

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

EXPERIMENTAL
(Nature of Service)

XT MO
(Class of Station)

WH2XTJ
(Call Sign)

0224-EX-CR-2017
(File Number)

NAME ViaSat, Inc.

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(i) of the Commission's Rules

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 July 01, 2017 and
will expire 3:00 A.M. EST July 01, 2019

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) 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.
- (3) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (4) POINT-OF-COMMUNICATIONS: ViaSat-1, WildBlue-1, ANIK-F2, AMC-15, AMC-16 and O3b satellites.
- (5) The designated point-of-contact to terminate transmissions if interference occurs can be reached at 1-720-493-7300.
- (6) Operation is subject to prior coordination with the existing and future Fixed Microwave Service licensees in accordance with 47 CFR, Part 101.103(d).
- (7) 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.
- (8) 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 Ob3 Limited 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.
- (9) 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.

Special Conditions:

- (10) 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.
- (11) 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.
- (12) 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.
- (13) Stations authorized herein must not be used for air traffic control communications.
- (14) Aircraft operations are limited to U.S.-registered aircraft.
- (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.