

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

EXPERIMENTAL

(Nature of Service)

WO9XYP

(Call Sign)

XT MO

(Class of Station)

1300-EX-ST-2019

(File Number)

NAME Fortem Technologies, Inc.

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:

To test prototype ultra-small SWaP-C radar devices for commercial applications designed to detect and avoid airborne vehicles.

Station Locations

- (1) MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00
- (2) MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00
- (3) MOBILE: Las Vegas, NV, within 35 km, centered around NL 36-03-50; WL 115-13-00
- (4) MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00

Frequency Information

MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.7 GHz	MO	300MF0N	30 W (ERP)	0.000094 %

This authorization effective August 04, 2019 and
will expire 3:00 A.M. EST January 05, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.7 GHz	MO	300MF0N	30 W (ERP)	0.000094 %

MOBILE: Las Vegas, NV, within 35 km, centered around NL 36-03-50; WL 115-13-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.7 GHz	MO	300MF0N	30 W (ERP)	0.000094 %

MOBILE: Las Vegas, NV, within 10 km, centered around NL 36-03-50; WL 115-13-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.7 GHz	MO	300MF0N	30 W (ERP)	0.000094 %

Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) For operations in the 15.43-15.63 GHz, the effective EIRP must be in accordance with Recommendation ITU-R S. 1340.
- (4) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (5) This experimental station shall only be used for Detect and Avoid (DAA) operations. It shall not be used for radiolocation purposes such as UAS detection for security perimeters, drone interdiction or counter-UAS purposes.
- (6) Future STA requests to extend this authorization will not be considered.

Special Conditions:

- (7) Fortem Technologies, Inc. should also be aware that radio astronomy services (RAS) has a primary band from 15.35-15.4 GHz where all emissions are prohibited. Any future operational use or development that may cause interference to this band would not be supported. For site locations or more information, please contact the NSF spectrum management unit at esm@nsf.gov.