

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

EXPERIMENTAL

(Nature of Service)

WN9XBH

(Call Sign)

XT FX MO

(Class of Station)

1510-EX-ST-2019

(File Number)

NAME O3b Limited

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:

O3b is requesting renewed special temporary authority to conduct on-the-ground tests of the GetSat Microsat for fixed and short range mobile operations at its testing facility in Manassas, VA

Station Locations

- (1) Manassas, VA - NL 38-47-00; WL 77-34-19; MOBILE: Within a 1 mile radius of the coordinates, within 1.6 km, centered around NL 38-47-00; WL 77-34-19

Frequency Information

Manassas, VA - NL 38-47-00; WL 77-34-19; MOBILE: Within a 1 mile radius of the coordinates, within 1.6 km, centered around

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27.5-30 GHz	MO		22138905.78 mW (ERP)	0.0003 %
		50M0G7D		
		6M00G7D		

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.

This authorization effective August 30, 2019 and
will expire 3:00 A.M. EST February 18, 2020

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Special Conditions:

- (3) Licensee shall coordinate with the Fixed Microwave Service licensees in accordance with 47 CFR.Part 101.103(d) prior to commencing the test operations.
- (4) Licensee is authorized to operate 2 units of 0.2 meter GetSat Ka-band antennas to conduct on-the-ground tests for fixed and short range mobile operations using the 27.5-30 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. Operations in the 27.5-28.6 and 29.5-30 GHz frequency bands must be in compliance with the equivalent power Flux-density limit (-162 dBW/m²/40 KHz) in Article 22.5D of the ITU Radio Regulations.

c. Operations in the 27.5-28.6 and 29.5-30 GHz frequency bands must be in compliance with the following:

Frequency	Emission Designator	Maximum Authorized Power	Maximum EIRP
27.5-28.6 GHz	50M0G7D	775 W (ERP)	31 dBV
27.5-28.6 GHz	6M00G7D	93 W (ERP)	21.8 dBW
29.5-30 GHz	50M0G7D	775 W (ERP)	31 dBV
29.5-30 GHz	6M00G7D	93 W (ERP)	21.8 dBW

d. The stations are authorized, on a non-protected and non-harmful interference basis, to transmit to the non-geostationary-orbit space stations using the 27.5-30 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 GHz frequency band. The stations authorized herein cannot claim protection from harmful interference from any radio system lawfully operating in the 27.5-30 GHz frequency band.

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.

- (5) The stop buzzer contact for this project is Name: Will Lewis
Phone: 7035897034
Email: will.lewis@o3bnetworks.com
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.