# **Technical Description**

### **The Boeing Company**

Submitted: 09/01/2020 Allen Lindsay, SR Frequency Manager

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#### **JUSTIFICATION:**

## **SATSIM** test and setup

The Boeing Company is requesting a Special Temporary Authorization (STA) to support satellite antenna development. Boeing will conduct testing using a Ka Band Satellite simulator. The testing will be conducted in Silver Springs, NV, and the Commercial EM Test Facility (Element) in Hillsboro, OR.

Start Date: 9/17/2020 Stop Date: 3/17/2021

**Manufacturer:** Atlantic Microwave Ltd

**Model: CST-MSS-130021-S5S5 (Ka-band)** 

Frequencies: 18.7 – 21.2 GHz (Downlink)

**Emissions:** 10M0G7D

ERP:  $0.000005 \text{ W } (5 \mu\text{W})$ 

**Station Class:** FX

Data terminal low power mode:

Manufacturer: GetSAT

Model: Ka MicroSAT Antenna System

Frequencies: 29-31 GHz (Uplink)

Emissions: 10M0G7D ERP: 0.04 W Station Class: FX

Manufacturer: AvL Technologies

Model: 2.4 meter Ka Antenna System (Ground VSAT)

Frequencies: 29-31 GHz (Uplink)

Emissions: 10M0G7D ERP: 2.35 W Station Class: FX

## **Technical Description**

Data terminal high power mode only for indoor test chamber at Silver Springs, NV

Manufacturer: GetSAT

Model: Ka MicroSAT Antenna System

Frequencies: 29-31 GHz (Uplink)

Emissions: 10M0G7D ERP: 39,811 W

**Station Class:** FX

Manufacturer: AvL Technologies

Model: 2.4 meter Ka Antenna System (Ground VSAT)

Frequencies: 29-31 GHz (Uplink)

**Emissions:** 10M0G7D

ERP: 2,350,000 W (2.35 MW)

**Station Class:** FX

**LOCATIONS:** 

Location: Silver Springs, NV

Lat/Lon: within 5 km, centered around NL 39-17-50; WL 119-22-31

Station Class FX

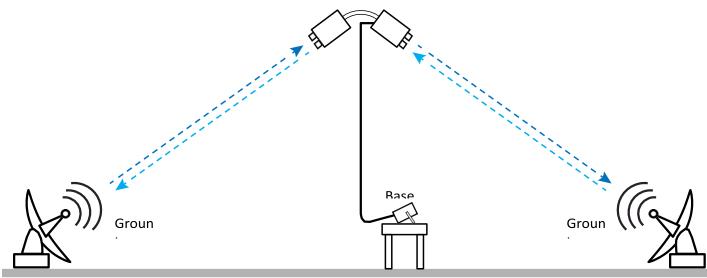
Location: Hillsboro, OR

Lat/Lon: within 5 km, centered around NL 45-31-45; WL 122-55-53

Station Class FX

#### STOP BUZZER POINT OF CONTACT:

Stop Buzzer for Operation: Ben Schreffler at 509-493-4691,



Transponders

# **Technical Description**