

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

EXPERIMENTAL

(Nature of Service)

WK9XUS

(Call Sign)

XT FX

(Class of Station)

1697-EX-ST-2016

(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:

Demonstration of a phase stability receive test with a high gain deployable aperture.

Station Locations

(1) Smyrna (COBB), GA - NL 33-54-32; WL 84-31-43

Frequency Information

Smyrna (COBB), GA - NL 33-54-32; WL 84-31-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3700-4200 MHz	FX	100MF3N	1 mW (ERP)	0.005 %

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (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) Georgia Institute of Technology must notch the band 4200-4400 MHz to protect airborne radar altimeters.

This authorization effective February 01, 2017 and
will expire 3:00 A.M. EST August 01, 2017

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Special Conditions:

- (4) The maximum antenna elevation angle with respect to the horizontal plane is -30 degrees (or 30 degrees below the horizon).
- (5) The antenna must point at an azimuth angle of 128 degrees, +/- 5 degrees (preferably to point eastward as much as possible).
- (6) Prior to operation, experimental licensee, must notify licensees of earth stations operating the 3700-4200 MHz within 20 kilometer radius of the locations from which experimental operations will occur. Experimental licensee, must also provide such notification to the National Spectrum Managers Association frequency coordinators by email. (see http://wireless.fcc.gov/services/index.htm?job=licensing_1&id=microwave). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, eirp density) and day and times of each test. Consult the IBFS database to identify licensed earth station in the band 3700-4200 MHz band.
- (7) 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.
- (8) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (9) No automatic renewal for operations in the 3700-4200 MHz band of this authorization.