Airbus DS SatCom Government, Inc.

Application for Modification of License to
Add Authorization for up to
500 Sinaero 1.2 Meter Flyaway Model SA-1.2TFLY Ku-band Antennas to
Call Sign WB36 License;

And

Update the Particulars of Operation, Antenna Facilities and other Specifications for Sea Tel Model 9707/9797/9711 and 9711QOR 2.4 Meter C-band

Earth Station on Vessel (ESV) Antennas

Currently Authorized per the Cell Sign WP26 ESV Authorizetion:

Currently Authorized per the Call Sign WB36 ESV Authorization;

And

Add up to

500 Intellian Model v100 1.06 Meter Ku-band Antennas; 500 Intellian Model v130 1.25 Meter Ku-band Antennas; 500 Mitsubishi Model MVA60 0.60 Meter Ku-band Antennas; 500 Mitsubishi Model MVA120 1.2 Meter Ku-band Antennas; 500 Thrane & Thrane Model TT-7080A Sailor 800A 0.83 Meter Ku-band Antennas and 500 Thrane & Thrane Model TT-7090B Sailor 900B 1.0 Meter Ku-band Antennas to Call Sign WB36 ESV Authorization

SES-MFS-20142010-00037

Call Sign WB36

### I. Sinaero 1.2 Meter Flyaway Model SA-1.2TFLYAuthorization Request

By this application Airbus DS SatCom Government, Inc. (ASGI) seeks authority to add authorization for up to 500 Sinaero 1.2. Meter Flyaway Model SA-1.2TFLY Kuband VSAT antennas to its call sign WB36 license. This antenna fully conforms with Commission regulations and is eligible for routine processing. It is also noted that the International Bureau has previously authorized this antenna for operation by ASGI for the same services and under the same conditions as those for which authorization is sought by this application, see SES-MOD-20131108-00955, Call Sign KA313.

Please see the 312 main form and schedule B for all required technical parameters.

### II. Sea Tel Model 9707/9797/9711 and 9711QOR Authorization Update Request

ASGI is also requesting by this application that certain Particulars of Operation and Antenna Facilities Specifications for the Sea Tel Model 9707/9797/9711 and 9711QOR 2.4 Meter C-band antennas currently authorized for use to provide ESV service per the WB36 license be updated. The reason for the update is to increase the power authorized for use with the antenna and update the authorized Emission Designator parameters accordingly.

It is therefore being requested that the specifications currently authorized for these antennas in the WB36 license for Emission Designator MAX EIRP/CARRIER and MAX EIRP DENSITY under Particulars of Operation and for Maximum Total Input Power at Antenna Flange and Maximum Aggregate Output EIRP for all Carriers under Antenna Facilities be deleted and then added back in as per the Schedule B information set forth in the Modification Application. No change is being made to any other aspects of the current authorization for these or any other ESV antennas authorized per the WB36 license. No information other than that listed below for the Sea Tel 9707/9797/9711 and 9711QOR antennas is to be updated.

Only the following specifications for Sea Tel 9707/9797/9711 and 9711QOR antennas are to be deleted and then replaced with the respective specifications set forth for those antennas in the Schedule B for questions E38, E40, E48 and E49 –

### Section B Particulars of Operation:

#### 9707/9797/9711 -

- MAX EIRP/CARRIER listed for 15MOG7W (in line 85) to be deleted and to be replaced with 64.0
- MAX EIRP DENSITY listed for 15MOG7W (in line 85) to be deleted and to be replaced with 28.3
- MAX EIRP/CARRIER listed for 15MOG1W (in line 88) to be deleted and to be replaced with 64.0
- MAX EIRP DENSITY listed for 15MOG1W (in line 88) to be deleted and to be replaced with 28.3

#### 971100R -

- MAX EIRP/CARRIER listed for 15MOG7W (in line 94) to be deleted and to be replaced with 64.0
- MAX EIRP DENSITY listed for 15MOG7W (in line 94) to be deleted and to be replaced with 28.3
- MAX EIRP/CARRIER listed for 15MOG1W (in line 96) to be deleted and to be replaced with 64.0
- MAX EIRP DENSITY listed for 15MOG1W (in line 96) to be deleted and to be replaced with 28.3

#### Section E Antenna Facilities:

### 9707/9797/9711-

- Maximum Total Input Power at Antenna Flange (Watts) value listed to be deleted and to be replaced with 170.0
- Maximum Aggregate Output EIRP for all Carriers (dBW) value listed to be deleted and to be replaced with 64.0

9711QOR-

Maximum Total Input Power at Antenna Flange (Watts) value listed to be deleted and to be replaced with 170.0

Maximum Aggregate Output EIRP for all Carriers (dBW) value listed to be deleted and to be replaced with 64.0

### III. Addition of Other ESV Remote Antennas to ESV Authorization Request

Finally, ASGI requests that the following new ESV remote antennas be added to the WB36 authorization to provide ESV service:

Intellian Model v100 1.06 Meter Ku-band Antennas;

Intellian Model v130 1.25 Meter Ku-band Antennas;

Mitsubishi Model MVA60 0.60 Meter Ku-band Antennas;

Mitsubishi Model MVA120 1.2 Meter Ku-band Antennas;

Thrane & Thrane Model TT-7080A Sailor 800A 0.83 Meter Ku-band Antennas;

Thrane & Thrane Model TT-7090B Sailor 900B 1.0 Meter Ku-band Antennas

All the remote ESVs – both the currently authorized antennas which are being updated and the new antennas which are being added to the authorization - will be located on vessels traveling in U.S. and international waters. They will operate with hub antennas that are separately licensed and will be utilized to provide ESV service in the same manner as previously authorized by the Commission and will be operated in full compliance with the requirements of the Commission's ESV regulations as set forth in part 25 of the Rules

ASGI's showing of compliance with Part 25 of the Commission's Rules follows herewith and except as further explained in the following section, the exhibits required by Section 25.222 are included as attachments to the application.

### IV. Use of Antenna Plots and Charts Filed With Prior Applications

It is ASGI's understanding that earth station applicants seeking authorization for earth station antennas which have been previously approved by the International Bureau need not attach antenna radiation plots as an exhibit to their application but need only provide an attachment citing the antennas for which authorization is being sought and an application file number and call sign of a license in which those antennas have been approved. Barring any countervailing considerations, the Bureau will consider granting the application for the antennas, providing the applicant proposes the same kinds of services as the operator of the previously authorized antennas under the same or substantially similar operating conditions.

ASGI notes that in addition to the prior authorization granted to ASGI to operate the 9707/9797/9711 and 9711QOR antennas per the WB36 license ASGI has also previously sought and been granted authorization under its Call Sign KA313 license to operate the other ESV antennas which it now seeks by this application to add to the

WB36 ESV authorization. AGSI is therefore not attaching with this application the charts and tables which would otherwise be submitted to show compliance with Sections 25.221 (a) (1) & (b) (1) and 25.221 (a) (1) & (b) (1). Rather, it will reference the application file number and call sign associated with the prior approval of each antenna.

The antennas for which specifications are being updated and the antennas to be added to the WB36 ESV authorization pursuant to instant application will be used for the same kinds of services as those for which the antennas previously authorized are used and will be used under the same operating conditions. ASGI therefore respectfully requests that the Commission's staff rely upon the prior application materials in processing the instant application to update the specifications in the WB36 license for the Sea Tel 9707/9797/9711 and 9711QOR antennas and add the other ESV remote antennas covered by this application to the WB36 authorization to provide ESV service.

### V. Showing of Part 25 Compliance for Remote Antennas and ESV Service

#### **Section 25.221**

(a) (1) Comply.

See the Sea Tel declaration and the exhibits previously submitted with the SES-MFS-20130612-00485, Call Sign WB36 application for approval of the Sea Tel model 9707/9797/9711 and 9711 QOR C-band antennas.

The Sea Tel model 9707/9797/9711 and 9711 QOR C-band antennas use transmitters that have off-axis EIRP spectral densities less than or equal to the levels in paragraph 25.221(a)(1)(i) and meet the requirements of 25.221 (a)(1)(i)(A-C) with an N value of 1. The referenced exhibits provide the detailed demonstration described in paragraph 25.221 (b)(1). The Sea Tel declaration contains the certifications that the antennas comply with the pointing requirement in paragraph 25.221 (a)(1)(ii)(A) and the cessation of emission requirement in paragraph 25.221 (a)(1)(iii)(A).

- (a) (2) Not Applicable
- (a) (3) Not Applicable
- (a) (4) Comply. The ASGI ESV Compliance Officer has authority and ability to cease all emissions from ESVs through the facilities of ASGI teleports or through facilities of non-ASGI teleports used to uplink ASGI operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASGI Southbury, CT teleport at 203-262-5010.
- (a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ASGI ESV Compliance Officer via the Southbury teleport at 203-262-5010.

- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled by the ASGI teleports located in the United States or non-ASGI teleports located in the United States used to uplink ASGI operated ESVs pursuant to telehousing arrangements.
- (a) (8) Comply.
- (a) (9) Comply.
- (a) (10) Comply. ASGI is not seeking protection for docked ESVs at this time. In the event that ASGI finds it necessary to do so in the future, it will be accomplished in accordance with the terms of this §25.221 (a) (9).
- (a) (11) Agree.
- (a) (12) Comply. The C-band ESVs which are the subject of this application will not operate within 200 Km of the U.S. coastline or fixed service offshore facilities unless prior coordination has been completed. It is noted that numerous C-band ESV interference studies and frequency coordinations have been completed for ASGI by Comsearch and Skjei Telecom and Notifications Concerning Completion of the Coordinations were filed with the Commission (under the WB36 and KA249 licenses) as specified in the Commission's Public Notice DA 05-1671, Released: June 15, 2005 and the Notifications placed on Public Notice. Other coordinations may be completed as-needed and if so, Notifications for same will be filed with the Commission for Public Notice as they are completed.
- (a) (13) Comply. ASGI has developed and deployed hardware and software which continuously monitors the location of each ESV and its operating frequency; compares this information with data containing mapping coordinates for areas in which ESV operation is (and is not) permitted and coordination information and terms for same; and which will automatically cease the transmissions of the ESV if it is in an area for which coordination is required and operation would be in violation of the terms of coordination.
- (b) (1) Comply. Please see the exhibits previously submitted with the SES-MFS-20130612-00485, Call Sign WB36 application for approval of the Sea Tel model 9707/9797/9711 and 9711 QOR C-band antennas for the tables described in 25.221(b)(1)(i).

The value N described in 25.221(a)(1)(i)(A) is 1. Referenced exhibits provide the detailed demonstration described in paragraphs 25.221(b)(1)(i)(A), (B) and (C). The certification from the equipment manufacturer stating that the tracking systems meet the pointing and cessation of emission requirements of 25.221(b)(1)(iii) is contained in the Sea Tel declaration.

- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See SES-4 and NSS-9 maps in the Operations Areas Exhibit.
- (b) (5) Comply. The ASGI ESV Compliance Officer has authority and ability to cease all emissions from ESVs through the facilities of ASGI teleports or through facilities of non-ASGI teleports used to uplink ASGI operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASGI Southbury, CT teleport at 203-262-5010.
- (b) (6) Comply. See the Radiation Hazard Report Exhibits.

#### **Section 25.222**

(a) (1) Comply.

See the Intellian, Mitsubishi and Thrane declarations and the exhibits previously submitted with the following applications for approval of the respective antennas:

Intellian Model v100 - see SES-MFS-20130504-00363, Call Sign KA313 Intellian Model v130 - see SES-MFS-20130504-00363, Call Sign KA313 Mitsubishi Model MVA60 - see SES-MFS-20130504-00363, Call Sign KA313 Mitsubishi Model MVA120 - see SES-MFS-20130504-00363, Call Sign KA313 Thrane Model Sailor 800A - see SES-MOD-20131108-00955, Call Sign KA313 Thrane Model Sailor 900B - see SES-MOD-20131108-00955, Call Sign KA313

All of the ESV antennas listed above use transmitters that have off-axis EIRP spectral densities less than or equal to the levels in paragraph 25.222(a)(1)(i) and meet the requirements of 25.222 (a)(1)(i)(A-C) with an N value of 1. The referenced exhibits provide the detailed demonstration described in paragraph 25.222 (b)(1). The Intellian, Mitsubishi and Thrane declarations contain the certifications that the antennas comply with the pointing requirement in paragraph 25.222 (a)(1)(ii)(A) and the cessation of emission requirement in paragraph 25.222 (a)(1)(iii)(A).

- (a) (2) Not Applicable
- (a) (3) Not Applicable
- (a) (4) Comply. The ASGI ESV Compliance Officer has authority and ability to cease all emissions from ESVs through the facilities of ASGI teleports or through facilities of non-ASGI teleports used to uplink ASGI operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASGI Southbury, CT teleport at 203-262-5010.

- (a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ASGI ESV Compliance Officer via the Southbury teleport at 203-262-5010.
- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled by the ASGI teleports located in the United States or non-ASGI teleports located in the United States used to uplink ASGI operated ESVs pursuant to telehousing arrangements.
- (a) (8) Comply.
- (b)(1) Comply. Please see the exhibits previously submitted with the applications listed in the response for 25.222 (a) (1).

The value N described in 25.222(a)(1)(i)(A) is 1. Referenced exhibits provide the detailed demonstration described in paragraphs 25.222(b)(1)(i)(A), (B) and (C). The certifications from the equipment manufacturers stating that the tracking systems meet the pointing and cessation of emission requirements of 25.222(b)(1)(iii) are contained in the Intellian, Mitsubishi and Thrane declarations.

- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See Operations Areas Exhibit.
- (b) (5) Comply. The ASGI ESV Compliance Officer has authority and ability to cease all emissions from ESVs through the facilities of ASGI teleports or through facilities of non-ASGI teleports used to uplink ASGI operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASGI Southbury, CT teleport at 203-262-5010.
- (b) (6) Comply. See the Radiation Hazard Report Exhibits.
- (c) Comply. ASGI has completed coordination with NASA for ESV operations in the 14.0 14.2 GHz frequency band within 125 km of NASA TDRSS facilities protected per 24.222 (c). The coordination has been filed with the Commission for completion of the coordination process. Until the coordination process is completed ASGI will continue to comply with 25.222 (c) by not operating Ku-band ESVs at all in the 14.47 14.5 GHz frequency band within the specified distances of the protected facilities.
- (d) Comply. ASGI does not operate any ESVs in the 14.47 14.5 GHz frequency band.