FCC Form 352
June 1984

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: BZ-861218AP

DAYTIME SITE

Call Sign: WMLA

AM BROADCAST STATION LICENSE

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission Rules made thereunder, and further subject to condition set forth in this license,[1] the LICENSEE

W. RUSSELL WITHERS, JR.

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. Loca Time DECEMBER 1, 1989 in accordance with the following:

1. Station location: NORMAL, IL

2. Main Studio location: (Listed only if not at transmitter site or not within boundaries of principal community)

3. Remote control location: 1218 South Main Street Normal, IL

4. Transmitter location: 2.4 Km North of Downs, IL

North latitude: 40 ° 25 ' 25 "
West longitude: 88 ° 52 ' 30 "

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

6. Antenna and ground system: Attached

7. Obstruction marking and lighting specifications — FCC Form 715, paragraphs: None required.

8. Frequency (kHz.): 1440

9. Nominal power (kW): 1.0 Day
__ Night

Antenna input power (kW): 1.08 Day

☐ Non-directional antenna: current ____ amperes; resistance ____ ohms.
☒ Directional antenna : current 4.56 amperes; resistance 52 ohms.

\- - - Night

☐ Non-directional antenna: current ____ amperes; resistance ____ ohms.
☐ Directional antenna : current ____ amperes; resistance ____ ohms.

10. Hours of operation: Specified in ~~construction permit (BR~~ BR-790727VI
11. Conditions: _ _

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 c 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 ha 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 b 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 herei 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 authorize 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 of use c control by the Government of the United States conferred by Section 606 of the Communications Act of 1934, as amended.

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

Dated: SEP 23 1987

KR/ajs

FEDERAL COMMUNICATIONS COMMISSION

OCT 1 1987

File NO. BZ-861218AP **Call Sign:** WMLA **Date:**

DA-D

1. **DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM**

No. and Type of Elements: Six vertical, guyed, series-excited, steel radiators of uniform cross section, top-loaded by the upper 9.1 m of the top guy wires. Theo. RMS: 288.1 mV/m @ 1 km. Aug. RMS: 303.4 mV/m @ 1 km.

Height above Insulators: 45.7 m (80.5° top loaded to 90°)

Overall Height: 46.6 m

Spacing and Orientation: Towers in the form of a right angle parallelogram. Long si consist of Towers #1, #3 & #5, and Tower #2, #4, & #6, spaced 217° between towers on a bearing of 40° True. Short sides spaced 90° on a line bearing 130° True.

Non-Directional Antenna: Not Used.

Ground System consists of 120 equally spaced buried, copper radials 53.3 m in length, plus 120 interspersed radials 22.9 m in length about the base of each tower. Intersecting radials shortened and bonded.

2. **THEORETICAL SPECIFICATIONS**

	NW(#1)	NE(#2)	WC(#3)	EC(#4)	SW(#5)	SE(#6)
Phasing:	0°	92.4°	0°	92.4°	0°	92.4°
Field Ratio:	1.0	1.0	1.82	1.82	1.0	1.0

3. **OPERATING SPECIFICATIONS**

Phase Indication*:	0°	85°	3.2°	89°	-6.5°	78°
Antenna Base Current Ratio:	1.00	0.85	1.91	2.06	1.11	0.96
Antenna Monitor Sample Current Ratio:	1.00	0.83	1.78	1.98	1.15	0.94

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

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

DAYTIME SITE

Direction of 10 degree true North. Leaving the transmitter turn left (east) and proceed 1.3 km to bend. Turn left and proceed 1.3 km to a "T" intersection. Turn right (east) and go 0.5 km to another "T" intersection. Turn left (north) and proceed 2.9 km to another "T" intersection. Turn left (west) and proceed 0.8 km to another "T" intersection. Turn right (north) and go 0.8 km to the monitor point. The measuring location is in the road by a farm land to the east. The field intensity measured at this point should not exceed 6.9 mV/m.

Direction of 40 degree true North. Leaving the transmitter road proceed to the left (east) 1.3 km to a bend in the road. Turn left and proceed 1.3 km to a "T" intersection. Turn right (east) and proceed 0.5 km to "T" intersection. Turn left (North) and proceed 2.9 km to another "T" intersection. Turn right (east) and proceed 1.6 km to the monitor point. The measuring location is 30.5 m southeast of the corner, in the field. The field intensity at this point should not exceed 10.5 mV/m.

Direction of 70 degree true North. Leaving the transmitter road, turn left (east) and proceed 1.3 km to a bend in the road. Turn left and go 1.3 km to a "T" intersection. Turn right (east) and proceed 2.1 km to another "T" intersection. Turn left (north) and proceed 0.8 km to the monitor point. The measuring location is on the east side of the road between two fence post with a small farm lane to the east. The field intensity measured at this point should not exceed 7.5 mV/m.

Direction of 100 degree true North. Leaving the transmitter road turn left (east) and go 0.5 km to a bend in the road. Turn left and proceed 1.3 km to a "T" intersection. Turn right (east) and proceed 3.2 km to a "T" intersection, the turn right (south) and proceed 1.3 km south to a bend in the road. Turn right (west) and go 0.5 km to another bend. The monitor point is 0.1 km south from this last bend. The measuring location is on the west side of the road just south of the small clump of trees. The field intensity measured at this point should not exceed 6.7 mV/m.

Direction of 130 degree true North. Leaving the transmitter road turn right (west) and proceed 0.8 km to "T" intersection. Turn left (south) and proceed 1.9 km to Hwy. 150. Turn left on Hwy. 150 and proceed 1.3 km to intersection with Downs Rd. Turn left on Downs Rd. and proceed 4.0 km to "T" intersection Turn right (south) and proceed 1.1 km to the monitor point. The measuring location is on the north side of the bridge in the middle of the road. The field intensity measured at this point should not exceed 4.9 mV/m.

mV/m.

Direction of 140 degree true North. Leaving the transmitter road turn right (west) and proceed 0.8 km to a "T" intersection. Turn left (south) and proceed 1.9 km to Hwy. 150. Turn left on Hwy. 150 and go 6.8 km to another "T" intersection. Turn left (north) and go 0.2 km to the monitor point. The measuring location is in the road by the Gas Line Marker. The field intensity measured at this point should not excee 2.6 mV/m.

Direction of 175 degree true North. Leaving the transmitter road turn right (west) and proceed 0.8 km to "T" intersection. Turn left (south) and go 1.9 km to Hwy. 150. Turn left on Hwy. 150 and go 0.8 km to Main St. in Downs, just east of bridge. Turn right (south) on Main St. and proceed south to end of street by gain elevator. Turn left (east) and go two blocks, then turn right (south) and proceed 2.9 km to the monitor point. The measuring location on the west side of the road where the road makes a 90 degree turn to the left. The field intensity measured at this point should not exceed 3.9 mV/m.

Direction of 200 degree true North. Leaving the transmitter road turn right (west) and Proceed 0.8 km to a "T" intersection. Turn left (south) and go 4.0 km (this is past Hwy. 150 and past the RR underpass) to a "T" intersection. Turn right and proceed 1.1 km to the monitor point. The measuring location is on the south side of the road by a double fence post which is braced. The field intensity measured at this point should not exceed 3.6 mV/m.

Direction of 238 degree true North. Leaving the transmitter road turn right (west) and proceed 0.8 km to a "T" intersection. Turn left (south) and go 1.9 km to a Hwy. 150. Turn right on Hwy. 150 and go 0.5 Km to an intersection with the Gillum Rd. Turn left on the Gillum Rd. and proceed 3.7 km to a "T" intersection. Turn left (south) and proceed 1.3 km to the monitor point. The measuring location is on the west side of the road in the ditch. This is across from an REA pole on the east side of the road. The field intensity measured at this point should not exceed 4.0 mV/m.

Direction of 264 degree true North. Leaving the transmitter road turn right (west) and proceed 0.8 km to a "T" intersection. Turn left (south) and go 1.9 km to Hwy. 150. Turn right on Hwy. 150 and proceed 5.6 km to a "T" intersection. Turn left (south) and proceed 2.0 km to the monitor point. The measuring location is just south of a RR crossing and just north of a farm driveway, on the west side of the road. The point is in line three poles on the road. The field intensity measured at this point should not exceed 6.5 mV/m.