



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

Authorizing Official:

Official Mailing Address:

\_\_\_\_\_  
 THE MACDONALD BROADCASTING COMPANY  
 2000 WHITTIER  
 SAGINAW MI 48601  
 \_\_\_\_\_

\_\_\_\_\_  
 Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau  
 \_\_\_\_\_

Facility Id: 39537

Call Sign: WILS

License File Number: BL-20080114ADF

Grant Date: April 24, 2008

This license expires 3:00 a.m.  
 local time, October 01, 2012.

This license covers permit no.: BP-20050831ADB

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.	8:00 AM	5:30 PM	Jul.	5:15 AM	8:15 PM
Feb.	7:30 AM	6:15 PM	Aug.	5:45 AM	7:45 PM
Mar.	6:45 AM	6:45 PM	Sep.	6:15 AM	6:45 PM
Apr.	6:00 AM	7:15 PM	Oct.	6:45 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

Callsign: WILS

License No.: BL-20080114ADF

Name of Licensee: THE MACDONALD BROADCASTING COMPANY

Station Location: LANSING, MI

Frequency (kHz): 1320

Station Class: B

Antenna Coordinates:

Day

Latitude: N 42 Deg 37 Min 19 Sec

Longitude: W 84 Deg 38 Min 38 Sec

Night

Latitude: N 42 Deg 37 Min 19 Sec

Longitude: W 84 Deg 38 Min 38 Sec

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

Nominal Power (kW): Day: 25.0 Night: 1.9

Antenna Input Power (kW): Day: 26.32 Night: 2.05

Antenna Mode: Day: DA Night: DA

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

Current (amperes): Day: 22.9 Night: 6.4

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	
1	None	60.6
2	None	60.6

Night:

Tower No.	ASRN	
1	None	60.6
2	None	60.6
3	None	60.6
4	None	60.6

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 1564.72 Night: 431.81

Standard RMS (mV/m/km): Day: 1643.79 Night: 453.63

Augmented RMS (mV/m/km):

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	94.6
2	0.6480	-97.000	90.0000	283.000	0	94.6

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	94.6
2	0.8100	-16.800	181.0000	294.000	0	94.6
3	0.8300	140.000	90.5000	202.000	0	94.6
4	0.6720	123.200	181.0000	294.000	1	94.6

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1
2	-90.5	0.67

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1
2	-14.9	0.922
3	132.3	0.879
4	113	0.804

Antenna Monitor: POTOMAC INSTRUMENTS AM-1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
80.5	6.72	48.39
125.5	8.18	30.91

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
90	11.6	2.53
139	8	1.23
268	5.07	4.42

Special operating conditions or restrictions:

- 1 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
  
- 2 Ground system consists of 120 equally spaced, buried, copper radials about the base of each tower, each 56.8 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers.

## Special operating conditions or restrictions:

## 3 Location of Monitor Points:

## Day:

Direction of 80.5° true North. From the WILS(AM) transmitter drive, turn left on north Smith Road and proceed north 0.4 km to the intersection of North Smith Road and East Vermontville Highway. Turn right on East Vermontville Highway and proceed east 1.6 km to the intersection of East Vermontville Highway and North Michigan Road. Turn left on North Michigan Road and proceed north 1.6 km to the intersection of North Michigan Road and Hold Road/Holt Highway. Turn right on Holt Road/Holt Highway and proceed east 4.9 km to the intersection of Hold Road/Holt Highway and Onondaga Road. Turn right on Onondaga Road and proceed south 0.9 km to the monitor point. The monitor point is 10 feet south of box 1704 on the east side of the road.

Direction of 125.5° true North. From the WILS(AM) transmitter drive, turn left on North Smith Road and proceed north 0.4 km to the intersection of North Smith Road and East Vermontville Highway. Turn right on East Vermontville Highway and proceed east 1.6 km to the intersection of East Vermontville Highway and North Michigan Road. Turn left of North Michigan Road and proceed north 1.6 km to the intersection of North Michigan Road and Hold Road/Holt Highway. Turn right on Holt Road/Holt Highway and proceed east 4.9 km to the intersection of Holt Road/Holt Highway and Onondaga Road. Turn right on Onondaga Road and proceed south 6.75 km to the monitor point. The monitor point is located on the west side of the road opposite the drive to Box 96.

## 4 Night:

Direction of 90° true North. From the WILS(AM) transmitter drive, turn left on North Smith Road and proceed north 0.4 km to the intersection of North Smith Road and East Vermontville highway. Turn right on East Vermontville Highway and proceed east 1.6 km to the intersection of East Vermontville Highway and North Michigan Road. Turn left of North Michigan Road and proceed north 1.6 km to the intersection of North Michigan Road and Holt Road/Holt Highway. Turn right on Holt Road/Holt Highway and proceed east 8.75 km to the intersection of Holt Road/Holt highway and Cedar Street. Turn right on Cedar Street and proceed southeast 1.8 km to the intersection of Cedar Street and North Edgar Road. Turn right on North Edgar Road and proceed south 0.6 km to the monitor point. The monitor point is located in a stand on trees directly west of factory building on the east side of the road.

Direction of 139° true North. From the WILS(AM) transmitter drive turn right on North Smith Road and proceed south 4.5 km to the intersection of North Smith Road and Columbia Highway. Turn left on Columbia Highway and proceed east 4.85 km to the intersection of Columbia Highway and Gale Road. Turn right on Gale Road and proceed south 1.6 km to the intersection of Gale Road and Curtice Road. Turn left on Curtice Road and proceed 0.2 km to the monitor point. The monitor point is located 20 feet east of the "Stop ahead" sign on the north side of the road.

Direction of 268° true North. From the WILS(AM) transmitter drive, turn left on North Smith Road and proceed north 0.4 km to the intersection of North Smith Road and East Vermontville Highway. Turn left on East Vermontville Highway and proceed west 5.25 km to the intersection of East Vermontville Highway and Nixon Highway/Nixon Road. Turn left on Nixon Highway/Nixon Road and proceed south 0.6 km to the monitor point. The monitor point is located approximately 50 feet north of the "Phaner Highway Ahead" sign on the west side on the road.

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Special operating conditions or restrictions:

- 5 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.

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