10M0G1W Astrium Services Government, Inc.

Application for Modification of License to Add up to 500 Sinaero 1.2. Meter Flyaway Model SA-1.2TFLY Ku-band Antennas to Call Sign KA313 License Ku-band VSAT Network Authorization;

And

Update the Particulars of Operation, Antenna Facilities and other Specifications for Sea Tel Model 6006 1.5 Meter Ku-band Earth Station on Vessel (ESV)
Remote Antenna Currently Authorized per the KA313 ESV Authorization;
And

Add up to 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 KA313 ESV Authorization

SES-MFS-20130504-00363

Call Sign KA313

By this application Astrium Services Government, Inc. (Astrium) seeks authority to add up to 500 Sinaero 1.2. Meter Flyaway Model SA-1.2TFLY Ku-band antennas to its call sign KA313 license Ku-band VSAT Network Authorization. This antenna fully conforms with Commission regulations and is eligible for routine processing. Please see the 312 main form and schedule B for all required technical parameters.

Astrium is also requesting by this application that the Particulars of Operation, Antenna Facilities and other Specifications for the Sea Tel Model 6006 1.5 Meter Kuband antenna currently authorized for use to provide ESV service per the KA313 license be updated. It is requested that all information currently listed in the KA313 license for the Sea Tel 6006 antenna be completely 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 KA313 license. No information other than that listed below for the Sea Tel 6006 antenna is to be deleted. Only the following specifications, which are all for Sea Tel 6006 antenna, are to be deleted—

Section A Site Locations: 3)

Section B Particulars of Operation: 229 – 251

Section C Frequency Coordination: 14 – 16

Section D Points of Communication: 9), 10) & 11)

Section E Antenna Facilities: ESV/6006

Section F Remote Control: ESV/6006

The Specifications set forth in the Schedule B for the Sea Tel model 6006, 6009 and 6012 antenna is then to be added back in to the license to complete the update.

Finally, Astrium requests that the following new ESV remote antennas be added to the KA313 authorization to provide ESV service:

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 antenna which is 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.

ASTRIUM's showing of compliance with Part 25 of the Commission's Rules follows herewith and the exhibits required by Section 25.222 are included as attachments to the application.

Showing of Compliance with Section 25.222 of the Commission's Rules

(a) (1) Comply.

See the Sea Tel declaration and Exhibits 2, 3 and 4 for the Sea Tel model 6006, 6009 and 6012 antenna.

See the Thrane & Thrane declaration and Exhibits 5, 6 and 7 for the Thrane & Thrane Model TT-7080A Sailor 800 antenna.

See the Thrane & Thrane declaration and Exhibits 8, 9 and 10 for the Thrane & Thrane Model TT-7090B Sailor 900B antenna.

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 Sea Tel and Thrane & Thrane declarations also 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 ASTRIUM ESV Compliance Officer has authority and ability to cease all emissions from ESVs through the facilities of ASTRIUM teleports or through facilities of non-ASTRIUM teleports used to uplink ASTRIUM operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASTRIUM 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 ASTRIUM ESV Compliance Officer via the Southbury teleport at 203-262-5010.
- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled by the Hub earth station located at ASTRIUM's Southbury Teleport.
- (a) (8) Agree.
- (b)(1) Comply. The tables described in 25.221(b)(1)(i) are attached as the following exhibits:
 - Exhibits 2, 3 and 4 for the Sea Tel model 6006, 6009 and 6012 antenna.
 - Exhibits 5, 6 and 7 for the Thrane & Thrane Model TT-7080A Sailor 800 antenna.

Exhibits 8, 9 and 10 for the Thrane & Thrane Model TT-7090B Sailor 900B antenna.

The value N described in 25.222(a)(1)(i)(A) is 1. Exhibits 2, 5 and 8 provide the detailed demonstration described in paragraph 25.222(b)(1)(i)(A). Exhibits 3, 6 and 9 provide the detailed demonstration described in paragraph 25.222(b)(1)(i)(B). Exhibits 4, 7 and 10 provide the detailed demonstration described in paragraph 25.222(b)(1)(i)(C). The certifications from the equipment manufacturer stating that the tracking systems meet the pointing and cessation of emission requirements of 25.222(b)(1)(iii) are contained in the Sea Tel and Thrane & Thrane declarations.

- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See Operations Areas Exhibit.
- (b) (5) Comply. The ASTRIUM ESV Compliance Officer has authority and ability to

cease all emissions from ESVs through the facilities of ASTRIUM teleports or through facilities of non-ASTRIUM teleports used to uplink ASTRIUM operated ESVs pursuant to telehousing arrangements. This point of contact is available 24 hours a day, seven days a week via the ASTRIUM Southbury, CT teleport at 203-262-5010.

- (b) (6) See the Radiation Hazard Report Exhibits.
- (c) Comply. ASTRIUM 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 25.222 (c). The coordination has been filed with the Commission for completion of the coordination process. Until the coordination process is completed ASTRIUM 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. Frequencies in the 14.47 14.5 GHz frequency band are not currently used for ESVs operating in the proximity of any of the locations specified in 25.222 (d). If at some time in the future frequencies in the 14.47 14.5 GHz frequency band are used in these areas ASTRIUM will insure that transmissions of any ESVs utilizing these frequencies are ceased within the specified distances of the protected facilities.