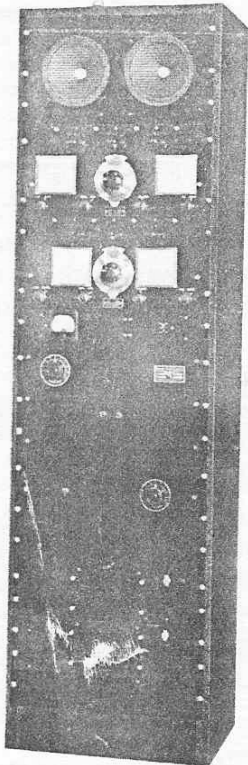


● 202-A Transmitter

The Iowa State Police transmitter installations are of particular interest as an example of the most modern type of police radio equipment. The 202A Transmitters are arranged to work at a power of either 400 or 500 watts in connection with vertical radiators on 1682 kc. Tower matching units are located at the base of the radiators and energy is carried from the transmitter to the matching

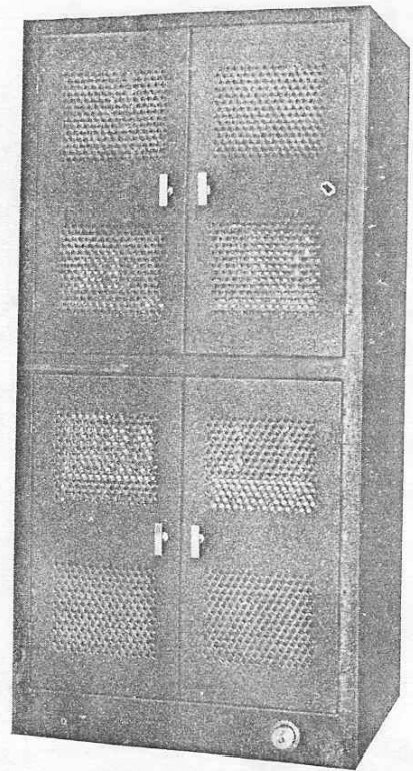
broadcast. When the operator's key is closed the receivers are disconnected and the transmitter is fully modulated with a 500 cycle tone for a period of five seconds. When the tone modulation ceases the speech circuit is automatically connected and a pilot light indicates to the operator that the broadcast may be started. Electronic timing is used to control the duration of the warning signal and an adjustment is provided so that the duration may be varied between one-half second and thirty seconds. The frequency of the warning tone may also be set at any value between 250 and 2500 cycles so that each station may be given a distinguishing note if desired.

The two receivers on the control bay are normally adjusted to receive broadcasts from other stations in the State network and from police transmitters in certain cities throughout the state. At the present time Collins 150C transmitters are in service at police headquarters in Cedar Rapids and Davenport. It is contemplated that other cities in the state will make installations in the future and co-ordinate their activities with the state law enforcement system by radio.

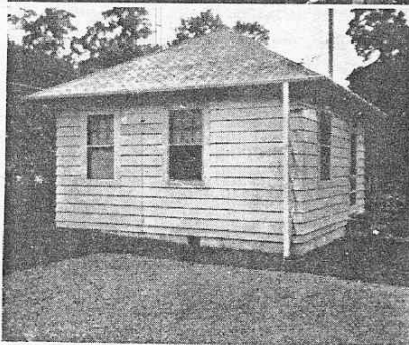
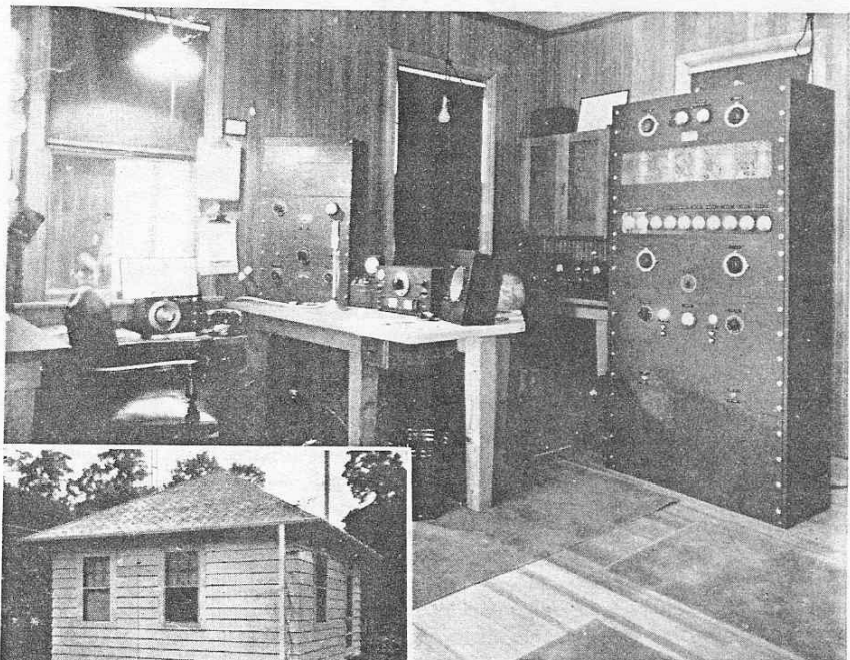


unit through a new type of concentric transmission line. The convenience with which this transmission line can be installed permits the radiating system to be located in the most desirable position and permits the transmitting equipment to be installed in existing office space assigned for this purpose.

A control bay of the type illustrated above is installed with each transmitter. In addition to the 7C speech amplifier the control bay contains a type 8C Signal Frequency Oscillator, modulation indicators, control keys and two communication-type Superheterodyne receivers with their associated power supplies and speakers. The signal frequency oscillator is arranged to transmit a warning tone automatically before each



REAR VIEW—Closed



W2BSD, New Rochelle, New York. The first radiophone station of Mr. Cannon, the owner, was built in 1916 and was operated at that time by Cannon and DeForest to broadcast the first scheduled programs in this country.

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