



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

WOODWARD COMMUNICATIONS, INC.

APPLETON WI 54912

Son Nguyen

Supervisory Engineer

Audio Division

Media Bureau

Facility Id: 73660

Call Sign: WHBY

License File Number: BL-20050920AGF

Grant Date: January 11, 2007

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

License to cover BMP-20040514AAR as modified by BMP-20050920AEJ to augment patterns.

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.	7:30 AM	4:45 PM	Jul.	4:30 AM	7:30 PM
Feb.	7:00 AM	5:30 PM	Aug.	5:00 AM	7:00 PM
Mar.	6:15 AM	6:00 PM	Sep.	5:30 AM	6:00 PM
Apr.	5:15 AM	6:30 PM	Oct.	6:00 AM	5:15 PM
May	4:30 AM	7:15 PM	Nov.	6:45 AM	4:30 PM
Jun.	4:15 AM	7:45 PM	Dec.	7:15 AM	4:15 PM

Name of Licensee: WOODWARD COMMUNICATIONS, INC.

Station Location: KIMBERLY, WI

Frequency (kHz): 1150

Station Class: B

Antenna Coordinates:

Day

Latitude: N 44 Deg 08 Min 20 Sec

Longitude: W 88 Deg 32 Min 46 Sec

Night

Latitude: N 44 Deg 08 Min 20 Sec

Longitude: W 88 Deg 32 Min 46 Sec

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

Nominal Power (kW): Day: 20.0 Night: 25.0

Antenna Input Power (kW): Day: 21.06 Night: 26.325

Antenna Mode: Day: DA Night: DA

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

Current (amperes): Day: 20.5 Night: 22.9

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1243914	
2	1243915	
3	1243916	
4	1243917	
5	1243918	
6	1243919	

Night:

Tower No.	ASRN	Overall Height (m)
1	1243914	
2	1243915	
3	1243916	
4	1243917	
5	1243918	
6	1243919	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 1290.36 Night: 1442.51

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Day: 1365.17 Night: 1517.03

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	0.3800	-87.000	0.0000	0.000	0	92.0
2	0.7240	-105.500	182.5000	130.500	0	92.0
3	0.3340	-40.000	369.0000	127.100	0	92.0
4	0.4210	-3.400	120.3000	228.400	0	92.0
5	1.0000	0.000	200.8000	154.600	0	92.0
6	0.2150	22.400	382.1000	140.800	0	92.0

* 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	5.0	20.0	2502.00
2	136.5	10.0	122.50
3	160.0	10.0	158.00
4	236.5	10.0	88.40
5	254.0	15.0	162.80
6	281.0	15.0	122.80

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4970	-5.000	0.0000	0.000	0	92.0
2	1.0000	0.000	182.5000	130.500	0	92.0
3	0.5540	7.800	369.0000	127.100	0	92.0
4	0.4520	75.300	120.3000	228.400	0	92.0
5	0.9960	97.700	200.8000	154.600	0	92.0

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
6	0.5760	120.000	382.1000	140.800	0	92.0

* 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	86.5	10.0	109.00
2	108.5	10.0	87.80
3	153.0	14.0	154.20
4	198.5	10.0	280.60
5	218.5	14.0	584.40
6	239.0	8.0	68.00
7	311.0	20.0	81.60

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-84.9	0.365
2	-97	0.736
3	-33	0.378
4	-16.9	0.399
5	0	1
6	24.5	0.235

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0.9	0.529
2	0	1
3	5.7	0.575
4	78.2	0.463
5	95.4	1.044
6	118.4	0.614

Antenna Monitor: POTOMAC 1901

Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:

1 MONITOR POINT DESCRIPTIONS:

136.5° - Point located 0.55 km south of intersection of Highway GG and Sherman Road, on west side of Sherman, just south of curve, across from farm egress, 4.86 km from site, max 26.9 mV/m daytime.

160° - Point located on north side of road at mailbox for 1002 Sunnyview Road (County Road Y), 6.58 km from site, max 28.2 mV/m daytime.

236.5° - Point located on south end of Skeleton Bridge Road overpass over Highway 110, on west side of Skeleton Bridge Road about 25 feet south of end of metal guardrail, 7.56 km from site, max 13.2 mV/m daytime.

281° - Point located on west side of road at mailbox for 7133 Fahley Road, 5.99 km from site, max 25.2 mV/m daytime.

86.5° - Point located on west side of Adella Beach Road, across from driveway at 176 Adella Beach, 0.29 km NE of intersection of Adella Beach and County Road A (Commercial Street), 6.81 km from site, max 8.5 mV/m nighttime.

108.5° - Point located on east side of Dixie Road, across from and about 30 feet south of gated entrance of trucking company, 1.80 km south of intersection of Dixie and County Road G (Lyndale Avenue), 4.3 km from site, max 26.4 mV/m nighttime.

153° - Point located on east side of road, 30 feet north of driveway of 5097 and 5099 Sherman Road, 5.47 km from site, max 39.4 mV/m nighttime.

198.5° - Point located on south side of County Road Y, next to farm field, 0.87 east of intersection of County Road Y and County Road T, and 2.33 km west of intersection of Road Y and State Highway 76, 6.6 km from site, max 35.4 mV/m nighttime.

239° - Point located on north side of road, about 40 feet east of driveway to 5536 County Road S, 8.91 km from site, max 10.3 mV/m nighttime.

311° - Point located on west side of road, at north corner of driveway of 7853 County Road T, 6.21 km from site, max 10.8 mV/m nighttime.

*** END OF AUTHORIZATION ***