

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

EXPERIMENTAL

(Nature of Service)

WM9XHS

(Call Sign)

XT FX

(Class of Station)

1163-EX-ST-2018

(File Number)

NAME The MITRE Corporation

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:

The purpose of the operation is two fold. First, to provide two way radio frequency communication with a satellite utilizing an experimental antenna. Second, to conduct radar experiments.

Station Locations

- (1) Bedford, MA - NL 42-30-19; WL 71-14-05
- (2) Bedford (MIDDLESEX), MA - NL 42-30-19; WL 71-14-05

Frequency Information

Bedford, MA - NL 42-30-19; WL 71-14-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.1685-5.2015 GHz	FX	32M5F7D 50M0G7D	15310.87 W (ERP)	0.1 %
5.645-5.655 GHz	FX	10M0F7D	15310.87 W (ERP)	0.1 %
5.72-5.73 GHz	FX	10M0F7D	15310.87 W (ERP)	0.1 %

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

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Bedford, MA - NL 42-30-19; WL 71-14-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.72-5.73 GHz	FX	10M0G7D	15310.87 W (ERP)	0.1 %
5.745-5.755 GHz	FX	10M0F7D 10M0G7D	15310.87 W (ERP)	0.1 %

Bedford (MIDDLESEX), MA - NL 42-30-19; WL 71-14-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2.41 GHz	FX	20M0G7D	31.6 kW (ERP)	0.1 %
2.45 GHz	FX	50M0G7D	31.6 kW (ERP)	0.1 %

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) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.
- (4) The licensee shall coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR. Part 101.103(d) prior to operation on 2.45 GHz.
- (5) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) The stop buzzer contact for this project is Chris Hall Phone: 703-983-1329
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.

Special Conditions:

- (8) The MITRE Corporation must coordinate all operations using a frequency of 2.41 GHz or 2.45 GHz with the NASA JSC Spectrum Manager, Cathy Sham (catherine.c.sham@nasa.gov), and NASA JSC Alternate Spectrum Manager, Alan Chu (alan.h.chu@nasa.gov), at least 60 days in advance of operation.