

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

EXPERIMENTAL

(Nature of Service)

WP9XOQ

(Call Sign)

XT MO

(Class of Station)

1663-EX-ST-2019

(File Number)

NAME WaveSense

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:

Develop and test new sensor designs.

Station Locations

- (1) MOBILE: Contiguous United States, within 3000 km, centered around NL 39-09-13; WL 97-02-19

Frequency Information

MOBILE: Contiguous United States, within 3000 km, centered around NL 39-09-13; WL 97-02-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
88-108 MHz	MO	NON	4.1 nW (ERP)	0.0001 %
137-216 MHz	MO	NON	4.1 nW (ERP)	0.0001 %
216-328.6 MHz	MO	NON	7.2 nW (ERP)	0.0001 %

This authorization effective November 05, 2019 and
will expire 3:00 A.M. EST April 18, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Contiguous United States, within 3000 km, centered around NL 39-09-13; WL 97-02-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
335.4-960 MHz	MO	NON	7.2 nW (ERP)	0.0001 %

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (3) 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.
- (4) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 20 miles of the contours of the testing area:
 - Paging Service licensees in 152 MHz
 - Paging Service licensees in 158 MHz
 - Paging Service licensees in 152 MHz/158 MHz
 - AMTS Licensee (217-218 MHz/219-220 MHz)
 - 218-219 MHz Service licensees
 - 220-222 MHz Service licensees
- (5) The stop buzzer contact for this project is Byron Stanley
Phone: 6179020321
Email: byron@wavesense.io
- (6) WaveSense must adhere to the following:
 - a. For operations within Arizona, coordinate with the DoD AFC AZ office at 520-538-6423/6424 prior to operations.
 - b. For operations within New Mexico and Texas (west of 104W), coordinate with AFC-WSMR via email to: usarmy.wsmr.imcom-central.list.dodafc@mail.mil prior to operations.
 - c. Avoid operation within the National Radio Quiet Zone, as well as operation within 10km of sites listed in US131.
- (7) WaveSense must notch out the following bands:
 - i. 108-137 MHz
 - ii. 328.6-335.4 MHz
 - iii. All 307 additional frequencies identified in the exhibit in the application entitled "STA 1663-EX-ST-2019 Notches.pdf."
- (8) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number: requires notching out 108-137 MHz and 328.6-335.4 MHz.
- (9) WaveSense should be aware that due to the concentration of Federal users in the area and the operational parameters of those users it is possible that they may experience interference.

Special Conditions:

- (10) WaveSense should have no expectations that this system will be approved for operational use in Federal or Maritime bands based upon concurrence with this testing.
- (11) This authorization SUPERSEDES the previously issued authorization with the same call sign and file number: adds Special Conditions (9) and (10); and requires notching out 307 additional frequencies in the attachment in the application entitled "STA 1663-EX-ST-2019 Notches."