Kristi Key, 1 Rocket Road, Hawthorne, CA 90250,

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WP9XLD
(Nature of Service)	(Call Sign)
XT FX MO	1936-EX-ST-2019
(Class of Station)	(File Number)

NAME Space Exploration Technologies Corp. (SpaceX)

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:
Experimental launch, landing, and recovery of the Starship suborbital test vehicle from Boca Chica TX.

Station Locations
(1) MOBILE: Boca Chica Pad Suborbital Test Veh Max Alt 22.5km, within 5 km, centered around NL 25-59-50; WL 97-09-25
(2) Boca Chica (CAMERON), TX - NL 25-59-52; WL 97-09-26

Frequency Information

MOBILE: Boca Chica Pad Suborbital Test Veh Max Alt 22.5km, within 5 km, centered around NL 25-59-50; WL 97-09-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2211 MHz	MO	4M84F1D 4M88G1D	11.8 W (ERP)	0.000225 %
2232.5 MHz	MO	4M84F1D 4M88G1D	11.8 W (ERP)	0.000225 %

This authorization effective November 08, 2019 and will expire 3:00 A.M. EST April 13, 2020

FEDERAL COMMUNICATIONS COMMISSION

Frequency Information

MOBILE: Boca Chica Pad Suborbital Test Veh Max Alt 22.5km, within 5 km, centered around NL 25-59-50; WL 97-09-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2255.5 MHz	MO	4M84F1D 4M88G1D	11.8 W (ERP)	0.000225 %
2272.5 MHz	MO	4M84F1D 4M88G1D	11.8 W (ERP)	0.000225 %

Boca Chica (CAMERON), TX - NL 25-59-52; WL 97-09-26

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2090 MHz	FX	800KG1D	3 W (ERP)	0.0002255 %

Special Conditions:

(1) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.

(2) All operations shall be limited to telemetry, tracking and launch vehicle communications for SpaceX Starship Suborbtial Mission 1569 from Boca Chica, TX launch pad, and the experimental uplink supporting recovery operations. This STA is limited to the single SpaceX Starship Mission 1569 from Boca Chica, TX launch pad. This STA will expire as soon as the suborbital test launch has been completed or 13 April 2020, whichever occurs first.

(3) SpaceX 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 SpaceX shall have no expectations that future launches will be approved.

(4) The STOP BUZZER POC information, for launch operations shall be provided to NTIA (bmitchell@ntia.doc.gov). This phone shall be manned 24/7.

(5) All transmissions in the band 2200-2290 MHz shall comply with national and international power flux density limits, unless otherwise coordinated and agreed to. PFD analysis and exceedances shall be provided in the FCC application and provided to the NTIA for US Government review.

Special Conditions:

(6) Due to potential harmful interference to naval activities, SpaceX RF operations plan shall be submitted, at least 60 days prior to planned launch date, to the Naval Surface Warfare Center, Dahlgren Division (NSWCDD), Mr. James Moneyhon (540)653-3477, or james.moneyhon@navy.mil, for assessment. SpaceX, Inc. must also comply with any and all restrictions that may be levied by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD).

(7) Air Force (Email: Jimmy.Nguyen@us.af.mil, Robert.Avery.9@us.af.mil, Shaobei.Xu.1@us.af.mil) with the following data for launch coordination: i) primary and back up launch date/time/window; ii) planned first- and second-stage trajectory, transmission frequencies with associated duration/cut-off time; iii) the launch coordination Memo and iv) copy/ies of FCC granted (STA) for frequency/ies that will be used for the launch.

(8) No later than 5 business days prior to the planned launch, SpaceX is required to provide Air Force (Email: Jimmy.Nguyen@us.af.mil, Robert.Avery.9@us.af.mil, Shaobei.Xu.1@us.af.mil) with the primary and back up launch date/time/window for Mission 1569. In the event of last-minute changes, 24-hour notice is required.