

Radio News

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How Soon TELEVISION?

By The Television Reporter

AGAIN the old question arises! "How soon television?" But this time there seems to be an answer. Spurred on by considerable technical progress at home and public-participating activities abroad, the leading contenders for American television supremacy are on the verge of announcing a definite date for dropping completely the veil of secrecy surrounding many of their current tests and permitting the public at large to look-in as well as listen-in.

One of the biggest strides towards television's early arrival was the CBS surprise announcement that it was already operating a 441-line sight-and-sound station in New York prior to the completion of its more elaborate video transmitter atop the Chrysler Building. This immediately put the Columbia chain on a virtual equal footing with NBC who have been conducting joint experimental high-definition transmissions from the Empire State Building for a considerable time. With these two great radio units vieing for video supremacy in the metropolitan area, New Yorkers stand to gain an early and advanced public service.

NBC and its parent firm—RCA—have always maintained that public television was a long, long way off. However, with the announcement of its exhibitions plans for the New York World's Fair in 1939, it was disclosed that public reception of the NBC video transmissions would be assured by that time. An RCA representative told the writer that sets would definitely be released to the public by that time—and probably before.

Not Yet But Soon!

Just how much before 1939 the sets will be on sale cannot be determined. But the opening of the CBS Chrysler Building station next Spring may bring about the mass pub-

THE race is on! Who will be the first television broadcaster with regular and continuous programs? Who will be the first manufacturer of video-and-sound receivers for popular participation? Will it be Columbia? Will it be NBC? Or will a "dark horse" among the present contenders win the first television honors. Our reporter seems to find activities in the television field working up to a crisis that may soon answer these questions.

lic release of receivers and kits as early as March, 1938. It is believed that the launching of the big CBS video station—which will naturally sharpen the rivalry between that chain and NBC—will be the wedge towards mass receiver sales. And once one of the big manufacturers enters the market—the whole roster of set makers will follow. Each manufacturer is watching the other closely on this point.

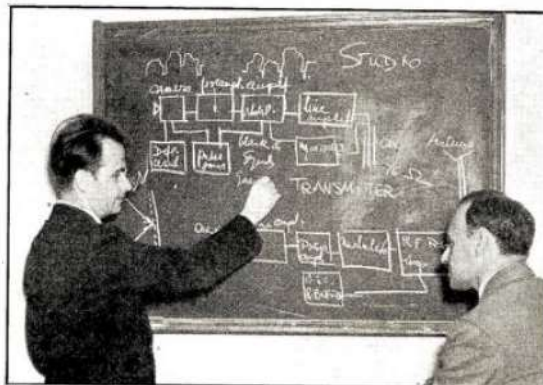
With New York assured of early television service, thoughts are now being turned to other cities. The Philadelphia area is already equipped with three up-to-the-minute television systems. The Philco station in that city, the Farnsworth plant in Wyndmoor and the RCA transmitter in Camden guarantee the Quaker City and its environs a superb television service. Don Lee experiments are continuing in Los Angeles and National Television has applied for a station in New York.

From coast to coast, key cities are watching the pioneer television municipalities with great interest. When the public cry of "Let's go!" is heard, the video art will be a national form of entertainment long before experts have predicted. With the demand for facilities heavy enough, it will be possible to reduce into a short period what now seems a development span of years and years.

The Columbia Broadcasting System's recent announcement of the construction of huge studios in Grand Central Terminal, New York, to supply program material for the powerful high-definition sight-and-sound station previously announced for the nearby Chrysler Building was accompanied by the disclosure that the network had already been operating a 441-line system from its headquarters building at 485 Madison Avenue in the same city. Thus, working quietly, the chain had been participating in

PLANNING A NEW TELEVISION SYSTEM

Dr. Peter C. Goldmark, chief television engineer, and Gilbert Seldes, the new television program director of CBS, study the new layout for W2XAX.





A TELEVISION STAR POSES FOR THE ICONOSCOPE

Here you see Miss Patience, "Pat" for short, posing in NBC's television studio. The man at the right is not holding a watch to the lady's ear; he is using a light meter to measure the amount of illumination on her imperturbable face. But she doesn't mind. She's a wooden model!

laboratory and field experiments simultaneously with other companies who accompanied their efforts with considerable ballyhoo.

Call Letters W2XAX

Call letters of the Madison Avenue transmitter are W2XAX. This same designation will be assigned the Chrysler Building station upon its completion in the spring. The present W2XAX is a home-built job entirely constructed by CBS engineers. The station occupies considerable space on the fifth floor—far below the studio levels—and even many CBS men didn't know of its existence for a time.

CBS, now recognized as a major contender for a leading television rating, is building its new "Look See" transmitter on the seventy-third and seventy-fourth floors of the Chrysler structure. This point will be linked by coaxial cable with the gigantic studio set-up in the Grand Central railroad station across the street. It is understood that RCA equipment will be largely used but that Farnsworth and other makes of apparatus will be represented in certain features and components.

Central Location

Space in the Grand Central structure was acquired both on account of its convenient location in one of the busiest spots of the metropolis and its ready-made adaptability to television usage. The studios are located on the Forty-second street side directly above the station's main waiting room. It is claimed that the main studio will be the largest television broadcasting chamber in the world, measuring 225 feet long, 55 feet wide and 40 feet high. Special rooms for rehearsals, dressing and observation will also be provided. There

will be extensive facilities for visitors to view the operations of the video program plant.

The network recently acquired the services of Gilbert Seldes, newspaper and magazine writer, in the new post of experimental television program director. Seldes is a former movie critic and has given extensive attention to reviews of the drama and other arts. Seldes took up his task last September and is working from the old W2XAX until the new station is in readiness.

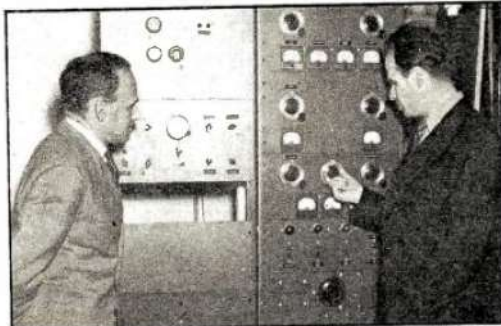
Old System Was a Mechanical One

Columbia has been in the television field experimentally on previous occasions. A mechanical scanning system was on the air for several seasons until about five years ago.

There were indications recently that the network contemplated entering the television set manufacturing or merchandising field but the rumors have now been denied. The reports were based on the fact that none of the receiving sets (with one RCA exception) in the CBS building were of established American

LEARNING

Columbia executives have built and studied television operation and technique through the use of a series of transmitters. This one is installed at 485 Madison Avenue. The new and larger equipment is being built atop the Chrysler Building.



manufacture and the premise that the network had to seek some concrete means of income from television to pay for the expensive equipment and upkeep until the video programs are sponsored and pay their own way—with a lot left over—as in sound broadcasting.

The writer had a chat with Mr. Seldes the day he took over his television program duties and was told that all branches of entertainment would be drawn from in the experimental sight-and-sound production efforts. Both live and filmed subjects will be employed, this situation being a carry-over from the earlier, but unballyhooed tests that had been going on in previous months.

Increasing Sensitivity

Dr. Peter C. Goldmark, chief television engineer of the network, recently returned from Europe where he made first-hand observations of the foreign television systems.

He declared that of greatest importance to the future of television programs is the progress of engineers in stepping up the light sensitivity of the television camera.

"Developments now under way in England and Germany as well as America," he said, "promise a television camera ten times more sensitive to light than any now in use, thus rendering it even more useful for reproduction than the ordinary photographic camera using modern emulsions."

An obvious advantage of this development, according to Dr. Goldmark, would be to reduce the intensity of studio illumination to a point where heat and glare would no longer handicap the performers. Also, it would make possible a greater depth of focus, enabling actors to freely move about the stage without becoming blurred on the receiving screen. This, in turn, would greatly extend the pick-up possibilities of the camera in conditions where special lighting would be impractical, he explained.

Color Television

He pointed out that scientists are striving to make the television camera reproduce all colors of the spectrum in their original intensities. He reported that, in England, the BBC has already put to practical use a television camera which has been rendered panchromatic to a "fair degree."

Dr. Goldmark complimented BBC on the fine quality of outdoor pickups. He said transmitters mounted on trucks enable the BBC to (Turn to page 361)

prosperity to exporting and cruise business and that has meant more radiops being taken off the beach, more ships put back into commission and more and better happy days. So with a cheerio and 73 . . . ge . . . GY

How Soon Television?

(Continued from page 328)

television events taking place within a 20-mile radius of Alexandra Palace where the transmitter is located. The interesting point of his observations is that such outdoor pickups can be made in any daylight illumination ranging from bright sunshine to a dim foggy day.

The engineer observed that the "high cost" of television receivers was handicapping the new art's status as a popular entertainment medium. During his visit prices ranged from \$300 to \$800. However, within a couple of weeks of his return, British televisions introduced at the London radio show, were selling for \$200 and even lower, with, of course, deluxe models in the higher brackets.

French Television

France, too, was showing television progress, he observed, with transmissions on the old 180-line standard abandoned and Government preparations under way for a 441-line unit atop the Eiffel Tower.

New activities in television have also been reported by NBC and RCA. The most important of the new announcements emanating from Radio City was the statement of Lenox R. Lohr, NBC president, to the effect that outdoor pick-ups would be made experimentally from a mobile television unit—claimed to be the first built in the United States. England and Germany had been using television "vans" for remote sight-and-sound broadcasts for a considerable time.

Outdoor experimentation, according to Lohr, will be another forward step in the television field test program of his company. The mobile station was to be placed in operation during October and should be in frequent use at the time you read this.

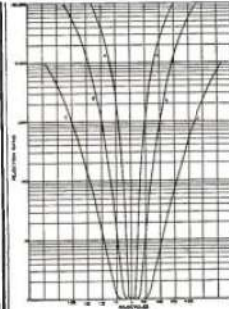
O. B. Hanson, NBC chief engineer, cited presidential inauguration ceremonies, political conventions, football and baseball games and boxing matches as some of the remote events that might be desirable video program fare.

Mobile Pick-ups

The mobile television station consists of two specially constructed motor cars each about the size of a large bus. Picture and sound pick-up equipment will be installed in one, and a video transmitter, operating on a frequency of 177,000 kilocycles, in the other. Ten engineers will be required to operate the two television units. The earlier-designed NBC mobile sound transmitter will be part of the portable television arrangement.

Plans call for sight and sound to be relayed by microwaves to the Empire State Building transmitter of the network for rebroadcasting. The layout of equipment in the trucks will be a veritable counterpart of the Radio City-Empire State television station, although much more compact.

A new use for the pretty-faced dummies seen in fashionable women's shops has been discovered by NBC television engineers. A comely manikin is now used to test lighting and pick-up effects, the job being a bit too tedious for a live subject. They've named her Miss Patience—or "Pat" for short.



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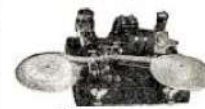
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