

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

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WO9XKJ

(Call Sign)

0725-EX-ST-2019

(File Number)

NAME AIRXOS, 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:

AIRXOS will be evaluating the efficacy of multiple radar models in the detection of various unmanned and low-altitude manned aircraft.

Station Locations

- (1) MOBILE: Walter RC Park, Saranac, MI, within 1 km, centered around NL 42-52-04; WL 85-13-07
- (2) MOBILE: Kent Radio AeroModelers, Alto, MI, within 1 km, centered around NL 42-49-14; WL 85-21-23
- (3) MOBILE: AiRXOS, Grand Rapids, MI, within 1 km, centered around NL 42-54-12; WL 85-32-50

Frequency Information

MOBILE: Walter RC Park, Saranac, MI, within 1 km, centered around NL 42-52-04; WL 85-13-07

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.7 GHz	MO	300MQXN	20 W (ERP)	0.000028 %

This authorization effective May 20, 2019 and
will expire 3:00 A.M. EST November 21, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



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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) AIRXOS, Inc. must adhere to the following:
 - a. For operations at Revere, MA and Medford, MA, all emissions must be above 15.5 GHz.
 - b. 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.
- (4) For operations in the 15.43-15.63 GHz, the effective EIRP must be in accordance with Recommendation ITU-R S. 1340.
- (5) The stop buzzer contact for this project is Primary:
Adam Diffenderfer
Phone: 6166906777
Email: adam.diffenderfer@ge.com
- (6) The authorized herein must not be used for air traffic control communications.
- (7) Aircraft operations are limited to U.S.-registered aircraft.
- (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.

Special Conditions:

- (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.
- (13) No automatic renewal for this authorization