

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

EXPERIMENTAL

(Nature of Service)

WN9XJU

(Call Sign)

XT MO

(Class of Station)

0996-EX-ST-2018

(File Number)

NAME Advanced Protection Systems 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:

To test the low weight, low power radar sensor prototype.

Station Locations

- (1) MOBILE: Quantico, VA, within 8 km, centered around NL 38-34-28; WL 77-32-43
- (2) MOBILE: Columbus, NC, within 16 km, centered around NL 35-15-11; WL 82-11-49
- (3) MOBILE: Live Oak, FL, within 5 km, centered around NL 30-14-17; WL 82-52-08
- (4) MOBILE: Stateline, NV 89449, within 5 km, centered around NL 38-57-43; WL 119-56-39
- (5) MOBILE: Fort Dix, NJ, within 8 km, centered around NL 40-01-47; WL 74-37-06

Frequency Information

MOBILE: Quantico, VA, within 8 km, centered around NL 38-34-28; WL 77-32-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.3-10.6 GHz	MO	100MF0N	49 W (ERP)	0.00001 %

This authorization effective July 01, 2018 and
will expire 3:00 A.M. EST December 31, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Columbus, NC, within 16 km, centered around NL 35-15-11; WL 82-11-49

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.3-10.6 GHz	MO	100MF0N	49 W (ERP)	0.00001 %

MOBILE: Live Oak, FL, within 5 km, centered around NL 30-14-17; WL 82-52-08

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.3-10.6 GHz	MO	100MF0N	49 W (ERP)	0.00001 %

MOBILE: Stateline, NV 89449, within 5 km, centered around NL 38-57-43; WL 119-56-39

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.3-10.6 GHz	MO	100MF0N	49 W (ERP)	0.00001 %

MOBILE: Fort Dix, NJ, within 8 km, centered around NL 40-01-47; WL 74-37-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10.4-10.6 GHz	MO	100MF0N	96 W (ERP)	0.00001 %

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) NTIA does not support the use of 10.3-10.6 GHz for the use of Detect and Avoid (DAA) for UAS. For future DAA development, Advanced Protection Systems, LLC should use the 15.4-15.7 GHz band.

Special Conditions:

- (3) Applicant should be aware that the band 10.3-10.6 GHz is allocated for federal radiolocation services, and it should have no expectations of automatic approval in this band in future submissions.
- (4) Advanced Protection Systems LLC shall ensure that this equipment will be used for counter-drone function, and that it shall not be used for sense-and-avoid (detect-and-avoid/DAA) purposes.
The frequency allocation is only suitable for radiolocation and is not consistent with the requirements for aeronautical radionavigation that is needed for DAA.