutes of introductory remarks on color TV. This is followed by approximately one-half hour of watching various color demonstrations on the studio's TV screens. Then the audience enters the originating studio, looks over the color equipment (KOMO has a TK-26 3-V color



FIG. 1. Art Director, Bob Dinsmore, demonstrates typical product pitch.

film system capable of handling movies, slides, opaques and small product displays; and two TK-41 live color studio cameras); examines the products, backgrounds and techniques involved in the demonstrations, asks questions and frequently arranges for future demonstrations of specific products. Each session lasts about two hours.

#### **Program Format**

Clinic attendees feel the impact of color TV at the very outset of the clinic program. It begins in black and white but quickly switches to color, demonstrating the vivid difference between the two.

Lighting is a popular and important topic of KOMO clinics. Lighting demonstrations are given showing control of quality and placement of lights in the studio, contrast range and how to kill highlights on certain reflective surfaces such as an aluminum cooking utensil.

#### **Product Demonstrations**

Clinic sessions concentrate heavily on demonstrations of various products as they appear on color TV. This portion of the session provides many helpful hints to agency and sponsor people on how to adapt from black and white to color and how to pick colors for packaging which complement rather than detract from the appearance of the product. Things to avoid when presenting products on color TV such as great masses of black or white, except for occasional dramatic effect—are also thoroughly outlined during the program.

#### Participant Reaction

Letters from clinic participants—written sometimes days, weeks or even months after a clinic—indicate continued interest in color TV. Here are some excerpts from typical letters:

"... a refreshing experience. Something over 20 of our staff, plus quite a few clients were involved—the 40 hours of overhead was well worthwhile."

"... really appreciated the information hope we can have another clinic soon.

"The color clinic was very enlightening. Thanks for the clear way in which you explain handling of live color, color films and slides."

Originator of the first color programming in the area, KOMO believes its color clinics the finest means for promoting color. Here they can reach their potential customers as well as the potential owners of color sets.

FIG. 2. Guests of KOMO-TV view Color Clinic presentation in studio. Two RCA 21-inch color TV sets are used. Between them is a 17-inch, black-and-white monitor employed for contrast.





# FLORIDA'S COLORFUL STATION

### WFGA-TV

Beautiful, semi-tropical Jacksonville, Florida, is the perfect setting for one of the most colorful telecasters in the peninsular state.

WFGA featured color in its first telecast, September 1, 1957, from Television Park, adjacent to Jacksonville Baseball Park and the Gator Bowl, popular new sports arena. From that time on, WFGA's colorcasting steadily increased. Today, Channel 12 viewers see regularly scheduled color programs every day of the week, plus specials and spectaculars presented during prime viewing times.

#### **Color** Originations

Though WFGA carries both NBC and ABC network shows, local originations are a large part of the station's color programming. A typical day of colorcasting, for example, consists of more than two hours of local color divided between live studio pickups, film and TV tape.

Local color consists of studio audience childrens' shows, feature films and cartoons, and color breaks on network programs. Several new color cartoon series were added this Fall, including "Popeye," "Bozo the Clown" and "Mr. Magoo," the latter a half-hour show run weekly at prime time.

Beside these regular telecasts, WFGA presents live color "specials" monthly and several spectaculars through the year. A favorite among viewers is the colorful annual Christmas Symphony by the Jacksonville Symphony orchestra, a WFGA studio production.

#### **Color Promotions**

WFGA is an avid promoter of the use of color because most reactions of sponsors and viewers are in favor of color.

Promotion is done in many ways. Newspaper ads displaying the NBC peacock and directing attention to color shows on WFGA are run frequently by the station. All artwork and studio sets are made for color. All commercials wherever possible and station 1D's are color. Preceding network shows, a color film strip of the peacock spreading his wings is used with station identification.

Visitors at the Jacksonville Agriculture and Industrial Fair this year saw an interesting demonstration when WFGA set up live color cameras as a "see yourself in color" exhibit at the Fair. Reactions were very favorable. WFGA personnel work with local distributors and dealers, and attend service clinics to further promote color in the area.

Color is taken in stride by the WFGA engineering department. Members have attended color training programs at RCA, and have used the information to train others on the staff. Color presents no problems to the smooth operation at WFGA.

FIG. 1. Participants in colorful fashion show produced in WFGA-TV studio.



FIG. 2. WFGA's spectacular annual "Christmas Symphony" features selections by the Jacksonville Symphony orchestra.



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### COLOR TV PROMOTION BY NBC

Color is everywhere at NBC ... The tremendous progress of color television in 1960 was made possible by the team effort of many people in many different departments. Literally hundreds of people backstop each color program: engineers, cameramen, scenic designers, makeup artists, all people directly connected with putting the show on the air.

In addition, there is another team equally important—promotion people whose job it is to promulgate the exciting story of color. In order to keep the public and the industry up to date on the ever changing and ever growing dynamic new medium color television—different promotion departments are necessary:

#### PRESS DEPARTMENT

Special color bulletins are sent out daily to 1,500 newspapers all over the country. The complete color schedule, special stories on color programs and feature stories on the personalities who appear in color shows are also sent. This always results in excellent pickup of the information.

#### **Progress Reports**

Periodically, summaries of color's developments to date are sent to the 1,500 TV editors. This information receives wide mention. It is a means of focusing special attention on color TV periodically.

#### **Trade Stories**

Thirty-five broadcasting industry trade magazines are supplied with articles on all aspects of color television: research on color audience, technical developments, color advertisers, and, of course. new techniques that spur the medium.

#### **PROMOTIONAL SERVICES DEPARTMENT**

When Dinah says "My dress is a beautiful blue. I hope you have color television so you can see what a pretty color it is," credit is due to the Promotional Services Department. Getting the stars themselves to sell color viewing either within a show or tying in with other advertising is the responsibility of this department. Just before every color show the voice of the star is heard announcing the upcoming show and the fact that it is in color thanks to promotional services.

#### NATIONAL ADVERTISING AND PROMOTION DEPARTMENT

More than 150 spot announcements per week are scheduled by NBC to promote color shows, and each of these announcements—film, tape or live—specifically calls the attention of viewers to the fact that the program being promoted is in color. This will result in 1961 in a total of some 10,000 announcements that spotlight Color-TV, spread over all viewing hours.

#### **Newspaper Advertising**

Color television is highlighted in every newspaper/magazine ad prepared by NBC for a color program. The 1961 total is expected to be well in excess of a million agate lines of advertising in the nation's major markets—all prominently promoting the color television medium.

#### **Station Promotion**

NBC furnishes each affiliated station with a comprehensive battery of advertising-promotion elements for color TV promotion (see opposite page).

#### SALES PLANNING DEPARTMENT

This Department keeps a list of some 2,000 advertising agency and company personnel supplied with information on the values of sponsoring color programs. The data is carefully researched and, consequently, eagerly sought after.

#### **Color Bulletins**

Information bulletins summarizing latest developments in research, programming, technical developments, etc., are issued regularly to agencies and companies.

#### **Promotion Pieces**

From time to time handsome brochures are sent to the full agency-company list. (See the brochure illustrated above.)

#### Presentations

Regular showings of a color presentation are made to agencies, potential color clients and color dealers. Full-color film is always used in order to demonstrate the tremendous impact of color. Every effort is made to show the advertiser the many advantages of being in color—the extra impact of merchandising to his own organization and to the high quality color audience that watches more and remembers more.

Additional color promotion is done on many levels. For example, each letter from a color viewer is carefully answered by the Information Department. Policy speeches by Mr. Robert W. Sarnoff summarize the tremendous strides of color. In every way, everyone at NBC is working hard to tell the exciting story of color television.

ON-THE-AIR COLOR PROGRAMMING -- ONE MINUTE ON-THE-AIR This Fall, color IV a This Fall, nearly living color -- the COLOR PROMOTION -- GENERAL -- ONE MINUTE cast by NB Cand than ever before are **ON-THE-AIR** day, more 41 390:000 110 PROGRAM COLOR TV - SET SALES - ONE MINUTE So, you've almost decided to SBC Color TV KH 1960 have some questions you'd like that great? From owners and They say it's "brilliant." "beaut SCHE DULE I So will you when you see it. COLAR SSROOM In a recent survey, 91% of owners DAYTIME AY YOUR HENCH ee; and the 1961 models are 1.63 CE IS RIGHT going to be a problem? The MONDAY UBF AY SHOW 10:30-11 AL CLASSROOM no tr OFP SPP HUNCH 8.30 PM E IS RIGHT TUESDAY N MURRAY SHOW 10 GLASSROO' NCH ifth: is the YON WED: CLASSROOM of color programs season. Your TV dealer will be glad to st SHOW NTAL GLASSROOM of ealth the FRIDAY SATURDA NBC COLOR TV KIT 1960-61

- Facts and Figures on Color TV
- Reproductions of Articles on Set Sales and Case Histories of Color Promotion on Local Level
- Schedules of NBC Color Programming
- Promotion Slides
- Air Announcements
- News Stories

d.

- Direct Mail Letters
- Exploitation Ideas



Is color tv more effective than black and white in tv commercials? Is the difference measurable? What special problems does the color medium impose on the television advertiser? What has the performance been up till now, and what is the shape of things to come in commercial color television?

In undertaking to answer these and other questions that should be, but too often are not, raised by the advertisers who will be taking the plunge into color, Schwerin Research Corporation is relying on nearly two years of actual pretesting experience. Our studies embrace more than a dozen different products and services, and roughly one hundred individual commercials.

#### Color Commercials are More Effective

Are commercials more effective in color than black and white? Our answer is an emphatic *ycs*. That affirmative will have to be qualified, and the greater part of these remarks devoted to qualifications rather than bald affirmation. But the outstanding fact disclosed by our pretesting research is that color, *when it is used properly*, enjoys a tremendous advantage over the same commercials in monochrome.

Late in 1955, Schwerin Research Corporation began pretesting RCA Victor appliance commercials in "compatible" color. The same commercials were audience-tested in both full-color and blackand-white versions in identical control shows. Out of these tests, which continued throughout 1956 and are still going on, emerged the central finding that—all other things being the same—color increased the effectiveness of the commercials over their black-and-white versions by an average of 100 per cent (see Fig. 1). Other principal findings from our pretesting inquiries might conveniently be summarized here:

- Natural settings have proved more effective than "showcase" settings;
- (2) Distracting use of color diminishes the effectiveness of the commercial;
- (3) Commercials in the middle range of effectiveness benefit most from the use of color;
- (4) Color helps certain product types more than others;
- (5) Women are more influenced than men by color.

#### Popular Illusion Re Color TV

The first big illusion to go will be the all too prevalent attitude held by advertisers of products in the sensory field—foods, fabrics, etc.—that merely splashing color on their products will trigger the viewer to rush to the store and lay in a supply.

This misconception brings to mind a poetaster who approached us once for an opinion about her latest poetic effusion. It was an utterly pedestrian piece of versification; hack work cut from the whole cloth. The only imperishable thing about it was the terse reminder appended at the bottom of the paper: "Add colorful imagery."

A good poem is obviously not made by rhyming some words, then stuffing the result with colorful imagery. Neither is an effective color commercial made by simply waving a rainbow over a black-and-white rendition of the product. It seems almost self-evident that products with sensory appeal such as foods, beverages, apparel and fabrics stand to gain the most from color commercials. One would expect products in the sensory field to be girding for the competitive struggle that is sure to develop as color tv comes of age. But the surprising fact is that those products that have the most to gain from color are doing the *least* experimenting.

#### **Advertising Paradox**

Figure 2 illustrates this paradox in terms of our experience. Products with taste appeal are doing only about one-fifth as much research in color as they are in black and white. And they account for only a small fraction of all color-commercial tests.

In other words, those products that presumably have least to gain are doing the most experimenting in color. By pretesting, the nonsensory products will be able to reap a rich harvest from color, particularly in the early phases. The RCA Victor example is a good case in point.

Meanwhile, the advertisers with sensoryappeal products are holding aloof from pretesting in color, reasoning (wrongly) that at the right moment they can leap into the medium with a "natural." When color does open up in earnest, everyone in the food field will jump simultaneously. And in the face of extremely heavy competition, the advertiser who has not learned the potentialities and limitations of color will be lost in a kaleidoscopic shuffle.

### Natural settings have proved more effective than "showcase" settings.

The most successful color commercials tested to date have been those which employed natural, recognizable backgrounds and settings. This was one of the major findings to emerge from the RCA studies.

### Distracting use of color diminishes the effectiveness of the commercial.

One such commercial made use of a large number of scene-and-idea changes: it was too "busy" in its video. The black-andwhite version reflected this confusion by

# OF COLOR TV COMMERCIALS

A Researcher Looks at Color Television—Notes Increased Effectiveness of Commercials, But Wonders Why Products Most Sensitive to Color are Undergoing the Least Amount of Preparation for Color

by HORACE S. SCHWERIN, President, Schwerin Research Corporation

securing from the audience a change on the *post* choice of only three per cent, which was well below average for this particular advertiser.

When it was done in color, the felony was compounded. The commercial became a many-tinted chaos that failed to move *any* viewers to that product. In addition to making the commercial ineffective, color also reduced sales point recall 40 per cent.

### Color helps certain product types more than others.

In general, the more familiar the product is the less benefit it will reap from color, while the new brand will probably gain a great deal from multichromatic exposure.

> Commercials in the middle range of effectiveness benefit most from the use of color.

Neither extremely weak nor particularly strong black-and-white versions pick up as much effectiveness with color as do moderately effective commercials. The monochrome commercial that is highly effective in its own right can expect some additional value from color. On the other hand, if a commercial cannot hold its own in black-and-white, the color-splashing technique will not do it much good.

#### Conclusion

This matter of "compatible effectiveness," of creating commercials that are successful in both mediums, has already been solved by some advertisers through pretesting. It is they who will have clear sailing as the transition from black-andwhite to color gains momentum, leaving the expensive method of trial and error to their less foresighted brethren.



BLACK & WHITE

COLOR





FIG. 2. Percentage of total testing done by products. Note that smaller fraction of testing is being done by products with taste appeal. Especially note that these products, which are sensitive to color, are doing only one-fifth as much research in color as in black and white.

# WLW-CINCINNATI IS COLORTOWN USA

Where 5% of All Homes Have Color Sets and Station Sales Have Increased Over 34%\*

by JOHN T. MURPHY, Vice-President in Charge of Television, Crosley Broadcasting Corporation, Cincinnati, Ohio

In 1953, while attending an NBC Affiliates Meeting, I was fortunate in being able to take a trip to Princeton, New Jersey, to the David Sarnoff Research Labs, to learn more about color television. It was at that time that I was privileged to sign the first network color contract and, as a result, WLW-Television became the first NBC color affiliate . . . and there began another era of pioneering for WLW—that of *color* television.

#### **Crosley Color Firsts**

In this field, WLW also racked up an impressive number of "firsts." We were the first in our area to carry network color: The Tournament of Roses Parade, in January, 1954. We were also the first nonnetwork station to purchase a color mobile unit which, incidentally, is an excellent promotion gimmick. The color bus is so impressive that it never fails to attract comment wherever it is parked.

#### **Progress Means Color**

We, at Crosley, cannot stand still. We have a firm belief in color . . . and we have the belief that in color lies our progress. We went to great expense to install the necessary equipment, and make whatever technical changes were necessary or helpful . . . and then, with much flourish and fanfare, with hotel and studio parties in Cincinnati. in Dayton and in Columbus, we originated our first local color telecast, in August. 1957, with the Ruth Lyons 50-50 Club.

#### **Top Programs for Color**

We selected this program not only because of its overwhelming popularity, but because of the fact that it was now important to us to sell color television sets in as many homes as possible. Believing that nothing sells like exposure, and that nothing attracts more viewers to color than programs and talent. we added our Paul Dixon Show daily, from 9 to 10:30 a.m., and we have now increased our local color shows to the point where we have a schedule of approximately 20 hours weekly, in local color programming . . . plus. of course sports and special events.

I think you will be interested to know that our station breaks, and our promotional spots, are done in color . . . as well as a rapidly increasing number of commercial announcements.

#### Sets for Viewing

The management of the Croslev Broadcasting Corporation believes so strongly in the fact that nothing sells like exposure, they had color television sets installed in key traffic spots, such as our lobby at Crosley Square, and in the homes of each of its executives, and department heads. The thinking behind this was when neighbors and guests were entertained in these homes, they were exposed to color programming. I, personally, had special invitations made up by our art department, and have invited many, many guests to my home to watch some of the NBC color specials, as well as the various sporting events, and I can say positively that because of this exposure alone, some 200 color sets were sold. Create the desireand a set is sold.

#### Dealer Tie-in

Our really big push in color tv came in the spring of 1959, when we added the daytime home games of the Cincinnati Reds baseball team to our color schedule . . . and this was the first time for major league baseball to be colorcast on a regular basis. We went on to make tie-ins with the RCA dealers in our area to promote color. We furnished them with special color displays and we attended and spoke at dealer meetings. We pointed out to them that their enthusiasm for color television could well mean more dollars in their own pockets. because these were additional sales that could be made to people who already had black and white television sets. As I said before-create the desire for color. and a set is sold!

#### **Special Promotions**

We borrowed a page from the history book . . . and you all probably remember that the first black and white television that was seen by a good many potential set owners was in the neighborhood bar. We worked out a plan whereby progressive tavern owners could become color set owners. We even made an arrangement for special credit, and maintenance, if they desired to have it—and for less than \$1.00 a day . . . 71c, to be exact. It soon became apparent that the increase in businessespecially with the avid interest in sporting events—more than covered the cost of the color television set. The sale of three or four "Boilermakers" took care of the 71c, and from there on, the rest was profit.

We also supplied the local bars with poster and streamer kits, and we gave onthe-air plugs for the specific bars that boasted of color television. This really helped to get color TV off the ground, and start it flying. As a matter of fact, RCA was so pleased with the color efforts being put forth by WLW-Television that, in addition to other assistance, they helped sponsor the Cincinnati Redlegs colorcasts. I might mention here, too, that the Admiral distributor in town is also working diligently on the sale of color sets, and indications are that other top manufacturers will be joining the group. This can only mean greater success in color television.

#### **Technical Advances**

Heretofore, such intense lighting was required at the ball park, for example, that the lights blinded the players. Our chief engineer, Howard Sipple, worked with a new tube, and found that this was really the break-through in color we had been waiting for. It eliminated the necessity for additional lighting and, likewise, for additional studio air-conditioning. But he found, more important, that we could colorcast previously impossible events. In addition, color shows could be originated in our studios with the lighting normally used for black and white . . . and the outdoor sporting events, that are such naturals for color television, could be telecast at nighttime.

#### Sports in Color

The first indoor sporting event in the history of color television was fed by WLW-T to the NBC network when we picked up the Cincinnati Royals basketball game from the Cincinnati Gardens, on Saturday, November 21, 1959 . . . followed shortly after by the championship University of Cincinnati basketball games.

We did all of the night home games of the Cincinnati Reds this past summer under normal ball park lighting. Many of these games were also fed in color to Pittsburgh. St. Louis, and Chicago.

<sup>\*</sup> Presentation at Color Panel of Broadcaster's Promotion Assn., New Orleans, Nov, 14, 1960.

#### **Color Net Feeds**

WLW-T also enjoyed feeding the first religious services in color to the NBC network this year, on Palm Sunday and Easter Sunday, from Christ Church and St. Peter in Chains Cathedral, in Cincinnati. Many of you may have seen either of these services, or both.

#### Schedule 30 Per Cent Color

It's easy to see, then, that with a little imagination, and a lot of effort, there's no limit to what can be done . . . and the excitement that can be created—now—in color, in television! I daresay any one of you could come up with several suggestions on how a color promotion could automatically make any show more acceptable. And think especially of some of your special events in color, too. There's much food for thought in this new, entirely unlimited, colorful subject.

At the moment, in Cincinnati—Colortown, U.S.A.—30 per cent of our schedule is in color.

#### Colortown-40,000 Sets

RCA tells us that we have reached the 5 per cent figure in color TV homes. This

is approximately 40,000 color TV homes, and this has been accomplished in the short period of three years. Five per cent or 40,000 homes certainly can influence any ARB or Nielsen. Yes, this is a pretty impressive figure, and it explains why there are more color sets in our area, proportionately, than any other place in the country. What single factor has achieved all this? Promotion, of course. Diligent, concentrated, all-out promotion. And has this effort been worthwhile?

#### Time Sales Jumped 34 Per Cent

Our sales figures have shown an increase of 34.4 per cent since we became involved in color. And let me cite a few other facts and figures for you.

From the Burke Survey which we had made for us last year, we gather this one, all-important fact: The ratings for shows are double in color homes what they are in black and white homes.

What this actually means is that in homes where there is a color set, those people would rather watch a color show than some other program telecast only in black and white. For example:

	6/20	color
50-50 Club rating	16.6	32.5
Dinah Shore rating	34.6	71.5
Composite rating	22.7	47.4

There is a naturally greater impact in color.

It was additionally proven, by the Burke Survey in 1960—that color commercials have a  $3\frac{1}{2}$  times greater impression value than black and white. (A color commercial in 1000 color homes is equal, in effectiveness, to a b/w commercial in 3589 homes.) As I said, 30 per cent of our schedule is now in color, and we have just about completed studies which should result in adding approximately six more hours weekly, which could include our news and weather shows. This, too, will undoubtedly be increased as more syndicated and feature film packages become available in color.

Aside from the fact that WLW-Television, because of its ambitious experimentation and impressive programming in color has enjoyed a vastly increased trade press, we feel that color has provided the rouge on the jeweler's cloth, and our continued application of elbow grease will go far to keep the Croslev Broadcasting corporate image bright and shining.



WLW Pioneered in Color



Procused Color Mobile Unit



Ruth Lyons Show in Color



Paul Dixon Show in Color



Color in Executive's Homes



**Baseball** in Color



Night Baseball in Color



Religion Service in Color



500 Mile Speedway in Color

### HOW AN ENTERPRISING STATION ENGAGES IN COLOR PROMOTION

Station WBAP-TV colorcasts all local programs and employs color to promote color.

Color is always used in newspaper advertisements — for programs that appear in color. To sell color television in trade magazines, full color ads are employed. Color direct mail is used to promote special color programs. A complete advertising and promotion program is geared to color.

#### **Newspaper Advertising**

This schedule is heavy during rating months, with insertions running daily in Fort Worth and Dallas newspapers. A typical advertisement is shown in Fig. 7. Further, the station engages in the full schedule of NBC cooperative advertising.

#### Direct Mail

Color mailings are usually sent monthly to a list of some 300 names in the two-city area, mostly appliance dealers but including sponsors, agencies, journalists. This list receives notices of special events: Color Day, Color Weekend, Color Week, Rodeos.

Gaint, color postcards, supplied by sponsors. (see Figs. 5, 8, 9) are mailed approximately bimonthly. They are sent to some 1000 names by adding more newspapers and places where color sets are installed.

#### **Trade Paper Advertising**

This is done on an irregular schedule. During 1960, for example, WBAP-TV prepared three full-color ads to promote color television. These ads appeared in five trade magazines, giving a total of fifteen insertions. (See Fig. 2 for a typical trade paper ad.) For 1961, the station is preparing additional full color trade ads.

#### **Sales Promotion Pieces**

Typical promotional items are shown on these pages. Figure 3, shows "Menu" prepared for Color Day, Another device was the bag of color crayons (see Fig. 1) sent to all color set owners, advertisers and agencies. At Christmas, a ceramic cheese tray went to agencies, sponsors, dealers.

By means of the foregoing complete advertising and promotion program. WBAP-TV is endeavoring to push color television to the fore in the Dallas and Fort Worth area of Texas.

COLOR

FIG. 2. Full color trade paper advertisement.

CHErs the

FIG. 3. Menu designed for COLOR DAY Press Luncheon

super

market

super

salesman

tional charge on WBAP TV Let WBAP-TV color be your





FIG. 4. Program Schedule—15.000 distributed at Texas State Fair in Dallas—1960.





FIG. 1. Color promotion mailed to agencies and advertisers and color set owners.

FIG. 6. Program promotion piece, appliance dealer mailing.



FIG. 8. Giant color postcard for appliance dealer mailing.



FIG. 9. Sponsors color postcard for appliance dealer mailing.

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# WBAP-TV Converts all Local Programs To Color

FIG. 1. "Popeye Color Theatre" presented weekdays at 5:30 P.M.



On September 19, 1960 WBAP-TV in Ft. Worth-Dallas, literally turned off all black and white cameras and began "to color everything that moves" in its Channel 5 studios.

#### Local Live Programs

Regular programs such as "High Noon News," the 6 p.m. "News and Weather," "News, Weather and Sports" at 10:15 p.m. and Sunday morning's "Christian Questions," all received the color treatment.

Many new local programs were born in this color boom including:

- "The New Popeye Color Theater" a package of 208 Popeye cartoons created especially for television. The 25-minute program is emceed locally by Jack Hicks and is presented Monday through Friday at 5:30 p.m.
- "Dateline" a 25-minute colorcast spotlighting fashions, visiting celebrities, filmed happenings in the Ft. Worth-Dallas area and interviews with interesting local residents. The program is seen at 12:30 p.m. and has Lynn Trammell (Miss) as regular moderator. Announcers Jack Hicks and Larry Morrell alternate as hosts on the weekday show.
- "City Hall" features members of the Ft. Worth city council who discuss vital issues of city government. The colorcast is presented each Sunday from 1 to 1:30 p.m.
- "Abe Martin Show" is a 30-minute colorcast shown each Sunday during football season at 3 p.m. The TCU football coach comments on Southwest conference teams and has many of his players as guests. The sports show is moderated by WBAP sports director Tom Mullarkey.
- "Farm Page" Calvin Pigg, WBAP farm editor presents 30-minutes of area farm events from 7:30 to 8 a.m. each Satur-

day morning. The program is mainly devoted to farm features and guests. Programming combines live, color videotape and film.

- "Premiere Performance" In October, 1960 WBAP-TV purchased a package of 85 films many of which are in color such as: "The Lady Killers," starring Alec Guinness and "Richard III," starring Laurence Olivier. The films are shown each Sunday night at 10:30.
- "Sunday Showcase" seen at 1:30 p.m., is a 90-minute feature film always in color. The films are mainly composed of Twentieth Century Fox musicals.

In addition to the aforementioned roster we carry two color syndicated films, namely: "Judge Roy Bean," and "Danger Is My Business."

#### **Color Burst Day**

During 1960, we have also designated many Saturdays as "Colorburst Day," heralding local as well as network color shows. One of our biggest local spectaculars was 'The Curly Broyles Show," previously seen on Saturday afternoons. The format was Dixieland and featured names like Jack Teagarden, Jo Ann Castle and Johnny Desmond. Due to the addition of new network shows, the Broyles show is no longer seen in this area.

#### **Extensive Promotion**

On "Color Day—USA" (November 11, 1960) we had a total of 12½ hours network and local shows. Our tint time was boosted considerably by a 90-minute motion picture on our regular "Family Theater," presented at 4 p.m.

Our color promotion for the year amounted to a deluge of promotion releases: ads in trade magazines; four full page color newspaper ads, plus six color insertions. We also sent many direct mail pieces to dealers, viewers and the press.

FIG. 2. Color staging for daily weathercasts.



FIG. 3. Local color spectaculars are frequently telecast on Saturdays.



### WBAP-TV Uses Color Tape In All Program Fields

In October, 1959 WBAP-TV in Ft. Worth installed the first television recorder in the State of Texas.

Its extensive use in every phase of programming has proved so great that another recorder was ordered from RCA and was installed early in 1961.

Another major reason for the need of a second color recorder is that in September, 1960 WBAP-TV began presenting all local programs in color. Since that date a black and white camera has not been turned on in the Channel 5 studio.

Color tape has played a big part in colorful "product displays" from packages to automobiles. In the commercial area, color tape has caught on with many sponsors and has been constantly on the upgrade. During the month of October, 1960 -17 commercials were taped in color.

According to Rupert Bogan, chief engineer, many public service programs and interview segments would be impossible without tape facilities. A prime example is the Sunday "City Hall" program, featuring city council and key Ft. Worth employees. This public service show is color taped on Saturday morning at the convenience of the participants.

Visiting celebrities have also been captured on tape to be played back at a later date and three of the Channel's motion picture intros and closes are all on color tape.

One of the most extensive uses of color tape occurred this year in connection with a WBAP-TV promotion contest. During the two-month campaign, a series of color tape promotions were made ranging from 20 to 60 seconds. They were played 283 times!

Public service, religious programs, children's shows and news programs have all fully utilized the convenience of color tape.

At the present time WBAP-TV local shows employing color tape in whole or in part are:

- "Daily Bible Reading" (sign on and sign off)-6 minutes per day. All in color tape.
- "Farm Page"—Saturday (7:30-8 a.m.)— Interview segments are usually color taped.

- "Books 'n Things"- Public Library, Saturday (8-8:15 a.m.)--All color tape.
- "Family Theater"—weekday movie. Intro and close on color tape.
- "City Hall"—Sunday (1-1:30 p.m.)—All color tape.
- "Abc Martin Show"—Football—Sunday (3-3:30 p.m.)—Color tape intro.
- "Sunday Showcase"—Movie. Intro and close are taped.
- "Premier Performance"—Movie. Taped intro and close.
- "Popeye Color Theater"-Weekdays, Color tape intro.
- "Datcline"—Weekdays. Fashions, interviews. Interviews are often color taped sometimes the entire show.

Commenting on the station's "color spread." manager Roy Bacus said: "We want to take full advantage of the contribution which color makes, not only on the information and entertainment side but in displaying and selling the many products that are so beautifully packaged."



FIG. 2. Number one of two tv tape recorders at WBAP-TV. Both are color equipped.

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# WBTV PIONEERED USE OF COLOR TV TAPE

WBTV was a pioneer in color television in the Southeast. Network color and locally originated color film and slides were first broadcast in 1954. In 1955 live color camera equipment was added and two RCA TP-4A color slide scanners were purchased and converted for color opaque scanning. In September, 1958 WBTV became the first station in the country to install color television tape recording equipment. A second RCA Color TV Tape Recorder was installed in October, 1959. Regularly scheduled local live color programs have been broadcast since 1956.

WBTV people like to describe their studio building, which was dedicated April 1955, as "the first built from the ground up for color operation." The claim seems merited. Some stations have "made provisions for color" in their original planning. Other stations have adapted monochrome studios for color. Some have renovated their whole plants for "all-color." But WBTV has gone further. In their original planning and building they have (a) designed the whole building for allcolor programming, (b) provided all the cabling, switching and control circuits for all-color, (c) installed color equipment for all types of color telecasting (TV tape, film, slides. opaques, live) and (d) provided space for several additional live color studio camera chains-the only extra items needed for 100 per cent color programming.

WBTV management is enthusiastic about color television and they are of the opinion that all television will be in color in the not too distant future. Until the present time they have proceeded at a deliberately moderate pace, without fanfare. They are, however, fully prepared for the impending transition to color.



FIG. 1. Installation of first Color TV Tape Recorder in the nation by station WBTV. Frank Bateman, Technical Operations Manager (right), points out the cue track recording head to WBTV executives— I. to r.: Charles H. Crutchfield, Executive Vice-President, Jefferson Standard Broadcasting Company: Kenneth Tredwell, Vice-President and Managing Director WBTV: and Tom Howard, Vice-President, Engineering and General Services, Jefferson Standard Broadcasting Co.



FIG. 2. This is how the WBTV installation looks today. Here are two RCA Color TV Tape Recorders side-by-side. These machines see daily use in the Jefferson Standard Broadcasting Company operation, which includes station WBTW at Florence. South Carolina (which is also equipped with an RCA TV Tape Recorder).

# KING SIZE COMMERCIALS IN COLOR GENERATE ADDED SELLING POWER

by HORACE S. SCHWERIN

President, Schwerin Research Corporation

In 1957, a Schwerin study made exclusively for *Broadcast News* summed up the existing state of knowledge about effectiveness of color television.

The main point made then: If you show viewers a commercial in color it will, on the average, cause 50 per cent more of them to want the product than if they see the identical commercial in black and white.

There is another pertinent fact we have noted in analyzing our data further. Over the years, more than one out of every three black and white commercials we have tested have been wholly ineffective; that is, they have not caused any significant number of people to desire the product. In contrast, less than one out of ten of the color commercials Schwerin Research has studied have failed in this respect.

The measurement we use in reaching these conclusions is, by the way, highly practical. Before viewing the commercial, our audience members choose from a list of all major brands in a product class the one they would like to receive if they win a drawing. For items like soaps or foods, the winner gets ten dollars' worth; for a major appliance, the make he selects. The audience then view the commercial in program context. Afterwards, they again choose from the same list. By noting the percentage who changed their decisions regarding the advertised brand, we know precisely whether the commercial did or did not influence viewers.

There is, of course, one condition necessary if the qualitative advantages we have noted are to pay off. It is that there must be a big enough home audience exposed to color television.

Incidentally, our estimates about effectiveness of color television are highly conservative; for one of the points made in the 1957 study was that products with obvious sensory appeal have been doing a disproportionately small amount of research in this area.

One reason for this condition has since become clear in our consultancy discussions with clients. Take food advertisers, an outstanding instance of potential beneficiaries of color. They tell us that, though it may be economically sound for an auto maker to try to influence the less than two per cent of the populace with TV receivers, such is not the case for the seller of a grocery-shelf item.

As readers of this publication are well aware, the big car companies have indeed been the heaviest supporters of tint programing. Indeed, President John L. Burns of RCA noted not long ago that more than half the \$70 million auto makers invested in network television during one season represented shows in color.

This leads to another interesting fact about color's effectiveness, because Detroit

needs-and uses-elbow room to show off its models. Schwerin Research recently recapitulated all its effectiveness data in terms of the length of commercials. A good many of the color efforts we have tested have been "king-size," with the advertiser going all out to exhibit the virtues of his product. The accompanying chart reveals that these extra-long color commercials are generally far more effective than those of conventional 60-second length, while the opposite is true in monochrome. In color, added length tends to result in added selling power; in black and white, added length is apt to dissipate the power of the sales message.

All that I have said above emphasizes that it is desirable for everyone concerned —TV receiver makers, advertisers, public —to see the "million-set barrier" breached as rapidly as possible.

There is great hope all around, as I see it, if a breakthrough occurs soon. The reaching of the magic number—perhaps the million color sets in use—is bound to release the favorable forces I have described. It will convince many now-hesitant advertisers that they should become serious about color TV. lest their rivals get the jump on them. It will create more of a stir in the air among viewers. And of course not at all incidentally—it can create a shot in the arm for the economy, because of color's proven ability to sell goods.

COLOR



BLACK & WHITE



FIG. 1. WFBM uses NBC color mobile unit to cover Memorial Day Race and 500-Festival Golf Tourney.

FIG. 2. Scale model of Indianapolis Motor Speedway is used in programming of annual 500 mile classic.



## COLORFUL CHANNEL SIX WFBM-TV, INDIANAPOLIS

by K. C. STRANGE Promotion Manager

What RCA is to the color tv industry, what NBC is to the color tv network, Channel Six is to color tv in Indiana. While Channel Six has stressed color all year, there have been high points in our activities as outlined below.

#### Memorial Day 500 Mile Race

To highlight what has become one of the country's most colorful festivals, WFBM-TV decided to telecast as much of the month's activities, as possible, in color. For this purpose, the giant RCA-NBC Mobile Television Unit was brought to Indianapolis. Channel Six telecast a total of 18 programs in color direct from the Indianapolis Motor Speedway. Fourteen of the shows consisted of 15 minute "wrap-ups" of the day's activities on the famed race track. Four color programs covered the new \$50,000 500-Festival Golf Tourney.

The "Trackside" programs, the daily wrap-ups, were beamed direct from the control tower at the track. The golf shows came from nearby Speedway Golf Course. Included in the latter series was an hour program covering the elimination tourney, a half hour golf clinic, and two full hours of the final 36 hole match. Color cameras covered action on three holes including the 18th green. Channel Six's double color tape units came into play during the coverage of the festival and performed admirably. Many times, programs were taped for delay purposes and the playbacks proved equal to live telecasts insofar as color quality was concerned.

On the eve of the big race, Channel Six telecast its first program which was taped in color using studio equipment. The show was one hour long and featured interviews with drivers. mechanics, and race officials. Film clips of past races were shown during the program which was entitled appropriately. "Gentlemen. Start Your Engines."

#### **Tape Clinic**

In August, Channel Six conducted a TV Tape Clinic for some 75 guests including advertisers, agency personnel, and community leaders. The clinic was scheduled as a follow-up to the highly successful "Color Clinic" conducted in late 1958.

Station Manager Don Menke, along with Bob Flanders, Director of Engineering and Bob Brockway, Chief Engineer-Technical, demonstrated the advantages of tv tape and the techniques to be used for maximum effectiveness. Brockway discussed the use of color tape at the clinic and demonstrated the color quality by showing some of the golf tourney which had been taped more than two months previous. Brockway also explained the mechanics of color tape and escorted the guests on a tour of the tape facilities.

#### Color Day-U.S.A.

During the recent color promotion, WFBM-TV backed up the celebration with a full schedule of local color programming. In addition to the color telecast over NBC. Channel Six aired more than three and one-half hours of local color. All live portions telecast during the day were in color, plus two feature movies and a rare print of a half hour syndicated program.

Channel Six also helped promote Color Day with a strong schedule of promotional announcements and a newspaper ad.

While the preceding three features represent the highlights of WFBM-TV's colorful year, it must be remembered that on-the-air promotion has been strong all year and will continue. Channel Six runs an average of five spots per day devoted exclusively to the promotion of the day's color shows and the upcoming specials.

FIG. 3. Two color cameras cover action at speedway course during "Golf Clinic." FIG. 4. Don Menke, station manager, leads discussion at WFBM-TV color tape clinic.



### HOW DOES THE ADVERTISING AGENCY LOOK AT COLOR TV?

by I. W. SOLOMON

Vice President, Copy Director, Al Paul Lefton Company, Inc.

When the Lefton Company was asked the question that you find in the title of this article, a famous remark made by Gertrude Stein came to mind.

Somebody once asked this formidable lady what her attitude was to modern art. She answered, "I like to look at it."

When we were asked our Agency's attitude toward color television we found we could definitely go Miss Stein one better. Our answer is: "We like to look at it. But even more, we like to work at it. Or if you prefer, we like to work with it." The reasons for our answer to the question are ample enough and clear enough. What's more, we have seen them evolve out of the theorizing stage into the practical everyday world: the world of advertising on television in color.

#### The First Time

The first time we called on color television we did so for intensely practical reasons. We wanted to sell our client's range. We had to get across a three-point sales story in a 60-second commercial. That sales story was that you can grill, bake or barbecue—and that you can do them all at once— on our client's range.

In order to make our sales message register, we selected three girls: a blonde, a brunette, and a redhead. They were set up as a choral group under the direction of Vaughn Monroe. Vaughn asked the question: "What can you do on a client range?" The blonde answered, "You bake"; and the brunette in her turn said, "You barbecue." At this juncture Vaughn said. "Oh no, no. tet's have it all at once." Whereupou the three girls in unison said. "You grill, bake and barbecue all at once on a client range."

You can see it was the use of the three girls and the ability of the color telecast to first separate them into the three distinctive portions of the sales message, and then to unify them, which made possible a highly effective solution to the marketing problem. Effective because color permitted a fresh approach.

#### Service in Color

Another client for whom color provided a dramatic vehicle to convey important sales points was a Service Company.

The Service Company had developed a jingle used for radio broadcast and desired to extend it into television. Color enabled us to endow the commercials with a







Typical color TV commercials produced by Al Paul Lefton for clients.

warmth, a charm and a strong identity which took them out of the usual field of animation-plus-jingle commercials. Furthermore, since audiences had become accustomed to seeing their favorite cartoon characters delineated in color on the movie screen, it was only natural that using color for the same basic concept of animation, with animal characters, would have a much stronger impact on the same persons when they were looking at television in their own homes.

#### **Regional Advertising**

However, it has not been only in network advertising that we have discovered the power and persuasiveness of color. The huge distributing organization, Raymond Rosen & Company, responsible for distributor sales in the greater Delaware Valley area for RCA Victor products has been sponsoring a newsreel on the ABC outlet in its marketing area.

About six months ago, we began the use of live commercials telecast in color. This immediately won a strong reaction from dealers and consumers. At last there was a way for a local advertiser to tell the most important merchandising story that appliances had at their command in many years. As you know, pastel color in appliances has been almost as effective a selling tool as features during the last few seasons. Color television provided a means of showing customers the exact tones of the new refrigerators, washers, ranges and other articles formerly categorized as "white goods."

While you might think that R.O.P. newspaper color would have provided the answer it had certain limitations not imposed by color television. Because of the advance closing date for newspaper color, there was less flexibility as far as merchandise is concerned. The art work and plates for R.O.P. color are high in cost when used in only a single market. And there was often some difficulty with registration and other technical problems.

But through the use of color television, we could prepare a color commercial on just two or three days notice, fitting it neatly into the plans of the distributors and their working arrangements for cooperative advertising at the dealer level.

#### Areas of Experiment

Right now the Agency is experimenting with color television for two of its major food advertisers. Our enthusiasm is very high. We have seen the tremendous value of R.O.P. color in newspapers and we can't wait to harness the greater power that is inherent in color television.

Recently a color advertisment we prepared for General Baking Company scored the highest Starch readership of any national advertisment in the same issue of the newspaper. It scored so well through the use of art work of children eating donuts-all in full color-imagine what the effect will be when we can show these youngsters actually eating their donuts and drinking their milk as the camera dollies in for a full screen closeup in color of a golden Bond donut frosted with thick chocolate icing, flanked by a glass of cold milk or a sparkling soda — — — Make you hungry? Put down this magazine and send out for your "coffee and -

### STRATEGIC AIR COMMAND USES RCA COLOR TV FOR BRIEFINGS

Offutt Air Force Base-ten miles south of Omaha, Nebraska-is the headquarters of the Strategic Air Command, The SAC mission-to preserve peace by maintaining a combat-ready force of poised strategic air power. Helping SAC in this mission is RCA color television.

Installed three stories below the ground in SAC's bombproof operations center are five live color TV cameras and a complete color film system. Six separate program channels are available to send information to various receiving locations. TV is used to brief the staff on weather conditions, deployment of aircraft and other information vital to making necessary decisions. From these decisions one day could come the order-only after hostile enemy intent is known-which would send strike forces from bases all over the globe toward the destruction of enemy military targets.

The TV system has been expanded to connect SAC with the North American Air Defense Command in Colorado Springs, and in the not-too-distant future will be connected with USAF Headquarters at Washington, D.C. After that is envisioned a closed-circuit television ring to permit immediate TV contact with all SAC bases the world over. The immediate transmission of combat information by television will permit complete and instant co-ordination of the nation's aerial offensive and defensive forces.



FIG. 1. General Thomas S. Power, SAC Commander in Chief, and his staff, are seated in the glassed-in balcony area overlooking the Operations Map Room. Each member of the staff is charged with a specific phase of SAC responsibility.

FIG. 2. The 140 by 39-foot expanse of the SAC Operations Map Room is shown here. Note, the giant map panels each 20 feet high and 8 feet wide. At lower right, weather officer is conducting a TV briefing. Note color TV cameras on floor and on elevated track at left.





FIG. 1. Noted news commentator, Gunnar Back, is seen on WFIL-TV twice each evening, Monday through Friday.



FIG. 2. Pretty and personable Lynne Barrett appears nightly to tell viewers about RCA tv sets and home appliances.

# WFIL-TV PROMOTES COLOR IN PHILADELPHIA

Roger W. Clipp, vice president of Triangle Stations and general manager of WFIL-TV is one of industry's strong and active proponents of color telecasting. His faith in color has made WFIL-TV, Philadelphia's first color TV station and one of the country's color pioneers.

#### **A Color Pioneer**

Back in 1953 WFIL-TV sponsored an all-day show dedicating their new RCA color facilities and at the same time commemorating Channel 6 as the first in Philadelphia to broadcast color. One year ago WFIL-TV began colorcasts of its regular film series "World's Best Movies," This marked the first time in broadcasting that color feature films were ever telecast on a weekly schedule. It also added two full hours to the station's color schedule which now totals 42 weekly shows and approximately 20 hours of color telecasting. This schedule will be further increased with WFIL-TV's live color telecasting of the New Year's day "Mummers" parade for the fourth consecutive time, and a new 15-minute live farm show, "RFD Six,"

#### Live Color Commercials

WFIL-TV's 20 hours of weekly color are about equally divided between film and live studio pickups.

All color commercials are live. Camera pickups are of actual products arranged in sets in WFIL-TV's color studio. The only exceptions are the live color Schmidts' commercials which are produced on site during telecasts of the New Year's day Mummers' parade.

#### Value of Color

Asked why they use color, WFIL-TV management gave this consensus: We use color because of its promotional value to the station. We believe color is important to WFIL-TV and to television—because it offers greater opportunities for interest in programming, and because it demonstrates better than monochrome WFIL-TV's experience in telecasting. In commercials it adds appeal, particularly where the color of a product is an important selling feature, as in the Bell telephones and RCA appliances.



FIG. 3. WFIL-TV's color promotions include full-page color newspaper ads, national mailing campaigns and transportation company car-cards.



FIG. 4. For the fourth straight year WFIL-TV telecast the 1961 New Year's Day "Mummers' parade using a color mobile unit. Commercials were telecast in live color.

Dr. John F. Baxter. Professor of Chemistry at the University of Florida, conducts a college-level course in his subject for students across the country on NBC's "Continental Classroom." More than 300 colleges give credit to students taking the five-day-a-week early-morning TV course, which brings experiments and demonstrations to the screen in full color.



### COLOR TV IN EDUCATION

The power of color television as a communicator is adding new dimensions to education, training and instruction, and to the very common denominator in these fields—communications itself.

In the use of new tools such as color television the Armed Forces have been in the forefront, mostly because of their need for getting results quickly. But many educators, researchers and business men are now utilizing color tv to the fullest potential.

#### **Color TV Supports Military Briefings**

Below ground in a bombproof operations center at headquarters, color tv is helping the Strategic Air Command preserve peace by maintaining a force of air power poised and ready to be directed at an aggressor.

Several live color cameras and a complete color film system are used to brief the SAC staff and key personnel at the North American Defense Command on weather conditions. deployment of aircraft and other information vital to emergency decisions.

#### Nucleus of Medical Training and Education

Largest of closed-circuit color tv setups is that of the Army's Walter Reed Medical Center in Washington. This is an ideal demonstration of the potential of color tv for training and education in a variety of medical-scientific activities. For, here are the functions of a general hospital, a research and graduate education center, and central laboratory for the Armed Forces Institute of Pathology.

Using color television, up to 150 lectures and demonstrations per month are programmed not only to students throughout the huge center but to other points in the Washington area and even to medical conferences in New York.

#### Mobile Color TV for A.M.A. Demonstrations

Smith, Kline & French Laboratories, pharmaceutical manufacturers, employ a color studio-on-wheels to bring live surgical and clinical demonstrations before large audiences of doctors attending meetings of the American Medical Association. In seven years operation from coast to coast and from Canada to Mexico, SK&F has presented in behalf of the medical profession 90 programs consisting of 1138 clinics and 705 surgical procedures to nearly a half-million doctor-visitors. The traveling medical color tv unit contains live color cameras, surgical cameras, slide projectors, special effects and controls.

#### **Color Telecasts of College Courses**

Color tv is being used in an increasing number of educational programs carried by commercial television stations and networks.

An outstanding example is "Continental Classroom," now in its third year on NBC. Designed primarily to help high-school science teachers. the tv courses in Atomic Age Physics and Modern Chemistry are conducted by eminent professors at leading universities who appear as guest lecturers on the NBC early morning program. More than 300 colleges and universities give credit to students and teachers taking the five-day-a-week courses.

### COLOR TELEVISION AND MEDICAL INSTRUCTION AT THE UNIVERSITY OF MICHIGAN

#### A Two Year Progress Report by RICHARD D. JUDGE, MD

Assistant Professor of Internal Medicine and Television Coordinator, The University of Michigan Medical School

Two years ago The University of Michigan Medical School purchased and installed an RCA closed-circuit color television system for undergraduate, graduate and postgraduate medical instruction. Since that time, instruction by television has been accepted by students and faculty as an integral part of the Medical School teaching facility.

The initial installation included three color television cameras (TK-41, TK-45 and TK-26), one portable black-and-white television camera (TK-35) and the related test, audio and lighting equipment. The original receiving equipment consisted of ten RCA Victor 21-inch, color, home-television receivers. This equipment has been supplemented and in some cases, replaced, by three TM-21 color monitors and one TLS-50 color television projector.

Color programs originate in two places: a fully-equipped television studio and an operating room, both in University Hospital. The portable TK-35 makes it possible to originate black-and-white programs from anywhere in the Medical Center. Originally, viewing was possible only in an amphitheater and two classrooms near the studio. At the present time, programs may also be viewed in three 250-seat auditoria in the Medical Science Building, a classroom in Women's Hospital and a classroom in the Department of Postgraduate Medicine.

#### **Obstetrics and Gynecology**

Dr. Norman F. Miller, chairman of this department, holds a number of postgraduate conferences during the academic year. These conferences are designed to acquaint practicing physicians with the latest advances in obstetrics and gynecology. In the past, these meetings were held in classrooms with the standard lecture and slide presentations, Now, Dr. Miller arranges a full day of television demonstrations for the visitors. The day begins with two surgical procedures. The surgery is televised by two cameras; the black-andwhite TK-35 on a tripod and dolly in the operating room and the color TK-45 permanently mounted over the operating table

and remote-controlled. An intricate intercommunications system allows two-way discussion between the surgeon, the audience and the control room. In the afternoon, a six-part Gynecology research program is televised, using the TK-41, TK-26 and TK-35. As a result of the versatility of the equipment, operative procedures; panel discussions; laboratory demonstrations; movie film, slides, and other audiovisual material are channeled through the television medium giving greatly increased effectiveness to the presentation.

#### Psychiatry

An important aspect of psychiatric instruction for medical students is the observation of interviews with a mental patient. In the past, these interviews were conducted on the stage of a 250-seat amphitheater. Two years ago. Dr. Raymond W. Waggoner, Chairman of the Department of Psychiatry, requested the use of television for this demonstration. Since that time, the interviews have been televised from a secluded room into the amphitheater. The privacy afforded the interviewer and patient gives the student a much clearer view of the technique.

#### **Physical Diagnosis**

This course is taught by Dr. Jere M. Bauer and the writer and is the Sophomore Medical Student's first introduction to clinical medicine. The subjects range across the whole spectrum of medicine. The magnification possible with the television camera makes television an invaluable supplement to the teaching of this course. Approximately one-quarter of the semester is devoted to television demonstrations.

The color television studio is now a familiar place to the Medical School faculty and more departments are using it every month. Dr. William N. Hubard, Jr., Dean of the Medical School and Dr. Harry A. Towsley, Associate Director of the Department of Postgraduate Medicine and Chairman of the Medical School Television Committee, have given unqualified support to this new tool of medical education.



FIG. 1. Richard D. Judge, MD, lectures on Physical Diagnosis to sophomore medical students.



FIG. 2. Robert C. Hendrix, MD, Prof. of Pathology at U. of Mich, uses TV and a specially adapted microscope to show students tissue cultures.

FIG. 3. U. of Mich. has surgical color TV camera installed in operating room of University Hospital.



# KHQ-TV SPARKS COLOR TV IN SPOKANE



Station KHQ-TV started telecasting color back in 1954. It was one of the first stations equipped with two live color studio cameras and a complete 3-V color film system. In 1955 the station built a color equipped mobile TV unit. Just recently there was added two RCA color TV Tape Recorders. Offices are located in the downtown Radio Central Building, while the studio and transmitters are on a 30-acre plot, five miles distant.

#### **Color Mobile Unit**

Probably the most significant piece of equipment, designed and built by station engineers, is the dual mobile unit for remote pick ups. This is built into a one-ton Chevrolet truck with custom-built body and 138-inch wheelbase. Control and rack equipments are portable. They are removable so that the truck can be used for either black and white or color TV remotes. These same control and switching equipments are used in the station studio.

In the front are two camera controls for the TK-41 color cameras and a TS-5A switcher. There are two TM-6C master monitors and two TM-10B color monitors. There are facilities for seating a five-man operating team.

#### **Color Programs**

Live coverage of the Armed Forces Day Parade and the Lilac Festival have been annual events since 1956. Local color programming includes live portions of a daily newscast. Recently a series of afternoon color movies was inaugurated. Also, KHQ-TV carries the full NBC color schedule.

Station KHQ-TV has a philosophy all its own to tackle the immediate color situation. This consists of concentrating on special events for color-casting and at the same time publicizing these color shows as widely as possible. This accounts for the emphasis upon the color mobile unit since most of the special events are remote pick ups. Local RCA Distributors, Prudential Distributors, and others have co-operated in these special color telecasts. Together with the push in color TV receiver promotion and the increase in color programming. KHQ-TV hopes to make Spokane one of the leaders in Color Television in the U.S.A.

Dee Waymire, Chief Engineer, and Al Kern, Assistant Chief Engineer, KHQ-TV.





FIG. 1. Tester checks color fidelity of RCA Victor color TV receiver.

## QUALITY IS A FACTOR IN SALES RISE OF COLOR TV SETS



FIG. 2. RCA color picture tube undergoes electromagnetic tests.

Dealer Orders for 1961 Color Receivers Have Increased Nationwide 300% Over a Year Ago

Contributing heavily to color TV dealers' spurting sales successes are the excellent field reports boldly underscoring advances made in color TV receiver performance and reliability.

This quality is not by accident. In 1960 RCA spent more than \$2-million on special quality controls for the new home instrument line alone, a very large part of which is now in color TV quality control facilities. At RCA's plant at Bloomington, Indiana, one out of every five employees devotes all of his time to the inspection and testing of the work of the other four people who actually build the color television receivers.

#### Rigid "Torture" Tests

RCA TV receiver testers are always looking for trouble and they have devised devious ways to find it. For example, wirewrap connections in every set are subjected to highly corrosive gases and a 32pound "pull" test to reveal contact imperfections. Each TV chassis is given a rapid vibration treatment to expose possible weaknesses and shake out foreign matter, and then pounded with a rubber mallet during alignment tests to expose nearshorts. The safety glass faceplate which guards the picture tube withstands, without breakage, the impact of a two-pound steel ball dropped from a height of six feet. Finally assembled, each set is air-tested on all channels by RCA's plant color TV transmitter.

Even after being packed for shipping, several units of each new model are put through a jarring "drop" test to check the ability of the design to withstand rough handling. Life tests with peak voltages are equivalent to one-and-a-half years of normal viewing in the home.

Quality control begins in the research laboratory and extends through the production stages, but doesn't end there. The search for ways and means to improve the product after it is marketed continues.

One striking example of this is the nearperfection of the tint-controls and the ease of tuning in the 1961 RCA Victor color TV line.



FIG. 3. New RCA Color TV receivers are given many assembly line check-ups.

*Editor's Note:* Ed Jones, the author of "It Could Be You," built his first radio receiver in 1909. He retired in October after a fifty-year career as ship's operator, Navy radio man, first editor of RADIO NEWS, radio set wholesaler and for the past twenty-five years a member of RCA's advertising department, including a stint as editor of BROADCAST NEWS (1935-39).

At a retirement dinner in Mr. Jones' honor, his friends and co-workers presented him with a shower of gifts, including, among other things, a color receiver. Ed had never had a color set in his home before—in fact, he was never more than lukewarm on television, spent very little time viewing it—preferred listening to radio and records. But now—behold—everything is different. The stoic Mr. Jones is as excited as the teen-agers he quotes.

We have printed Ed's little piece here, just as he sent it to us, not because his discovery will be news to many of our readers, but because it may serve to remind us that there is a way to get new excitement into a business which has been widely accused of becoming a little dull.

## "IT COULD BE YOU"\*

Yes, at this very moment, you could be guilty of the same mistake I made by failing to thoroughly investigate and learn the facts about color television.

I have been guilty of cheating myself and my family out of many exceptionally colorful and entertaining television presentations . . . The Dinah Shore Chevy Show, The Bell Telephone Hour, Bonanza, Perry Como's Kraft Music Hall, Ford Show with Ernie Ford, Meet The Press, The Price Is Right, Shirley Temple Show, The Jack Paar Show and numerous others.

The period of my procrastination was occasioned by the many false rumors that were making the rounds, which I later found, had no foundation in fact. For example, the technician who installed our color set cleared up one of the most fallacious of these rumors—He purposely twisted all of the knobs indiscriminately to demonstrate the ease of bringing in a perfect color picture. I readily learned that color tuning is just as simple as the old black and white set.

You simply tune in the set as if you were operating a black and white receiver . . . When you obtain the picture in black and white . . . You merely adjust the color knob and then, for critical adjustment, the "tint" knob—so, there is actually nothing

to it—even a young child can obtain a satisfactory picture. It was also comforting to learn that once these two color controls have been adjusted . . . it is not necessary to make any but very slight changes of their settings.

Color is far more pleasing and satisfying than black and white-We had that demonstrated to us long, long ago-and yet cannot understand why we did not take the hint from that experience which I will tell vou about. When we first tuned in the Mummers parade which takes place annually in Philadelphia on New Years Day -we had a black and white receiver. We did not think much of the parade because everything looked alike-there was no color in the costumes or the clown's faces-So one year we decided to see in person this so-called magnificent spectacle. Well, it was everything they claimed for it . . . brilliant, spectacular-a colorful extravaganza-really was out of this world.

You can well imagine how anxious we were to see the first of the new year 1961 come around—and for the first time see the "Tournament of Roses"—as it actually looks to human eyes. We have looked at this parade several years on our black and white receiver—and yet—we had never seen it—for each float is made up of thousands upon thousands of colorful flowersby ED. JONES

but there came a day that we did really see it . . . What a beautiful sight it was and only on color tv can you actually see it unless you go out to California and witness it in person. That would cost more than the price of a good color ty receiver.

To give you some idea as to the effect it (color) has on newcomers—on several occasions—visitors who had not as yet seen color tv—actually went into ecstacies— They sounded like the female teen-agers who squeal when they witness a very popular handsome young male singer . . . It really carries a powerful emotional wallop.

By this time, I have a strong hunch that you will be getting a Color TV soon so go ahead and "PLAY YOUR HUNCH"<sup>11</sup> and get one now—for "THE PRICE IS RIGHT."<sup>22</sup> The so-called difference in cost will fade into insignificance after you have enjoyed the first color program in your own living room.

Color tv is not for "THE NEXT GENERATION"<sup>3</sup>—it is for us—today! No one should deny himself this greatest pleasure of our time.

<sup>\*</sup> Color Program, Daily NBC 12:30 pm est.

<sup>&</sup>lt;sup>1</sup> Color Program, Daily NBC 10:30 am est.

<sup>&</sup>lt;sup>2</sup> Color Program. Daily NBC 11 am est and Wednesday Night 8:30 pm est.

<sup>&</sup>lt;sup>3</sup> Color Program, WRCV Sunday 2:30 pm est, and Thursday 1:30 am est.

PERRY COMO'S KRAFT Music Hall	SELL TELEPHONE HOUR	BONANZA
	FORD SHOW ERNIE FORD	
THE PRICE IS RIGHT	SHIRLEY TEMPLE SHOW	

Living Color seven days a week! Network color programs include everything from sports to spec-taculars! Many local stations have their own color shows, too!



Living Color plus black and white! Both from the same set! Turn to the program you want whether it's in color or in black and white, you'll see it beautifully !



Remote costrol with"Complete-off!" "Wireless Wizard" lets you change channels, volume and color . . and it's the only remote that turns the set completely off!



Full-year warranty on all parts and tubes! Covers even the picture tube! *j year* warranty on Security Sealed circuit boards! Labor costs are excluded.

# You don't know what you're missing 'til you get new RCA VICTOR COLOR TV !



See the Jack Paar Show in Living Color-Monday thru Thursday nights-NBC-TV



Today's RCAVictor Color TV is TV as you've never seen it before! You'll be amazed at its new picture clarity-color realism-casier tuning-new performance and dependability! New programs too, and more of them.

New RCA Victor Color TV is priced lower than you'd ever guess. Ask your dealer for a demonstration. See what you've been missing ! Service is no problem. See your local dealer, serviceman, or RCA Service Co. Price, specifications subject to change without notice.





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