

Received 8/13/2012



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

FIRST STATE COMMUNICATIONS
3012 HIGHWOODS BLVD, #201
RALEIGH NC 27604

Son Nguyen
Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 21630

Call Sign: WPTF

License File Number: BZ-20120222ABU

Grant Date: July 02, 2012

This license expires 3:00 a.m.
local time, December 01, 2019.

This supersedes authorization of same date to specify antenna registration numbers. (HKC 7/18/2012)

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

Name of Licensee: FIRST STATE COMMUNICATIONS

Station Location: RALEIGH, NC

Frequency (kHz): 680

Station Class: B

Antenna Coordinates:

Day

Latitude: N 35 Deg 47 Min 38 Sec

Longitude: W 78 Deg 45 Min 41 Sec

Night

Latitude: N 35 Deg 47 Min 38 Sec

Longitude: W 78 Deg 45 Min 41 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 50.0

Antenna Input Power (kW): Day: 50.0 Night: 52.6

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 20.59 Night: 32.45

Resistance (ohms): Day: 118 Night: 50

Non-Directional Antenna: Day

Radiator Height: 149.9 meters; 122.4 deg

Theoretical Efficiency: 326.7 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1007885	

Night:

Tower No.	ASRN	Overall Height (m)
1	1007884	
2	1007883	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 2069.6
 Standard RMS (mV/m/km):
 Augmented RMS (mV/m/km): Night: 2176.94
 Q Factor: Night:

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.9250	-140.000	0.0000	0.000	0	92.1
2	1.0000	0.000	72.2000	341.400	0	92.1

* 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	37.2	10.0	189.90
2	90.0	40.0	2253.08
3	285.0	10.0	189.90
4	304.0	13.0	877.09
5	309.0	10.0	901.23
6	311.5	10.0	901.23
7	341.4	11.0	1287.47

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1
2	-134	0.835

Antenna Monitor: POTOMAC INSTRUMENTS AM-19 (204)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

Radial (Deg. T)	Distance From Transmitter (km)	Maximum Field Strength (mV/m)
37.2	3.39	55.8
285	4.05	33.2
341.4	4.38	231.8

Special operating conditions or restrictions:

1 Monitor Point Descriptions

37.2° - From intersection of Blue Ridge Road and I-40 West, proceed west 3.22 km on I-40 just past I-40 connector underpass to exit ramp on right side of road, point located on top of metal storm drain at start of exit ramp, 3.39 km from site, max 55.8 mV/m nighttime.

285° - From intersection of Durham Road and Highway 54, proceed west on Highway 54 for 2.74 km, point located 50 feet into field on south side of road, halfway between speed limit sign and mailbox for house #1001, 4.05 km from site, max 33.2 mV/m nighttime.

341.4° - From intersection of N. Harrison and Weston Parkway, proceed left onto Weston Parkway for 0.8 km, point is at storm drain grating at curb of westbound lane, 200 feet east of the Weston entrance monument, 4.38 km from site, max 231.8 mV/m nighttime.

2 Ground system consists of 120 equally spaced, buried, copper radials 82.3 meters in length or to points of intersection between N(#1) and S(#2) tower 122 m in length or to points of intersection about the base of the Non-Da #3 tower. Intersecting radials shortened and bonded to transverse copper straps E#3 tower has 14.6 m by 14.6 m ground screen.

*** END OF AUTHORIZATION ***