

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

EXPERIMENTAL

(Nature of Service)

WN9XQB

(Call Sign)

XT FX MO

(Class of Station)

1915-EX-ST-2018

(File Number)

NAME Virginia Tech

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:

Testing LTE.

Station Locations

- (1) Arlington (ARLINGTON), VA - NL 38-52-51; WL 77-06-57; MOBILE: Arlington, VA, within 5 km, centered around NL 38-52-51; WL 77-06-57

Frequency Information

Arlington (ARLINGTON), VA - NL 38-52-51; WL 77-06-57; MOBILE: Arlington, VA, within 5 km, centered around NL 38-52-51;

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3.65-3.7 GHz	MO	20M0D7D 10M0D7D	400 mW (ERP)	
3.65-3.7 GHz	FX	20M0D7D 10M0D7D	400 mW (ERP)	

This authorization effective December 15, 2018 and
will expire 3:00 A.M. EST May 16, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Arlington (ARLINGTON), VA - NL 38-52-51; WL 77-06-57; MOBILE: Arlington, VA, within 5 km, centered around NL 38-52-51;

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.925-7.125 GHz	FX	40M0D7D 20M0D7D	400 mW (ERP)	
5.925-7.125 GHz	MO	40M0D7D 20M0D7D	400 mW (ERP)	

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) Licensee must avoid pointing the transmitting antenna main beam gain within 15 degrees of any point on the geostationary orbital arc while transmitting signals in the 3.65-3.7 GHz and 5.925-7.125 GHz bands.
- (4) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (5) Licensee shall ensure that the transmitting fixed station antenna(s) main beam gain tip down when possible and avoid pointing above the horizon to protect satellite stations.
- (6) 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.
- (7) Licensee shall maintain operation separation from the grandfathered earth stations as defined in Part 90, Sub-part Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3.65-3.7 GHz band.
- (8) Licensee shall consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic area.
- (9) Licensee must coordinate with the local Society of Broadcast Engineer frequency coordinator and the affected Fixed Microwave Service licensees prior to operation in 5.925-7.125 MHz band.
- (10) Licensee shall be aware that FSS earth stations are licensed above 3700 MHz and if any interference occurs, the experimental licensee of this authorization will be subject to immediate shut down.

Special Conditions:

- (11) Licensee shall be aware that FSS earth stations are licensed above 3700 MHz and if any interference occurs, the experimental licensee of this authorization will be subject to immediate shut down.
- (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) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.