

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: **HR-2123**
Call Sign: **K R A I**

STANDARD BROADCAST STATION LICENSE

MAIN AND AUXILIARY TRANSMITTERS

Subject to the provisions of the Communications Act of 1934, subsequent Acts, and Treaties, and Commission Rules made thereunder, and further subject to conditions set forth in this license, ^{1/} the LICENSEE

NORTHWESTERN COLORADO BROADCASTING CO.

is hereby authorized to use and operate the radio transmitting apparatus hereinafter described for the purpose of broadcasting for the term ending 3 a.m. Local Time

APRIL 1, 1977

The licensee shall use and operate said apparatus only in accordance with the following terms:

1. On a frequency of **550** kHz.
 2. With nominal power of **500** watts nighttime and **5 kilo** watts daytime,
with antenna input power of **540** watts - **directional**
antenna nighttime
and antenna input power of **5 kilo** watts **non** directional
antenna daytime
Hours of operation: **Unlimited time.**
- | | | | |
|---------------------|------------|--------------|---------|
| Common Point | current | 3.21 | amperes |
| | resistance | 52 | ohms |
| Antenna | current | 16.78 | amperes |
| | resistance | 17.75 | ohms |

average hours of sunrise and sunset:
Jan. 7:30am to 5:15pm; Feb. 7:00am to 5:45pm;
Mar. 6:30am to 6:15pm; Apr. 5:30am to 6:45pm;
May 5:00am to 7:15pm; June 4:45am to 7:45pm;
July 4:45am to 7:45pm; Aug. 5:15am to 7:15pm;
Sep. 5:45am to 6:15pm; Oct. 6:15am to 5:30pm;
Nov. 7:00am to 5:00pm; Dec. 7:30am to 4:45pm;

AUXILIARY 1kw DAY:
Antenna current 7.51 amps.
Antenna input power 1kw.

Mountain Standard Time (Non-Advanced)
4. With the station located at: **Craig, Colorado**

5. With the main studio located at:
125 West Victory Way
Craig, Colorado

6. The apparatus herein authorized to be used and operated is located at: North Latitude:
West Longitude: **40° 32' 45"**
On Hwy. 13, approx. 1.2 miles N. of
Craig, Colorado
107 31 52

7. Transmitter(s): **CCA, 5000-D(MAIN)**

(or other transmitter currently listed in the Commission's "Radio Equipment List, Part B, Aural Broadcast Equipment" for the power herein authorized).

8. Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715:

9. Conditions: **1, 3, 12 and 21.**
~~XXXXXXXXXX~~

Transmitters may be operated by remote control from 125 West Victory Way, Craig, Colorado, while using directional antenna.

The Commission reserves the right during said license period of terminating this license or making effective any changes or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

^{1/} This license consists of this page and pages

2 & 3.

FEDERAL
COMMUNICATIONS
COMMISSION



Dated: **APRIL 24, 1974**

File No. BR-2123 Call Letters KRAI Date 4-24-74

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

DA- N

No. and Type of Elements: Two uniform cross-section, guyed, series-excited vertical steel radiators.

Height above Insulators: 312' (62.7°)

Overall Height: 317'

Spacing and Orientation: Spaced 1370' (276°) on a line bearing 121° true.

Non-Directional Antenna: Southeast tower used with the northwest tower open-circuited at the base.

Ground System consists of 120-448' equally spaced, buried copper radials plus a 24' square copper ground screen about the base of each tower. Ground systems are connected with copper strap.

2. THEORETICAL SPECIFICATIONS

NORTHWEST TOWER (1)

SOUTHEAST TOWER (2)

Phasing: 0°

165.6°

Field Ratio: 1.0

0.593

3. OPERATING SPECIFICATIONS

Phase Indication:* 0°

166°

Antenna Base Current

Ratio: 1.0

0.610

Antenna Monitor Sample

Current Ratio: 1.0

0.610

*As indicated by Clarke 108E phase monitor.

If remote control authority for directional operation is not authorized or if authorized but is not being used the base currents, their ratios and the deviation of these ratios in percent from the licensed values shall be entered in the maintenance log at least once every seven days with no less than five days elapsing between successive observations

Field intensity measuring equipment shall be available at all times and the field intensity at each of the monitoring points shall be measured at least once every thirty days and an appropriate record kept of all measurements so made.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Point #2, direction of 34° true North. From the transmitter building travel East through the gate and into the lane. Thence go North about 0.2 mile to Highway 13. (Take Mileage). Proceed East on Highway 13, 2.45 miles to gate and gravel roadway on left. (Take Mileage). Turn left into lane and travel 0.3 mile to post No. 2, on right of lane along fence. Reading is taken on roadway opposite the post. Distance - 3.0 miles. The field intensity measured at this point should not exceed 15.8 mv/m.

Point #1, direction of 24° true North. (Take Mileage). From post No. 2, proceed westward on winding road, through gully and up hill, for a distance of 0.65 miles, post No. 1 is on the right fence line. Reading is taken opposite the post on the right of way. Distance - 2.55 miles. The field intensity measured at this point should not exceed 28.2 mv/m.

Point #3, direction of 208° true North. From the transmitter building proceed East through the gate. Turn left and travel North to Highway 13, at about 0.2 mile. (Take Mileage). Proceed left, west on Highway 13, 3.05 miles to Main Street (Highway 40) in Craig. (Take Mileage). Turn left on Highway 40 and proceed West 0.8 mile to crossroad. Turn left, South and proceed down lane 0.7 mile to an East-West fence line, just before a turn in the roadway. Reading is taken at post No. 3, which is located approximately 150 feet to the east of the roadway along the east-west fence line. Reading is taken opposite the post to the South of the fence. Distance - 3.0 miles. The field intensity measured at this point should not exceed 12.4 mv/m.

Point #4, direction of 301° true North. (Take Mileage). From the transmitter building drive East through the gate, turn left into lane and travel approximately 0.2 mile to Highway 13. (Take Mileage). At Highway 13 turn left, West, and travel 3.05 miles to Main Street in Craig. This is Highway 40. (Take Mileage). Turn right on Highway 40, West and travel 1.45 miles to junction of Highway 40 and 355, (take mileage). Turn right and travel northward on Highway 355 for a distance of 1.6 miles where the road forks. (Take Mileage). Keep straight ahead on the gravel road, county No. 31, and proceed 1.9 miles - watching for a gate on the right side of the roadway. At the gate (1.9) miles turn right into field and proceed about 0.3 mile to the Kline Ranch. The marker post is just west of the stucco house on the right side of the road. Reading is taken opposite the post on roadway. Distance - 2.25 miles. The field intensity measured at this point should not exceed 42.5 mv/m.