



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

Authorizing Official:

Official Mailing Address:

\_\_\_\_\_  
 CAPSTAR TX, LLC  
 7136 S. Yale Avenue  
 Suite 501  
 Tulsa OK 74136  
 \_\_\_\_\_

\_\_\_\_\_  
*Son Nguyen*  
 Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau  
 \_\_\_\_\_

Facility Id: 2946  
 Call Sign: WWNC  
 License File Number: BMML-20170731AJP

Grant Date: **NOV 13 2017**  
 This license expires 3:00 a.m.  
 local time, December 01, 2019.

Direct Measurement of Power using the method of moment rules.

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

Callsign: WWNC

License No.: BMML-20170731AJP

Name of Licensee: CAPSTAR TX, LLC

Station Location: ASHEVILLE, NC

Frequency (kHz): 570

Station Class: B

Antenna Coordinates:

Day

Latitude: N 35 Deg 35 Min 49 Sec

Longitude: W 82 Deg 36 Min 24 Sec

Night

Latitude: N 35 Deg 35 Min 49 Sec

Longitude: W 82 Deg 36 Min 24 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: 5.00 Night: 5.4

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 16.22 Night: 10.39

Resistance (ohms): Day: 19 Night: 50

Non-Directional Antenna: Day

Radiator Height: 97.5 meters; 66.8 deg

Theoretical Efficiency: 291.29 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1007876	

Night:

Tower No.	ASRN	Overall Height (m)
1	1007873	
2	1007874	
3	1007875	
4	1007876	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 634.1  
 Standard RMS (mV/m/km):  
 Augmented RMS (mV/m/km): Night: 667.01  
 Q Factor: Night:

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	66.8
2	1.8000	86.500	110.0000	0.000	0	66.8
3	1.1500	56.500	309.6000	23.240	0	66.8
4	0.6400	330.000	213.0000	35.000	0	66.8

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	31.5	34.0	120.70
2	50.0	20.0	173.00
3	169.0	16.0	339.30
4	261.0	14.0	297.73

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-84.8	0.56
2	0	1.
3	-29.7	0.693
4	-111.1	0.359

Antenna Monitor: POTOMAC INSTRUMENTS AM-1901

Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:

- 1 The permittee/licensee in coordination with other users of the site 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.

Special operating conditions or restrictions:

- 2 Ground System Description:  
Ground system consists of 120 - 131.1 meters equally spaced buried copper wire radials about the base of each tower, plus a 14.6 meter square ground screen at the base of each tower. Radials are shortened and bonded to copper strap where they would overlap between towers.
  
- 3 The licensee shall perform the measurements described in Section 73.155 at least once within every 24 month period.

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