

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

EXPERIMENTAL

(Nature of Service)

WN9XAP

(Call Sign)

XT MO

(Class of Station)

0015-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:

This operation will focus on testing and developing the first FCC part 15 compliant variant of the Localizing GPR system.

Station Locations

- (1) MOBILE: Near Calhoun County MI, within 305 km, centered around NL 42-17-51; WL 84-59-50

Frequency Information

MOBILE: Near Calhoun County MI, within 305 km, centered around NL 42-17-51; WL 84-59-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-108 MHz	MO	NON	400 uW (ERP)	0.0001 %
139-325 MHz	MO	NON	400 uW (ERP)	0.0001 %
337-400 MHz	MO	NON	400 uW (ERP)	0.0001 %

This authorization effective March 06, 2019 and
will expire 3:00 A.M. EST August 22, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



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.
- (3) WaveSense must notch out the following:
 - a. (+/- 8 kHz) 156.525 MHz, 156.800 MHz, 161.975 MHz, 162.025 MHz, 243.000 MHz
 - b. (+/- 12.5 kHz) 154.265 MHz, 154.890 MHz, 155.580 MHz, 156.000 MHz, 158.940 MHz, 158.970 MHz, 163.7125 MHz, 164.000 MHz, 164.125 MHz, 164.1375 MHz, 164.150 MHz, 164.9375 MHz, 166.250 MHz, 166.5625 MHz, 166.6625 MHz, 167.700 MHz, 167.725 MHz, 168.175 MHz, 168.200 MHz, 168.6125 MHz, 168.625 MHz, 168.650 MHz, 169.125 MHz, 169.900 MHz, 169.925 MHz, 169.975 MHz, 170.475 MHz, 170.525 MHz, 171.425 MHz, 171.500 MHz, 171.575 MHz, 172.250 MHz, 172.275 MHz, 172.4375 MHz
- (4) 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 WaveSense may experience interference.
- (5) 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.
- (6) 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
- (7) The stop buzzer contact for this project is Byron Stanley
Phone: 6179020321
Email: byron@wavesense.io
- (8) The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.
- (9) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (10) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (11) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (12) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.