

THE VIDEO REPORTER

by Samuel Kaufman

WITH wars raging in several parts of the globe and with huge defensive measures being taken in the U.S.A., these are times to rally around the colors and that's just what every true American is doing.

And, in recent weeks, even television rallied 'round the colors.

When CBS, after an extended period of silence on its video activities, suddenly came forth with a color television system, there was quite a furor in the industry. "Would black-and-white images be shelved?" was a query on every participant's tongue.

CBS went to town in a big way in revealing the achievements of its chief television engineer, Dr. Peter C. Goldmark. The first demonstration given privately to FCC Chairman James Lawrence Fly got an exceptionally favorable "press" but despite the high-pressure publicity technique of issuing "quotes" from prominent observers, some succeeding demonstrations didn't quite prove that the CBS system was a thing that would replace black-and-white.

It is true that color images are preferred to black-and-white. But the present simplicity of the latter as compared with the mechanical complications of Dr. Goldmark's 343-line color system still gives it an edge in public preferences.

Getting images as natural as possible is a goal of all television engineers. And putting the pictures in natural colors is a step ahead. But consideration must be given the fact that the potential look-and-listening audience, after being accustomed to black-and-white motion pictures, has come to regard the two-tone images as "natural."

A return to the revolving disk—this time in conjunction with a cathode ray tube—forms the basis of Dr. Goldmark's method. Similar disks, synchronized, are used at both the transmitter and receiver. Blue, red and



Dr. Goldmark shows his color video.

green filters on each disk serve to transmit and receive the corresponding color components of the subject so rapidly that the received image has a natural appearance.

The placing of a whirling disk before the cathode-ray tube of the home receiver cannot be ardently welcomed by those video enthusiasts who hailed the dropping of the old scanning disk in favor of the kinescope. But a big point in favor of Dr. Goldmark's system is that he can achieve color reception within the limits of existing television.

The demonstrations were limited to pickups of color movies. Dr. Goldmark said that there would be a bit of delay until a pickup camera for "live" telecasts in color would be possible. He said the film pickup was actually the more difficult of the two and that's the one he completed first. However true this is, the fact remains that the demonstration would have had much more of a dramatic wallop if live color pickups were shown.

(Continued on page 65)

Video Reporter

(Continued from page 38)

Demonstrations of color television are not too new. But commercializing color methods will be a new step—and a great stride at that. But that hasn't been done yet. However, CBS executives made not-too-definite references to January, 1941 as a possible starting date for a regular color program service.

Dr. Herbert E. Ives, of the Bell Labs, demonstrated color television as far back as 1929 with a fifty-line image produced by a three-color filter arrangement. His system involved optical blending of separate signals transmitted for each primary color.

Most enthusiastic comment on Dr. Goldmark's color system came from Gerald Cock, former BBC television director, now serving as North American representative for the British broadcasting monopoly.

"It is a miracle!" he said.

Much regret was expressed over the necessity to suspend television program service in the London area as an emergency war measure. Yet, we can't help but wonder whether or not television is playing an important technical role in military and naval operations.