

## By RADIO & TELEVISION NEWS' WASHINGTON EDITOR

TV, with its color wheels, reflective optics, dichroic mirrors, triple-beam tubes, and field-sequential, line-sequential and dot-sequential red, blue and green systems, transformed Washington and New York into a tense proving ground as the early days of '50 rolled around. With transmitters in the nation's capital and New York City colorcasting on quite an extensive schedule and with specially-built color receivers in strategic locations and under observation by both a technical and man-on-the-street type audience, an all-out polling effort began to race along, viewers being asked to offer opinions which might guide the Commission as they pondered what to do about the blistering problem of color TV.

Activities in the hue quiz centered around Washington during the early days of the trial, with the FCC Commissioners as the pace setters. CBS felt that the gentlemen who will eventually say yes or no to the color idea should have receivers as soon as the test programs went on the air, and thus models were dispatched to six of the officials who were agreeable to the look-in plan: Wayne Coy (chairman of the Commission), Rosel H. Hyde, Robert F. Jones, George E. Sterling, Paul A. Walker, and Edward M. Webster.

Installation in the government expert's homes was followed by a setup of some fifteen models in a building in downtown Washington, where the public could look in on programs coming from WOIC. Admissions to the showings were provided by complimentary tickets available at such points as a cigar counter at the Mayflower Hotel, assistant manager's desk at the Statler Hotel, desk and newsstand at the Willard Hotel, front desk and newsstand at the Carlton Hotel, main floor desk of the Washington Post and the Walker building, where the sets were located, and two stations, WOIC and WTOP. Those attending the public viewings were asked to cite what they thought about the quality, detail, and general picture impression.

In New York, the tests of a more technical nature and conducted in one of the CBS studio buildings, involved a small group of viewers, looking in on 10-inch screen models equipped

with magnifiers providing a 12-inch picture. In Washington, three types of receivers were provided, with 7-inch, 10-inch, and 16-inch basic picture tubes. The 7- and 10-inch images were magnified to 10- and 12-inch sizes, while the 16-inch tube had a mask to reduce the image to about 13 inches and a magnifier to bring the picture back to about 16 inches. The smaller models were featured in the public-viewing arrangements in the Walker building.

The information sought from the New York groups concerned such problems as co-channel interference. With a push-button at the viewer's disposal to vote on the acceptability of the picture as varying degrees of co-channel venetian-blind effects were introduced, CBS hoped to compile a report on station spacing for both color and monochrome allocations. WOR-TV, cooperated in the test, supplying a signal which was converted by CBS into co-channel type of input.

The RCA public tests, which hadn't begun as this column was being prepared, were expected to follow the CBS pattern. Technical tests were, however, under way, with the FCC's Laurel laboratories and the Condon Committee, which is conducting an investigation for the Senate Interstate and Foreign Committee, scheduled to receive direct-viewing 10-inch models.

Commenting on RCA's color experiences, in a report to the FCC, E. W. Engstrom said that from September 18 to December 30, 1949, a total of 409 hours of test operation on the air were provided by WNBW and KG2XCL, the former using standard channel 4 and the latter an experimental frequency in the 523 to 529 mc. band.

The usefulness of the public-poll information, based on the one-system viewing, appeared to be of little long-term value, according to many observers. They declared that unless it becomes possible to view the systems in a comparative way, the expressions offered can mean little. Answers to such important questions as color values and eye comfort cannot be provided very readily by the average person, these experts added.

When the consensus information is compiled, it may contain the testimony of one viewer who didn't have a CBS model, but rather one that was built in a shop at home. Forrest W. Killy of Roselle, N. J., reported the color pickup news, declaring that he was able to tune in on the colorcasts by making some minor changes in his set. He accomplished this, he said, by first installing a switch to control the horizontal oscillator of his model. Turning this switch on reduced the number of lines in the picture from 525, the black and white standard, to 405, used in color work. Then he took some cardboard, and sheets of red. green and blue cellophane, and constructed a pie-shaped disc about 12 inches in diameter, with alternate layers of the red, green and blue cellophane. The disc was hooked up to a phono motor, whose speed was increased to provide color resolution. The wheel was then placed in front of the picture tube, which he claims provided good color pictures.

Although no official opinions on the color tests were available from FCC quarters, one member of the Commission did reveal in quite an explicit manner just where he stood on the issues. From color TV's staunchest supporter, Commissioner Robert F. Jones, came the expressions, and there were many, appearing before a luncheon meeting of the American Marketing Association at the Hotel Commodore in New York City, the Commissioner fired away at industry, accusing them of delaying color TV. He said that too many manufacturers had spent little or nothing on color research of their own or field testing of systems proposed by others.

"Instead of offering us the results of field tests," he went on, "we are offered new forms of advisory committees, committees which are but a part of a general scheme which frequently reminds me of the interlocking directorates the public utilities used in the heyday of that industry."

The Commissioner pointed out that in 1941, the National Television Systems Committee showed great interest in color, suggesting that the art should be encouraged and field tested at once. Unfortunately, he added, the war intervened with the steps that were to be taken in advancing color. But since the war's end, the FCC official continued, there has been ample opportunity to continue in the enthusiastic spirit shown eight years ago.

The Commissioner also directed his anger at industry in a letter to Paramount Television Productions' president, Paul Raibourn, declaring that the prexy had displayed a "debonaire" attitude toward the art and a "lack of work or at least enthusiasm" for the color systems. The letter was in reply to one from Raibourn which had commented on Jones' questioning during the hearings concerning the absence of the motion-picture executive. The prexy indicated that he would be very pleased to appear and offer his opinions, and had not appeared earlier since he had no new engineering data to offer. The Commissioner noted in his letter that he hoped that when Raibourn appeared he would not . . . "join the parade" of the many who oppose . . . "anyone who dares to have a different view than the vested interests."