Mr. David Bryant, 708 Quince Orchard Rd., Gaithersburg, MD 20878

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WN9XQQ
(Nature of Service)	(Call Sign)
XT MO	1930-EX-ST-2018
(Class of Station)	(File Number)

NAME UltiSat 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:
Demonstration and testing of an ESAA terminal.

Station Locations
(1) MOBILE: CONUS

Frequency Information

MOBILE: CONUS

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.2-14.47 GHz	MO	20M0G1D	13.182 kW (ERP)	

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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
(3) The stop buzzer contact is Tim Wiegand, Phone: 240.243.5138, Email: NOC@ultisat.com

This authorization effective December 06, 2018 and
will expire 3:00 A.M. EST May 24, 2019

FEDERAL COMMUNICATIONS COMMISSION

Special Conditions:

(4) POINT OF COMMUNICATION: Geostationary-satellite orbit (GSO) satellite: EUTELSAT 117WA (located at 117° W.L.); Sky B-1 (located at 317° E.L.); Intelsat 29e (located at 310° E.L.); SES-1 (located at 101° W.L.); and AMC-21 (located at 125° W.L.)

(5) The aircraft earth stations (ESAAs) are authorized, on a non-protected and non-harmful interference basis, to transmit to the geostationary-orbit space stations using the 14.2-14.47 GHz frequency band that are authorized by the Commissions. The aircraft earth stations authorized herein must immediately terminate operations upon notification that such operation is causing harmful interference to any other radio system lawfully operating in the 14.2-14.47 GHz frequency band. The aircraft earth stations authorized herein cannot claim protection from harmful interference from any radio system lawfully operating in the 14.2-14.47 GHz frequency band.

(6) Operation pursuant to this authorization must be in compliance with the terms of coordination agreements between the proposed operators operating in the 14.2-14.47 GHz frequency band and operators of other Ku-band geostationary space stations within six angular degrees of those space stations. In the event that another GSO FSS space station commences operation in the Ku-band at a location within six degrees of any of these space stations, earth stations operating pursuant to this temporary authority shall ease transmitting to that space station unless and until such operation has been coordinated with the new space station's operator or Licensee demonstrates that such operation will not cause harmful interference to the new co-frequency space station.

(7) Communications between ESAAs and the Ku-band geostationary space stations must be in compliance with all existing and future space station coordination agreements reached between the Ku-GSO operators and other administrations.

(8) Licensee's ESAAs must employ a tracking algorithm that is resistant to capturing and tracking adjacent satellite signals, and each station must be capable of inhibiting its own transmission in the event it detects unintended satellite tracking.

(9) Licensee's ESAAs must be monitored and controlled by a ground-based network control and monitoring center. Such stations must be able to receive "enable transmission" and "disable transmission" commands from the network control center and must cease transmission immediately after receiving a "parameter change" command until receiving an "enable transmission" command from the network control center. The network control center must monitor operation of each earth station to determine if it is malfunctioning, and each earth station must self-monitor and automatically cease transmission on detecting an operational fault that could cause harmful interference to a fixed satellite service network.

(10) Licensee must maintain a point of contact available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized herein, for discussing interference concerns with other licensees, and must submit a letter to be included in its license file with the name and telephone number of the point of contact prior to commencing operation.

(11) Operations must comply with the Section 25.203(e), (f), and (g) and Section 25.227 of the Commission's Rules.

(12) ESAAs authorized herein must not be used for air traffic control communications.

(13) ESAAs must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.

Special Conditions:

(14) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.