



United States of America  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION LICENSE**

Authorizing Official:

Official Mailing Address:

\_\_\_\_\_  
 AGRICULTURAL RESOURCE GROUP, INC.  
 12110 WABASH ROAD  
 MILAN MI 48160  
 \_\_\_\_\_

Son Nguyen  
 Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau

Facility Id: 39533

Call Sign: WION

License File Number: BZ-19950201AA

Grant Date: **MAY 23 1995**  
 This license expires 3:00 a.m.  
 local time, October 01, 2004.

This supersedes authorization of same date to remove lighting specifications. 9/20/04

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

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 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. 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.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:  
 Local Standard Time (Non-Advanced)

Jan.	8:15 AM	5:30 PM	Jul.	5:15 AM	8:15 PM
Feb.	7:45 AM	6:15 PM	Aug.	5:45 AM	7:45 PM
Mar.	7:00 AM	6:45 PM	Sep.	6:15 AM	6:45 PM
Apr.	6:00 AM	7:15 PM	Oct.	7:00 AM	6:00 PM
May	5:15 AM	8:00 PM	Nov.	7:30 AM	5:15 PM
Jun.	5:00 AM	8:15 PM	Dec.	8:00 AM	5:00 PM

Name of Licensee: AGRICULTURAL RESOURCE GROUP, INC.

Station Location: IONIA, MI

Frequency (kHz): 1430

Station Class: B

## Antenna Coordinates:

## Day

Latitude: N 43 Deg 00 Min 16 Sec

Longitude: W 85 Deg 05 Min 09 Sec

## Night

Latitude: N 43 Deg 00 Min 16 Sec

Longitude: W 85 Deg 05 Min 09 Sec

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

Nominal Power (kW): Day: 5.0 Night: 0.33

Antenna Input Power (kW): Day: 5.4 Night: 0.36

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 10.33 Night: 2.67

Resistance (ohms): Day: 50 Night: 50

## Antenna Registration Number(s):

## Day:

Tower No.	ASRN
1	None
2	None
3	None

## Night:

Tower No.	ASRN
1	None
2	None
3	None

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 671.1 Night: 172.41

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Day: 705.34 Night: 181.2

Q Factor: Day: 26.76 Night: 6.88

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.9530	144.000	0.0000	0.000	0	102.0
2	1.0000	0.000	80.0000	345.000	0	102.0
3	0.3430	-144.000	80.0000	345.000	1	102.0

\* Tower Reference Switch

- 0 = Spacing and orientation from reference tower
- 1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	105.0	10.0	241.40
2	160.0	10.0	346.01
3	165.0	10.0	346.01

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.9530	144.000	0.0000	0.000	0	102.0
2	1.0000	0.000	80.0000	345.000	0	102.0
3	0.3430	-144.000	160.0000	345.000	0	102.0

\* Tower Reference Switch

- 0 = Spacing and orientation from reference tower
- 1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	105.0	10.0	62.00
2	160.0	10.0	88.90
3	165.0	10.0	88.90

## Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	142	0.425
2	0	1
3	-146	0.735

## Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	142	0.425
2	0	1
3	-146	0.735

Antenna Monitor: POTOMAC INSTRUMENTS AM-19(204)

Sampling System Approved Under Section 73.68(b) of the Rules.

## Monitoring Points:

## Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
105	5.2	24.3
165	6.1	28.4
210	3.2	41.5
240	4.5	29.5

## Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
105	5.2	6.3
165	6.1	7.3
210	3.2	10.6
240	4.5	7.5

## Special operating conditions or restrictions:

- 1 The ground system consists of 120 equally spaced, buried copper radials 60.97 m in length where shortened at property lines or common transverse strap about the base of each tower.

## Special operating conditions or restrictions:

- 2 Direction of 105 degrees True North: Proceed South from the transmitter on Raynor Road 1.2 miles to Rt. 21, known as the Blue Water Highway. Proceed East on Rt. 21, 3 miles to a point 0.1 mile Northeast of its intersection with Prairie Creek Road. Point is on the west side of the road near the top of a rise. This is point No. 23 on this radial. Distance from antenna 3.25 miles. The field intensity measured at this point should not exceed 24.3 mV/m (day), and 6.3 mV/m (night).

Direction to 165 degrees True North: Proceed South from the transmitter on Raynor Road 1.2 miles to M-21. Turn left (East) on M-21, and go 0.7 mile to the intersection with southbound M-66. Turn right (South) on M-66, and proceed 2.6 miles to Tuttle Road. Turn left (East) on Tuttle Rd., and proceed 0.4 mile to the point. The point is on the north side of the road, in the Rather School parking lot. This is point # 26 on the radial. Distance from the antenna 3.8 miles. The field intensity measured at this point should not exceed 28.4 mV/m (day), and 7.3 mV/m (night).

Direction of 210 degrees True North: Proceed South from the transmitter on Raynor Road 1.2 miles to R. 21, known as Blue Water Highway. Proceed West and Southwest on Rt. 21 one mile. Point is located on the North side of the highway in the service road to the Michigan Medium Security Prison. A highway department benchmark is located on the south side of highway. This is point No. 16 on this radial. Distance from the antenna 2.0 miles. The field intensity measured at this point should not exceed 41.5 mV/m (day), and 10.6 mV/m (night).

Direction of 240 degrees True North: Proceed South from the transmitter on Raynor Road 1.2 miles to R. 21, known as Blue Water Highway. Proceed West and southwest on Rt. 21, 2.7 miles to Bellamy Rd., 0.75 mile North on Bellamy Road. Point is on the West side of the road, 40 feet north of the top on the rise, opposite house numbered 196 Bellamy Rd. This is point No. 23 on this radial. Distance from antenna 2.83 miles. The field intensity measured at this point should not exceed 29.5 mV/m (day), and 7.3 mV/m(night).

\*\*\* END OF AUTHORIZATION \*\*\*