

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

EXPERIMENTAL

(Nature of Service)

WN9XZQ

(Call Sign)

XT MO

(Class of Station)

1480-EX-ST-2019

(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:

These experiments will verify that this equipment may be safely used in an airborne environment to test and evaluate Department of Defense radar systems.

Station Locations

- (1) MOBILE: Cartersville Airport, Cartersville, GA, within 0.8 km, centered around NL 34-07-23; WL 84-50-55
- (2) MOBILE: Newport News-Williamsburg Airport, VA, within 0.8 km, centered around NL 37-07-54; WL 76-29-34

Frequency Information

MOBILE: Cartersville Airport, Cartersville, GA, within 0.8 km, centered around NL 34-07-23; WL 84-50-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
435 MHz	MO	0H10N0N 2M00P0N	500 W (ERP)	0.0001 %
3.3 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %

This authorization effective September 01, 2019 and
will expire 3:00 A.M. EST March 02, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Cartersville Airport, Cartersville, GA, within 0.8 km, centered around NL 34-07-23; WL 84-50-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4.6 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %
5.6 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %
9.3 GHz	MO	0H10N0N 2M00P0N	12.6 kW (ERP)	0.0001 %

MOBILE: Newport News-Williamsburg Airport, VA, within 0.8 km, centered around NL 37-07-54; WL 76-29-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
435 MHz	MO	0H10N0N 2M00P0N	500 W (ERP)	0.0001 %
3.3 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %
4.6 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %
5.6 GHz	MO	0H10N0N 2M00P0N	6.3 kW (ERP)	0.0001 %

Frequency Information

MOBILE: Newport News-Williamsburg Airport, VA, within 0.8 km, centered around NL 37-07-54; WL 76-29-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9.3 GHz	MO	0H10N0N 2M00P0N	12.6 kW (ERP)	0.0001 %

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.
- (3) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (4) Station authorized herein must not be used for air traffic control communications.
- (5) Station's operations are limited to U.S.-registered aircraft.
- (6) Stop Buzzer: Lester Gostin
Phone: 470-445-0820
Email: lamar.gostin@gtri.gatech.edu
- (7) Georgia Institute of Technology must notch out 4550 MHz (+/- 8.9 MHz) at the Newport News/Williamsburg VA location.