

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

EXPERIMENTAL

(Nature of Service)

WI9XXU

(Call Sign)

XT MO

(Class of Station)

0884-EX-ST-2015

(File Number)

NAME ViaSat, 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:

Testing the VR-12 Ka band antenna on the O3b satellites.

Station Locations

- (1) MOBILE: CONUS, Hawaii and Alaska
- (2) MOBILE: US, US

Frequency Information

MOBILE: CONUS, Hawaii and Alaska

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
28350-29100 MHz	MO	10M0G7D 15M0G7D	30620 W (ERP)	
29500-30000 MHz	MO	15M0G7D	30620 W (ERP)	

This authorization effective August 25, 2015 and
will expire 3:00 A.M. EST September 18, 2015

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: US, US

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
28350-30000 MHz	MO	24M0G7D	193000 W (ERP)	

Special Conditions:

- (1) All customers participating in the experiment shall be informed that this operation is for experimental purposes only and can be cancelled at any time.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) 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.
- (4) The designated point-of-contact to terminate transmissions if interference occurs can be reached at 1-720-493-7300.
- (5) Operation is subject to prior coordination with the existing and future Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (6) Viasat must maintain records of the following data for each earth station operating pursuant to this authorization: location (latitude, longitude, altitude); aircraft attitude (pitch, yaw, roll); transmit frequency and occupied bandwidth; data rate; EIRP; and target satellite. This data must be recorded at intervals of no more than two minutes while an earth station is transmitting and every 30 seconds when aircraft roll angle is greater than 10 degrees. Viasat must also record antenna pointing error at 30-second intervals when the error exceeds 0.25 degrees. Viasat shall make this data available upon request to an FSS system operator or the Commission within 24 hours after receiving the request.
- (7) Operation pursuant to this authorization must be in compliance with the terms of coordination agreements between the operators of the AMC-16, AMC-15, ANIK-F2, WB-1, ViaSat-1 and O3b space stations and operators of other Ka-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 Ka-band at a location within six degrees of any of these space stations, earth stations operating pursuant to this temporary authority shall cease transmitting to that space station unless and until such operation has been coordinated with the new space station's operator or Viasat demonstrates that such operation will not cause harmful interference to the new co-frequency space station.
- (8) Communications between Viasat's earth stations and the ANIK-F2 and WB-1 space stations must be in compliance with all existing and future space station coordination agreements reached between Canada and other administrations.
- (9) Viasat's earth stations 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.

Special Conditions:

- (10) Viasat's earth stations 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.
- (11) Viasat 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.
- (12) Stations authorized herein must not be used for air traffic control communications.
- (13) Aircraft operations are limited to U.S.-registered aircraft.
- (14) The licensee should be aware that the other stations may be authorized on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (15) Prior to operation, licensee must successfully coordinate with the existing and future Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (16) Operation is subject to prior coordination with Local Multipoint Distribution Service (LMDS) licenses in the area.