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

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WG9XHP
(Nature of Service)	(Call Sign)
XT MO	1856-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:
Launch vehicle communications.

Station Locations
(1) MOBILE: Pad39a, KSC: Launch vehicle 1st stage, sub-orbital
(2) MOBILE: Pad 39a, KSC: Launch vehicle 2nd stage, orbital

Frequency Information

MOBILE: Pad39a, KSC: Launch vehicle 1st stage, sub-orbital

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2247.5 MHz	MO		11.8 W (ERP)	0.000225 %
		4M14F1D		
		4M84F1D		
2255.5 MHz	MO		10.8 W (ERP)	
		4M14F1D		
		4M84F1D		

This authorization effective November 11, 2019 and
will expire 3:00 A.M. EST May 11, 2020

FEDERAL COMMUNICATIONS COMMISSION

Frequency Information

MOBILE: Pad 39a, KSC: Launch vehicle 2nd stage, orbital

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2232.5 MHz	MO	4M14F1D	9.4 W (ERP)	0.000225 %
2272.5 MHz	MO	4M14F1D	9.6 W (ERP)	0.000225 %

Special Conditions:

(1) All operations shall be limited to telemetry, tracking and launch vehicle communications for SpaceX F9 Mission 1429 from Kennedy Space Center, FL. This STA is limited to the single SpaceX F9 Mission 1429 from Kennedy Space Center, FL. This STA will expire as soon as the launch has been completed or 11 May 2020, whichever occurs first.

(2) SpaceX shall be aware that future access for non-federal launches in the 2200-2290 MHz band will be considered on a case-by-case basis and SpaceX shall have no expectations that future commercial launches will be approved for use of this band.

(3) As soon as possible, but no later than 60 business days prior to the planned launch, SpaceX 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), Felipe Arroyo (felipe.arroyo-1@nasa.gov, NASA/WFF), NASA GSFC Spectrum Management Office (NASA-DL-GSFC-Spectrum-Management@nasa.gov), Scott Galbraith (vincent.s.galbraith@nasa.gov, NASA/GSFC), Stephen Horan (stephen.j.horan@nasa.gov, NASA/LaRC), NOAA Satellite Operations Control Center (philip.l.whaley@noaa.gov), Richard Ontiveros, (richard.ontiveros1@navy.mil, NMSC), kenneth.l.dudley@nasa.gov, NASA/LaRC), NOAA Satellite Operations Control Center (philip.l.whaley@noaa.gov), Matt Sullivan (Matt.G.Sullivan@noaa.gov, NOAA Satellite Operations Control Center), Richard Ontiveros, (richard.ontiveros1@navy.mil, NMSC), and Cathy Sham (catherine.c.sham@nasa.gov). In the event of last-minute changes, 48-hour notice is required.

(4) 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. A blackout zone of 1500 nautical mile radius, centered at 22N160W, shall be assumed, unless otherwise coordinated with, and agreed to, by the NSWCDD. SpaceX, Inc. must also comply with any and all restrictions that may be levied by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD).

Special Conditions:

(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.

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

(7) Sixty (60) days prior to transmitting at Complex 39a, Kennedy Space Center, Florida, SpaceX shall coordinate and schedule their operations with Range Scheduling (1ropschd@us.af.mil, 321.853.5941), Jamie Bjornbak (James.P.Bjornbak@nasa.gov, 321.867.6905, NASA KSC SMO), Scott Galbraith (vincent.s.galbraith@nasa.gov, 301-286-5089, NASA GSFC SMO) and provide a copy of FCC license to the 45th Space Wing Spectrum Management Office, (321)-853-8408, email: 45sw.erfmo@us.af.mil with Cc'ing DoD EAFC (321)-853-8426 at 45sw.dodeafc@us.af.mil and NASA GSFC Spectrum Management Office (NASA-DL-GSFC-Spectrum-Management@nasa.gov).

(8) SpaceX shall keep a log of all transmissions in the band 2200-2290 MHz and provide to the NTIA after the mission. This log shall include, as a minimum, at least date, time, frequency, EIRP density, pointing direction of all antennas. The log shall be provided to the following NTIA personnel no later than three (3) weeks after completing the mission: bmitchell@ntia.doc.gov and edrocella@ntia.doc.gov.

(9) This STA (1856-EX-ST-2019) does not specifically identify the spectrum requirements for its payload in Mission 1429; therefore, the spectrum requirements for that payload are not addressed in this response. Spectrum requirements for the payload may result in additional restrictions.