



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

MENTOR PARTNERS, INC.
 18720 16 MILE ROAD
 BIG RAPIDS MI 49307

Son Nguyen
 Supervisory Engineer
 Audio Division
 Media Bureau

Facility Id: 70506

Call Sign: WBRN

License File Number: BL-20080604ADJ

Grant Date: November 10, 2008

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

This license covers permit no.: BP-20080520AAZ

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	7:00 PM
Apr.	6:00 AM	7:30 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	8:30 PM	Dec.	8:15 AM	5:00 PM

Callsign: WBRN

License No.: BL-20080604ADJ

Name of Licensee: MENTOR PARTNERS, INC.

Station Location: BIG RAPIDS, MI

Frequency (kHz): 1460

Station Class: B

Antenna Coordinates:

Day

Latitude: N 43 Deg 39 Min 49 Sec

Longitude: W 85 Deg 28 Min 54 Sec

Night

Latitude: N 43 Deg 39 Min 49 Sec

Longitude: W 85 Deg 28 Min 54 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: 2.5

Antenna Input Power (kW): Day: 5.0 Night: 2.7

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 16.4 Night: 7.35

Resistance (ohms): Day: 18.5 Night: 50

Non-Directional Antenna: Day

Radiator Height: 51.3 meters; 90 deg

Theoretical Efficiency: 305.78 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1000288	

Night:

Tower No.	ASRN	Overall Height (m)
1	1000287	
2	1000288	
3	1000286	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 524.81
 Standard RMS (mV/m/km): Night: 551.38
 Augmented RMS (mV/m/km):
 Q Factor: Night: 18.11

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	90.0
2	1.4560	-133.000	90.0000	353.000	0	90.0
3	0.8100	88.000	180.0000	353.000	0	90.0

* Tower Reference Switch

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

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-39.8	0.364
2	0	1
3	45.4	0.371

Antenna Monitor: POTOMAC INSTRUMENTS AM-19(210)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
88.7	1.53	16.5
146.1	2.57	4.2
199.9	2.57	6
257.3	3.54	10.1

Special operating conditions or restrictions:

- 1 Description of Directional Antenna system: Three (3) towers; Tower #1 & #3 are guyed, series-excited, steel radiators of uniform cross section; Tower #2 is a guyed, 3 wire skirt shunt feet uniform cross section tower and tuned to 90° height. Tower #2(C) has a FM broadcast antenna side-mounted near the top, with several antennas side mounted at various levels.

Ground system consists of 120-60.98 m equally spaced, buried, copper radials about the base of each tower. Radials are shortened and bonded to copper strap midway between elements.

- 2 DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 88.7° True North: From station go north on Northland Drive 0.4 miles. Turn east (right) onto 14 Mile Road, then travel 1.0 mile to 190th Avenue. Turn south (right) then continue 0.4 miles to 13539 190th Avenue driveway. Point is location #1 and lies 20 feet west of 190th Avenue on driveway, 1.53 km from WBRN. The field intensity measured at this point should not exceed 16.5 mV/m.

Direction of 146.1° True North: From 88.7° point, go south (right) on 190th Avenue 1.5 miles to meadow across from "Curve" sign. Point is location #6 and lies 50 feet east of 190th Avenue in meadow, 2.57 km from WBRN. The field intensity measured at this point should not exceed 4.2 mV/m.

Direction of 199.9° True North: From 146.1° point, 0.2 miles go south on 190th to 12 mile Road (0.2 miles) then west 1.4 miles on 12 miles Road to 20277 12 mile road mailbox. Location #11 lies at a distance of 2.57 km. The field intensity measured at this point should not exceed 6.0 mV/m.

Direction of 257.3° True North: From station go south on U.S. 131 1/20 mile to Arthur Road, west on Arthur Road 0.5 miles to 205th Avenue, south on 205th Avenue 0.6 miles to 13 Mile Road, west on 13 Mile Road 1.5 mile to 220th Avenue. Point is southwest corner of intersection. Location #13 lies at a distance of 3.54 km. The field intensity measured at this point should not exceed 10.1 mV/m.

*** END OF AUTHORIZATION ***