

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

EXPERIMENTAL

(Nature of Service)

WL9XMM

(Call Sign)

XT MO

(Class of Station)

1922-EX-ST-2018

(File Number)

NAME Georgia Institute of Technology

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 experiment will contribute the state of the art in detection and discrimination of small air vehicles.

Station Locations

- (1) MOBILE: Elliott Airfield, Dawsonville, GA, within 5 km, centered around NL 34-27-38;
WL 84-10-57

Frequency Information

MOBILE: Elliott Airfield, Dawsonville, GA, within 5 km, centered around NL 34-27-38; WL 84-10-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15.4-15.65 GHz	MO	250MF3N	150 W (ERP)	0.001 %

This authorization effective January 01, 2019 and
will expire 3:00 A.M. EST July 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (1) Georgia Institute of Technology should be aware that the 15.4 - 15.7 GHz band is allocated for Aeronautical Radionavigation and as such is suitable for unmanned aircraft detect and avoid (DAA) systems. Also, an allocation for Radiolocation is required for counter drone operations and there is no Radiolocation allocation in the 15.4-15.7 GHz band for US Civil operators. Further, Federal Government counter drone operators would be constrained by the footnote US511E which limits Federal Government Radiolocation operations in this band to system that require an emission bandwidths that exceed 1.6 GHz.
- (2) The radars mounted on UAS must not be used for air traffic control purposes or separation of aircraft.
- (3) Aircraft operations must be limited to U.S.-registered aircraft.
- (4) The stop buzzer contact for this project is Jim Perkins, Phone: 404-407-8270, Email: jim.perkins@gtri.gatech.edu