

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

ROY H. PARK BROADCASTING OF THE MIDWEST, 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

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

- On a frequency of _____ kHz.
- With nominal power of **560** watts nighttime and _____ watts daytime,
with antenna input power of **5 kilo** watts directional
antenna nighttime **5.4 kilo**
and antenna input power of _____ watts directional
antenna daytime **5.4 kilo**

Common Point	current	8.79	amperes
Common Point	resistance	70	ohms,
Common Point	current	70	amperes
Common Point	resistance	8.79	ohms
Common Point		70	
- Hours of operation: **Unlimited time.**

Average hours of sunrise and sunset:

Jan. 7:45am to 4:45pm; Feb. 7:15am to 5:30pm;
 Mar. 6:30am to 6:15pm; Apr. 5:30am to 7:00pm;
 May 4:30am to 7:30pm; June 4:15am to 8:00pm;
 July 4:30am to 8:00pm; Aug. 5:00am to 7:15pm;
 Sep. 5:45am to 6:15pm; Oct. 6:30am to 5:30pm;
 Nov. 7:15am to 4:30pm; Dec. 7:45am to 4:15pm;

Central Standard Time (Non-Advanced)

- With the station located at: **Duluth, Minnesota**
- With the main studio located at:

**1001 East 9th Street
Duluth, Minnesota**

- The apparatus herein authorized to be used and operated is located at: North Latitude: _____
West Longitude: **46° 38' 37" N
91° 59' 09" W**

**On County Hwy. 2, 0.35 mile West of
Intersection with U.S. Hwys. 2 and 53
7.8 miles SE of Superior, Wisconsin**

- Transmitter(s): **GAYES, DC-5H(Main)
COLLINS, 21-B (Auxiliary)**
or other transmitter currently listed in the Radio Equipment List, Part B, Aural Broadcast Equipment' for the power herein authorized).
- Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715:
- Conditions: **1, 3, 12 and 21.**

**Transmitters may be operated by remote control from 1001 East 9th Street,
Duluth, Minnesota.**

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**

Dated:

MARCH 29, 1974

av

FEDERAL
COMMUNICATIONS
COMMISSION



File No. BR-620

Call Letters W E B C

Date 3-29-74

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

DA- 2

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

Height above Insulators: **400' (82°)**

Overall Height: **405'**

Spacing and Orientation: **Spaced 439' (90°) between adjacent elements on a line bearing 155° true.**

Non-Directional Antenna: **None Used.**

Ground System consists of **120 equally spaced buried, copper radials 439' long or to property lines plus a 48' square copper ground screen at the base of each tower. Intersecting radials between towers shortened and bonded to common transverse copper strap.**

2. THEORETICAL SPECIFICATIONS

		Northwest Tower (2)	Center Tower (1)	Southeast Tower (3)
Phasing:	Night	-127°	5°	127°
	Day	-25°	45°	25°
Field Ratio:	Night	.60	1.0	.60
	Day	.75	1.0	.75

OPERATING SPECIFICATIONS

Phase Indication:*	Night	6°	0°	-9.2°
	Day	55°	0°	-172.3°
Antenna Base Current Ratio:	Night	0.552	1.0	0.644
	Day	0.648	1.0	0.655
Antenna Monitor Sample Current Ratio:	Night	0.713	1.0	0.853
	Day	.864	1.0	0.977

*As indicated by Nems-Clarke 112 antenna monitor

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 71° True North. To reach this location from the transmitter, turn right (east) on County Highway Z and proceed to the intersection with State Highway 13, and U.S. Highway 2 and 53. Continue straight ahead on Highway 13 for a distance of 2.8 miles to the intersection with County Highway U. Turn left at this intersection and proceed 0.8 miles to the location which is in the middle of the road. The airline distance from the transmitter to the location is 3.31 miles. The field intensity measured at this point should not exceed 20 mv/m. NIGHTTIME.

Direction of 145.5° True North. To reach this location from Point #1 return to Highway 13 and turn right (west). Proceed 2.8 miles to intersection with U.S. Highway 2 and 53. Turn left and proceed approximately 1.3 miles to intersection with County Highway UU. Turn right on Highway UU and proceed 0.7 mile to monitoring location which is in the middle of the road and approximately 300° east of a house on the right. This location is 0.96 miles airline from the transmitter. The field intensity measured at this point should not exceed 36 mv/m. NIGHTTIME. 250 mv/m. DAYTIME.

Direction of 208.92° True North. To reach this location from Point #2, continue straight ahead on Highway UU a distance of 0.3 mile to the intersection with County Highway E. Turn right on Highway E and proceed 0.1 mile to intersection with County Highway K. Turn left on Highway K and proceed 2.0 miles to intersection with County Highway C. Turn right on Highway C and proceed 1.5 miles to intersection with road on the right. Turn right and proceed 0.2 miles to the monitoring location which is in the middle of the road. This location is 2.89 miles airline from the transmitter. The field intensity measured at this point should not exceed 28 mv/m NIGHTTIME.

Direction of 233° True North. To reach this location from Point #3, return to Hwy. C. turn left (east) and proceed 1.5 miles to intersection with County Highway K. Turn left and proceed 2.0 miles to intersection with County Highway E. Turn left and proceed 1.1 miles to intersection with County Highway Z. Turn left on Highway Z and proceed 0.85 mile to a road on the left. Turn left onto this road and proceed 1.0 miles to a road on the right. Continue straight past this side road for a distance of 0.25 mi. to the monitoring point location which is in the middle of the road. The airline distance from the transmitter is 1.80 miles. The field intensity measured at this point should not exceed 28 mv/m NIGHTTIME. 253 mv/m DAYTIME.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS: (Continued).

Direction of 335° True North. To reach this location from Point #4, return to Highway 4, turn right (east) and proceed 0.85 mile to intersection with County Highway E. Turn left and proceed 2.05 miles to intersection with 53rd Avenue, E. Turn right and proceed one block to the intersection with U.S. Highways 2 and 53. Turn right and proceed 0.1 mile to the monitoring point location which is on the right side (south) of the highway. The airline distance from the transmitter is 2.30 miles. The field intensity measured at this point should not exceed 181 mv/m DAYTIME.