

FCC Approval of Compatible Color Standards Launches RCA and NBC "Introductory Year"

Comprehensive Programming, Production, Training Schedules Are Announced;
Network Broadcast January 1 Highlights First Series of Programs

The opening of the color television era, launched on December 17 by approval of the Federal Communications Commission of standards for the compatible system pioneered and developed by RCA, put into practice the widespread programming, production and training plans prepared and rehearsed during 1953 by RCA and the National Broadcasting Company.

For NBC, the FCC decision opened the "Introductory Year" plan under which each of the network's major programs will be done at least once in color and a number of special events will be covered by color cameras for the nationwide audience. For RCA Victor Division, it gave impetus to production of both broadcasting and home receiving color equipment, and to extensive plans for training television manufacturing and service personnel of RCA, its licensees and its dealers in the techniques of color.

Within minutes of the FCC action on December 17, NBC went on the air with a network color signal — a multi-color slide reading "Color News Bulletin," and an announcer said: "Attention, please! Color television is here. You are looking at the first color picture telecast since compatible standards for color television were approved."

Assembly of RCA color TV cameras at Camden, N. J.



A short time later, NBC presented a special color broadcast featuring a statement by Brig. General David Sarnoff, Chairman of the Board of RCA, who was introduced by Sylvester L. Weaver, Jr., President of NBC. From the stage of the Colonial Theatre, the world's first fully equipped color television studio, Mr. Weaver appeared before the RCA color cameras and took the audience on a brief tour of the theatre's facilities.

First Sponsored Color Program

From the same stage three days later, on December 20, came the first sponsored color broadcast following the FCC decision — NBC's famed presentation of the Gian-Carlo Menotti Christmas opera, "Amahl and the Night Visitors." This was the second operatic production to be telecast in color from the Colonial Theatre; Bizet's "Carmen," the first major opera presented in the new medium, was broadcast in a one-hour version in color on October 31 under temporary experimental authorization from the FCC. Thanks to the compatibility of the RCA color system, both productions were seen in high quality black-and-white on the nation's millions of monochrome receivers.

Following the Menotti opera broadcast, "Season's Greetings," a variety show featuring leading NBC stars, was presented in color on December 22. And on New Year's Day, NBC color cameras, operating from a two-truck custom-built color mobile unit, covered the Tournament of Roses parade in Pasadena in the first West Coast origination of a color program and the first transcontinental West-to-East transmission. The first coast-to-coast color broadcast in either direction was transmitted by RCA and NBC on November 3 over a closed circuit from New York to Burbank, California. Color film also was transmitted for the first time by television on this occasion.

The Pasadena broadcast also was the first network color program handled by a coast-to-coast series of stations using special equipment for broadcasting a true color signal — and behind this fact lies the story of a remarkable production and delivery program carried out by the RCA Victor Division to equip stations in major

cities across the country for color reception and transmission in time for the January 1 program.

To meet the deadline, the special production unit at the RCA Engineering Products Department in Camden, N. J., worked on a 24-hour schedule seven days a week to turn out the stabilizing amplifiers, color monitors, phase correction networks and other items required by the stations to handle programs received over telephone circuits. The first shipment, covering the requirements of five stations, left the factory on November 30.

Planes Rush Station Equipment

As fast as equipment was completed and tested at Camden, it was trucked to Philadelphia's International Airport for shipment by air express to the stations. Five crews of specially trained technicians from the RCA Service Company, travelling by air, kept pace with the delivery schedule, calling at each station to supervise installation soon after the broadcast equipment had arrived.

At the same time, other technicians trained in color equipment courses given by the Service Company were assigned to install monitors in broadcast stations and telephone company locations where the program was to be taken off the network. This group also installed the pre-production model color receivers in distributors'

headquarters, as well as the sets supplied by NBC to stations handling the program.

Indicative of the scope of the operation is the fact that color equipment was installed by January 1 in Los Angeles, San Francisco, Salt Lake City, Denver, Omaha, Minneapolis, Chicago, St. Louis, Milwaukee, Cleveland, Cincinnati, Toledo, Detroit, Philadelphia, Washington, Wilmington, Baltimore, New York, Wilkes-Barre, Johnstown, Pa., and New Haven.

Plans for the production of color receivers for the home also moved ahead with the announcement of the FCC decision. Initial output of RCA tri-color tubes proceeded from the pilot production line established in the RCA tube plant at Lancaster, Pa., where tubes for test and demonstration purposes had been turned out during 1953. At the Bloomington, Ind., plant of RCA Victor's Home Instrument Department, production of home receivers also moved ahead on a pilot basis. At the same time, production specialists advanced provisions to expand tri-color tube output into existing black-and-white kinescope production facilities as the demand for the color tubes increases beyond the 2,000 per month expected of the pilot line at Lancaster.

Training Plans For Service Industry

The official start of color television broadcasting brought with it the announcement of further plans by

Black-and-White Television Has Assured Future, Elliott Says

By J. B. Elliott

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Now that the Federal Communications Commission has given the official "green light" for compatible color television, more and more people are asking: "What is going to happen to black-and-white television?"

The answer is simple.

For years to come, all stations and networks will continue to broadcast many of their top programs in black-and-white; manufacturers will continue to produce technically improved black-and-white sets and millions of persons will buy new black-and-white sets to bring the marvel of television into an ever expanding number of homes.

The progressive action of the Federal Com-

munications Commission in approving standards for compatible color will serve as a guaranty that the adoption of color will not make obsolete any of the more than 27 million black-and-white sets now in use in American homes. It also assures today's purchaser of a black-and-white set that colorcasts will not affect the usefulness of his new receiver. With the RCA system of compatible color, programs broadcast in color can be received on black-and-white sets as black-and-white programs without any changes whatever in the receivers.

In terms of screen size, picture quality, cabinet styling, and all-around technical performance, black-and-white receivers today offer the greatest values in television history.

The Consumer Products Division of the Radio Corporation of America, as it has since the birth of all-electronic television, will continue to manufacture the finest black-and-white receivers on the market — just as it will produce the finest color sets to be available in the months and years ahead.



The NBC mobile color unit, used for the first time on Jan. 1 for colorcast of the Tournament of Roses parade.

RCA to make available to the servicing industry all needed information on the installation and servicing of color equipment.

The policy of sharing RCA know-how on the broadcast basis took several forms during 1953 prior to the FCC decision. In July, licensed tube manufacturers received full information on the RCA tri-color tube, and in October the full design and performance details of RCA's basic color receiver were given to 250 industry representatives at a symposium in New York. The RCA Victor Tube Department also made available to equipment manufacturers special color television kits containing more than 20 special developmental tubes and components, including the RCA tri-color tube.

In addition, the RCA Victor Division held technical seminars in Camden for broadcast engineering consultants to help prepare broadcasters for the handling of color programs. The RCA Service Company, continuing during the year to develop and refine test equipment and servicing techniques, provided technical assistance to television stations in the installation and checking of the equipment for handling network color broadcasts, and trained additional engineers to meet future demands for this type of service.

In the broadcasting field, NBC conducted an indoctrination program to give personnel from affiliated stations the benefit of experience in the color programming and technical fields.

Clinics To Be Held Through 1954

The plans for 1954, designed to cover the servicing field, were announced by RCA on December 22. The program comprises color television servicing clinics for RCA receiving set licensees, RCA distributors and TV service technicians, beginning early in 1954 and continuing through most of the year.

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The first clinics, consisting of four days of intensive instruction and demonstration, will be held for the licensees, it was announced by E. C. Anderson, Vice President in Charge of the RCA Commercial Department. For the convenience of set manufacturers, the same clinics will be held in each of three cities beginning in New York on January 11, followed by Chicago on January 25 and Los Angeles on February 28. Each of the clinics will involve a total of 28 hours of instruction, presented by lecturers of the RCA Service Company. The subject matter has been designed to provide basic color information for service technicians already acquainted with black-and-white television, with the curriculum covering color theory, color signals, basic circuitry, components and adjustments.

The industry-wide training and educational program for TV service technicians, supplementing the program for licensees and distributors, was announced by Edward C. Cahill, President of the RCA Service Company. The principal phase is a series of two-day clinics to be held in 65 cities across the country, starting early in February. Technical specialists of the RCA Service Company, using textbooks, test equipment and other instructional materials developed especially for these clinics by the Company, will conduct the courses, to which service dealers and servicemen in each city will be invited.

The Service Company also has prepared a comprehensive textbook, "Practical Color Television for the Service Industry," based on the experience of more than 5 years in research, development and field testing of color receiving and broadcasting equipment by various departments of RCA. Copies will be made available to servicemen completing the clinics, and will also be distributed through RCA parts and tube distributors or directly from the RCA Service Company in Camden at \$2 a copy.

Mr. Cahill also disclosed that a new type of test equipment for use with color television sets has been installed in RCA factory service branches in areas where color television will be received. Called the color signal stimulator, the equipment is essential for the proper phasing and alignment of color sets.

Another phase of training, a color television home study course for technicians of the electronics industry, was announced by George F. Maedel, President of the RCA Institutes, Inc. The course, in nine lessons, covers all phases in the principles and servicing of color receivers, based on material prepared by the Service Company for the over-all color training program. Mr. Maedel said that a bulletin describing the course in detail may be obtained from the Home Study Department of RCA Institutes at 350 West 4th Street, New York 14.