



RCA ENCOURAGES THE RADIO AMATEUR TO TRY
HIS HAND AT A NEW FIELD OF EXPERIMENTATION

TELEVISION

RCA ENCOURAGES THE AMATEUR IN

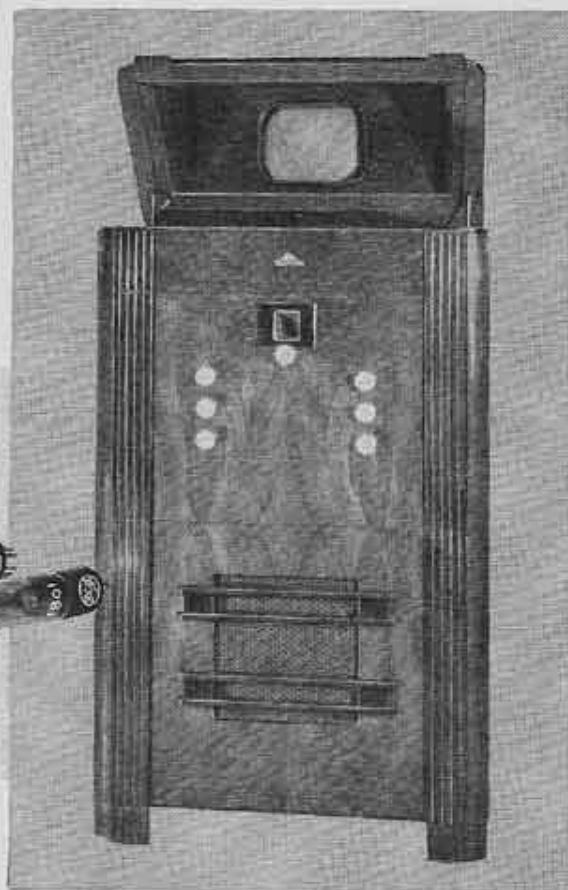
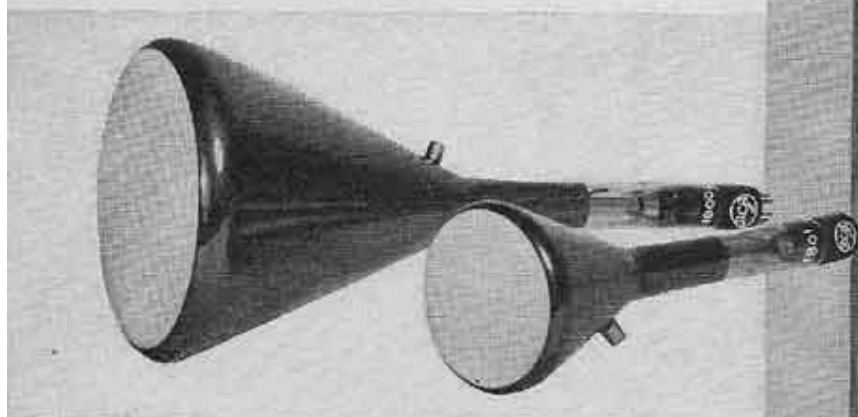
Two Television Kinescopes* Now Available for the Experimenter

RCA knows and is deeply appreciative of the radio amateur's contribution to the art of ultra-high frequency communication. The early development of television gave rise to problems best solved in the laboratory, but as the art slowly emerges from this status to the stage where field experiments can best

even one state. Building these stations and relaying television programs to them for broadcasting is a tremendous commercial problem.

Right... Experimental RCA television receiver used in field tests.

Below... RCA Kinescope* tubes, 1800 and 1801.



answer the current problems, RCA believes that the amateur can and is eager to contribute to the perfection of this new art.

Television Problems

Definition... Before television for the general public becomes an actuality, the picture must be sufficiently clear and detailed to hold the public's interest. Briefly, it must compare favorably with good printed illustrations or motion pictures.

Geographic Coverage... Present television systems require exceedingly wide band widths—a channel six megacycles wide. Because space in the radio spectrum is not available at the low frequencies, ultra-high frequencies must be used. At present these are more or less limited to line of sight transmission distances, which means a multiplicity of stations to cover

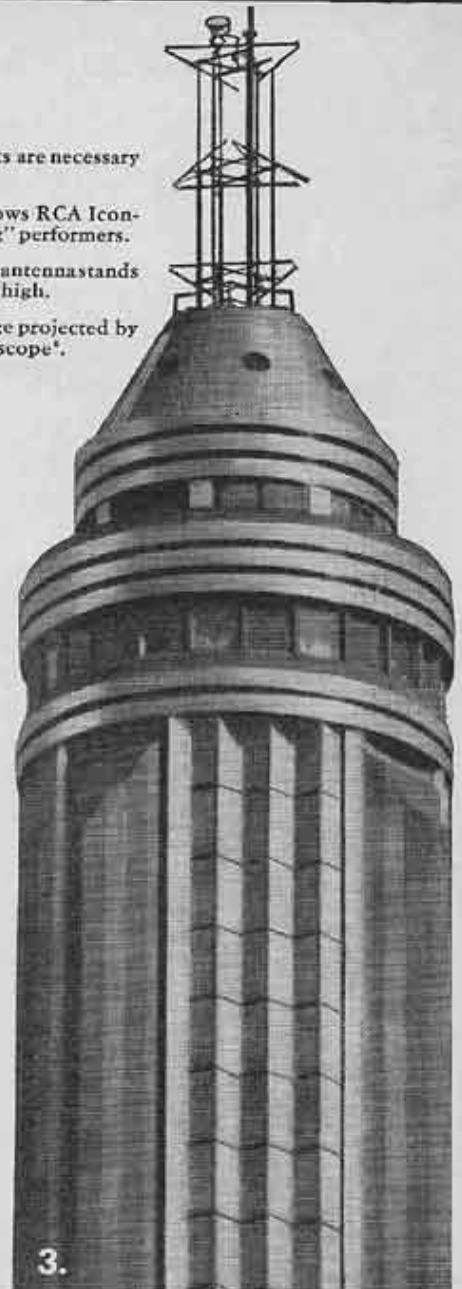
Programs... There is no point in the general public buying television receivers until programs are provided. And there is no point in putting a program on the air until there is an audience. This "cat chasing its tail" situation must be ended before television is ready for the public.

Standardization... Television receivers must be designed to synchronize with the particular transmitter whose programs they receive. Transmissions employing different standards of definition than that for which a receiver is designed cannot be received. Thus no standardization should take place until satisfactory definition is achieved because no great change can be made in either the transmitter or the receiver without obsoleting the other.

THE DEVELOPMENT OF TELEVISION

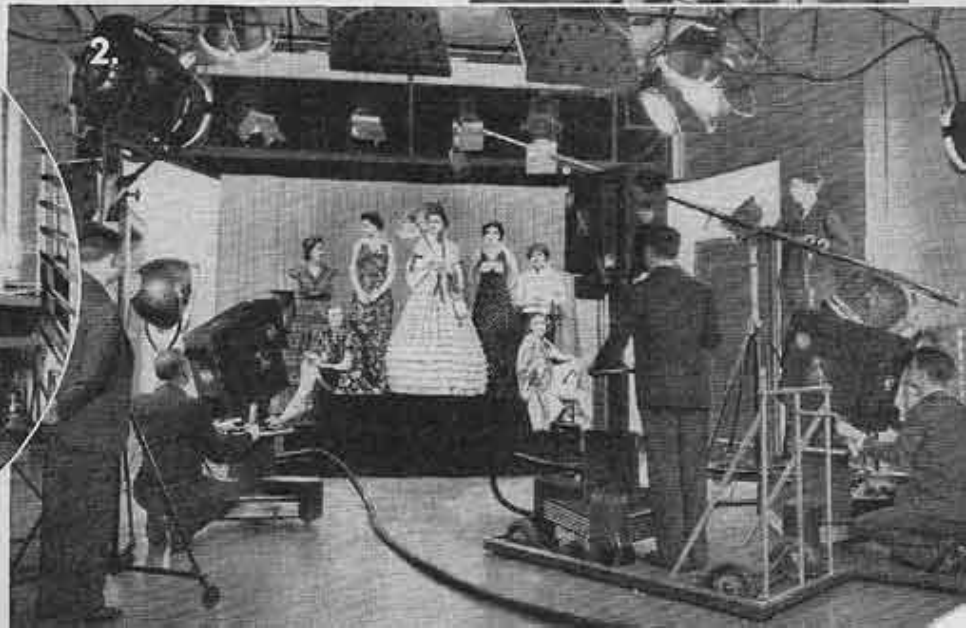


1. Make-up experts are necessary for television.
2. Stage scene shows RCA Iconoscope "eyeing" performers.
3. NBC television antennastands over 1,250 feet high.
4. Television image projected by new RCA Kinescope.



Present Status of Television

RCA's field tests in New York area have been well publicized. Other investigators are conducting experimental transmissions in several parts of the country. However, there may be lack of standardization between these transmissions so that receivers suitable for one system may be unsuited for others. No regular program service is being offered since stations are frequently off the air redesigning and rebuilding their equipment. These constant changes in transmitters during the field test work may make receivers designed for receiving experimental transmissions obsolete—or otherwise may require corresponding changes in receivers.





In Radio and Television it's "RCA ALL THE WAY!"

RCA will continue field experiments in the New York area. These experiments look toward the solution of many and varied problems, such as a satisfactory standardization of definition, suitable transmitter and receiver designs, and acceptable program technique.

RCA has designed and is manufacturing a television system for the Columbia Broadcasting System. CBS will also conduct field experiments with a view of having adequate experience when television is ready for the general public.

What this Means to the Amateur

As television gradually steps out of the laboratory... as the number of experimental stations on the air increases... the radio amateur has the opportunity to experiment with an entirely new kind of apparatus. Even more important, RCA believes that the radio amateur now has an opportunity

to contribute valuable technique to an art which has been hailed as one of the greatest cultural forces ever created for mankind's use.

What the amateur's contribution can or will be no one knows, any more than the early television experimenters could predict current technique. However, using the past to predict the future, RCA believes the amateur's contribution will be considerable.

To enable the amateur to begin television experiments, RCA announces

RCA-1800 and RCA-1801

two Kinescopes* for television reception. Full technical information will be sent upon request. We invite those of you who are located in areas where television experimental transmissions are in progress to try your hand at this fascinating art.

RCA-1800 Kinescope* \$60.00
RCA-1801 Kinescope* \$40.00

A deflecting yoke for the operation of either of these tubes is also available.

**Registered Trade Names of RCA Manufacturing Co., Inc.*



for Amateur Radio and Television

AMATEUR RADIO AND TELEVISION SECTION

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