

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

EXPERIMENTAL

(Nature of Service)

WK9XRY

(Call Sign)

XT MO

(Class of Station)

1712-EX-ST-2016

(File Number)

NAME UNITED LAUNCH ALLIANCE, 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:

Launch vehicle communications for commercial space launch mission from Space Launch Complex 41 (LC-41) at Cape Canaveral Air Force Station, Florida.

Station Locations

- (1) MOBILE: Launch Vehicle - Suborbital Trajectory, centered around NL 28-35-00; WL 80-34-59

Frequency Information

MOBILE: Launch Vehicle - Suborbital Trajectory, centered around NL 28-35-00; WL 80-34-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2211 MHz	MO	1M60G7D 1M23G1D	135 W (ERP)	0.0017 %
2211 MHz	MO	9M60G7D	36 W (ERP)	0.0017 %

This authorization effective February 07, 2017 and
will expire 3:00 A.M. EST August 02, 2017

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Launch Vehicle - Suborbital Trajectory, centered around NL 28-35-00; WL 80-34-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2287.5 MHz	MO	161KG2D	10 W (ERP)	0.002 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) Any RF radiation on CCAFS should be coordinated through Range Scheduling (321) 853-5941 prior to operation.
- (3) All United Launch Alliance (ULA), LLC, operations granted on an experimental basis shall be on an unprotected, non-interference basis to authorized AF stations.
- (4) All operations shall be limited to Atlas V/OA-7 Mission supporting launch processing operations, in-flight profiles, telemetry and tracking operations and a disposal of then Centaur upper-stage. This STA is limited to the single Atlas V/OA-7 Mission launch scheduled for no earlier the 14 March 2017. This STA will expire as soon as the launch/mission has been completed or 1 August 2017, whichever occurs first. Any future launches will need to submit applications to the FCC to be re-coordinated with the NTIA.
- (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) ULA 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 ULA shall have no expectations that future launches, utilizing the 2200-2290 MHz band, will be approved.
- (7) As soon as possible, but no later than 60 business days prior to the planned launch, ULA is required to provide, as a minimum, launch date/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), Kevin 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, ULA 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), NOAA Operations Control Center (phillip.l.whaley@noaa.gov) and Scott Galbraith(vincent.s.galbraith@nasa.gov, 301-286-5089, NASA GSFC SMO). Any changes to launch dates/times shall be coordinated with the above.

Special Conditions:

- (9) Due to potential harmful interference to naval activities, United Launch Alliance 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. United Launch Alliance must also comply with any and all restrictions that may be levied by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD).
- (10) The STOP BUZZER POC information for launch operation, for launch operations shall be provided to NTIA (bmitchell@ntia.doc.gov). This phone shall be manned 24/7.
- (11) ULA 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 required by NTIA, 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.