## Airbus DS SatCom Government, Inc.

Request for Special Temporary Authority for Testing of Southbury, CT Teleport 13.1 Meter C-Band Hub Antenna Utilizing Low Power CW Carrier to Communicate With IS-903 Satellite at 325.5 W.L.

Call Sign KA312

FILE NO. SES-MFS-20140630-00546

Airbus DS SatCom Government, Inc. (ASGI) requests a grant of Special Temporary Authority ("STA") for testing of a 13.1 Meter C-Band Hub Antenna located at its Southbury, CT Teleport (identified as SBY20) utilizing a CW Carrier to communicate with the IS-903 Satellite at 34.5 W.L. ASGI also hereby requests a partial waiver of the frequency coordination requirements for purposes of the testing for which STA is sought.

The requested partial waiver is only to the extent that this requirement is for a report specifically prepared for SBY 20. ASGI is respectfully requesting that the coordination requirements for purposes of the testing STA be satisfied with a Frequency Coordination and Interference Analysis Report for a nearby Hub Antenna (identified as SBY 24). SBY 24 is sited nearby SBY 20 within an area bounded by 1 second of latitude and 1 second of longitude on the grounds of the Southbury teleport and the power and other specifications used for the SBY24 frequency coordination are comparable to that to be used for the SBY 20 testing. The SBY 24 coordination report is therefore being attached to the STA application to satisfy the coordination requirements for purposes of the SBY 20 testing STA.

No other waivers are needed or requested for testing of the antenna and the antenna fully complies with all Commission Regulations. All technical characteristics and parameters for the testing follow on the next page. Grant of the STA is in the public interest because the purpose of the testing is to help prepare the antenna for operations which will support the Federal Aviation Authority Wide Area Augmentation System.

Accordingly, ASGI respectfully requests that the Bureau grant the STA for a period of thirty days beginning August 3, 2015. Any questions with respect to this matter may be directed to James G. Lovelace at 703 466 5945.

## **Technical Characteristics and Parameters**

Antenna Size	13.1m
Antenna Latitude/Longitude	41° 27' 4.55" N, 73° 17 ' 24.01" W
Antenna height above Ground Level (meters)	15.1
Antenna height above Sea Level (meters)	51.7
Antenna Gain	53.4 dBi @ 4.200/57.2 dBi @ 6.725
Total Input Power at antenna flange (Watts)	0.398
Total EIRP for all carriers (dBW)	53.2
Transmit Parameters	
Frequency range	5925 – 6425 MHz
Antenna Polarization	Right Hand Circular
<b>Emission Designators</b>	N0N (pure carrier)
Maximum EIRP per Carrier	53.2
Maximum EIRP Density per Carrier(dBW/4kHz	2) 53.2
Receive Parameters	
Frequency range	3600-3629 MHz
Antenna Polarization	Right Hand Circular
Emission Designators	NON (pure carrier)
Maximum EIRP per Carrier	N/A
Maximum EIRP Density per Carrier (dBW/4kH	z) N/A
FREQUENCY COORDINATION Information	•
Satellite Orbit Type	Geostationary
Frequency Limits	3600-3629 & 6425 – 6454 MHz
Range of Satellite Arc	2W-144W
Earth Station Azimuth Angle Eastern Limit	102.6
Earth Station Azimuth Angle Western Limit	257.0
Antenna Elevation Angle Eastern Limit	5.3
Antenna Elevation Angle Western Limit	5.7
Maximum EIRP Density toward the Horizon	53.2