



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

Authorizing Official:

Official Mailing Address:

SAGA COMMUNICATIONS OF NEW ENGLAND, LLC  
 73 KERCHEVAL AVENUE  
 GROSSE POINTE FARMS MI 48236

Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau

Grant Date: June 30, 2011

Facility Id: 58543

Call Sign: WFEA

This license expires 3:00 a.m.  
 local time, April 01, 2014.

License File Number: BML-20110330AYO

Correction ASRN number

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

Callsign: WFEA

License No.: BML-20110330AYO

Name of Licensee: SAGA COMMUNICATIONS OF NEW ENGLAND, LLC

Station Location: MANCHESTER, NH

Frequency (kHz): 1370

Station Class: B

Antenna Coordinates:

Day

Latitude: N 42 Deg 54 Min 26 Sec

Longitude: W 71 Deg 27 Min 45 Sec

Night

Latitude: N 42 Deg 54 Min 26 Sec

Longitude: W 71 Deg 27 Min 45 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: 5.0

Antenna Input Power (kW): Day: 5.4 Night: 5.4

Antenna Mode: Day: DA Night: DA

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

Current (amperes): Day: 10.4 Night: 10.4

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1218380	
2	1218378	

Night:

Tower No.	ASRN	Overall Height (m)
1	1218380	
2	1218378	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 750.44 Night: 754.78

Standard RMS (mV/m/km): Day: 788.31 Night: 792.89

Augmented RMS (mV/m/km):

Q Factor: Day: 22.51 Night: 23.16

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.6500	-10.000	0.0000	0.000	0	99.7
2	1.0000	0.000	187.9000	85.750	0	175.4

\* 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	0.8850	-3.800	0.0000	0.000	0	99.7
2	1.0000	0.000	187.9000	85.750	0	175.4

\* 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	-15	0.39
2	0	1

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-18	0.265
2	0	1

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)
60.5	3.62	22.2
85.7	3.41	22.9
265.5	3.2	17.33

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
265.5	6.44	3.4

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 The west tower (Tower #1) ground system consists of 120 radials 15 meters long and 120 radials 60.9 meters long except where shortened and bonded to a transverse copper ground strap running midway between the two towers of the directional array. Additionally, a 7.3 meter square ground screen is installed about the base of this tower. All radials running to the west of the tower continue outward to a distance of 55 meters except where shortened at the western property boundary.

The east tower (Tower #2) ground system consists of 120 radials 15 meters long and 120 radials 60.9 meters long except where shortened and bonded to a transverse copper ground strap running midway between the two towers of the directional array. Additional, a 7.3 meter square ground screen is installed about the base of the tower. Near the base of the antenna is an equipment building with a perimeter copper ground strap. All radials traversing the building are bonded to the copper strap and continue outward to a distance of 60.9 meters.

## Special operating conditions or restrictions:

## 3 Day:

Direction of 60.5° true North. From transmitter entrance, turn left (north) on Daniel Webster Highway (U.S. Route 3) and drive 3.3 miles to highway interchange. Proceed 2.3 miles east on Interstate 93/Interstate 193/U.S. Route 101 to the South Wilson Street exit. Turn right (south) on South Wilson Street (State Route 28) 0.7 miles, bear right on Harvey Road and continue 1.65 miles south. Monitor Point is located 0.14 miles south of Grenier Field Road on the right-hand side of the road, 90 feet north of a fire hydrant.

Direction of 85.7° true North. From transmitter entrance, turn left (north) on Daniel Webster Highway (U.S. Route 3) and drive 3.3 miles to highway interchange. Proceed 2.3 miles east on Interstate 93/Interstate 193/U.S. Route 101 to the South Wilson Street exit. Turn right (south) on South Wilson Street (State Route 28) 0.7 miles, bear right on Harvey Road and continue 2.65 miles to white farm house on left-hand side, at the back of which are two large brown barns. Monitoring point is located on this farm driveway 20 feet east of Harvey Road.

Direction of 265.5° true North. From transmitter entrance, turn right and proceed south on Daniel Webster Highway (U.S. Route 3) a distance of 1.75 miles, turn right (west) on Bedford Road and proceed 1.1 miles to Liberty Hill Road. Bear right (north) on Liberty Hill Road and proceed 1.2 miles to a large white barn on the left-hand side of the road. The Monitoring Point is located on the western side of the first driveway at the fork to a farm road, 25 feet west of Liberty Hill Road.

## 4 Night:

Direction of 265.5° true North. Turn right at the WFEA driveway onto Daniel Webster Highway and head south for 1.7 miles (2.7km) to the intersection of Bedford Road. Turn right onto Bedford Road and go west for 1.6 miles (2.6 km) to the intersection of Wire Road. Turn right onto Wire Road and go north for 1.3 miles (2.1) to the intersection of Beals Road. Turn left onto Beals Road and go west for 0.4 miles (0.64 km) to the intersection of Jenkins Road. Continue on Beals Road to another 0.8 miles (1.3 km) to the monitor point on the right side of the road marked in paint. The monitor point is in front of the home at 145 Beals Road. The geographical coordinates at this point are North Latitude 42°54'12" and West Longitude 71°32'27".

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