

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

EXPERIMENTAL

(Nature of Service)

WK2XKU

(Call Sign)

XT FX

(Class of Station)

0619-EX-CN-2019

(File Number)

NAME SES Americom, 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(j) of the Commission's Rules

Station Locations

(1) NA, UA - NL 0-00-00; WL 0-00-00

Frequency Information

NA, UA - NL 0-00-00; WL 0-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-28.35 GHz	FX	216MG7D	638.7 kW (ERP)	0.0003 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (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) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (4) The stop buzzer contact for this project is Will Lewis, Phone: (202) 813-4033, E-mail: will.lewis@ses.com

This authorization effective September 26, 2019 and
will expire 3:00 A.M. EST October 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (5) Licensee is authorized to operate 10 units of AvL Technologies 1.0 m fixed Ka-band antennas to conduct tests in the contiguous United States, Hawaii, Puerto Rico, and the U.S. Virgin Islands using the 27.5-28.35 GHz frequency band. The operations are subject to the following conditions:
- a. POINT OF COMMUNICATION: O3b Limited's NGSO (non-geostationary orbit space stations) satellites.
 - b. Licensee is authorized to operate AvL Technologies 1.0 m fixed Ka-band antenna that is located or installed on the vehicle. The vehicle will be at a complete stop when communicating with the O3b Limited's NGSO satellite(s). The authorized antennas meet the antenna performance standards set forth in Section 25.209(a).
 - c. The stations are authorized, on a non-protected and non-harmful interference basis, to transmit to the non-geostationary-orbit space stations using the 27.5-28.35 GHz frequency band that are authorized by the Commission. The 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 27.5-28.35 GHz frequency band. The stations authorized herein cannot claim protection from harmful interference from any radio system lawfully operating in the 27.5-28.35 GHz frequency band.
 - d. Operations granted in this license are limited by existing and future coordination agreements between the O3b NGSO space stations and other satellite operators.
 - e. Communications between authorized station(s) and the O3b NGSO space stations must comply with all existing and future coordination agreements reached between the United Kingdom and other Administrations, including all coordination agreements reached between the United Kingdom and the United States. In the absence of a coordination agreement, such communications must comply with applicable provisions of ITU Radio Regulations.