David J. Den Herder, SpaceX DC Office, 1030 15th Street, NW, Suite 220 E, Washington, DC 20005,

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WG9XHP
(Nature of Service)	(Call Sign)
XT MO	1225-EX-ST-2015
(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, for F9-22 commercial GTO mission, from Cape Canaveral.

Station Locations
(1) MOBILE: Complex 40, Cape Canaveral AFS: Launch vehicle 1st stage, sub-orbital
(2) MOBILE: Launch vehicle 2nd stage, orbital

Frequency Information

MOBILE: Complex 40, Cape Canaveral AFS: Launch vehicle 1st stage, sub-orbital

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2221.5 MHz	MO	3M27F1D	33.9 W (ERP)	
2273.5 MHz	MO	3M27F1D	33.9 W (ERP)	

This authorization effective January 15, 2016 and
will expire 3:00 A.M. EST June 15, 2016

FEDERAL COMMUNICATIONS COMMISSION

Frequency Information

MOBILE: Launch vehicle 2nd stage, orbital

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2213.5 MHz	MO		32.4 W (ERP)	
		3M27F1D		
		1M00F1D		
2251.5 MHz	MO		33.9 W (ERP)	
		3M27F1D		
		2M00F1D		
5765 MHz	MO		193 W (ERP)	
		2M00LXN		

Special Conditions:

(1) As soon as possible, but no later than seven (7) business days prior to the planned launch, SpaceX is required to provide NASA the following with the planned launch date/time/window, planned trajectories (1st and 2nd stages), transmission start/end time/receiving stations from liftoff through end of transmission for both the 1st and 2nd stage rockets:
Farzin Manshadi (farzin.manshadi@jpl.nasa.gov, 818-354-0068, NASA JPL/DSN SMO)
Scott Galbraith (vincent.s.galbraith@nasa.gov, 301-286-5089, NASA GSFC SMO)
Cathy Sham (catherine.c.sham@nasa.gov, 281-483-0124, NASA JSC SMO)
In the event of last minute changes, 48 hours notice is requested.

(2) Prior to transmitting at Cape Canaveral AFS, Florida, SpaceX shall coordinate their operations by contacting the following:
Steven Schindler (steven.f.schindler@nasa.gov, 321-867-2520, NASA KSC SMO)
Ashley Stockbridge (ashley.n.stockbridge@nasa.gov, 321.867.0218, NASA KSC SMO)
Scott Galbraith (vincent.s.galbraith@nasa.gov, 301-286-5089, NASA GSFC SMO)

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

(4) Because of extensive naval ground and flight-testing activities projected in the Pacific region during the requested period, there is a high likelihood of conflicts between the Navy activities and the proposed Space Exploration Technologies Corp. (SpaceX) operations. The Department of the Navy has no technical objection to the frequency use as proposed as long as the SpaceX coordinates with the Naval Surface Warfare Center, Dahlgren Division (NSWCDD), Mr. James Moneyhon (540)653-3477, or james.moneyhon@navy.mil, a minimum of 30-days prior to any operations to mitigate harmful interference to Navy and Marine Corps operations. SpaceX must also comply with any and all restrictions, including blackout zones, that may be levied by the NSWCDD.

Special Conditions:

(5) All Space-X operations granted on an experimental basis shall be on an unprotected, non-interference basis (NIB) to authorized NOAA/NESDIS stations.

(6) No later than seven business days prior to the planned launch, SpaceX is required to provide NOAA the planned launch date/time/window, planned trajectories (1st and 2nd stages), transmission start/end time/receiving stations from liftoff through end of transmission for both the 1st and 2nd stage rockets: This information should be sent to:
albert.j.mcmath.jr@noaa.gov
philip.l.whaley@noaa.gov
richard.kelley@noaa.gov
alfredo.mistichelli@noaa.gov
yu.deng@noaa.gov

(7) In the case of this specific launch (on 14 January 2016 with a backup date of 15 January 2016) our analysis show SpaceX transmissions will violate ITU protection criterion with DMSP during the primary launch window and COSMIC B during the backup window. We expect about one minute of interference into the COSMIC's Wallops ground station antenna between four and five minutes after liftoff. We expect about one minute of interference into the DMSP Wallops ground station antenna between 104 and 105 minutes after the liftoff in the worst case scenario. We do not expect interference from SpaceX launch to the other NOAA missions.