



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

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

Son Nguyen
Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 9676

Call Sign: WWTC

Permit File Number: BP-20180213AAO

Grant Date:

JUN 18 2018
This permit expires 3:00 a.m.
local time, 36 months after the
grant date specified above.

Permit to change site, patterns, increase power, and co-locate with
station KKMS (AM).

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

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

Callsign: WWTC

Permit No.: BP-20180213AAO

Name of Permittee: 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

Longitude: W 93 Deg 12 Min 54 Sec

Night

Latitude: N 44 Deg 47 Min 18 Sec

Longitude: W 93 Deg 12 Min 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 Mode: Day: DA Night: DA

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

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1039518	
2	1039519	
3	1039520	
4	1039521	

Night:

Tower No.	ASRN	Overall Height (m)
1	1039518	
2	1039519	
3	1039520	
4	1039521	

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.)	Tower Ref Switch *	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 No.	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

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Inverse Distance Field Strength:

The inverse distance field strength at a distance of one kilometer from the above antenna in the directions specified shall not exceed the following values:

Day:

Azimuth:	Radiation:	
116.5	242.2	mV/m
173	71.5	mV/m
221	71.5	mV/m
277.5	242.2	mV/m

Night:

Azimuth:	Radiation:	
91.5	130.7	mV/m
123.5	62	mV/m
158.5	49.7	mV/m
235.5	49.7	mV/m
270.5	62	mV/m
302.5	130.7	mV/m

Special operating conditions or restrictions:

- 1 The permittee must submit a proof of performance as set forth in either Section 73.151(a) or 73.151(c) of the rules before program tests are authorized.
A proof of performance based on field strength measurements, per Section 73.151(a), shall include a complete nondirectional proof of performance, in addition to a complete proof on the (day) and (night) directional antenna system. The nondirectional and directional field strength measurements must be made under similar environmental conditions. The proof(s) of performance submitted to the Commission must contain all of the data specified in Section 73.186 of the rules.
Permittees who elect to submit a moment method proof of performance, as set forth in Section 73.151(c), must use series-fed radiators. In addition, the sampling system must be constructed as described in Section 73.151(c) (2) (i).
- 2 Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.

Special operating conditions or restrictions:

- 3 Before program tests are authorized, sufficient data shall be submitted to show that adequate filters, traps and other equipment has been installed and adjusted to prevent interaction, intermodulation and/or generation of spurious radiation products which may be caused by common usage of the same antenna system by Stations KKMS (ID# 18518), and there shall be filed with the license application copies of a firm agreement entered into by the two stations involved clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment. In addition, field observations shall be made to determine whether spurious emissions exist and any objectionable problems resulting therefrom shall be eliminated. Following construction, and prior to authorization of program test under this grant, both stations shall each measure antenna or common point resistance and submit FCC Form 302 as application notifying the return to direct measurement of power.
- 4 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.
- 5 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 ***