

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: DR-2174

Call Sign: K O J M

MODIFIED
STANDARD BROADCAST STATION LICENSE

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

NORTH MONTANA BROADCASTERS, INC.

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, 1980**

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

1. On a frequency of **610** kHz.
2. With nominal power of **1 kilo** watts nighttime and **1 kilo** watts daytime, with antenna input power of **1.08 kilo** watts --- directional antenna nighttime and antenna input power of **1.08 kilo** watts --- directional antenna daytime

Common Point	current	4.47	amperes
Common Point	resistance	54.0	ohms,
Common Point	current	4.47	amperes
Common Point	resistance	54.0	ohms
3. Hours of operation: **Unlimited Time.**
Average hours of sunrise and sunset:
Jan. 8:15 am to 4:45 pm; Feb. 7:30 am to 5:45 pm;
Mar. 6:30 am to 6:30 pm; Apr. 5:30 am to 7:15 pm;
May 4:30 am to 8:00 pm; June 4:15 am to 8:30 pm;
July 4:30 am to 8:15 pm; Aug. 5:15 am to 7:30 pm;
Sep. 6:00 am to 6:30 pm; Oct. 6:30 am to 5:30 pm;
Nov. 7:30 am to 4:45 pm; Dec. 8:00 am to 4:15 pm;
Mountain Standard Time (Non-Advanced).
4. With the station located at: **Harro, Montana**
5. With the main studio located at: **Approx. 2 mi. N. Northeast of, Harro, Montana**
6. Remote control point:---

7. Transmitter location:

Approx. 2 mi. N. Northeast of Harro, Montana	North Latitude: 48° 34' 48"
	West Longitude: 109° 38' 54"

8. Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: **1, 3, 12 & 21.**
9. Transmitter(s): **COLLINS, 20V-2**
10. Conditions: --

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, & 4.**



File No. BR-2174 Call Sign KOJM

Date 7-21-77

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

DA-2

No. and Type of Elements: Two (2) uniform cross section, guyed, series excited vertical radiators. A remote pickup receiving antenna side mounted near top of NE(#1) tower.

Height above Insulators: 350' (78.1°)

Overall Height: 355'

Spacing and Orientation: Towers are spaced 403' (90°) on a line bearing N 25° true.

Non-Directional Antenna:

Ground System consists of 120 equally spaced, buried, copper radials 403 feet in length plus 120 equally spaced, buried copper radials 50 feet in length about the base of each tower. Intersecting radials shortened and bonded to a transverse copper strap midway between adjacent towers.

2. THEORETICAL SPECIFICATIONS

	Tower	NE(#1)	SW(#2)
Phasing:	Night	0°	+135°
	Day	+98°	0°
Field Ratio:	Night	1.0	1.0
	Day	1.0	1.0

3. OPERATING SPECIFICATIONS

Phase Indication:*	Night	0°	131°
	Day	92.1°	0°

Antenna Base Current Ratio:	Night	1.00	0.948
	Day	0.860	1.00

Antenna Monitor			
Sample Current Ratio:	Night	1.00	0.956
	Day	0.854	1.00

*As indicated by Potomac Instruments AM-19(204) Antenna Monitor.

Section 73.114(A)(8) of the Rules and any requirement for weekly monitoring point readings are WAIVED during proper operation of approved Sampling system: Provided, monitoring point readings are made at least once every thirty days.

Field 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 seven days and an appropriate record kept of all measurements so made.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 10° true North. From the transmitter proceed west on transmitter access road, 1.9 miles to Wildhorse Trail. Turn right on Wildhorse Trail and proceed 0.9 mile to fork with St. Joe Road. Turn right on St. Joe Road and proceed 5.5 miles to intersection with a gravel road. Turn right on Gravel Road and proceed 2.5 miles to a marked post to south and the monitoring point. The point is at the edge of the right of way, two paces west of the marked post. Distance from the array is 6.21 miles. The field intensity measured at this point should not exceed 5.0 mv/m, DAY.

Direction of 25° true North. From the N. 10° monitoring point continue east on the gravel road 1.55 miles to the intersection with Shepherd Road. Turn right on Shepherd Road and proceed 0.55 mile to a marked pole on the east side of Shepherd Road and the monitoring point. The point is 20 paces west of the road directly opposite the marked pole. Distance from the array is 6.10 miles. The field intensity measured at this point should not exceed 5.2 mv/m, DAY.

Direction of 40° true North. From the N. 25° monitoring point continue south on Shepherd Road 2.5 miles to a marked post on the east side of Shepherd Road and the monitoring point. The point is located at the east edge of the road directly opposite the marked post. Distance from the array is 4.01 miles. The field intensity measured at this point should not exceed 7.2 mv/m, DAY.

Direction of 145° true North. From the transmitter, proceed west on the transmitter access road 1.9 miles to the intersection with Wildhorse Trail. Turn left on Wildhorse Trail and proceed 2.35 miles toward Havre to the traffic light at First Street and Seventh Avenue. Turn left onto First Street at the traffic light and proceed 0.5 mile to Fourteenth Avenue. Turn right on Fourteenth Avenue and proceed 4.85 miles south on Fourteenth Avenue and Clear Creek Road to a marked "curve" sign to the south and the monitoring point. The point is at the North edge of the road directly opposite the marked "curve" sign. Distance from the array is 5.44 miles. The field intensity measured at this point should not exceed 8.0 mv/m, NIGHT.

Direction of 205° true North. From the N. 145° monitoring point, turn around and retrace the route back to the Traffic Light at First Street and Seventh Avenue. At the Traffic Light proceed west on First Street two blocks to the Traffic Light at First Street and Fifth Avenue. Turn left on Fifth Avenue and proceed three blocks to Fourth Street. Turn left on Fourth Street and proceed three blocks to the east edge of Pepin Park and the monitoring point. The point is located in the NE corner of the Park at the intersection of the North-South and Northeast-Southwest walkways in the park 30 paces south of Fourth Street. Distance from the array is 2.33 miles. The field intensity measured at this point should not exceed 64 mv/m, NIGHT.

Direction of 265° true North. From the N. 205° monitoring point, proceed east on Fourth Street to Ninth Avenue. Turn left on Ninth Avenue and proceed three blocks to First Street. Turn left onto First Street and proceed two blocks to the traffic light at First Street and Seventh Avenue. Turn right at the traffic light and proceed 0.55 mile north and west on Wildhorse Trail to the intersection with a gravel road (River Road) to the west. Turn left on River Road and proceed 3.3 miles to a marked pole to the north and the monitoring point. The point is located at the south edge of River Road directly opposite the marked pole. Distance from array is 4.30 miles. The field intensity measured at this point should not exceed 5.6 mv/m, NIGHT.