

10 kw FM Transmitter

a full measure of music, from hill-billy to highbrow, from a massive library of recordings; and many local-talent and community public service programs which effect a close integration of the station with the people of the community.

The new FM transmitter has greatly enlarged the station's opportunities by providing better service throughout the listening area. Twenty-three percent of the persons covered in a survey, made early in 1948 in fourteen cities and towns within a 60 mile radius of the station, were FM listeners. Not only this audience, but regular listeners from as far as 250 miles away, have responded to the new service with satisfying enthusiasm. Veteran broadcaster Frank O. Myers, general manager of KCMC and KCMC-FM, says: "The service we are able to give with our 10 kw FM transmitter has exceeded all our expectations. This new equipment is certainly carrying the ball for us."



In modern studios shared by KCMC and KCMC-FM, audience watches program production through windows installed opposite control room.



New FM transmitter at WJR is installed in master control room for ease of operation.

WJR-FM Detroit, Michigan

Up above the hustle and bustle of Detroit, on the 21st floor of the Fisher Building, WJR-FM serves the millions in the metropolitan area of the automobile city, as well as the rich farming region of rural Michigan surrounding the city—and a substantial area across the border in Canada. The antenna is on top of the building, 479 feet above average elevation in the service area. The Western Electric 506B-2 transmitter is installed between the Master Control Room and the workshop, adjoining the elaborate studios shared by WJR and WJR-FM. Here is a fine example of the big-city-office-building installation of 10 kw FM, with its convenience in operation and its solid coverage of a great center of population.

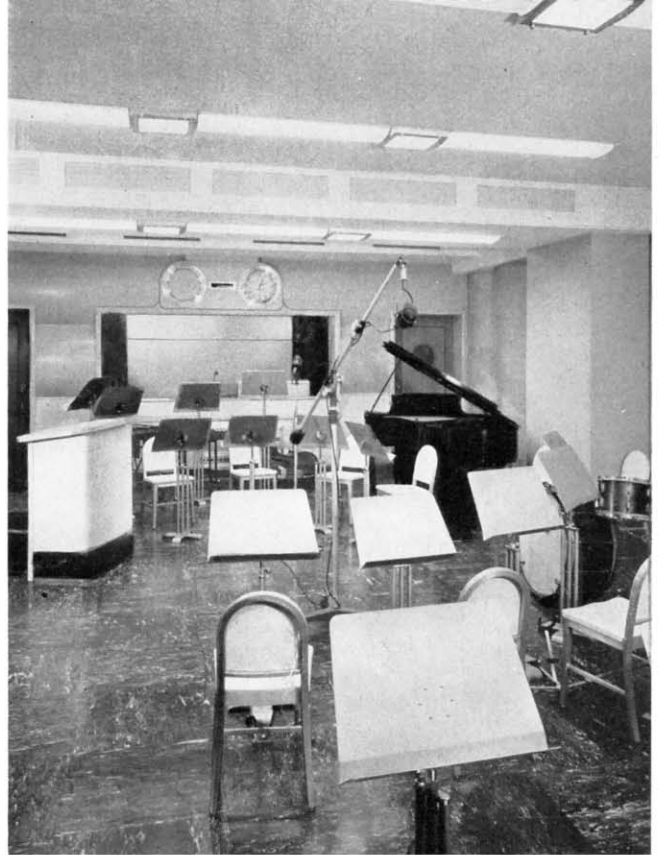
WJR, the "Goodwill Station", one of the leading stations in the Middle West since its founding in 1925, brings the programs of the Columbia Broadcasting System to the Detroit area, as well as a full complement of programs originated in its own studios. One important "studio" is a mobile unit, mounted in a bus, which is used to cover the rural areas for such events as the state sheep-shearing contest, or an important auction at the annual State Farmers' Week. The station went to 50,000 watts on AM in 1935, with a Western Electric 306B transmitter.

The 10 kw FM transmitter went on the air with regular programs May 30, 1948. Prior to the installation of the FM transmitter, the executive offices of the station were moved to the 28th floor to make room for the new polycylindrically treated studios and control rooms on the 21st floor. Putting the FM transmitter with front in

the Master Control Room and rear in the workshop, as shown in the photographs on these pages has proved highly satisfactory and most convenient in operation, with no trouble of any kind from r-f energy being picked up by the speech input equipment.

Program routing at WJR, with the Master Control unit designed by Technical Supervisor Friedenthal and built of Western Electric components, is a story in itself. Engineer Friedenthal described an earlier installation in the September, 1938 issue of *Pickups*. The Master Control Unit now in use has many additional features, reflecting the growing complexity of the control problem at WJR.

WJR-FM has proved itself a reliable day-and-night performer throughout the 50-mile radius of its primary service area. Enthusiastic listeners' reports testify to the establishment of an effective new voice for the "Goodwill Station".



View of Studio "A" at WJR and WJR-FM, looking toward the control room, shows efficient arrangement and attractive decoration.



At left, G. A. Richards, Chairman of the Board of WJR and WJR-FM, and at right, G. F. Leydorf, Vice President in charge of engineering.

Rear of Western Electric 10 kw FM transmitter at WJR-FM, with a corner of the well-equipped workshop visible at left.

