



United States of America

FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

MORTENSON BROADCASTING COMPANY

3270 BLAZER PKWY

SUITE 101

LEXINGTON KY 40509

Facility Id: 18517

Call Sign: WWNL

License File Number: BZ-19961220AB

Grant DatSEP 6

2001

Mass Media

Bureau

Audio

Services Division

Son Nguyen Supervisory

Engineer

This license expires 3:00 a.m. local time, August 01, 2006.

registration numbers. re-issues licensed authorization granted on 3/21/1997 stration numbers. (JBS 9/6/2001) to add tower

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

herein interest, convenience, or necessity undertakings This license is issued on the licensee's representation statements contained in licensee's application are true license, be carried out conferred. therein render issued on in good faith. The licensee shall, such broadcasting service as will contained so far as they are t O the full extent consistent herewith, during the term of serve the public serve the public of the privileges and that that

Communications Government assigned or otherwise transferred in violation of the Communications herein. license station 1934. This license is subject to the right of use rernment of the United States conferred by Section munications Act of 1934. license beyond the ron Neither any shall not the right term hereof, nor license nor the uī. vest the use of in the the right licensee any right to operate the f the frequency designated in the c in any other manner than authorized granted hereunder shall or control 606 of the by the Act

Hours of Operation: Daytime

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

Jun.	мау	Apr.	Mar.	Ko C.	Jan.
4:45		1 : C : C : C : C : C : C : C : C : C :	1 0): LO	7:45
AM	AM	AM	AM	AM	AM
7:45	7:30	7:00	6:30	6:00	5:15
PM	PM	PM	PM	PM	PM
De	No	0	ល	A.	Ū
		Oct.			
7:30	7:00	6:30	6:00	5:30	5:00
AM	AM	AM	AM	AM	AM
5:00	5:00	5:45	6:30	7:15	7:45
ΡM	PM	PM	PM	PM	PM

Name of Licensee: MORTENSON BROADCASTING COMPANY

Station Location: PITTSBURGH, PA

Frequency (kHz): 1080

Station Class: D

Antenna Coordinates:

Day

Longitude: Latitude: Z Z 40 Deg 79 Deg Deg 57 Min 36 Min 17 37 Sec Sec

Critical

Longitude: Latitude: ZZ 40 Deg 36 Min 17 Sec

79 Deg 57 Min 37 Sec

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

(kW): Day: 50.0

Power (kW): Day: 52.6

Critical: 25.0

Critical: 26.3

Day: DA Critical: DA

Current (amperes):

(DA=Directional Antenna,

ND=Non-directional

Antenna;

CH=Critical Hours)

Antenna

Antenna

Input Mode:

Nominal

Power

Day: 32.45

Critical: 22.95

Resistance (ohms):

Day: 50

Critical: 50

Antenna Registration Number(s):

Day:

Critical: Tower No. 4 2 1029591 1029589 1029590 1029588 ASRN

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2349.64

Critical: 1660.84

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Day:2474.6

Critical: 1749.4

Critical: 66.973

Day: 94.749

Ø

Factor:

Theoretical Parameters:

Day Directional Antenna:

*	4	ω	2	⊣	Tov No.
ower					ver
* Tower Reference Switch; "	0.3000	0.8200	1.0000	0.6300	Tower Field Ratio Phasing No. (Deg.)
Switch,"	67.000	-146.000	0.000	150.000	
	0.3000 67.000 300.0000	0.8200 -146.000 200.0000	0.000 100.0000	0.6300 150.000 0.0000	Spacing (Deg.)
	175.000	175.000	175.000	0.000	not
	0	0	0	0	Tower Ref Height Switch * (Deg.)
	111.0	111.0	111.0	111.0	Height (Deg.)

¹⁰ Spacing and orientation from reference tower

Augmentation Parameters:

No. (Deg. T) (1) (1) (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Azimuth
Н	
- 4 4 4 4	വ
(Deg.) 28.0 28.0 46.0 28.0	Span
(mV/m @ 1 km) 643.74 547.18 643.74 482.80	Radiation at Central Azimuth
-	@ 1 km)

Theoretical Parameters:

Critical Directional Antenna:

ω	N	Н	Tower No.
0.8200	1.0000	0.6300	Field Ratio Phasing (Deg.)
-146.000	0.000	0.6300 150.000	io Phasing (Deg.)
0.8200 -146.000 200.0000	0.000 100.0000	0.0000	Spacing (Deg.)
175.000	175.000	0.000	Orientation Tower Ref Height (Deg.) Switch * (Deg.)
0	0	0	Tower Ref Switch *
111.0	111.0	111.0	f Height (Deg.)

П Spacing and orientation from previous tower

Theoretical Parameters:

Critical Directional Antenna:

Tower No. Field Ratio Phasing Spacing Orientation Tower Ref Height (Deg.) (Deg.) (Deg.) Switch * (Deg.)

0.3000

4

67.000 300.0000 175.000 0

111.0

Tower Reference Switchi"

Spacing and orientation from reference tower

Spacing and orientation from previous tower

Augmentation Parameters:

14	13	12	11	10	9	∞	7	6	ഗ്വ	4	ω	2	⊢	Aug No.
355.0	341.0	327.0	304.0	280.0	266.0	253.0	245.0	97.0	84.0	70.0	46.0	23.0	9.0	Central Azimuth (Deg. T
28.0	28.0	28.0	46.0	28.0	26.0	16.0	10.0	26.0	26.0	28.0	46.0	28.0	28.0	al ch Span T) (Deg.)
513.38	450.62	386.24	452.23	341.18	370.15	289.68	450.62	305.78	370.15	341.18	455.44	386.24	455.44	Radiation at Central Azimuth (mV/m @ 1 km)

Day Directional Operation:

4	ω	2	Н	Twr.
66	-146	0	150	Twr.Phase No. (Deg.)
0.29	0.86	⊣	0.58	Antenna Monitor Antenna Sample Current Ratio Current
0.276	0.838	Н	0.545	Antenna B Current R
		×		Base

Critical Directional Operation:

4	ω	2	Н	Twr.
66	-146	0	150	(Deg.)
0.27	0.85	Ь	0.56	Antenna Monitor Antenna Sample Current Ratio Current
0.275	0.842	1	0.543	Antenna Base Current Ratio

Antenna Monitor: Potomac Instruments AM-19(204)S/N 154

Sampling System Approved Under Section 73.68(b)) Ho the es.

Monitoring Points:

Special operating conditions or restrictions

1 MONITOR POINT DESCRIPTIONS

playground area. DAYTIME. Continue E onto Ewalt, then south and then E for total of 0 Molnar Dr. Turn right and proceed 1.7 mi into entrance to (Hance School. Point located 40 ft from NW corner of school playground area. Point located 2.83 km from site, max 223.0 Gibson to SR 910. Turn right From WWNL site, and proceed Turn proceed W on Lah Rd 0.23 mid N 0.42 mito Gibson Rd. C n right and proceed E then south and then 1 km from site, max $223.6~\mathrm{mV/m}$ into entrance to Gouveneur 0.92 mi Cont total of 0.47 mi to West to Ewalt Rd. Hardies building g in

Turn right and proceed N 0.42 mi to Gibson Rd. Continue N 1.43 m Gibson to SR 910. Turn right and proceed Extension. Turn left and proceed 0.08 mi to point. Point on E eroad. Point located 4.96 km from site, max 31.8 mV/m DAYTIME. From WWNL site, N 1.43 mi on Hardies E edge of

Turn left E 2.35 mi Rd. Turn right and proceed E 2.1 mi to SR 0.25 mi to entrance of West Deer Town (WDTSCC). Point edge (WDTSCC). Poin edge of SR 910. From WWNL site, and proceed Point is in 910. Point West Deer Township Senior Citizens Center center of parking lot of WDTSCC 100 ft from W located 6.02 km from site, max 49.9 mV/m DAYTIME S 0.63 mi proceed W on Wildwood Rd. and proceed N 0.6 mi Lah Rd 0.23 mi 910. Turn right and proceed Turn left to West eft and proceed to Cedar Ridge

max 2530 on entrance to W 1.65 mi to Babcock Rd, where Wildwood becomes Ingomar Rd. 1.4 miles on Ingomar to Grubbs Rd. Turn right and proceed W 1.65 mi Turn entrance 48 left mV/m DAYTIME. From WWNL site, if and proceed S to Devlin road to parking area. Park parking area. arking area. Point proceed W on 0.63 mi to V W on Lah Rd 0.23 mi to to Wildwood Rd. Turn Turn right and proceed NW 0.08 mirea. Point is 75 ft W of Grubbs located Turn right and proceed 5.04 km from West Hardies Rd. Continue site Rd Ø

Mill Road. Turn left and proceed NW of Pearce Mill Rd and 40 ft E of the 280° - From WWNL site, proceed Turn left and proceed S 0.63 mi W 1.65 mi to Babcock Rd. Turn 2800 l and 40 ft E of located 4.97 km proceed W Turn right to Wildwood Rd. the Ambridge picnic shelter near large no Lah Rd 0.23 mi and proceed N 0.25 mi to Pearce 1.64 mi to point. Turn to West Hardies Rd. right Point 65 ft and proceed

Turn right and proceed N 0.42 mi to Gibson Rd. Continue N 1.43 mi (Gibson to SR 910. Turn left and proceed W 0.91 mi to North Montour Turn right and proceed N 0.3 mi to point. Point on E edge of North Montour Rd at center of small clearing. Point 3.92 km from Hardies Rd. g Rd

Gibson to SR 910. Turn left and proceed NE 0.3 driveway to #3836. Point DAYTIME. Turn Turn right 0.3 mi to Point proceed W N 0.42 mi ight and proceed E 0.17 mi to West Hardie i to point. Point on E edge of Dickey Rd. located 3.31 km from Continue N 1.43 mi e of Dickey Rd at max 211.2 mV/m Hardies mV/m g Rd. Turn