

WHAT Television MEANS TO YOU

by DOC SCHNURMACHER



Gilbert Seldes, who says we will have television in N. Y. by 1939.

GILBERT SELDES* is the sort of a chap with whom one can get directly to the point without making any bones about it. I told him that the readers of RADIO NEWS wanted to know what television would mean to them as he saw things from where he sat. He was perfectly willing to talk frankly, without a slide rule in his hand, a mess of kilocycles in his voice or any fanfare of trumpets for the much publicized medium.

[*Several months ago, Gilbert Seldes, well known journalist, joined the staff of the Columbia Broadcasting System as "Director of Television Programs."—Ed.]

I suggested to him that as a typical radio listener with a moderately priced set at home, he tell me what I might expect of television; what the millions of dollars' worth of experiments in television meant in terms of my own radio enjoyment. This is what Mr. Seldes had to say:

"If you've got a radio receiving set in your home today, you'll probably be using it for quite a while.

"Television isn't coming in overnight. When it does come, it is going to be a gradual affair. As a matter of fact, I understand that there are just about a hundred experimental sets in the country today in spite of all that you hear about the imminence of television.

"When televised programs begin to take regularly to the air, the first home sets will be used by people who live in the larger cities. Since present television broadcast experiments in ultra short wave channels have demonstrated that clear reception is attainable only as far as the visual horizon—say, up to about 40 miles in our CBS broadcasts from the tower of the Chrysler Building, it will be understood that the first users of the sets will be in such cities as New York and Chicago. From there on

down to cities with a population of 100,000 or more, only about 5% of the country will be able to see television at first. That is, of course, unless radio engineers develop some sort of a system of booster stations to bring the televised programs to the smaller cities, towns and rural areas.

"Now let's look at the set situation. One radio expert has figured that it would take nearly 15 years to replace all the receiving sets now in use with television sets. That may be so. What is more important to the public at this time, however, is to know that a set which may be bought next week won't be obsolete next year.

"Do you remember 'way back when you had a crystal set to pick up the early radio programs? Well, if you've got that set
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The Chrysler Tower (left) from which television broadcasts will be made. The test tower (inset) will be duplicated there.



One of the CBS 2½-ton television transformers. There are ten of these, each cooled by an extensive free flowing oil system.



Ham Shack

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filaments of the latter are supplied from a separate filament transformer

The high voltage power supply consists of a transformer which delivers 1825 volts a.c. each side of center-tap at 200 mils. However, the voltage, when rectified and filtered, is 1100 volts d.c. The rectifier tubes are Taylor 866-Jr.'s and will give excellent service. The T-40 will only draw about 125 mils when fully loaded and rectifiers will not break down.

The first choke in the two-section filter high power supply is a swinging choke. The second is a filter choke. The filter condensers are both 2 mfd. capacity rated at 1500 volts.

A bleeder of about 20,000 ohms resistance, 150 watts rating, should be connected across the output of this supply.

Since provision is made right in the transmitter to bleed off the voltage for the 6L6 screen, a variable bleeder across the output of the low voltage supply is not needed, and a fixed one is used.

The power outlets are terminated at the rear of the chassis to two sockets; one four prong for low voltage and the five prong for the high voltage.

On the front of the panel may be seen three switches. The purpose of one of these has already been explained. The second one controls the primary of the transformer supplying filament voltage to the T-40. (Both this transformer and the one for the '66-J's filaments are under the chassis.) The third switch controls the primary of the large plate transformer. The location of all parts may be seen from the photographs. In the low-voltage supply the power leads may be cabled. However, this is not advisable in the high power unit and all high tension wires should be left in the open to minimize the possibility of arcing over.

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Television

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somewhere around the house, you'll find that it probably can still pick up a program. But that won't work with a television set. When it becomes obsolete, it will be absolutely finished as far as any use is concerned.

"That is why it is absolutely necessary for the engineers to take all of the bugs out of television before sets are put on the market. And in this respect the government, the manufacturers and the broadcasting systems are standing firmly together to prevent the public from losing money. The television experiments which will continue to go on won't be paid for out of their pockets.

"When television does get out of the experimental stage and starts going into the home, no one can predict how rapidly it will spread. My belief is that it won't be too sudden. When it does start, however, we'll be ready for it from a program angle and that is where my work as director of television programs comes in. And that

brings us to the television program of the future and of what it will consist.

"To begin with, I am absolutely convinced that Americans won't stand for any second rate or amateurish programs simply because they are a novelty. The newness of television will wear off very rapidly and the program offerings will be of the highest calibre consistent with the medium being used.

"I want to make one exception to what I just said about a 'novelty,' however. By this I did not mean novelty as it pertains to seeing the event as it is taking place. That gives a person a terrific kick. It is something like flying—exhilarating!

"Right now all of us are preparing to make it good when it does come. We haven't been premature here in America as they have been in England where they have a couple of thousand sets in operation and are referring to television as a 'British Art.'

"They have the sets and they still have the 'bugs.' When America starts buying television sets for its homes, it will be able to do so with the knowledge that the 'bugs' which give our cousins across the big pond headaches have been ironed out as far as we are concerned."

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Hidden Treasure

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associates were engaged to chart the intricate network, locating every branch and lateral connection.

The versatile instrument also aids in locating "go-devils," current-borne devices sent through sewers and pipelines to clean them. A metaloscope, fitted into a torpedo-shaped watertight case, is attached to the go-devil and follows it until halted by an obstruction. With the aid of a second instrument the pipeline can be followed from above until a telltale buzz spots the halted go-devil and shows where to dig up the pipe.

Since waves of the frequencies emitted by the metaloscope have a relatively short range compared with high frequencies, Fisher believes such low-powered transmitters may aid army aviators in directing formation flying without betraying their signals to the enemy. Again, since the impulses readily penetrate the ground, they can be utilized to communicate between levels in a mine, and are valuable in rescue work.

Treasure hunters in various parts of the world have used the metaloscope with varied success. Recently an Arizona man with its aid located a buried adobe smelter buried years before by Mexican settlers and containing \$14,000 in gold, silver and copper bullion. Another found \$10,000 worth of currency buried in an old metal bean pot. Still another located \$900 worth of gold and silver coins in an old jug.

Thus does radio and its various applications more and more come into general use, not in the field of entertainment alone, but in industrial and humanistic fields as well.

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