

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

EXPERIMENTAL

(Nature of Service)

XT FX MO

(Class of Station)

WH2XXT

(Call Sign)

0024-EX-CM-2016

(File Number)

NAME Astro Digital, Incorporated

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 SAT, 600 km circular altitude, 97.8 deg. incl.
- (2) Moffett Field (SANTA CLARA), CA - NL 37-24-34; WL 122-03-12
- (3) MOBILE: global
- (4) MOBILE: LEO SAT, 610 km circular altitude, 97.8 deg. incl.

Frequency Information

MOBILE: LEO SAT, 600 km circular altitude, 97.8 deg. incl.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
26.8 GHz	MO	86M4G1D	82 W (ERP)	5.0E-6 %

Moffett Field (SANTA CLARA), CA - NL 37-24-34; WL 122-03-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
402.58-402.62 MHz	FX	40K0F1D	17.6 kW (ERP)	2.5E-6 %

This authorization effective July 13, 2017 and
will expire 3:00 A.M. EST July 13, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: global

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
400.155-400.195 MHz	MO	40K0F1D	2 W (ERP)	2.5E-6 %

MOBILE: LEO SAT, 610 km circular altitude, 97.8 deg. incl.

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1615-1618.725 MHz	MO	1M23G7D	0.76 W (ERP)	5.0E-6 %

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) POINT OF COMMUNICATION: CORVUS BC-1 and CORVUS BC-2
- (3) 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.
- (4) The licensee must coordinate any transmissions in the 400.15-401 MHz frequency band with Orbcomm prior to operating.
- (5) 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.
- (6) Operations in the 1617.775-1618.725 MHz frequency band must be coordinated with the Iridium satellite system
- (7) 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
- (8) Prior to operating, licensee must coordinate and obtain agreement of any transmissions in the 402.58-402.62 MHz frequency band with Spire Global, Inc.