# **Douglas Young**

From: Douglas Young

Sent:Tuesday, February 14, 2017 1:48 PMTo:John Kennedy; David DuarteCc:OET-SCB; ELB-Coordination-Info

**Subject:** STA Coordination, Space Exploration Technologies Corp., File #0194-EX-ST-2017

**Attachments:** 0194-EX-ST-2017.RTF

Tracking: Recipient Read

John Kennedy
David Duarte
OET-SCB

ELB-Coordination-Info Read: 2/14/2017 1:49 PM

Attached is a coordination for the subject experimental STA. The requested start date is **02/28/2017**. This request is for capsule communications for SpaceX CRS-11 mission, an ISS commercial re-supply mission for NASA customer between **02/28/2017** and **08/28/2017**.

Please CC <u>ELB-Coordination-Info@fcc.gov</u> with all responses.

Doug

#### FCC FREQUENCY COORDINATION NOTICE

# **Experimental Licensing Branch Office of Engineering and Technology**

# The following application is attached for your review:

**Applicant:** Space Exploration Technologies Corp.

File Number: 0194-EX-ST-2017

**Start Date:** 2/28/2017 **End Date:** 8/28/2017

# Why STA Is Necessary:

This application uses information from previous grant 1395-EX-ST-2016. This STA is necessary for Dragon capsule telemetry, tracking, and command, for the upcoming SpaceX CRS-11 mission to the International Space Station. The launch site for the capsule is Complex 39a, Kennedy Space Center. The launch and re-entry licensing authority is the FAA. Launch is also to be coordinated with Eastern Range. On-orbit rendezvous with the ISS is to be coordinated with NASA. The requested STA should remain valid for 6 months or until mission is concluded, whichever occurs first.

## **Purpose of Operation:**

STA is required for capsule communications for SpaceX CRS-11 mission, an ISS commercial re-supply mission for the NASA.

**Contact:** Christopher Wilkins **Phone:** 2026492729

Email: cwilkins@spacex.com
Nature of Service: EXPERIMENTAL

Class of Station: XT FX MO

Call Sign: WF9XGI

#### Station Location (1)

Kennedy Space Center, BREVARD, FL- NL 28-36-29; WL 80-36-14; MOBILE: Space: Dragon S-Band Directional Array, centered around NL 28-36-29; WL 80-36-14

Frequency	Station Class	<b>Emission Designator</b>	<b>Authorized Power</b>	Frequency Tolerance (+/-)
2287.5 MHz	MO	4M80G1D	300W (ERP)	0.00003000

### Station Location (2)

Kennedy Space Center, BREVARD, FL- NL 28-36-29; WL 80-36-14; MOBILE: Space: Dragon S-Band Omni, centered around NL 28-36-29; WL 80-36-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2216 MHz	MO	1M76F1D	40W (ERP)	0.0000020
2216 MHz	MO	406KF1D	40W (ERP)	0.00000020
2287.5 MHz	MO	4M80G1D	40W (ERP)	0.00003000

#### Station Location (3)

Kennedy Space Center, BREVARD, FL- NL 28-36-29; WL 80-36-14; MOBILE: Space: Dragon CUCU Patch Hemispherical, centered around NL 28-36-29; WL 80-36-14

Frequency	Station Class	<b>Emission Designator</b>	Authorized Power	Frequency Tolerance (+/-)
400.5 MHz	MO	338KG1D	2.5W (ERP)	

Station Location (4)

Kennedy Space Center, FL- NL 28-37-24; WL 80-41-11

Frequency Station Class Emission Designator Authorized Power Frequency Tolerance (+/-)

2040.5675 MHz FX 5K60G1D 175000W (ERP)

Station Location (5)

Kennedy Space Center, FL- NL 28-32-37; WL 80-35-24

Frequency Station Class Emission Designator Authorized Power Frequency Tolerance (+/-)

2040.5675 MHz FX 5K60G1D 15300W (ERP)

Station Location (6)

Vandenberg AFB, CA- NL 34-43-09; WL 120-31-52

Frequency Station Class Emission Designator Authorized Power Frequency Tolerance (+/-)

2040.5675 MHz FX 5K60G1D 15300W (ERP)