

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WH9XGN

(Call Sign)

XT MO

(Class of Station)

0897-EX-ST-2014

(File Number)

NAME Vortant Technologies LLC

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

Developing a system for transmitting water quality data from under the surface of the water to local land-based receivers.

Station Locations

- (1) MOBILE: Weaverville, NC, within 100 km, centered around NL 35-44-00; WL 82-34-25
- (2) MOBILE: Wilmington, NC, within 60 km, centered around NL 34-13-35; WL 77-56-42
- (3) MOBILE: Apex, NC, within 100 km, centered around NL 35-42-29; WL 79-00-50
- (4) MOBILE: Charleston, SC, within 100 km, centered around NL 32-46-11; WL 79-55-50

Frequency Information

MOBILE: Weaverville, NC, within 100 km, centered around NL 35-44-00; WL 82-34-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
110-130 kHz	MO	1K00F1D	10 W (ERP)	0.01 %
3.155-3.399 MHz	MO	1K00F1D	20 W (ERP)	0.01 %

This authorization effective October 16, 2014 and
will expire 3:00 A.M. EST April 16, 2015

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Wilmington, NC, within 60 km, centered around NL 34-13-35; WL 77-56-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
110-130 kHz	MO	1K00F1D	10 W (ERP)	0.01 %
3.155-3.399 MHz	MO	1K00F1D	10 W (ERP)	0.01 %

MOBILE: Apex, NC, within 100 km, centered around NL 35-42-29; WL 79-00-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
110-130 kHz	MO	1K00F1D	10 W (ERP)	0.01 %
3.155-3.399 MHz	MO	1K00F1D	10 W (ERP)	0.01 %

MOBILE: Charleston, SC, within 100 km, centered around NL 32-46-11; WL 79-55-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
110-130 kHz	MO	1K00F1D	10 W (ERP)	0.01 %
3.155-3.399 MHz	MO	1K00F1D	10 W (ERP)	0.01 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.

Special Conditions:

- (3) NTIA has no technical objection to the frequency use as proposed pending approved Mid-Atlantic Frequency Coordinator (MIDAFRC) coordination and notification of NAVY POC, Mr. Robert Goddard at 301-342-1194 (robert.n.goddard@navy.mil) prior to anticipated testing start time for frequencies 3.155 MHz - 3.399 MHz.
- (4) Operation is NOT PERMITTED using the following frequencies:
- a. 3156 kHz
 - b. 3161 kHz
 - c. 3181 kHz
 - d. 3204.5 kHz
 - e. 3209.5 kHz
 - f. 3226 kHz
 - g. 3232.5 kHz
 - h. 3237 kHz
 - i. 3242 kHz
 - j. 3254.4 kHz
 - k. 3266.5 kHz
 - l. 3267 kHz
 - m. 3269 kHz
 - n. 3274.5 kHz
 - o. 3293.5 kHz
 - p. 3307.5 kHz
 - q. 3326.5 kHz
 - r. 3329.4 kHz
 - s. 3330.6 kHz