

RCA Begins Production of Color TV Sets; Gives Manufacturing "Know-how" to Industry

Plans Announced to Bring Color TV into American Homes; Deliveries of 15-Inch Color Receivers Started from Bloomington, Ind., Plant

Production of the Radio Corporation of America's first commercial color television sets began on March 25 in the Bloomington, Ind., plant of the RCA Victor Home Instrument Division as the initial step in a comprehensive program to bring color television into American homes.

The following day, RCA revealed its color plans to seventy competing manufacturers, furnishing detailed engineering and manufacturing information on RCA's first commercial model — the CT-100. At the same time, a full report was made on RCA's manufacturing plans and on the National Broadcasting Company's plans for colorcasting.

As a prelude to the meeting of television manufacturers, RCA invited press representatives to Bloomington on March 25 for an inspection of its color television production line, which is more than two city blocks in length and geared to an output of 2,000 color sets a month.

RCA announced that it planned:

1. To manufacture during 1954 — regarded as the "introductory year" for color television — about five thousand 15-inch color receivers and about five thousand 19-inch color receivers. These quantities can be increased to meet the public demand as it develops.

2. To begin shipment of color sets the following week. Initial deliveries are going to RCA distributors in areas where network color signals can now be received. Already, color reception is possible in 35 large cities from the Atlantic to the Pacific Coast. It is estimated that by the end of 1954, one hundred twenty-five TV stations will be equipped for color broadcasts, providing coverage for 75 per cent of American homes.

3. To expand color programming over the NBC network. By the end of this year, NBC will be colorcasting two programs a week from New York and a third from Burbank, Calif. In addition, NBC will present a series of specially produced ninety-minute shows, "Spectaculars in Color," the most elaborate in the history of broadcasting, beginning in October, 1954.

◀ Largest set ever built for television — created for the NBC broadcast of "King Richard II."

J. B. Elliott, Executive Vice-President in charge of Consumer Products, discussing the outlook for the color television market, said:

"Basically, as was the case of black-and-white TV, we are interested in seeing color television grow, steadily and securely, into a national service. This will take a lot of doing. Such an undertaking is too big for any one firm. It must be an industry-wide project, backed to the limit by each of the separate, competitive companies.

"We believe that the prospects for color television today are just as bright as black-and-white's were seven years ago. To show the extent of RCA's confidence, I quote the figures we prepared — figures on the sales prospects of color receivers during the next five years.

"During this year and next we believe the demand for color sets will exceed the supply. According to our estimates, the industry should be able to sell 70,000 units in 1954, and 350,000 in 1955.

"During 1956 we believe unit sales will reach 1,780,000; during 1957, 3,000,000; and during 1958, about 5,000,000. These annual sales add up to the very satisfactory total of 10,200,000 color sets in use five years from now.

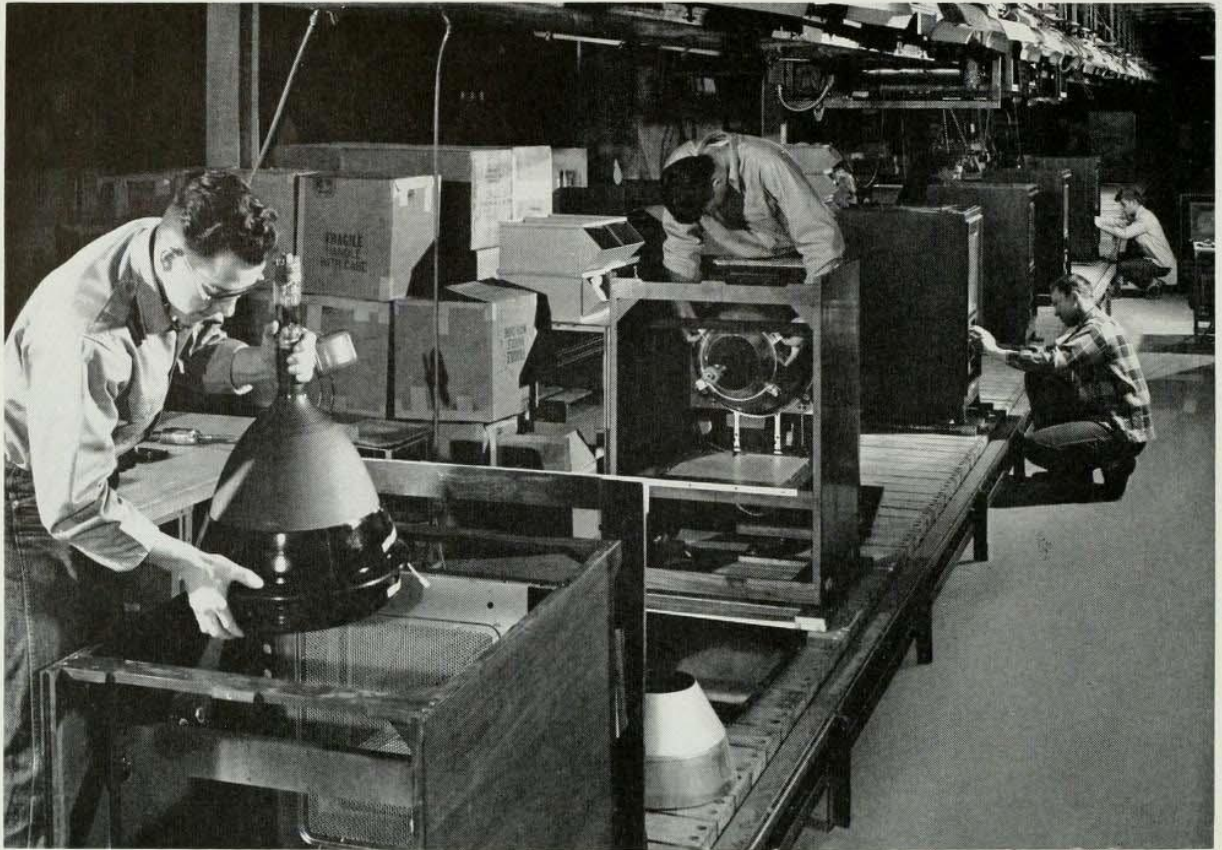
"We believe that the RCA initial model CT-100 (with a suggested list price of \$1,000) will help make television history. And we believe the market for color is as great as the market for black-and-white television was seven years ago."

Information to Competitors

E. C. Anderson, Vice-President of the RCA Commercial Department, made these comments on the plant visit by RCA's set licensees:

"This visit is another expression of RCA's long-standing policy to introduce color television at the earliest possible time. We have devoted substantial cash and considerable manpower to this important task. We believe that the process of continuing research and development by RCA and by other companies in this vital new field of color will be commercially rewarding to the industry within the next few years.





RCA tricolor tubes are installed in the first commercial production sets at Bloomington, Ind., RCA plant.

"Color receivers are now ready to enter the market. With them comes the need for new studios, new transmitting equipment, and for new factories to build these things. In short, a great new industry is being born.

"We have made available to our competitors and licensees the benefits of our pioneering and costly efforts in color as well as in black-and-white television. Since 1946, we have kept our licensees abreast of our progress in the development of compatible color television through demonstrations, technical bulletins and other informational services.

"We are fulfilling the promise we made in 1950 to make available to licensees complete manufacturing information on our first commercial color television receiver. This information includes an engineering description, manufacturing drawings, bill of materials, and sources of supply as well as an inspection tour of our color production set-up at our Bloomington factory."

D. Y. Smith, Manager of Marketing, RCA Tube Division, told the licensees of RCA production plans for tubes, special components and testing equipment. He stated that six brand new receiving tubes specifically for

color television circuits, as well as electronic components for color television are now available, and that the Tube Division will begin shipments soon of three new items of equipment for the servicing of color receivers.

T. A. Smith, Vice-President in charge of RCA Engineering Products Division, told of progress in the equipping of stations to carry color network programs. Early in March, he said, RCA started shipment of additional color cameras to both NBC and the Columbia Broadcasting System, providing more facilities for producing color programs. In addition, live color cameras will be shipped to several independent stations during April.

Announcement of the NBC programming plans was made to the licensees by Barry Wood, Executive Producer and Color Coordinator for NBC.

The Production Line

The production line shown to the press and the licensees turns out the RCA Model CT-100, an open-face, console-type receiver which has a mahogany cabinet and a 15-inch RCA tricolor picture tube. Production of

a second model, with 19-inch tube, will start sometime later this year.

The tour, from receiving platforms to loading docks, included an inspection of all-channel UHF (ultra high frequency) and VHF (very high frequency) color tuner assemblies. It moved along a base assembly line where scores of women installed sub-assemblies, aligned circuits and soldered connections and parts in the receiver's base chassis.

It then moved downstairs where men handled the work of installing picture tubes, tuners, base assemblies and other components in the cabinets. It passed from assembly into the test area, where engineers and plant technicians brought the color screen to life with vivid bar patterns and, even more spectacularly, with a bright picture that provided a critical check on color test controls.

The visitors next inspected the crating operation where an overhead conveyor deposited cardboard box containers onto the moving line — and each container packaged a factory tested color set. As a final step, the visitors followed the crates into a storage warehouse where they were tagged for delivery in early April — with American homes as their destination.

RCA reached the "milestone" of commercial production less than a hundred days after the Federal Communications Commission approved standards for

compatible color television. This nearly halved the Corporation's original estimate of six months.

During February RCA passed the 2,000-a-month rate in the production of tricolor picture tubes. This rate was achieved three months ahead of schedule.

The newsmen were welcomed by T. A. Weeks, manager of the RCA Bloomington plant, who described production requirements for a color set, as compared with black-and-white. He pointed out that RCA's most popular 21-inch black-and-white set now in production, uses a total of 437 parts, including 19 tubes and approximately 63 feet of wire. The CT-100 color receiver has a total of 1,012 parts including 35 receiving tubes and the 15-inch color tube, along with approximately 150 feet of wire.

The Bloomington plant, with 1,850 employees, is one of the most modern in the nation. Installed there, at a cost of more than \$500,000, is a newly developed test unit to permit factory tuning of color television sets to insure faithful color reception. The equipment is, in effect, a small-size television station which can transmit color test patterns over a closed-circuit in the plant.

The factory is a two-story stone structure located on an 81-acre tract. It has 430,000 square feet of space, of which 30,000 are now being utilized for the assembly of color television receivers.

Welding a 19-inch tricolor tube at the Lancaster, Pa., RCA plant, where tube is in pilot production.



RCA color TV cameras undergo final testing at end of commercial production line in Camden, N. J.

