

# KRDO . . . 250 W AM

Colorado Springs, Colorado

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President and General Manager

The City of Colorado Springs is an ideal place for a 250-watt independent radio station such as KRDO. The population is between sixty and seventy thousand and the city maintains a brisk retail trade—in the neighborhood of seventy million reported during 1948.

Programming features music, news and sports. On the spot coverage of special events by direct lines has included such events as hockey broadcasts from points as far as California and Michigan. It has carried over thirty football broadcasts during the 1948 season.

Because the station engages in so many remote pickups, special remote lines have been permanently installed between the station and the Colorado College, the high school, the city auditorium, the Fine Arts

Center, and several other civic centers and churches. Twenty remote lines to the telephone test board are in use regularly.

In addition to employing the numerous telephone circuits, KRDO has three remote pickup transmitters which are used in broadcasting special events such as Pikes Peak Hill Climb on Labor Day, emergencies such as floods and forest fires, and civic activities such as parades, clean-up drives and dedications.

The KRDO mobile studio (Fig. 5) is the best equipped and finest unit of its type in the state. It carries enough equipment to make it possible to bring the radio audience a word picture of almost any event. The technical equipment, carried by the studio on wheels, consists of a 100-watt transmitter, remote mixing and

pre-amplifiers, a recorder, a public address system, an all-band receiver, and a parabolic microphone. The interior of the unit can accommodate a dozen people. A platform on top of the mobile studio makes a perfect place from which an announcer can describe special events. The mobile unit has already been used near the summit of Pikes Peak at an altitude of 14,000 feet, proving its mobility.

The station has a staff of fifteen, including a general manager, a business manager, two commercial salesmen, three announcers, two full-time and two part-time engineers, two of which act as announcer-engineers, program manager, copy writer, news editor, and receptionist-stenographer.

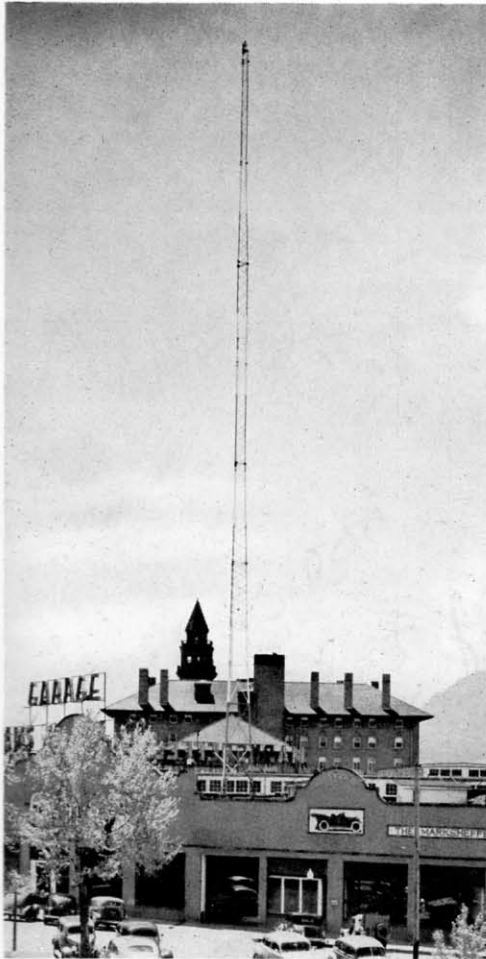


FIG. 1. Tower insulators of the KRDO antenna are located 25 feet above the ground level of a one-story garage.

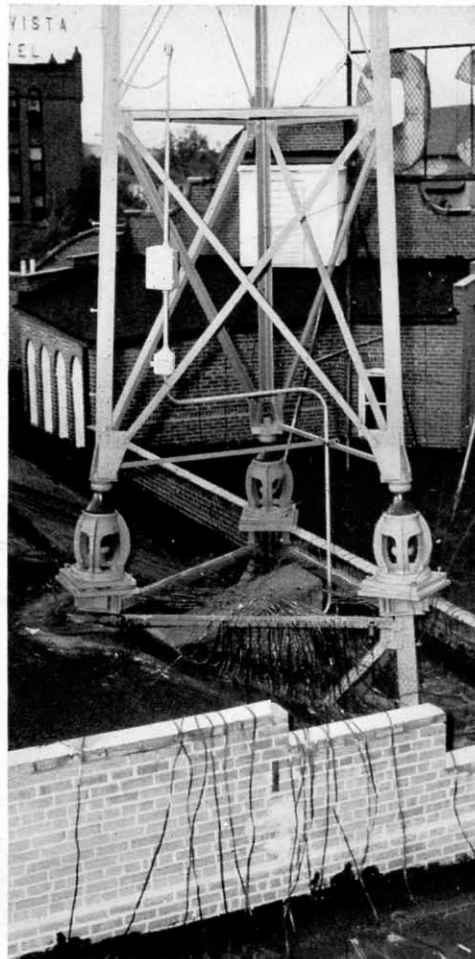


FIG. 2. The ground system includes 25,000 feet of copper ribbon laid out radially as shown. In addition, 5,200 square feet of copper ground is located at the tower base.

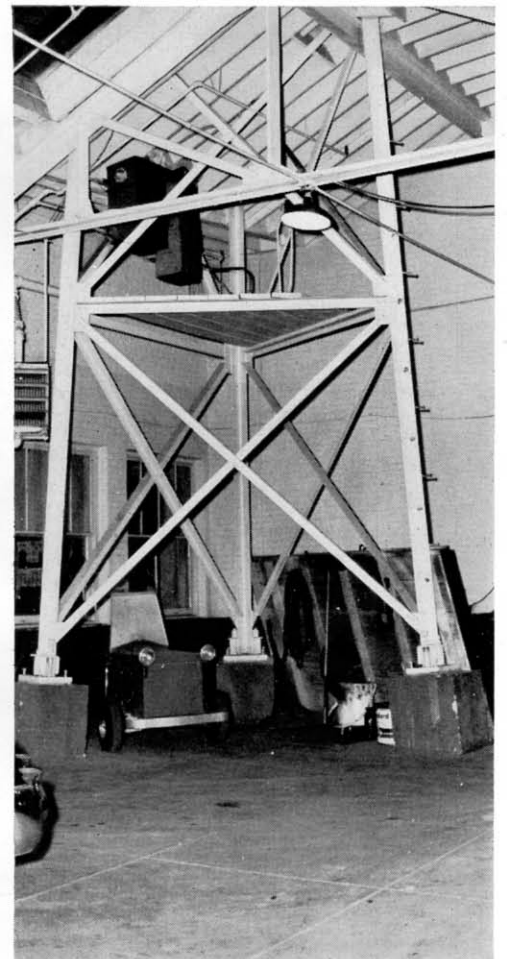


FIG. 3. The base of the KRDO tower is built inside a garage. The tower pylons were sunk eight feet in the ground. The tuning unit and lightning choke are shown at upper left of photo.

The studio equipment consists of a 76-B2 Consolette and three 70-C2 Transcription Turntables with BA-2A Pre-amplifiers. Line equalizers, volume indicators, bridging and matching coils, attenuators, and jack bays are installed in racks for operating convenience. There are three studios grouped around the control room, two of which are used for announcing only, and a third which measures 18 by 33 feet is used for live talent programs.

A 250-watt RCA transmitter, RCA Type BTA-250-L, operating at 1240 kc, provides excellent coverage for Colorado Springs. The monitoring equipment consists of a WF-48A frequency meter and a WM-43A modulation monitor.

Most unique feature of the KRDO installation is its tower construction and counterpoise. The tower is located five hundred feet from the transmitter in the hotel and is fed with 72 ohm concentric cable which is run overhead across the street and suspended from a carrier cable.

The ground system consists of 25,000 feet of three-quarter inch copper ribbon laid out radially every three degrees around the tower. In addition, there are 5200 square feet of copper ground screen at the tower base.

The steel beams supporting the roof are all bonded into the ground system. The base of the KRDO tower is inside the garage building. The tower pylons extend eight feet into the ground. The antenna tuning unit and lightning chokes, located just under the roof, are easily accessible from a large platform. (Fig. 3).



FIG. 5. The KRDO mobile unit is adequately equipped to broadcast almost any event. As shown, the roof serves as vantage point for the announcer. The small "dish" is a parabolic microphone.

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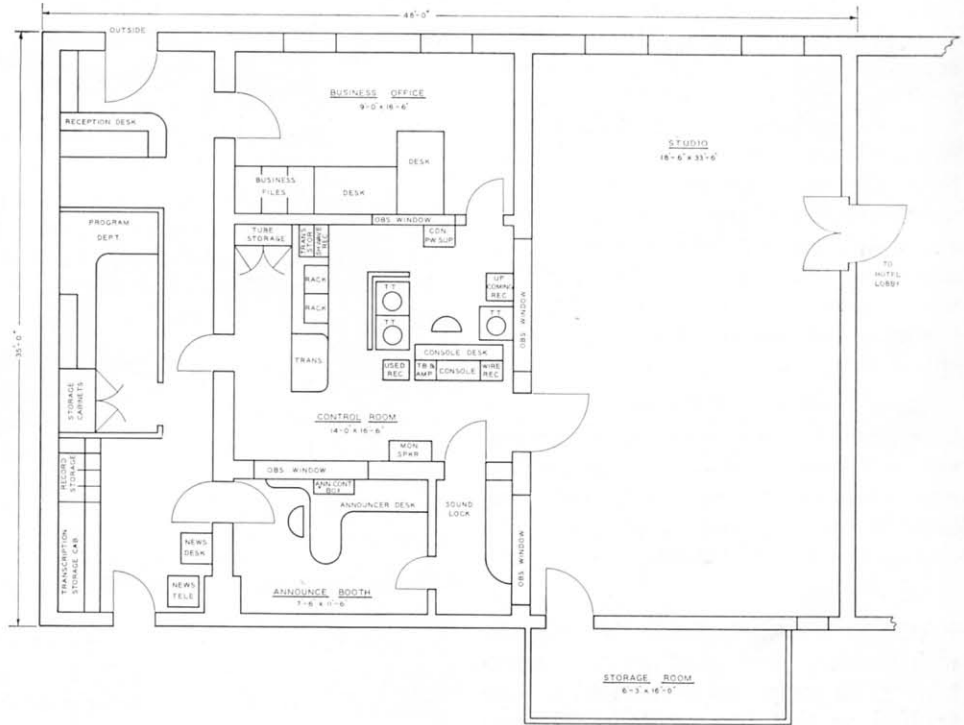


FIG. 4. The floor plan (above) shows the layout of station KRDO including the studios and transmitter located on the ground floor of the Alta Vista Hotel.



FIG. 6. The main control room houses the transmitter and studio equipment which is one hundred percent RCA.