

KAKE . . . 250W AM

Wichita, Kansas

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KAKE Broadcasting Company, Inc., went on the air in September, 1947, on 1490 KC and later changed frequency to 1240 KC. The entire station installation (right from the purchase of land and leasing of studio space) was completed in less than 60 days. This performance may be attributed not only to construction and preliminary planning, but also to excellent operation of equipment employed.

Transmitter and Antenna

The transmitter plant, which is situated at some distance from the downtown studios, is shown in Figs. 1, 2 and 3. KAKE's tower installation consists of a 340 foot antenna (a half wave for the original frequency of 1490 KC). Also employed is a comparable ground system consisting of 120 radials, 330 feet long. The antenna now figures .43 wavelengths at 1240 KC. The overall antenna system, plus a near maximum soil conductivity for this region, gives KAKE a remarkable signal for a 250 watt station.

KAKE's 250 watt transmitter (RCA Type BTA-250L) is installed adjacent to audio, monitoring and test equipment racks (see Fig. 1). The transmitter desk console is located as shown in the floor plan of Fig. 2 in order to provide a convenient operating arrangement. The station employs a 10 KW stand-by emergency power unit which, incidentally, kept KAKE on the air during a severe storm in 1947 when primary power was interrupted to all stations in the area.

Studio Equipment

KAKE studios, which are located remote from the transmitter plant, are acoustically treated by Johns-Mansville. Studio programs are controlled from a centralized control room in which a control console, mikes and turntables are installed. Also included in the control room are two audio equipment racks, recording amplifiers, recorder, record storage space and an RCA 45 r.p.m. player. In addition, RCA 44-BX and 74-B microphones and stands are employed as standard studio equipment.

FIG. 1. KAKE's 250 W transmitter, RCA Type BTA-250L, is installed next to monitoring, test and audio equipment racks for convenient grouping.



FIG. 2. Floor plan below shows the location of transmitter building components. Note that living quarters are provided.

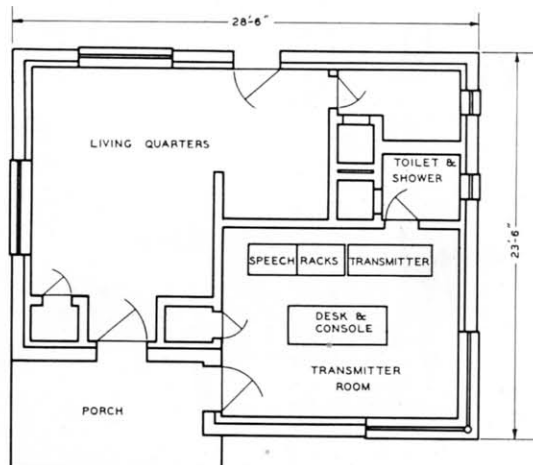


FIG. 3. KAKE's transmitter plant is a one-floor, brick-constructed building occupying a space of only 24' x 29' (approximately). Antenna tower is visible at right.

