

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

EXPERIMENTAL

(Nature of Service)

WK9XMW

(Call Sign)

XT MO

(Class of Station)

1471-EX-ST-2016

(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:

This ultra-small SWAP-C radar has been designed to enable UAVs to detect and avoid other airborne vehicles, thus allowing them to safely fly Beyond Line of Sight (BLOS).

Station Locations

- (1) MOBILE: Allen C Perkinson Blackstone Army Airfield, VA, within 10 km, centered around NL 37-04-26; WL 77-57-29

Frequency Information

MOBILE: Allen C Perkinson Blackstone Army Airfield, VA, within 10 km, centered around NL 37-04-26; WL 77-57-29

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16.3-16.5 GHz	MO	200MF0N	6 W (ERP)	

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.

This authorization effective November 01, 2016 and
will expire 3:00 A.M. EST April 01, 2017

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) At Least three (3) days prior to the start of testing, Fortem Technologies must contact MIDLANT AFC at midlantaafc_paxriver@navy.mil. Additionally, provide a stop buzzer POC for the planned testing.

- (4) The proponent should be aware that UAV detect and avoid system must operate in frequency bands that have a primary allocation for the Aeronautical Radionavigation service and have been designated for airborne Aeronautical Radionavigation operations. The 15.7-17.2 MHz band is not allocated to the Aeronautical Radionavigation service but rather to the Radiolocation service. Further radars operated in the 15.7-17.2 GHz band under the Radiolocation service must operate on a secondary basis to military systems. Thus, while experimental operations for prototype testing can be supported in the 15.7-17.2 GHz band, permanent licensing of a UAV detect and avoid system will need to be accommodated in bands with appropriate allocations