

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

EXPERIMENTAL

(Nature of Service)

WD2XAU

(Call Sign)

XT      FX MO

(Class of Station)

0142-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(g, i) of the Commission's Rules

Station Locations

- (1) Carlsbad (SAN DIEGO), CA - NL 33-07-35; WL 117-18-04
- (2) MOBILE: AIRCRAFT, US

Frequency Information

Carlsbad (SAN DIEGO), CA - NL 33-07-35; WL 117-18-04

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 14000-14500 MHz | FX            | 36M0G7D             | 1.0555 kW (ERP)  |                           |

MOBILE: AIRCRAFT, US

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 14000-14500 MHz | MO            | 2M00G7D             | 32.6 W (ERP)     |                           |

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

This authorization effective June 01, 2017 and  
will expire 3:00 A.M. EST June 01, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



**Special Conditions:**

- (2) Point of communication(s): Horizon-1.
- (3) The designated point-of-contact to terminate transmissions if interference occurs is Mr. Daryl Hunter at (760) 476-2583.
- (4) Prior to operating in the 14.47-14.5 GHz frequency band, in the listed locations, ViaSat, Inc. will coordinate with the National Academy of Sciences (NSF) and notify the Commission of the results of that coordination:  
Within 45 km of the radio observatory on St. Croix, Virgin Islands (latitude 17° 46' N, longitude 64° 35' W);  
Within 125 km of the radio observatory on Mauna Kea, Hawaii (latitude 19° 48' N, longitude 155° 28' W);  
Within 90 km of the Arecibo Observatory on Puerto Rico (latitude 18° 20' 46" N, longitude 66° 45' 11" W); and  
Within 160 km of the radio observatories listed in US203 as observing in the 14.47-14.5 GHz band.
- (5) Licensee shall comply with the EIRP density criteria set forth in Part 25.222(a)(1) through (a)(4) of the FCC's rules.
- (6) No transmissions are permitted between 14.47 GHz and 14.5 GHz within 125 km of Mauna Kea, HI (at latitude 19° 48' N, longitude 155° 28' W).
- (7) In accordance with Article 4.4 of the ITU Radio Regulations, the operations authorized herein shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the ITU Constitution, the ITU Convention, and the ITU Radio Regulations.
- (8) National Science Foundation (NSF) requests that licensee:  
1) Coordinate operation at the Taunton, MA site with the National Radio Astronomy Observatory's VLBA site at Hancock, NH. (POC Mr. Dan Mertely at Socorro, NM, Phone: 505- 835-7027 and e-mail: dmertely@nrao.edu).  
2) Coordinate operation at the Fredericksburg, VA site with Wes Sizemore at Green Bank. (Phone: 304-456-2107, e-mail:wsizemor@nrao.edu).
- (9) Subject to coordination with the Western Area Frequency Coordinator located at the Navy Pacific Missile Test Center, Pt. Mugu, Cal., prior to use within a 322 kilometer radius of Pt. Mugu or in California south of Latitude 37 30' North.
- (10) No transmissions are permitted between 14.0 GHz and 14.2 GHz within 125 km of White Sands, NM (latitude: 32° 20' 59" N, longitude 106° 36' 31" W and latitude: 32° 32' 40" N, longitude 106° 36' 48" W).
- (11) Licensee shall maintain a pointing error of less than 0.2°, between the orbital location of the target satellite and the axis of the main lobe of the earth station antenna. All emissions from the earth station shall automatically cease within 100 milliseconds if the angle between the orbital location of the target satellite and the axis of the main lobe of the earth station antenna exceeds 0.5°, and transmission will not resume until such angle is less than 0.2°.
- (12) No transmissions are permitted between 14.0 GHz and 14.2 GHz within 125 km of Blossom Point, MD (latitude: 38° 25' 44" N, longitude 77° 05' 20" W).
- (13) Operation is subject to prior coordination with FAA Great Lakes Regional Office, 2300 East Avenue, Des Plaines, Illinois 60018, phone 312-694-7071.
- (14) Operation is on a noninterference basis to the operations of NASA/ViaSat agreement on the same or adjacent channel and no protection can be afforded by that agency.