Ryan N. Terry, 2121 Crystal Drive, Suite 100, Arlington, VA 22202,

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL	WK9XFN
(Nature of Service)	(Call Sign)
XT MO	1119-EX-ST-2016
(Class of Station)	(File Number)

NAME Lockheed Martin Corporation

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 commercial space launch mission from Space Launch Complex 41 (SLC-41) at Cape Canaveral Air Force Station in Florida.

Station Locations
(1) MOBILE: Merritt Island,, FL. Launch Vehicle -- Orbital Trajectory, centered around NL 28-35-00; WL 80-34-58

Frequency Information

MOBILE: Merritt Island,, FL. Launch Vehicle -- Orbital Trajectory, centered around NL 28-35-00; WL 80-34-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2211 MHz	MO	9M60G7D 1M02G1D	65.2 W (ERP)	0.002 %
2287.5 MHz	MO	161KG2D	7.96 W (ERP)	0.002 %

This authorization effective September 15, 2016 and will expire 3:00 A.M. EST March 15, 2017

FEDERAL COMMUNICATIONS COMMISSION

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) All Lockheed Martin operations granted on an experimental basis shall be on an unprotected, non-interference basis to authorized federal stations.

(3) All operations shall be limited to telemetry, tracking and launch vehicle communications for the launch and deployment of the EchoStar XIX satellite. This STA will expire as soon as the launch has been completed or 14 March 2017, whichever occurs first. Any future launches will need to submit applications to the FCC to be re-coordinated with the NTIA.

(4) 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.

(5) Lockheed Martin 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/or any emission designator greater than 5 MHz in the in the band 2200-2290 MHz, and Lockheed Martin shall have no expectations that future launches will be approved.

(6) Due to potential harmful interference to naval activities, Lockheed Martin ' 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. Lockheed Martin must also comply with any and all restrictions that may be levied by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD).

(7) As soon as possible, but no later than 20 business days prior to the planned launch, Lockheed Martin 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), Scott Galbraith (vincent.s.galbraith@nasa.gov, NASA/GSFC), Vip Vipavetz (keven.g.vipavetz@nasa.gov, NASA/LaRC), NOAA Satellite Operations Control Center (philip.l.whaley@noaa.gov), Johnnie Best, (johnnie.w.best1@navy.mil,NMSC) and Cathy Sham (catherine.c.sham@nasa.gov). In the event of last-minute changes, 48-hour notice is required.

(8) Sixty (60) days prior to transmitting at Cape Canaveral AFS, Florida, Lockheed Martin shall coordinate and schedule their operations with Range Scheduling, COMM: (321)- 853-5941, email: 1ropschd@us.af.mil, Jamie Bjornbak (James.P.Bjornbak@nasa.gov, 321.867.6905, NASA KSC SMO), and Scott Galbraith (vincent.s.galbraith@nasa.gov, 301-286-5089, NASA GSFC SMO).

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

(10) Lockheed Martin 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, if requested, 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.