

WCFL Is on the Air with Television Programs

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FULFILLING the forecast made in the Spring issue of WCFL Radio Magazine, "The Voice of Farmer-Labor" is now broadcasting television signals. This notable achievement was accomplished many weeks sooner than promised. The first broadcast of human images was conducted during the early part of the evening of June 19. This was quickly followed by another on the afternoon of June 26. And now WCFL is preparing to broadcast motion pictures. In fact, this may be accomplished even before this issue of the magazine reaches its readers. WCFL is the real pioneer in television in this area, and may be depended upon to lead the way to the fullest realization of the advantages of this latest addition to modern conveniences.

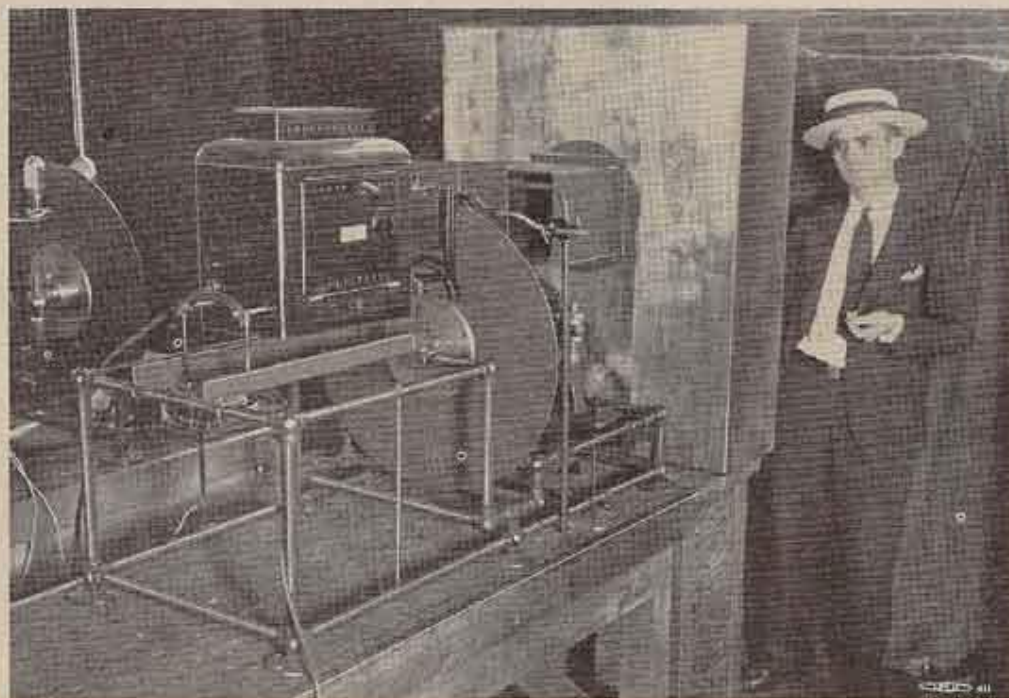
Station WCFL conducts two television broadcasts each week day. From 10:00 to 11:00 a. m. the signals are sent out over a short wave—61.25 meters, using the call letters 9XAA. From 4:00 to 5:00 p. m. the regular WCFL aural wave length of 483.6 meters, or 620 kilocycles, is used. Splendid results have been achieved on both wave lengths. Reports have

been received from fans in Davenport, Ia., Rockford, Ill., Benton Harbor, Mich., and from many points in Indiana, as well as from scores in Chicago. Where the fans are properly equipped to pick up the signals, the pictures come in with remarkable clarity.

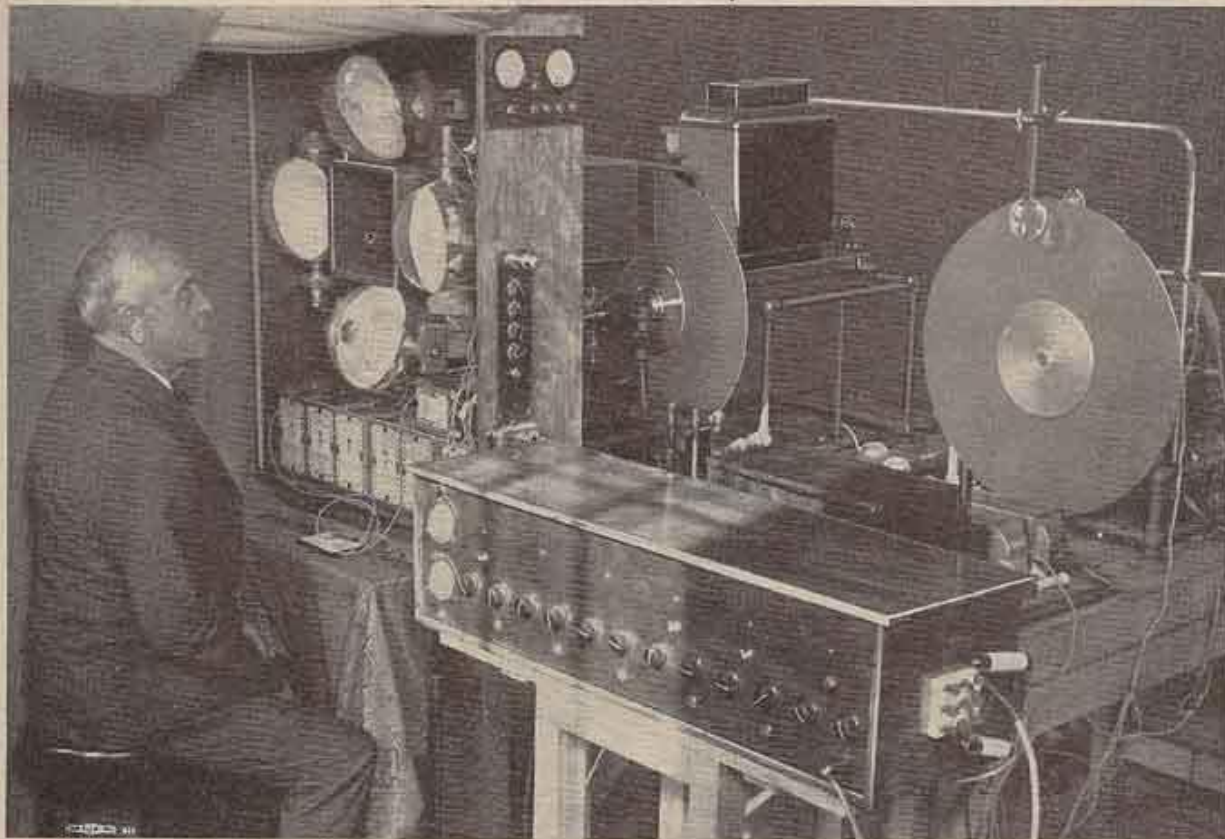
Just how long either or both of these broadcasts will continue—or just when the program will be further expanded—depends, of course, upon sanction of the Federal Radio commission. The initial broadcasts in June were conducted under special one-day permits. Authority to use a short-wave channel for television experimentation for a period of sixty days was received by WCFL on June 28. Permission to use the station's regular wave length for a schedule of television broadcasts was granted on August 24, this permit being for only thirty days. Both permits are, of course, subject to renewal. Additional broadcasts will, no doubt, be sanctioned when public interest seems to warrant.

The WCFL television booth and apparatus are located in the station's workshop and laboratory in the north tower of the Navy pier.

The television broadcast on the evening of June 19 was truly an epochal event. It was the first ever conducted successfully on a wavelength within the crowded sphere of frequencies reserved for standard radio programs. It was also the first television broadcast from a station in the Chicago area. Broadcasts



The scanning device of WCFL's television equipment is extremely compact, as shown in the accompanying picture. In the foreground is the projector lamp with the scanning disc immediately in front of the lens. The subject to be televised stands behind the wooden shield, the light being projected upon him through an aperture. In this instance, W. C. Conden, assistant manager of the Farmers Union Live Stock Commission company, stands in the booth. However, Mr. Conden is placed a bit out of line, so that our readers can recognize him.



Here is television at a glance. Light, projected through small holes in the sending scanning disc shines through the square apertures in the shield and onto the face of E. N. Nockels, secretary of Chicago Federation of Labor and manager of WCFL. Reflected into the four photo-electric cells, the rays set up current variations. Strengthened by the amplifier in the foreground, this current illumines the kino lamp, protruding just above the receiving disc on the right. If the apparatus were in operation, Mr. Nockels' image would appear behind the lens suspended in front of the disc.

previously made from eastern stations had all been on short waves. Many engineers had contended that the broadcasting of television signals requires such a wide band that it cannot be accomplished on the higher channels without causing serious interference to radio stations using adjacent bands. They insisted that there is not room enough for television broadcasts in the realm of higher wavelengths. However, WCFL had no difficulty in confining its television signals within in range of 500 cycles. In fact, the television signals could be tuned out more sharply than either vocal or instrumental broadcasts.

To E. N. Nockels, secretary of the Chicago Federation of Labor and manager of Station WCFL, goes the honor of being the first person to be televised on a standard radio wavelength. Televised—that's a new word for your vocabulary. Mr. Nockels was the first subject placed in the booth on the evening of June 19. For a considerable period his image was flashed out over the ether.

The signals were successfully picked up by a television receiving set located in the Electricians hall, 47 North Ogden avenue, Chicago, several miles west of the sending station. A little group of television experimenters and reporters gathered around the receiving set and each in turn was able to dis-

tinguish the likeness of Mr. Nockels and to note his facial movements. Reports were also received from several other television experimenters who were able to pick up the signals.

Later in the evening John Fitzpatrick, president of the Chicago Federation of Labor, visited the WCFL laboratory and was promptly ushered into the television booth. He was followed by his son, John, Jr. Several other people were also televised during the evening, including a woman radio experimenter who picked up the television signals on her radio receiver and set out immediately for the WCFL laboratory, arriving there before the hour of broadcasting had been concluded.

Two periods of television broadcasting were conducted on the afternoon of June 26, the first from 4:40 to 5:15 and the second from 5:40 to 6:10. A unique feature of this experiment was that the signals were picked up by a receiving set placed in a giant airplane which toured the skies over the western part of Chicago. Thus WCFL set another pioneering record by being the first television broadcaster to be picked up by an airplane.

The television broadcasts on June 26 were conducted as a compliment to the Kiwanis club of Forest

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Park, one of the western suburbs of Chicago. On that date members of the club held a meeting while touring over Chicago in two giant airplanes—the first meeting of that kind ever held up in the air. The demonstration was staged by the Kiwanians as a protest against the government abandoning the Mayfield flying field as a government airport.

When a regular schedule of short-wave broadcasts was commenced only images of the frequency chart were used for a considerable time, due to the fact that only a few amateurs were then equipped to receive television signals and even these few were having difficulty in getting reasonably clear reception.

The frequency chart is a placard with alternate black and white stripes or with checkered design, which is broadcast at the beginning of a television schedule in order to enable the receivers to tune in their sets. It is simple enough to tune a radio set until the squeals and howls give way to pleasanter sounds but it is more difficult to “tune in” television signals unless the image being broadcast is of simple design.

Many reports have been received from amateurs who have been able to pick up the WCFL television broadcasts, and this number, of course, is increasing rapidly. Inquiries also are flooding both the station and WCFL Radio Magazine office. There is a widespread and increasing interest in television. WCFL is doing everything possible to foster this interest.