From: <u>Michael Crowe</u>
To: <u>ELB-Coordination-Info</u>

Subject: FW: STA 2356-EX-ST-2023 Conditional Concurrence Date: Tuesday, December 26, 2023 10:22:30 AM

Attachments: 2356-EX-ST-2023.rtf

From: FAB < FAB@ntia.gov>

Sent: Tuesday, December 26, 2023 7:30 AM

**To:** David Duarte <David.Duarte@fcc.gov>; Ali Nassib <Ali.Nassib@fcc.gov>; Michael Crowe

<Michael.Crowe@fcc.gov>

**Cc:** FAB <FAB@ntia.gov>; OET-SCB <OET-SCB@fcc.gov>; Melz, Gregory <GMelz@ntia.gov>; McFall, John <JMcFall@ntia.gov>; Evans, Michael A. (GRC-MSCO) <michael.a.evans-1@nasa.gov>; Borey, Charles W Jr CIV USN (USA) <charles.w.borey2.civ@us.navy.mil>; Jeremiah Sullivan - NOAA Federal <jeremiah.sullivan@noaa.gov>; VERDEJO, JOSE R GG-13 USAF HAF AF/A2/6L

<jose.verdejo@us.af.mil>; Avery, Robert <ravery@ntia.gov>

**Subject:** STA 2356-EX-ST-2023 Conditional Concurrence

NTIA conditionally concurs with the FCC STA request on behalf of Space Exploration Technologies Corp. (SpaceX) for Cape Canaveral, FL during the period 27 December 2023 thru 27 June 2024, under the following condition(s):

- 1. All SpaceX operations granted on an experimental basis shall be on an unprotected, non-interference basis to authorized federal stations.
- 2. All operations shall be limited to telemetry, tracking and launch vehicle communications for the SpaceX Mission 1882 Starlink Group 6-37 launch from Kennedy Space Center (using LC-39a) or Cape Canaveral SFS (using LC-40), FL. This STA is limited to the single SpaceX Mission 1882 Starlink Group 6-37 launch from LC-39a or LC-40 to include pre-launch checkout test of the command uplink from an onshore station at launch site, the first and second stages, and experimental recovery operations (command of landed stage from recovery boat) following the launch of SpaceX Mission 1882 Starlink Group 6-37. This STA will expire as soon as the launch has been completed or 27 June 2024, 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. 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 Randall Shepherd (randall.shepherd@spaceforce.mil, USSF SSC SLD 30), Reginald Thomas (reginald.thomas.2@spaceforce.mil, USSF SSC SLD 30), Dave Everett (david.everett.16@spaceforce.mil, USSF SSC 2 ROPS/DOPS) James Davis, (james.davis.144.ctr@spaceforce.mil, USSF, W-LTRS/RGNext), Sigfredo Santiago (sigfre.santiagohernandez.1@spaceforce.mil, USSF SSC SLD 45), DoD Eastern AFC

(45sw.dodeafc@us.af.mil), SLD 45 SMO (45sw.erfmo@us.af.mil), Jimmy Nguyen (jimmy.nguyen@us.af.mil, AFSMO), Shaobei Xu (shaobei.xu.1@us.af.mil, AFSMO), Richard Ontiveros (richard.ontiveros@us.af.mil, AFSMO), Felipe Arroyo (felipe.arroyo-1@nasa.gov, NASA WFF), NASA GSFC Spectrum Office (NASA-DL-GSFC-Spectrum-Management@mail.nasa.gov), Ben Pearson (ben.j.pearson@nasa.gov, NASA LaRC), NOAA Satellite Operations Control Center (Matt.G.Sullivan@noaa.gov), and NASA JSC Spectrum Office (JSC-DL-Spectrum-Management@mail.nasa.gov). In the event of last-minute changes, 48-hour notice is required.

- 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. Sixty (60) days prior to transmitting at LC-39a or LC-40, SpaceX shall coordinate and schedule their operations with Range Scheduling (<u>1ropschd@us.af.mil</u>, 321-853-5941), Jamie Bjornbak (<u>James.P.Bjornbak@nasa.gov</u>, 321-867-6905, NASA KSC SMO), and NASA GSFC Spectrum Office (<u>NASA-DL-GSFC-Spectrum-Management@mail.nasa.gov</u>), and provide a copy of the FCC license, any changes to the launch mission trajectory/telemetry data, and Stop Buzzer POC to the 45th Space Wing Spectrum Management Office, 321-853-8408, email: <u>45sw.erfmo@us.af.mil</u> and DoD EAFC, 321-853-8426, email: <u>45sw.dodeafc@us.af.mil</u>
- 7. The STOP BUZZER POC information, for launch operations shall be provided to NTIA (ravery@ntia.gov). This phone shall be manned 24/7.
- 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: <a href="mailto:ravery@ntia.gov">ravery@ntia.gov</a> and <a href="mailto:edocola@ntia.gov">edocola@ntia.gov</a>.
- 9. Commercial launch service providers should be aware that a satellite integrated into a launch vehicle or deployment device without a current FCC authorization may need to be removed from that vehicle or deployment device if the satellite operator's application for an FCC authorization is not acted upon favorably, or for various reasons cannot be granted within a time frame consistent with the launch schedule. Commercial launch providers should exercise due diligence to verify satellite operator's regulatory approvals prior to launch (FCC Enforcement Advisory DA 18-368).
- 10. As soon as possible, but no later than 60 business days prior to the planned launch, SpaceX is required to provide operations and spaceflight trajectories to the Naval Surface Warfare Center, Dahlgren Division (NSWCDD). At a minimum, NSWCDD/E3 requires frequencies, modulation types, data rates, transmitters' powers, and trajectories. One (1) or more of six (6) blackout zones (BOZs) MAY be imposed as follows:

- a. 1500 nautical mile radius centered at 22N 160W;
- b. 1500 nautical mile radius centered at 33.25N 119.57W;
- c. 1500 nautical mile radius centered at 8.72N 167.73E;
- d. 1500 nautical mile radius centered at 57.46N 152.38W;
- e. 1500 nautical mile radius centered at 32.37N 106.47W;
- f. 1500 nautical mile radius centered at 57.34N 7.35W

The final launch schedule for this SpaceX mission will ultimately determine which, if any BOZ will be implemented. The primary contacts for frequency coordination:

- g. Mr. James Moneyhon, (540) 653-3477- james.m.moneyhon.civ@us.navy.mil,
- h. Mr. Matthew Dempsey, (540) 718 9212. matthew.c.dempsey3.civ@us.navy.mil,
- i. Mr. Kenton Young, (717) 491-4726, kenton.d.young2.civ@us.navy.mil,
- j. Mr. Phillip B. Scyphers, (540) 653-6071 Phillip.b.scyphers.civ@us.navy.mil
- k. Group email box DLGR NSWC FTMA.FCT@navy.mil.
- 11. SpaceX must avoid launching at a time that would result in the launch vehicle being visible over Wallops when the following NOAA spacecraft are also visible over the NOAA ground station in Wallops, VA (37.9454 N, 75.4616 W), NESDIS requests acknowledgement/confirmation from SpaceX that they will abide by this condition.

NOAA Satellite	NORAD ID
NOAA-15	25338
NOAA-18	28654
NOAA-19	33591

v/r

Jonathan Moak
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