

# ANSWER TO A QUESTION

## Summary of the Present Status of Color TV

By JACK GOULD

**W**HENEVER there is a lull in the world of broadcasting it is almost certain that someone will ask about color television. Senator Edwin C. Johnson, Democrat of Colorado, is the latest gentleman to do the honors by hinting darkly that "powerful interests" are deliberately trying to delay the advent of color TV.

Senator Johnson did not identify the "powerful interests" but by inference made it pretty clear that he meant the major set manufacturers. In asking for a Senatorial investigation of color TV he said the Federal Communications Commission, the networks and the manufacturers should be required to answer these questions:

"Why isn't color television here? Is this delay in manufacturing color television receivers deliberate? Are the standards adopted by the commission unsound? If so, in what manner? Have new standards been developed? If so, why are they not submitted to the F. C. C.?"

Before going to the extreme of suggesting some conspiratorial wrongdoing, it is unfortunate that Senator Johnson did not do a modicum of reportorial legwork because he would have found his answers quite readily. And they do not square at all with his off-hand conclusions.

### Useful Service

But the Senator has performed a useful service in raising the subject at a time when the future of color television finally seems to be nearing clarification. The best evidence of this is in the answers to the questions which the Senator himself has asked.

The basic reason for the lack of color television now lies in the practical shortcomings of the Columbia Broadcasting System's method of transmitting color video, which is the system adopted by the Federal Communications Commission. Nominally, the C. B. S. standards are operative as of the moment.

The fatal drawback to the C. B. S. system is that it is virtually impossible to introduce because it is "incompatible" with present TV. When C. B. S. puts on a color program, the owner of a black-and-white set sees just a lot of jiggly lines. To make a picture in black and white, the set owner must buy an adapter. Not many people will want to spend money just to obtain in a different way what they have now.

The problem is even more elemental on the programming end. Who is going to spend the money to put on a color show, if it means the loss of virtually all of the existing audience?

As both an economic and technical necessity, it long has been abundantly clear that an alternative system of color transmission would take the place of the C. B. S. method.

### New Color Method

Initial work on a system that would permit introducing color TV without interruption of existing black-and-white service had been done by the Radio Corporation of America. But now R. C. A. and virtually all major manufacturers are working on a new color method under the auspices of the National Television System Committee, an industry-wide group.

The N. T. S. C. system is difficult for the layman to understand but in essence it divides the color picture into two signals that are sent into the air.

One signal—called the brightness signal—is identical in all technical essentials to the present black and white transmission. The other signal—called the chromatic signal—carries color information, including the specific hue—whether red, blue or green.

On a current black-and-white receiver the so-called brightness signal by itself makes an existing set work just as it always has and perhaps a little better.

The color receiver, in turn, makes use of both signals to reproduce on a tri-color tube a complete color picture.

The advantage in the system is self-evident. Present sets will give service as long as they would normally and meanwhile color TV can be introduced on new sets. The two services can exist side by side.

### Field Testing

Development of the N. T. S. C. system has involved a fantastic amount of research and experimentation but it is now ready for field testing which is scheduled to begin next week.

It is the matter of field testing which explains why the new standards for the N. T. S. C. system have not yet been submitted to the F. C. C. Without adequate proof under actual operating conditions that the system is efficient, the F. C. C. quite properly would give it short shrift. The engineers of the industry want to make dead sure of their facts before sticking out their necks.

A further indication of the progress and growing competition in the color TV field is the word that the color tube developed by Prof. Ernest O. Lawrence is scheduled for demonstration within a month by the Chromatic Television Laboratories, a subsidiary of Paramount Pictures. It will be shown on the N. T. S. C. system. The Lawrence tube introduces the color elements by a modification of the standard technique of silk screen printing, as opposed to the phos-

## AWARDS

Hollywood's annual "Oscar" winning ceremonies will be broadcast by television and radio over the N. B. C. networks on Thursday evening from 10:30 to midnight. The main ceremonies honoring the best motion picture performances will be held in the R. K. O. Pantages Theatre, with Bob Hope as master of ceremonies.

A New York ceremony at the International Theatre, an innovation this year, also will be broadcast. Award contenders visiting here have been invited to participate in the local ceremony.

phor "dots" in the R. C. A. tube. When the field testing is completed in two or three weeks and assuming "bugs" in the system are ironed out—preliminary tests are said to be highly impressive though there is rumored to be still some instability in the colors—the new system will be submitted to the F. C. C.

Before there can be approval by the F. C. C., however, there is an extensive administrative ritual to be followed. Official demonstrations must be made and exhaustive inquiry conducted, a process which probably would consume additional months. After all, the F. C. C. will be in the embarrassing position of being asked to reverse its previous judgment on color TV. Certainly, the governmental body will not want to make a second mistake.

In his concern for the advancement of color TV, Senator Johnson always has expressed alarm that the manufacturers want to swamp the market with black-and-white television receivers and then resell the market all over again with color TV receivers.

This theory, which conveniently minimizes the very genuine technical problems involved in color TV, also overlooks the fact that the Model T came before the Cadillac. Already there is a heavy trade-in of old TV sets for new models and this trend is bound to continue and will assure the introduction of color. In the meantime good value will have been received from sets already sold and their usefulness for many additional years will not be impaired.

At various times during television's history the F. C. C. and some Senators have tried to second-guess the overwhelming bulk of engineering opinion in the industry, and so far have usually come off second best. Now the development of color TV seems to be following a practical and a logical course and doing so as fast as might be expected. Senator Johnson will do no harm in keeping the industry on its toes, but it seems the sound course now is to wait the little longer necessary for a workable color TV system. Certainly, there have been enough false alarms on the subject.