ing up any one of ten different remote lines and feeding them through four equalizer and amplifier circuits into the distributing switching which feeds any one of the ten studio inputs. The output of four rows of incoming line selector switches feeds through equalizers and amplifiers into four rows of distributing switches. If the remote that is on row 1 of the line selector switches is to be fed to Studio A, the A button on row 1 of the distributing switches is pushed, and that remote then feeds into the remote switches on "A" 's 76-B consolette. Likewise any remote on row 2, 3, or 4 may be sent to any of the studios up to Studio E, or master switching input from F to

K. This will allow the operator to have 10 remote lines normaled into these switches, and operate for a long period without going to the rack to change any remote patches.

The monitor selector switch shown on this panel selects the four channel monitor circuits and feeds into the control room loud-speaker directly without the use of the dial system. This will allow the master control room to monitor any of his programs in case of a failure in the dial system. Mounted on the rim of the desk are a number of jacks for headphone monitoring of the four channels, dial system, and Studio E. Jacks are also provided here for the handset connection to the

ringdown panel.

The ringdowns are shown on the right-hand panel. There are 24 standard ringdown circuits, although they are broken up four ways, one group taking care of the 10 studio positions, one directly to the manager's office, one to the clients' booth, one to NBC, and the remaining for remote lines.

Tie lines are provided between the master racks and the master desk, as well as between individual racks. This allows a very flexible system of patching. Lights are provided on these tie lines to indicate at either end when one is in use.

Fig. 22 is a photograph of the WLS master control room installation.

## DELUXE RECORDERS AT WFMJ

F. A. DIERINGER, Chief Engineer

HE WFMJ Recording Studio is equipped with two RCA DeLuxe Recorders. Diameter equalizers and an orthocoustic filter are also provided as well as a suction pump for shaving removal. A 94-D amplifier is used to feed the high-fidelity cutter heads.

Recordings of excellent quality and extremely low noise level are made regularly. The various mechanical features make possible a professional type recording of any pitch, with inside or outside start and at either of the two standard speeds.

We have used the recordings

for delayed network broadcasts such as the British Refugee Children telephone conversations with their parents in England, the foreign policy program, Between the Bookends and various special programs which could not have been broadcast by us because of previous commitments had it not been for the RCA recorders. We have also been able to arrange more convenient work schedules for those performers who conduct seven-day-a-week feature programs, thus permitting a normal work week by recording some programs in advance.

Many enthusiastic comments have been received on the excellent recorded quality and low noise level. Also our operating costs were reduced due to a big decrease in stylus breakage and a consequent reduction in disc wastage. The precision lowering device provided on the DeLuxe recorder for lowering the stylus to the disc has accounted largely for this improvement.

The ease and speed with which these recorders can be adjusted to any standard pitch and turntable speed is valuable to us since we have been called on to make quite a variety of recordings.

