



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
TIDEWATER COMMUNICATIONS, LLC
73 KERCHEVAL AVENUE
GROSSE POINTE FARMS MI 48236

Son Nguyen
Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 39493
Call Sign: W5VA

Grant Date: **FEB 15 2018**
This license expires 3:00 a.m.
local time, October 01, 2019.

License File Number: BMML-20171128ACC

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

Callsign: WSV4

License No.: BMML-20171128ACC

Name of Licensee: TIDEWATER COMMUNICATIONS, LLC

Station Location: HARRISONBURG, VA

Frequency (kHz) : 550

Station Class: B

Antenna Coordinates:

Day

Latitude: N 38 Deg 27 Min 04 Sec
Longitude: W 78 Deg 54 Min 29 Sec

Night

Latitude: N 38 Deg 27 Min 04 Sec
Longitude: W 78 Deg 54 Min 29 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: 1.0

Antenna Input Power (kW) : Day: 5.00 Night: 1.08

Antenna Mode: Day: ND Night: DA

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

Current (amperes) : Day: 16.2 Night: 4.65

Resistance (ohms) : Day: 19 Night: 50

Non-Directional Antenna: Day

Radiator Height: 106.1 meters; 70 deg

Theoretical Efficiency: 294.51 mV/m/kw at 1km

Antenna Registration Number(s) :

Day:

Tower No.	ASRN	Overall Height (m)
1	1018181	

Night:

Tower No.	ASRN	Overall Height (m)
1	1018180	
2	1018181	
3	1018182	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km) :

Night: 282.27

Standard RMS (mV/m/km) :

Augmented RMS (mV/m/km) :

Night : 298.98

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	-147.000	0.0000	0.000	0	70.0
2	1.5400	0.000	90.0000	315.000	0	70.0
3	1.0000	147.000	90.0000	315.000	1	70.0

* 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	49.0	40.0	30.58
2	49.0	10.0	32.19
3	180.0	80.0	429.69
4	220.0	50.0	42.59
5	245.0	50.0	109.44
6	278.5	67.0	25.75
7	278.5	10.0	43.45
8	315.0	10.0	104.61

Night Directional Operation:

Twr. Phase No. (Deg.)	Antenna Monitor Sample Current Ratio
1 -147.4	0.592
2 0	1
3 146.8	0.64

Antenna Monitor: POTOMAC INSTRUMENTS AM-19D (204)

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.

- 2 The licensee shall perform the measurements described in Section 73.155 at least once within every 24 month period.

- 3 Ground System Description:

Ground system consists of 120 equally spaced buried copper radials 136.3 meters long except where they would overlap, plus a 14.6 meter square copper ground screen under each tower. Copper bonding straps between tower bases and at intersection of radials.

*** END OF AUTHORIZATION ***