

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

EXPERIMENTAL

(Nature of Service)

XT FX MO

(Class of Station)

WJ2XNV

(Call Sign)

0548-EX-ST-2019

(File Number)

NAME SpaceQuest, Ltd.

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:

Emergency downlinking of S-band data to a Fairbanks, AK ground station.

Station Locations

- (1) MOBILE: NGSO Space Station
- (2) North Pole (Fairbanks North Star), AK - NL 64-46-09; WL 147-26-20
- (3) Fairfax (FAIRFAX), VA - NL 38-51-36; WL 77-18-30
- (4) Naalehu (HAWAII), HI - NL 19-03-26; WL 155-34-59
- (5) Limestone (AROOSTOOK), ME - NL 46-57-19; WL 67-54-19
- (6) MOBILE: NGSO Space Station

Frequency Information

MOBILE: NGSO Space Station

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2201 MHz	MO	1M00G1D	2.2 W (ERP)	

This authorization effective June 17, 2019 and
will expire 3:00 A.M. EST October 01, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

North Pole (Fairbanks North Star), AK - NL 64-46-09; WL 147-26-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.9-400.05 MHz	FX	25K0F1D	22 W (ERP)	

Fairfax (FAIRFAX), VA - NL 38-51-36; WL 77-18-30

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.9-400.05 MHz	FX	25K0F1D	22 W (ERP)	

Naalehu (HAWAII), HI - NL 19-03-26; WL 155-34-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.9-400.05 MHz	FX	25K0F1D	22 W (ERP)	

Limestone (AROOSTOOK), ME - NL 46-57-19; WL 67-54-19

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.9-400.05 MHz	FX	25K0F1D	22 W (ERP)	

Frequency Information

MOBILE: NGSO Space Station

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
400.5-400.65 MHz	MO	35K0F1D	2.1 W (ERP)	

Special Conditions:

- (1) 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.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (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) SpaceQuest, Ltd. shall limit the total combined number of downlink passes from either the THEA or BRIO satellites to the North Pole, Fairbanks North Star, AK ground station to 4 or less per day.
- (7) All operations on 2201 MHz/1M00G1D/2.2W (ERP) link shall limited to communications between THEA non-geostationary satellite to the RBC Signals ground station in Fairbanks, Alaska.
- (8) SpaceQuest, Ltd. is required to provide stop buzzer POC, to AF (Jimmy Nguyen, email: Jimmy.Nguyen@us.af.mil) prior to operations of 2201 MHz/1M00G1D/2.2W (ERP) link.
- (9) This authorization is without prejudice to any determination that may be made regarding pending or future experimental satellite earth station applications.