

Technical Description
SATCOM Antenna System Demonstration

The Boeing Company

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JUSTIFICATION:

SATCOM System Demonstration

The Boeing Company is requesting a Special Temporary Authorization (STA) to support satellite antenna development.

OBJECTIVE & TEST DESCRIPTION

This requirement supports the development of the MicroAnt 0.45meter Off Set Parabolic (OFP), 2.4meter GDSatcom Series 3244 and the GDSatcom 3.8meter Offset Fed Dual Optics Antennas with Hylas 4 (licensed by the United Kingdom (ITU Filing UKMMSAT-B2-TTC-C)).

The test will be conducted in in the vicinity of Herndon VA. Boeing is requesting to transmit Earth-to-Space, and receive Space-to-Earth. Hylas-4 transmit frequencies, 19.825 GHz, and 20.075 GHz are incorporated fro reference.

Operation Start Date: 4/282020

Operation End Date: 10/28/2020

2.4meter

Frequencies: 29.625 GHz

Emissions: 2M33G7D,

ERP: 35,481,339 W

Station Class: FX

0.45meter OFP

Frequencies: 29.625 GHz

Emissions: 57M33G7D

ERP: 446,684 W

Station Class: FX

0.45meter OFP

Frequencies: 29.625 GHz

Emissions: 115M12G7D

ERP: 446,684 W

Station Class: FX

2.4meter

Frequencies: 29.625 GHz

Emissions: 218M75G7D

ERP: 39,810,717 W

Station Class: FX

3.8meter

Frequencies: 29.875 GHz

Emissions: 25M00G7D

ERP: 9,289,664 W

Station Class: FX

2.4meter

Frequencies: 29.625 GHz

Emissions: 218M75G7D

ERP: 33,189,446 W

Station Class: FX

LOCATIONS

Location: Herndon, VA

Lat/Lon: 38 57 31 N 77 22 33 W

Station Class: FX

POINT OF COMMUNICATION: Hylas 4

STOP BUZZER POINT OF CONTACT:

Stop Buzzer for Operation: Boeing 24 hour NOC hotline: (855) 556-1001 email:

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