



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
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 37232

Call Sign: WPOP

License File Number: BMML-20200414AAU

Grant Date: August 12, 2020

This license expires 3:00 a.m.
local time, April 01, 2022.

This license covers Permit No.: BP-20200414AAI

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

Callsign: WPOP

License No.: BMML-20200414AAU

Name of Licensee: CAPSTAR TX, LLC

Station Location: HARTFORD, CT

Frequency (kHz): 1410

Station Class: B

Antenna Coordinates:

Day

Latitude: N 41 Deg 41 Min 34 Sec

Longitude: W 72 Deg 45 Min 07 Sec

Night

Latitude: N 41 Deg 41 Min 34 Sec

Longitude: W 72 Deg 45 Min 07 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	
1	None	56.1
2	None	56.1

Night:

Tower No.	ASRN	
1	None	56.1
2	None	56.1

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 684 Night: 684
 Standard RMS (mV/m/km): Day: 718.6
 Augmented RMS (mV/m/km): Night: 720.5
 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	17.500	0.0000	0.000	0	92.0
2	0.7500	0.000	230.0000	124.000	0	92.0

* 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	17.500	0.0000	0.000	0	92.0
2	0.9600	0.000	230.0000	124.000	0	92.0

* 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	87.5	11.0	178.40
2	93.0	11.0	113.27
3	108.5	31.0	299.02
4	124.0	31.0	370.15
5	139.5	31.0	296.73
6	155.0	11.0	101.95
7	259.0	10.0	40.23
8	349.0	42.0	120.70

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1

Day Directional Operation:

Twr. Phase No. (Deg.)	Antenna Monitor Sample Current Ratio
2 -20.2	0.832

Night Directional Operation:

Twr. Phase No. (Deg.)	Antenna Monitor Sample Current Ratio
1 0	1
2 -17.8	1.056

Antenna Monitor: POTOMAC AM19

Special operating conditions or restrictions:

- 1 Ground Systems consists of 120 86.9 m equally spaced buried copper radials about the base of each tower. Radials which would otherwise overlap are fore-shortened and bonded to transverse copper strap midway between towers. In addition, copper straps straddle a small stream which flows between the towers and electrical continuity across the stream is provided by means of transverse copper straps spaced at approximately 4.6 m intervals. A 7.3m x 7.3m ground screen is located at base of each tower. A copper strap extends along center line of towers.
- 2 The licensee/permittee 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.

*** END OF AUTHORIZATION ***