

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WJ2XRI

(Call Sign)

XT FX MO

(Class of Station)

0511-EX-CR-2019

(File Number)

NAME Boston University, College of Engineering

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(h) of the Commission's Rules

Station Locations

- (1) MOBILE: Nongeostationary, SP
- (2) Boston, MA - NL 42-20-57; WL 71-06-20

Frequency Information

MOBILE: Nongeostationary, SP

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
400-405 MHz	MO	53K7F1D	767.3 mW (ERP)	1 %

Boston, MA - NL 42-20-57; WL 71-06-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
400-405 MHz	FX	13K4F1D	96.38 W (ERP)	1 %

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

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (1) Upon receipt of a conjunction warning from the JSpOC or other source, the licensee must review the warning and take all possible steps to assess and, if necessary, to mitigate collision risk, including, but not limited to: contacting the operator of any active spacecraft involved in such warning; sharing ephemeris data and other appropriate operational information with any such operator; modifying spacecraft attitude and/or operations.
- (2) Following launch of the satellite, the licensee must notify the FCC through electronic submission to the license file, of the status of the satellite (transmissions commenced, etc.), not later than 7 days after commencement or expected commencement of transmissions, and of termination of transmissions, not later than three months after such termination.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) 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.
- (5) Uplink operations from the Boston, MA ground station to the CUPID CubeSat shall not occur when the NASA International Space Station (ISS) (NORAD designation 25544 or international spacecraft ID 1998-067A) is within horizon to horizon view of the Boston, MA ground station.
- (6) Downlink operations from the CUPID CubeSat to the Boston, MA ground station shall not occur when the CUPID CubeSat is within 2000 km of the NASA ISS (NORAD designation 25544 or international spacecraft ID 1998-067A).
- (7) Once available, Boston University shall provide the NORAD designation or international spacecraft ID for the CUPID CubeSat to the NASA Johnson Space Center (JSC) Spectrum Manager, Catherine Sham (catherine.c.sham@nasa.gov) and Alternate Spectrum Manager, Alan Chu (alan.h.chu@nasa.gov).
- (8) Boston University shall provide a Stop Buzzer POC to the NASA JSC Spectrum Manager, Catherine Sham (catherine.c.sham@nasa.gov) and Alternate Spectrum Manager, Alan Chu (alan.h.chu@nasa.gov).
- (9) Operation is subject to operational restrictions specified by NASA.