

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

File No. : **BZ-940711AB**

FAC ID : **57088**

Call Sign : **W-K-B-R**

LICENSEE:

ROBERT MILES BITTNER

W6AM

1. Community of License. . . : **Manchester, NH**
2. Transmitter location. . . . : **376 Goffstown Back Road
Goffstown, NH**

North Latitude. : **43° 00' 40"**
West Longitude : **71° 30' 19"**

6. Antenna and ground system:

Attached.

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

4. Main Studio Location: **(See Section 73.1125)**
**376 Goffstown Back Road
Goffstown, NH**

5. Remote control location

7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: **1, 3, 11 & 21.**

8. Frequency. : **1250 kHz**

9. Nominal power (kW). : **5.0 Day 5.0 Night**

Antenna input power (kW) :

5.4 Day ☐ Non-directional antenna : current **10.4** amperes: resistance **50.0** ohms.
☒ Directional antenna

5.4 Night ☐ Non-directional antenna : current **10.4** amperes: resistance **50.1** ohms.
☒ Directional antenna

10. Hours of operation : **BL-830331AD ATTACHED**

11. Conditions. :

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission rules made thereunder, and further subject to conditions set forth in this license,¹ the LICENSEE is hereby authorized to use and operate the radio transmitting apparatus herein described for the purpose of broadcasting for the term ending **3 A.M. Local Time**

April 1, 1998

The Commission reserves the right during said license period of terminating this license or making effective any change, or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period.

The license is issued on the licensee's representation that the statements contained in the 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, as amended. This license is subject to the right of control by the Government of the United States conferred by section 606 of the Communications Act of 1934, as amended.

NPS:rao

¹ This license consists of this page and pages

2, 3 & 4.

Dated:

OCT 28 1996

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1. **DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM**

No. and Type of Elements: Five uniform cross-section, guyed, series-excited vertical radiators. Theoretical RMS: 667.27 mV/m, Day; 706.50 mV/m, Night. Augmented RMS: 707.72 mV/m, Day; 743.33 mV/m, Night. Q: 22.361, Day & Night. All values @ 1km.

Height above Insulators: 62.79 m (94.2°)

Overall Height: 64.31 m

Spacing and Orientation: Daytime: Tower #1 & #4 spaced 279.84 m (420°) on a bearing of 296°. Tower #5 spaced 73.15 m (110° on a bearing of 180° true from center point of towers #1 & #4. Nighttime: Towers #1, 2, 3, & 4 spaced 93.27 m (140°) between towers on a line bearing 296° true.

Non-Directional Antenna: None used.

Ground System consists of 120-60.36 m equally spaced buried copper radials about the base of each tower. Intersecting radials shortened and bonded to transverse copper strap midway between towers.

2. **THEORETICAL SPECIFICATIONS**

Towers:		SE(#1)	SC(#2)	NC(#3)	NW(#4)	S(#5)
Phasing:	Night:	-147°	--	--	147°	-86°
	Day:	0°	109.7°	228.25°	-22°	--
Field Ratio:	Night:	1.0	1.45	0.912	0.25	--
	Day:	1.0	--	--	0.25	0.938

3. **OPERATING SPECIFICATIONS**

Phase Indication*:

Night:	0°	109.7°	228.25°	-22°	--
Day:	-147°	--	--	147°	-86°

Antenna Base

Current Ratio:

Night:	0.707	1.0	0.776	0.414	--
Day:	1.0	--	--	0.271	0.903

Antenna Monitor Sample

Current Ratio:

Night:	0.770	1.000	0.805	0.430	--
Day:	1.000	--	--	0.250	0.950

* As indicated by Potomac Instruments AM-19 (204) Antenna Monitor.
Antenna sampling system approved under Section 73.68 (b) of the Rules.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 90° True. Proceed as for the 56° monitor point to Union Street. Turn left (north) and proceed 0.2 miles to Webster Street. Turn right (west) and proceed approximately 0.1 mile to intersection with D.W. Highway N. (Route 3) Turn left (north) on Route 3 and proceed 0.4 miles to monitor point. The point is located 15 yards (paces) on west side of road directly opposite utility pole "NHP&L 28". The distance from antenna is .55 miles. The field intensity measured at this point should not exceed 39.6 mV/m, Daytime.

Direction of 266° True. Proceed as for the 206° monitor point to intersection of Tirrell Hill Road with Mast Road. Turn right on Mast Road and proceed 1.5 miles to the intersection of Normand Road. Turn left (south) on Normand Road and proceed 0.5 miles to monitor point. Point is 30 yards east of road in lower driveway to barn. Distance from antenna is 3.3 miles. The field intensity measured at this point should not exceed 22.4 mV/m, Daytime.

Direction of 345° True. From transmitter proceed east on Goffstown Road approximately 0.35 miles to Straw Road. Turn left on Straw Road and proceed 1.1 miles to junction with Dunbarton Road. Continue north on Dunbarton Road 1.7 miles to intersection with Montelona Road. Bear left onto Montelona and proceed 0.6 miles to intersection with Grady Road. Turn right onto Grady Road and proceed approximately 0.3 miles to the monitor point. Point is at the crest of the hill on the east side of the road opposite drive to white farm house. Point is 15 paces into field directly in front of two small trees. Distance from the antenna is 3.4 miles. The field intensity measured at this point should not exceed 5.8 mV/m, Nighttime.

Direction of 56° True. Proceed from transmitter east on Goffstown Road approximately 1.75 miles to intersection with Everett Turnpike. Following signs indicating Amoskeag Bridge and city proper (Manchester). Proceed 0.5 miles from Amoskeag Bridge east on W. Salmon Street to Union Street. Turn left (north) and proceed approximately 2.0 miles to Union Street to monitor point. The point is located on the NW corner of the intersection of Union Street with Coral Avenue, 20 yards (paces) west of fire hydrant. Point is close to small bush by garage of house. Distance from antenna is 2.55 miles. The field intensity measured at this point should not exceed 42.7 mV/m, Daytime.

Direction of 206° True. Proceed from transmitter NW on Goffstown Road approximately 2.3 miles to junction with Tirrell Hill Road. Turn left (south) and proceed south on Tirrell Hill Road 1.1 miles to intersection with Mast Road. Turn left and follow Mast Road approximately 0.7 miles to Route 114. Follow Route 114 south approximately 1.1 miles to the intersection with Shirley Hill Road. Turn right and proceed west on Shirley Hill Road approximately 1.7 miles to intersection with Wallace Road. Turn left and follow Wallace Road approximately 1.5 miles to New Boston Road; turn left (east) and

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DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

follow New Boston Road approximately 0.7 miles to monitor point. The point is located at crest of Hill on north side of road (15 yards off road) exactly opposite walkway to large white house. Distance from antenna is 3.10 miles. The field intensity measured at this point should not exceed 6.0 mV/m, Daytime.

Direction of 226° True. Proceed as for the 206° monitor point to intersection of Shirley Hill Road and Wallace Road. Turn left and follow Wallace Road approximately 0.6 miles to monitor point. Point is in middle of road in line with two large rocks on east. Distance from antenna is 3.35 miles. The field intensity measured at this point should not exceed 6.2 mV/m, Daytime.

Direction of 316° True. Proceed from transmitter NW on Goffstown Road 1.15 miles to Catamount Road. Turn right (north) on Catamount Road and proceed 0.3 miles to monitor point. The point is located 15 yards west of Catamount Road, 15 yards south of cross street. Distance from antenna is .4 miles. The field intensity measured at this point should not exceed 25.7 mV/m, Daytime.

Direction of 210° True. Proceed as for the 206°(Day) monitor point to intersection of New Boston Road and Wallace Road. Continue on Wallace Road approximately 0.2 miles to intersection with Cajun Court. The point is located on the SE corner of the intersection 10 yards east of Wallace Road at top of small cleared knoll. Distance from antenna is 3.60 miles. The field intensity measured at this point should not exceed 7.2 mV/m, Nighttime.

Direction of 296° True. From transmitter proceed NW on Goffstown Road 1.55 miles to the monitor point. Point is 30 yards south of gate on gated dirt drive on south side of Goffstown Road, 0.1 miles west of Racquetball club. Distance from antenna is 1.45 miles. The field intensity measured at this point should not exceed 27.6 mV/m, Nighttime.