

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

EXPERIMENTAL

(Nature of Service)

WN9XIB

(Call Sign)

XT MO

(Class of Station)

1288-EX-ST-2018

(File Number)

NAME Akash Systems, Inc.

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:

MCNAIR CubeSat

Station Locations

(1) MOBILE: NGSO - 500 km altitude, 97.8 degree inclination

Frequency Information

MOBILE: NGSO - 500 km altitude, 97.8 degree inclination

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2.286-2.288 GHz	MO	2M00G1D	2 W (Output Power)	0.001 %
19-20.2 GHz	MO	1G20G1D	10 W (Output Power)	0.001 %

This authorization effective October 01, 2019 and
will expire 3:00 A.M. EST April 02, 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) 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.
- (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) Applicant should be aware that the bands 2200-2290 MHz and 19.0-20.2 GHz are allocated for federal services, and it should have no expectation of automatic approval in those bands in future submissions.
- (5) Applicant must coordinate with the local Society of Broadcast Engineers frequency coordinator and with affected Fixed Microwave Service licensees prior to operation in the 19.0-20.2 GHz band.
- (6) Akash Systems, Inc. shall use a local crossing time of ascending node (LTAN) value of 09:30 AM for the MCNAIR CubeSat, shall limit operations to communications with that CubeSat, and ensure that transmissions occur only when that CubeSat is within view of the Dongara Earth Station, as stipulated in the application.
- (7) Point of communications: MCNAIR