

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

EXPERIMENTAL

(Nature of Service)

WL2XLM

(Call Sign)

XT FX MO

(Class of Station)

1004-EX-CN-2020

(File Number)

NAME Cornell University

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(J) of the Commission's Rules

Station Locations

- (1) MOBILE: LEO ISS Deploy
- (2) MOBILE: LEO 400KM A
- (3) Ithaca (TOMPKINS), NY - NL 42-26-37; WL 76-28-54
- (4) MOBILE: LEO 400KM B
- (5) MOBILE: LEO 400KM C
- (6) MOBILE: LEO 400KM D

Frequency Information

MOBILE: LEO ISS Deploy

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1621 MHz	MO	35K0G1D	1.518 W (ERP)	0.0001 %

This authorization effective March 17, 2021 and
will expire 3:00 A.M. EST April 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: LEO 400KM A

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
915 MHz	MO	62K1G1D	0.01 W (ERP)	0.001 %

Ithaca (TOMPKINS), NY - NL 42-26-37; WL 76-28-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
915 MHz	FX	62K1G1D	96.64 W (ERP)	0.002 %

MOBILE: LEO 400KM B

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
915 MHz	MO	62K1G1D	0.01 W (ERP)	0.001 %

MOBILE: LEO 400KM C

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
915 MHz	MO	62K1G1D	0.01 W (ERP)	0.001 %

Frequency Information

MOBILE: LEO 400KM D

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
915 MHz	MO	62K1G1D	0.01 W (ERP)	0.001 %

Special Conditions:

- (1) 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.
- (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) 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.
- (4) The licensee shall provide the Commission with all information required for the Advance Publication, Coordination and Notification of frequency assignments pursuant to the International Radio Regulations. This includes the preparation of draft materials, to be provided to the Commission prior to submission to the International Telecommunication Union. The authorized operations require notification of frequency assignments pursuant to Article 11 of the ITU Radio Regulations. Licensee shall provide the FCC, not later than 30 days after a frequency assignment is brought into use, the documents required for notification (including SpaceCap Notification MDB file) of such frequency assignments. The licensee shall also prepare materials for informing the ITU that a frequency assignments has been brought into use, or that its use has been suspended or permanently discontinued.
- (5) Prior to commencing any operations in the frequencies below, the applicant must notify the following within 316 miles of the contours of the testing area:
 - > Location & Monitoring Service licensees (902-928 MHz)
- (6) Concurrence is contingent upon the proper licensing of the complimentary portion of the requested operations by Iridium Satellite LLC.
- (7) Point of Communication: ALPHA CubeSat

Special Conditions:

- (8) ALPHA Cubesat Mission Stop Buzzer Designation
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