WLAK ... 1 KW AM



FIG. 1 (above). The WLAK, 1 KW transmitter is visible from window of central control room. Note that monitoring test and audio racks, as well as studio control consoles are all easily reached.



by WILLIAM P. LEE

Chief Engineer

When WLAK started broadcasting with a power of 100 watts in 1936, the transmitting equipment used was composite. About two years later the power was upped to 250 watts. The station (as was true of many stations then) experienced difficulties during the first years of operation.

The present owner, S. O. Ward, purchased the station in 1942, and immediately began making plans for enlarging its operation and services to Polk County. Florida's fifth market. Even though the war was on, plans were drawn by Donovan Dean, local architect, for enlarged studio and offices. An application was prepared for 1000 watts full time operation, and just as soon as the FCC was ready to accept applications after the close of the war, the application was filed, and equipment ordered, every piece RCA. After a hearing and the usual waiting period, the grant came through for 1000 watts full time, non-directional, on 1430 KC, William P. Lee, chief engineer for the station, drew all plans and installed the new equipment. His ultimate goal set forth by management was-"Put in the best, most versatile announcer-engineer operation you can build, and make it all new-and modern."

Transmitter

The 1 KW RCA transmitter (BTA-1L) is located in a separate transmitter room of the building (see Fig. 1). The transmitter is situated so that it may be seen at all times by the announcer-engineer from his position in the studio control room. The entire 1 KW transmitter occupies an approximate space of only 9 feet by 20 inches. The station has installed a 10 KVA auxiliary power supply that works automatically. The tower is 199 feet high and is fed by an RCA line, and RCA tuning equipment. In order to centralize station control and operation, transmitter monitoring equipment is installed in racks located in the control room (see Fig. 1).

Studio Equipment

Fig. 1 (also see Figs. 2, 3 and 4) shows the announcer-engineer position which

FIG. 2 (at left). This view shows "announcerengineer" position in the central WLAK control room where RCA type 76 consolette and 70-D turntable are conveniently arranged. faces the studio control room window. From this position, the operator has access to both consolettes, both turntables—and as previously mentioned has full view into the transmitter room. Note in Fig. 2, how a special turret was installed between the consolettes. This serves to accommodate essential remote meters, tower indicating lights and city or auxiliary power indicators.

Studio equipment includes the two RCA 76 series consolettes together with a semi-custom built left-hand wing turret (see Fig. 2). The overall arrangement of studio equipment provides extreme flexibility of control and enables the switching of equipment into any desired combination. The large console desk is covered with dark maroon linoleum and trimmed in chrome. The lower portion of the console desk is used to house RCA amplifiers that are mounted on hinges for greater accessibility.

At the rear of the studio control room and behind the announcer-engineer's position, is located the RCA custom-built, dual-recorder console (see Figs. 3 and 4). It is also trimmed in dark red linoleum and chrome to match companion equipment. This arrangement includes two RCA 73-B professional recorders with switching facilities which permit simultaneous or individual recorder operation as desired. Continuous recording without breaks, program monitoring and cueing are possible.

Also visible in Fig. 4 are the three RCA equipment racks which are flush-mounted in one wall of the control room. Frequency and modulation monitors, test equipment, etc., are mounted in these racks which are adjacent to the transmitter room. (All relays are located in the transmitter room.)

The studio equipment in addition to that described above includes an LC-1A duo-cone monitoring loudspeaker, RCA microphones, wall-type monitoring speakers, etc. The general installation and arrangement of equipment at WLAK resulted in a convenient and centralized arrangement in which all essential controls are easily reached.

FIG. 4 (at right). Closeup of corner of WLAK control room showing three RCA equipment racks of monitoring, test and audio equipment at left—and dual recorder at right.

1 KW AM . . . WLAK

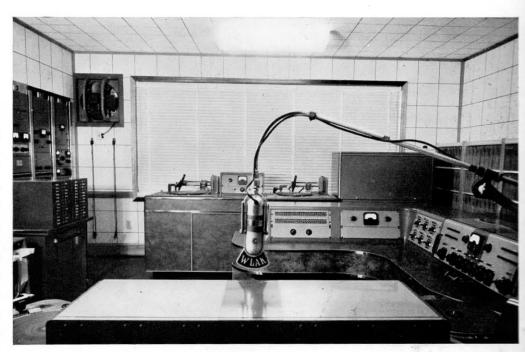


FIG. 3 (above). View from WLAK studio, looking into control room. Visible at rear is the WLAK dual-recorder which employs type 73-B professional unit.

