

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

EXPERIMENTAL

(Nature of Service)

WS9XKD

(Call Sign)

XT MO

(Class of Station)

1278-EX-ST-2021

(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 one suborbital flight of the launch system which includes a booster and capsule.

Station Locations

- (1) MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-27-06; WL 104-45-46

Frequency Information

MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-27-06; WL 104-45-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2202 MHz	MO	4M00G1D 4M00D1D	5 W (ERP)	
2247.5 MHz	MO	5M00D1D 5M00G1D	5 W (ERP)	

This authorization effective November 01, 2021 and
will expire 3:00 A.M. EST January 02, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Up to flight level 425,000 FT MSL, Van Horn, TX, within 8.4 km, centered around NL 31-27-06; WL 104-45-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2272.5 MHz	MO	5M00G1D 5M00D1D	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) All 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 stations. Blue Origin Texas, LLC should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee will be subject to immediate shut down
- (4) This STA is limited to launch vehicle communications for the telemetry transmissions and reception, no earlier than 1 November 2021, to support a single suborbital flight and supporting pre-flight and post-landing checkouts on the ground of the New Shepard space launch booster and capsule. This STA will expire as soon as the launch has been completed or 1 January 2022, whichever occurs first. Applications for any future launches, or modifications to this STA, shall be submitted to the FCC for coordination with NTIA and federal agencies.
- (5) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) 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.
- (7) As soon as possible, but no later than 60 business days prior to the planned launch, Blue Origin Texas, LLC is required to provide, as a minimum, launch date/time/window and planned first- and second-stage trajectory, transmission frequencies with associated duration/cut-off time to Jimmy Nguyen (jimmy.nguyen@us.af.mil, AFSMO), Shaobei Xu (shaobei.xu.1@us.af.mil, AFSMO), Pedro Mendoza (pedro.mendoza.1@us.af.mil, AFSMO), David Pooley (david.pooley@spaceforce.mil), Felipe Arroyo (felipe.arroyo-1@nasa.gov, NASA WFF), NASA GSFC Spectrum Office (NASA-DL-GSFC-Spectrum-Management@mail.nasa.gov), Stephen Horan (stephen.j.horan@nasa.gov, NASA LaRC), NOAA Satellite Operations Control Center (Matt.G.Sullivan@noaa.gov), and NASA JSC Spectrum Office (JSC-DL-Spectrum-Management@mail.nasa.gov). In the event of last-minute changes, 48-hour notice is required.
- (8) The Stop Buzzer information, for launch operations shall be provided to NTIA (ravery@ntia.gov). This phone shall be manned 24/7.

Special Conditions:

- (9) Commercial launch service providers should be aware that a satellite integrated into a launch vehicle or deployment device without a current FCC authorization may need to be removed from that vehicle or deployment device if the satellite operator's application for an FCC authorization is not acted upon favorably, or for various reasons cannot be granted within a time frame consistent with the launch schedule. Commercial launch providers should exercise due diligence to verify satellite operator's regulatory approvals prior to launch (FCC Enforcement Advisory DA 18-368).
- (10) As soon as possible, but no later than 60 business days prior to the planned launch, Blue Origin Texas is required to provide operations and spaceflight trajectories to the Naval Surface Warfare Center, Dahlgren Division (NSWCDD). The primary contacts for frequency coordination: Group email box - W_DLGR_NSWC_FTMA_FM@navy.mil, Mr. James Moneyhon, (540) 653-3477-james.moneyhon@navy.mil, Mr. A. Jason Verdugo, (540) 653-9590 – Anthony.J.Verdugo@navy.mil, and/or Mr. Phillip B. Scyphers, (540) 653-6071 – Phillip.scyphers@navy.mil.
- (11) Blue Origin must coordinate their S-Band operations, with the DoD-AFC (WSMR) office, at least 96 hours prior to operation, via e-mail to usarmy.wsmr.imcom-central.list.dodafc@mail.mil. Blue Origin to provide dates/times of tests, and an electronic copy of the final FCC License, under which they will be operating.