March of Radio

Colored Television on Standard Receiver with New Disc

A *standard* television receiver was made to pick up colored television images in a demonstration by Dr. E. F. W. Alexanderson to members of the National Television Systems Committee and George H. Payne, member of the F.C.C. The picture shows Dr. Alexanderson and Mr. Payne looking at the receiver.

The demonstration was staged at Dr. Alexanderson's home, where he had installed a *two-color* 24-inch revolving disk about a foot in front of the picture end of the cathode ray tube of his standard type receiver. As this whirled at 1,800 revolutions per minute, its transparent field of *orange-red* and *greenish-blue* reproduced the studio program in realistic colors. To do this, Dr. Alexanderson explained, a similar colored disk revolved before the iconoscope pick-up tube of the transmitter. Other than the two disks, everything was the same as with black-and-white television at *both* studio and receiver.

Dr. E. F. W. Alexanderson and George H. Payne, F.C.C. member, inspect the new two-color filter which converts black and white receiver to reproduce colored television images.

"In our early experiments we tried both two- and three-color disks," Dr. Alexanderson said. "With two colors and a speed of 1,800 r.p.m. of the disk, the same color succeeded itself 30 times per second. With three colors, they succeeded each other 20 times per second, producing a color flicker. So that is why we decided upon the two colors for the present. We found it did not detract much from the three-color picture. This gives very good results without flicker, and we feel it is most practical with standard commercial receivers."

The demonstration is still of a developmental nature, and *General Electric has no plans for introducing color to its television programs* for the present.

Prominent among members of the committee which attended the demonstration was Dr. P. C. Goldmark, in charge of television engineering for the Columbia Broadcasting System, which is also interested in adding color to its programs. While in Schenectady the members of the NTSC visited General Electric's television and new FM stations in the Helderbergs and, after the demonstration at Dr. Alexanderson's home, met with G-E scientists for a conference in the company's research laboratory.

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