

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

EXPERIMENTAL

(Nature of Service)

WN9XSO

(Call Sign)

XT MO

(Class of Station)

1981-EX-ST-2018

(File Number)

NAME Blue Origin Texas, LLC

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:

This application is for Flight #11 of the New Shepard space launch booster and capsule; receipt of telemetry data from the vehicles during flight.

Station Locations

- (1) MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-25-23; WL 104-45-26

Frequency Information

MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-25-23; WL 104-45-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2211 MHz	MO	4M00D1D 4M00G1D 5M00D1D 5M00G1D	5 W (ERP)	
2272.5 MHz	MO	4M00D1D 4M00G1D 5M00D1D	5 W (ERP)	

This authorization effective February 15, 2019 and
will expire 3:00 A.M. EST August 16, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-25-23; WL 104-45-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2272.5 MHz	MO	5M00G1D	5 W (ERP)	

Special Conditions:

- (1) 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.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.
- (4) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (5) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications
- (7) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.
- (8) All Blue Origin operations granted on an experimental basis shall be on an unprotected, non-interference basis to authorized stations. All spacecraft transmission to the ground shall be pre-coordinated for clearance for operation in accordance with each of the conditions specified below.
- (9) This STA is limited to launch vehicle communications for the telemetry transmissions and reception, no earlier than 15 February 2019, to support Flight #11 of the New Shepard space launch booster and capsule. This STA will expire as soon as the launch has been completed or 15 August 2019, whichever occurs first. Applications for any future launches, or modifications to this STA, shall be submitted to the FCC for re-coordination with NTIA.
- (10) All transmissions in the band 2200-2290 MHz shall comply with national and international power flux-density limits, except in cases where expected exceedances are pre-coordinated and agreed-upon.

Special Conditions:

- (11) In order to allow the Navy to address the potential for interference, Blue Origin must coordinate with the Naval Surface Warfare Center, Dahlgren Division (NSWCDD), Mr. James Moneyhon, (540) 653-3477, or james.moneyhon@navy.mil, a minimum sixty (60) prior to the flight test, to assess and mitigate harmful interference to Navy/Marine Corps/DoD operations. Blue Origin Texas must also comply with any and all restrictions that may be levied by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD).
- (12) The Stop Buzzer information, for launch operations shall be provided to NTIA (bmitchell@ntia.doc.gov). This phone shall be manned 24/7.
- (13) As soon as possible, but no later than 60 business days prior to commencing Flight #11, Blue Origin shall provide, as a minimum, launch date/window and planned first and second-stage trajectory, transmission frequencies with associated duration/cut-off time to: Jimmy Nguyen (jimmy.nguyen@us.af.mil), Scott Galbraith (vincent.s.galbraith@nasa.gov), Richard Ontiveros (richard.ontiveros1.civ@mail.mil), Stephen Harris (stephen.b.harris6.civ@mail.mil), Carmelo Rivera (carmelo.rivera@noaa.gov), and Cathy Sham (catherine.c.sham@nasa.gov). In the event of last-minute changes, 48-hour notice is required.
- (14) Blue Origin must schedule their operations at least ONE WEEK prior to activating their frequencies, with the DoD Area Frequency Coordinator (AFC), via e-mail to army.wsmr.imcom-central.list.dodafc@mail.mil, to include the planned dates/times of S-Band operation. Final authorization to radiate shall be contingent upon successful scheduling, and de-confliction of spectrum, and airspace (if applicable), with other regional operations - primarily at White Sands Missile Range (WSMR) - and shall be on a non-interference basis to DoD operations.
- (15) Blue Origin Texas, LLC shall be aware that future non-federal launches will be considered on a case-by-case basis, especially for requests in the band 2200-2290 MHz, and Blue Origin Texas, LLC shall have no expectations that future launches will be approved for operation in this band.