

## **United States of America**

# FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

SALEM MEDIA OF MASSACHUSETTS, LLC 4880 SANTA ROSA ROAD CAMARILLO CA 93012

Facility Id: 9676

Call Sign: WWTC

License File Number: BMML-20181210ABV

This license covers Permit No.: BP-20180213AAO

Soundiner

Son Nguyen

Supervisory Engineer Audio Division

Media Bureau

Grant Date: JAN - 3 2019

This license expires 3:00 a.m. local time, April 01, 2021.

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.

Subject to the provisions of the Communications Act of 1934, subsequent

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.	7:45	AM	5:00	PM	Jul.	4:45	AM	8:00	PM
Feb.	7:15	AM	5:45	PM	Aug.	5:15	AM	7:15	PM
Mar.	6:30	AM	6:15	PM	Sep.	5:45	AM	6:30	PM
Apr.	5:30	AM	7:00	PM	Oct.	6:30	AM	5:30	PM
May	4:45	AM	7:30	PM	Nov.	7:15	AM	4:45	PM
Jun.	4:30	AM	8:00	PM	Dec.	7:45	AM	4:30	PM

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Name of Licensee: SALEM MEDIA OF MASSACHUSETTS, LLC

Station Location: MINNEAPOLIS, MN

Frequency (kHz): 1280

Station Class: B

#### Antenna Coordinates:

Day

Latitude: N 44 Deg 47 Min 18 Sec 93 Deg 12 Min Longitude: W 54 Sec

Night

Latitude: Ν 44 Deg 47 Min 18 Sec W 93 Deg 12 Min Longitude: 54 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and

73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 10.0 Night: 15.0

Antenna Input Power (kW): Day: 10.5 Night: 15.84

Antenna Mode: Day: DA Night: DA

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

Current (amperes): Day: 14.5 Night: 17.8

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No. ASRN Overall Height (m) 1

1039518

2 1039519

1039520 3

1039521 4

Night:

Tower No. ASRN Overall Height (m)

> 1039518 1

1039519

3 1039520

1039521

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# DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 1125.3 Night: 1418.4 Standard RMS (mV/m/km): Day: 1182.1 Night: 1490.1

Augmented RMS (mV/m/km):

Q Factor:

Day:

Night:

### Theoretical Parameters:

#### Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)		Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	117.4
2	1.8180	-163.600	117.6000	17.000	0	117.4
3	2.0910	67.800	235.2000	17.000	0	117.4
4	0.9690	-73.000	352.8000	17.000	0	117.4

## \* Tower Reference Switch

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

#### Theoretical Parameters:

### Night Directional Antenna:

Tower	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	117.4
2	1.9430	-150.800	117.6000	17.000	0	117.4
3	2.0670	59.600	235.2000	17.000	0	117.4
4	1.0560	-86.200	352.8000	17.000	0	117.4

<sup>\*</sup> Tower Reference Switch

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

## Day Directional Operation:

	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-88.5	0.665
2	108	1.057
3	0	1
4	-106.6	0.23

# Night Directional Operation:

	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-81.7	0.789
2	137.9	1.168
3	0	1

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Night Directional Operation:

Twr. Phase Antenna Monitor

No. (Deg.) Sample Current Ratio

4 -139.9 0.26

Antenna Monitor: POTOMAC INSTRUMENTS 1901-4

Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:

Ground system consists of 120 equally spaced, buried, copper radials, each 76.2 meters in length except where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers, plus 120 interspersed radials 5.2 meters in length, about the base of all four towers.

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