FCC Form 352
May 1988

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No. : BS-960111WW

AM BROADCAST STATION LICENSE

Call Sign : W O C

LICENSEE: SIGNAL HILL COMMUNICATIONS, INC.

1. Community of License. . . : Davenport, IA

2. Transmitter location. . . . : Middle Road, 3 miles east of Davenport, IA

North Latitude. . . . . : 41° 33' 00"
West Longitude . . . . . : 90° 28' 37"

3. Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's rules)

4. Main Studio Location: *(See Section 73.1125)*
805 Brady Street
Davenport, IA

5. Remote control location
Middle Road, 5 miles east of Davenport, IA

6. Antenna and ground system:
SEE ATTACHED.

7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: Center Tower: 1, 3, 5, 14 & 21; Tower Nos. 1 and 2: 1* Only.

8. Frequency. . . . . : 1420 kHz

9. Nominal power (kW). . . . . : 5.0 Day 5.0 Night

Antenna input power (kW):

5.4 Day ☐ Non-directional antenna: ☒ Directional antenna : current 10.0 amperes: resistance 54 ohms.

5.4 Night ☐ Non-directional antenna: ☒ Directional antenna : current 10.0 amperes: resistance 54 ohms.

10. Hours of operation : Unlimited.

11. Conditions. . . . . :
*SPECIAL CONDITION: No lighting required provided adjacent 625 foot tower remains marked and lighted.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission rules made thereunder, and further subject to conditions set forth in this license,[1] the LICENSEE is hereby authorized to use and operate the radio transmitting apparatus herein described for the purpose of broadcasting for the term ending 3 A.M. Local Time

February 1, 1997

The Commission reserves the right during said license period of terminating this license or making effective any change, 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.

The license is issued on the licensee's representation that the statements contained in the 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 the 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, as amended. This license is subject to the right f or control by the Government of the United States conferred by section 606 of the Communications Act of 1934, as amended.

DFL

[1] This license consists of this page and pages 2, 3 and 4.

Dated: FEB 14 1996

FEDERAL COMMUNICATIONS COMMISSION

FCC Form 353-A

File No. BS-960111WW Call Sign WOC (AM)

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

No. and Type of Elements: Three (3) vertical, guyed, steel radiators of uniform cross section. The Center tower is a Franklin type antenna insulated at the base and 105.5 m from the top. The top 25.3 m consists of a six section television antenna. Daytime Theoretical RMS: 854.56 mV/m at 1km; Augmented RMS: 907.31 mV/m at 1 km. Nighttime Theoretical RMS: 788.58 mV/m at 1km; Augmented RMS: 832.03 mV/m at 1km. Q = 23.56 Daytime; 22.36 Nighttime.

	#1 (SE)	Center Tower	#2 (NW)
Height above Insulators:	109.7 m (187.1°)	189 m (322.2°)	109.7 m (187.1°)
Overall Height:	112.2 m	190.5 m	112.2 m

Spacing and Orientation: End towers are spaced 318° on a line bearing 139° True. The Center tower is spaced 15° at a True bearing of 250° from a point midway between end towers.

Non-Directional Antenna: None Used.

Ground System consists of 120 equally spaced, buried, copper radials about the base of each tower 84.4 m in length around the end towers No.1 and No.2 with a12.2 m by 12.2 m ground screen installed on the top of a concrete slab at the base of each tower; the radials around the Center tower are 105.5 m in length and a 12.2 m by12.2 m ground screen at the base of the tower is installed on pea gravel.

2. THEORETICAL SPECIFICATIONS

		#1 (SE)	Center Tower	#2 (NW)
Phasing:	Night	34°	8°	34°
	Day	36°	38°	- 36°
Field Ratio:	Night	0.71	1.0	0.66
	Day	0.64	1.0	0.64

3. OPERATING SPECIFICATIONS

Phase Indication*: Night

Upper Sampling Loop (Tower #1 Ref)	0°	-34°	-60°
Lower Sampling Loop* (Upper loop Ref)		32.9°	
Day			
Upper Sampling Loop (Tower #1(Ref)	0°	-4.7°	-60.2°
Lower Sampling Loop* (Upper loop Ref)		21.8	

Antenna Base			
Current Ratio: Night			
Line Current Ammeter (M4)**	1.0	2.09	0.78
Day			
Line Current Ammeter (M4)**	1.0	2.124	0.969
Antenna Monitor Sample			
Current Ratio: Night			
Upper Sampling Loop	1.0	0.520	0.859
Day			
Upper Sampling Loop	1.0	0.549	0.977

*** As indicated by Delta Electronics DAM-1 Antenna Monitor. Antenna sampling system approved under Section 73.68(b) rules.**

*Lower sampling loop phase indications may be read weekly.

**Section 73.52 (b) of the Rules applies.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 80° True North. From 85.5° T monitor point return to new U.S. Highway 67 and turn right (NE). Proceed 0.2 mile to Lane north. Monitor point is in lane north opposite tree east of lane approximately 100' north of Highway 67. This is Point No. 5 of the survey and is 1.76 miles from the antenna. The field intensity measured at this point should not exceed **160.3 mV/m Daytime.**

Direction of 85.5° True North. From 95° T monitor point continue northeast on U.S. Highway 67 for 0.5 mile to lane South. Turn right (SE) and proceed 0.09 mile to monitor point. Monitor point is in road opposite tree to west in line with the Center Tower of the WOC array. This is Point No. 4 of the survey and is 1.66 miles from the antenna. The field intensity measured at this point should note exceed **32 mV/m Nighttime; 73 mV/m Daytime.**

Direction of 95° True North. From 160° T monitor point continue northeast on new U.S. Highway 67 for 1.31 miles. Monitor point is on south shoulder of highway in line with west edge of Big River Equipment Company. This is Point No. 3 of the survey and is 1.28 miles form the antenna. The field intensity measured at this point should not exceed **76.2 mV/m Nighttime; 135 mV/m Daytime.**

Direction of 160° True North. From 255° T monitor point proceed south on Kimberly Road for 1.35 miles to intersection with U.S. Highway 67. Turn left (E) on Highway 67 and proceed 2.55 miles to monitor point. Monitor point is on south shoulder of highway opposite driveway to north. This is Point No. 3 of the survey and is 1.03 miles from the antenna. The field intensity measured at this point should not exceed **136 mV/m Nighttime; 309.5 Daytime.**

Direction of 255° True North. From 317° T monitor point continue south on 29th Street for 0.79 mile to intersection with Middle Road. Turn right (SW) and proceed 2.03 miles to Kimberly Road. Turn right (N) and proceed 0.17 mile to monitor point. Monitor Point is west of Kimberly Road opposite manhole cover. This is Point No. 8 of the survey and 2.3 miles from the antenna. The field intensity measured at this point should not exceed **270 mV/m Nighttime.**

Direction of 317° True North. From WOC transmitter road turn left (W) on Belmont Road. Proceed 0.03 mile to intersection with Middle Road. Turn left (SW) and proceed 0.26 mile to Devils Glen Road. Turn right (N) and proceed 0.84 mile to Tanglefoot Lane. Turn left (W) and proceed 0.39 mile to 29th Street. Turn left (S) and proceed 0.01 mile to 3735 29th Street. This is point No. 5 of the survey and is 1.0 miles from the antenna. The field intensity measured at this point should not exceed **121 mV/m Nighttime; 276.6 mV/m Daytime.**