Operational Description SATCOM Antenna System Demonstration

The Boeing Company

Submitted: 8/23/2018 By Allen Lindsay, SR Frequency Manager

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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 DESCRPTION

This requirement supports the development of the Datapath CCT-120, and ASC 3.5 M antenna systems with Inmarsat-5 F2.

The test will be conducted at the Inmarsat Lino Lakes MN teleport facility. Boeing is requesting to transmit Earth-to-Space on 30-31 GHz, and Space-to-Earth on 20.2-21.2 GHz.

Operation Start Date: 09/14/2018 Operation End Date: 03/14/2018

Manufacturer: **ASC** Model: 3.5M Frequencies: 30-31 GHz **Emissions:** 70M1M1D ERP: 204174W Emissions: 50M0M1D ERP: 794328W **Emissions:** 30M0M1D ERP: 794328W **Emissions:** 20M0M1D ERP: 794328W **Emissions:** 10M0M1D ERP: 794328W **Emissions:** 5M00M1D ERP: 794328W **Emissions:** 1M00M1D ERP: 316228W

I5-F2 -Downlink

Frequencies: 20.2-21.2 GHz **Emissions:** 70M1M1D ERP: 549541W **Emissions:** 50M0M1D ERP: 549541W **Emissions:** 30M0M1D ERP: 549541W **Emissions:** 20M0M1D ERP: 446684W Emissions: 10M0M1D ERP: 223872W **Emissions:** 5M00M1D ERP: 112202W **Emissions:** 1M00M1D ERP: 22387W

LOCATIONS

Location: Lino Lakes, MN

Lat/Lon: 45-08-03N 93-05-45W

Station Class FX

POINT OF COMMUNICATION: INMARSAT-5 F2 (55W)

STOP BUZZER POINT OF CONTACT:

Stop Buzzer for Operation: Robert Ruggieri cell +1 (301) 266-0924 or Boeing 24-hour NOC

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