

Exhibit 1 – Narrative and Showing of Compliance with Sections 25.221 and 25.222

Marlink, Inc.

Application for Modification of WB36 License to Update the Power to the Antenna Flange and Certain Other Specification Listed in Antenna Facilities Section E) for Following Antennas Currently Authorized per the WB36 ESV Authorization-
Intellian Model v240 2.4 Meter C-band Antennas
Intellian Model v80G 0.83 Meter Ku-band Antennas,
Intellian Model v100 1.06 Meter Ku-band Antennas,
Intellian Model v130 1.25 Meter Ku-band Antennas,
Sea Tel Model 5009/10/12 1.2 Meter Ku-band Antennas,
Sea Tel Model 9711 QOR-Ku 1.2 Meter Ku-band Antennas and
Thrane & Thrane Model TT-7090B Sailor 900B 1.0 Meter Ku-band Antennas, as well as Increase Quantity and Update Model Designations for Certain of the Above Antennas;
And
Add ESV Authorization for up to
500 Orbit Model Ocean TRx 7-300-C 2.2 Meter C-band Antennas,
500 Orbit Model Ocean TRx 7-300-Ku 2.1 Meter Ku-band,
500 Orbit Model OrSat AL-7103 MKII-Ku 1.2 Meter Ku-band Antennas,
500 Orbit Model Ocean TRx 4-500-Ku 1.2 Meter Ku-band Antennas and
500 Intellian Model v65/v65G 0.65 Meter Ku-band Antennas;
And
Change Licensee's Address and Simplify Site Location(s) Section A) by Consolidation of the Twenty Seven Site IDs Currently Listed into Three;
And
Utilize New Site ID Designations to Simplify Point of Communications Section D);
And
Utilize New Site ID Designations for Re-designation of Site ID Listed for Each Antenna in Antenna Facilities Section E);
And
Change Address and Utilize New Site ID Designations in Remote Control Section F);

SES-MFS-20150818-00530

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As noted in the heading, Marlink, Inc. (Marlink) respectfully seeks to make changes to simplify the WB36 license by consolidating the twenty seven (27) Site IDs currently listed into three (3) Site IDs. The 27 current Site IDs identify 27 separate individual remote VSAT antennas for which blanket license authorization has been granted. There is no need for each of the antennas to have its own separate Site ID however, as they can clearly be classified as belonging to one of three (3) categories of small transmitting earth stations eligible for blanket license authorization under the

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Commission’s Rules. Marlink is therefore requesting changes to the Site ID and related aspects of the WB36 license as explained in further detail in sections III through VI of this application narrative.

It is Marlink’s understanding that the best way to go about this is to first add in the new Site ID and related information and then after that part of the process is complete delete the information to be removed from the license and make the other appropriate changes. The new Site ID and related information is set forth in the Schedule B being submitted with the application to update the power and certain other specifications for some of the Earth Station on Vessel (ESV) antennas currently authorized per the license and add new antennas to the WB36 ESV Authorization. It is requested that processing of this Modification Application be completed by first adding into the license all the submitted Schedule B data and then making the deletions and changes in the order set forth in sections III through VI of this application narrative.

I. Request to Update Power to the Antenna Flange, Certain Other Specifications, Quantity Authorized and Model Listed In Antennas Facilities Section E) for Some of the Antennas Currently Authorized per the WB36 ESV Authorization

Marlink is requesting that the “Maximum Total Input Power at Antenna Flange” and “Maximum Aggregate Output EIRP for all Carriers” specifications in the Antenna Facilities Section E) be updated as set forth below and in the Schedule B and as shown in the attached license mark-up (Exhibit 2) in order to increase the power currently authorized per the WB36 license for the ESV antennas listed below. Please delete the current “Maximum Total Input Power at Antenna Flange” and “Maximum Aggregate Output EIRP for all Carriers” specifications currently listed in Section E) for the antennas set forth below and then add the new specifications back in as per the Schedule B information set forth in the Modification Application. It is further requested that the quantity of antennas authorized be increased and the Model Number updated for certain of these antennas as set forth below and in the Schedule B. 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 (and as shown in the mark-up attached as Exhibit 2) is to be updated for these or any other antennas.

Antenna ID – INTV240C

New “Maximum Total Input Power at Antenna Flange” = 158.8

New “Maximum Aggregate Output EIRP for all Carriers” = 63.7

Antenna ID – INTV80G

New “Maximum Total Input Power at Antenna Flange” = 19.0

New “Maximum Aggregate Output EIRP for all Carriers” = 52.3

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Antenna ID – INTV100

New “Maximum Total Input Power at Antenna Flange” = 22.9

New “Maximum Aggregate Output EIRP for all Carriers” = 54.8

New “Quantity” = 2000

Antenna ID – INTV130

New “Maximum Total Input Power at Antenna Flange” = 34.8

New “Maximum Aggregate Output EIRP for all Carriers” = 58.6

New “Model Number” = v130 & v130G

Antenna ID – 5009/10/12

New “Maximum Total Input Power at Antenna Flange” = 51.4

New “Maximum Aggregate Output EIRP for all Carriers” = 60.1

Antenna ID – TTSA900B

New “Maximum Total Input Power at Antenna Flange” = 18.2

New “Maximum Aggregate Output EIRP for all Carriers” = 53.7

New “Quantity” = 2000

New “Model Number” = 900B, 900 VSAT High Power & FV-110

Radiation Hazard Reports for the powers set forth above for each of these antennas are included in the Radiation Hazard Reports Exhibit 8 submitted with the application. The above requested changes are also shown in the mark-up of the current license submitted with the application as Exhibit 2.

**II. Request to Add Other New ESV Remote Antennas to WB36
ESV Authorization**

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

500 Orbit Model Ocean TRx 7-300-C 2.2 Meter C-band Antennas,
500 Orbit Model Ocean TRx 7-300-Ku 2.1 Meter Ku-band Antennas,
500 Orbit Model OrSat AL-7103 MKII-Ku 1.2 Meter Ku-band Antennas,
500 Orbit Model Ocean TRx 4-500-Ku 1.2 Meter Ku-band Antennas and
500 Intellian Model v65/v65G 0.65 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. They will be utilized to provide ESV service in the same manner as previously authorized by the Commission and will be operated in full

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compliance with the requirements of the Commission’s ESV regulations as set forth in part 25 of the Rules.

Marlink’s Showing of Compliance with Part 25 of the Commission’s Rules follows herewith and the exhibits required by Sections 25.221 and 25.222 are included as attachments to the Modification Application.

Showing of Compliance for the C-band Operation of the Orbit Model Ocean TRx 7-300-C Antenna with Part 25 of the Commission’s Rules

Section 25.221

(a) (1) Comply.

See the Orbit declaration in Exhibit 7 and “Tables Required by 25.221(b)(1)(i) to Demonstrate Compliance of Orbit Antennas with 25.221(a)(1)(i)” in Exhibit 3 for the Orbit Model Ocean TRx 7-300-C 2.2 Meter C-band Antennas.

The 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. Exhibit 3 contains the detailed demonstration described in paragraph 25.221 (b)(1). The declaration in Exhibit 7 contains the certification that the antenna complies 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 U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 11707 S Sam Houston Parkway West, Suite A, Houston, Texas, 77031 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC

(a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ESV Compliance Officer via 203-346-0461.

(a) (6) Comply.

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- (a) (7) Comply. The ESVs are controlled through teleports located in the United States and elsewhere used to uplink the ESVs. As noted in the (a) (4) response, the ESV Compliance Officer that is located within the United States has the capability and authority to cause any of the ESVs to stop transmitting if necessary.
- (a) (8) Comply.
- (a) (9) Comply.
- (a) (10) Comply. No protection is sought for docked ESVs at this time. In the event it is necessary to seek protection at some point in the future, it will be accomplished in accordance with the terms of this §25.221 (a) (10).
- (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 applicant by Comsearch and Skjei Telecom; the Notifications Concerning Completion of the Coordinations have been filed with the Commission as specified in this regulation; 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. Hardware and software have been developed and deployed 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. The tables described in 25.221(b)(1)(i) are attached in Exhibit 3. The value N described in 25.221(a)(1)(i)(A) is 1. The detailed demonstration described in paragraphs 25.221(b)(1)(i)(A), (B) & (C) is contained in the attached Exhibit 3. The certification stating that the tracking system meets the pointing and cessation of emission requirements of 25.221(b)(1)(iii) is contained in the declaration for this antenna in Exhibit 7.
- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See Exhibit 10 “AREAS OF OPERATIONS” for map showing geographic areas in which ESVs authorized per the WB36 license will operate.

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(b) (5) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 11707 S. Sam Houston Parkway West, Suite A, Houston, Texas, 77031 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC

(b) (6) Comply. See the Radiation Hazard Report in Exhibit 9.

Showing of Compliance for the Ku-band Operation of the Orbit Model Ocean TRx 7-300-Ku, Orbit Model OrSat AL-7103 MKII-Ku, Orbit Model Ocean TRx 4-500-Ku and Intellian Model v65/v65G Antennas with Part 25 of the Commission's Rules

Section 25.222

(a) (1) Comply.

See the declarations for these antennas in Exhibit 7 and “Tables Required by 25.222(b)(1)(i) to Demonstrate Compliance of Orbit Antennas with 25.222(a)(1)(i)” in Exhibits 4, 5 and 6 for the above listed antennas.

The antennas 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. Exhibits 4, 5 and 6 contain the detailed demonstration described in paragraph 25.222 (b)(1). The declarations in Exhibit 7 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 U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 11707 S. Sam Houston Parkway West, Suite A, Houston, Texas, 77031 and this point of

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contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC.

- (a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ESV Compliance Officer via 203-346-0461.
- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled through teleports located in the United States and elsewhere used to uplink the ESVs. As noted in the (a) (4) response, the ESV Compliance Officer that is located within the United States has the capability and authority to cause any of the ESVs to stop transmitting if necessary.
- (a) (8) Comply.
- (b)(1) Comply. The tables described in 25.221(b)(1)(i) are attached in Exhibits 4, 5 and 6.

The value N described in 25.222(a)(1)(i)(A) is 1. The detailed demonstration described in paragraphs 25.222(b)(1)(i)(A), (B) & (C) is contained in the attached Exhibit 4 for the Orbit Model Ocean TRx 7-300-Ku Antenna; in Exhibit 5 for the Orbit Model OrSat AL-7103 MKII-Ku and Orbit Model Ocean TRx 4-500-Ku Antennas; and in Exhibit 6 for the Intellian Model v65/v65G Antenna. The certifications for these antennas stating that the tracking systems meet the pointing and cessation of emission requirements of 25.222(b)(1)(iii) are contained in the declarations in Exhibit 7.
- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See Exhibit 10 “AREAS OF OPERATIONS” for map showing geographic areas in which ESVs authorized per the WB36 license will operate.
- (b) (5) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 11707 S Sam Houston Parkway West, Suite A, Houston, Texas, 77031 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC.
- (b) (6) Comply. See the Radiation Hazard Reports in Exhibit 9.

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- (c) Comply. Coordination has been completed 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. Marlink has developed and deployed a system which utilizes hardware and software to continuously monitor 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. Mapping coordinates for 14.0 – 14.2 GHz frequency band Transmit Exclusion Zones required by NASA per the above described coordination to protect the TDRSS facilities have been programmed into Marlink’s system. It will automatically mute any Marlink ESVs operating in the 14.0 – 14.2 GHz frequency band which enter one of these Exclusion Zones.

- (d) Comply. Mapping coordinates for 14.47 – 14.5 GHz frequency band Transmit Exclusion Zones have been developed for the areas within the specified distances of the facilities protected per 24.222 (d) and programmed into Marlink’s system. It will automatically mute any Marlink ESVs operating in the 14.47 – 14.5 GHz frequency band which enter one of these Exclusion Zones.

III. Request to Change Address and Utilize New Site ID Designations to Simplify Remote Control Section F)

Upon completion of entering all Schedule B information the following new Remote Control information should be present in the Remote Control Section F) of the license:

- 1 11707 S. Sam Houston Parkway West, Suite A Call Sign: WB36
Houston, Texas 77031
203-346-0461

- 2 11707 S. Sam Houston Parkway West, Suite A Call Sign: WB36
Houston, Texas 77031
203-346-0461

- 3 11707 S. Sam Houston Parkway West, Suite A Call Sign: WB36
Houston, Texas 77031
203-346-0461

All prior entries currently in Section F) should then be deleted. Please see Exhibit 2 for the mark-up of the current license which shows the modifications requested above.

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IV. Request to Utilize New Site ID Designations for Re-designation of Site IDs Listed for Antennas in Antenna Facilities Section E)

It is respectfully requested that the Antenna Facilities Section E) then be modified by changing the Site IDs on the IBFS Antenna tab as follows:

Change Site ID “3612” to “2”
Change Site ID “4003” to “2”
Change Site ID “4006/9/10” to “2”
Change Site ID “4012” to “2”
Change Site ID “4996” to “2”
Change Site ID “5009/10/12” to “2”
Change Site ID “6006/9/12” to “2”
Change Site ID “9707/97/11” to “1”
Change Site ID “9711QORC” to “1”
Change Site ID “9711QORKU” to “2”
Change Site ID “9797/11KU” to “2”
Change Site ID “INTV100” to “2”
Change Site ID “INTV110” to “2”
Change Site ID “INTV130” to “2”
Change Site ID “INTV240” to “1”
Change Site ID “INTV240K” to “2”
Change Site ID “INTV240MKU” to “2”
Change Site ID “INTV240MC” to “1”
Change Site ID “INTV60G” to “2”
Change Site ID “INTV80G” to “2”
Change Site ID “MITMV120” to “2”
Change Site ID “MITMV60” to “2”
Change Site ID “SA1.2MFLY” to “3”
Change Site ID “SAT30/3011” to “2”
Change Site ID “TTSA800A” to “2”
Change Site ID “TTSA900” to “2”
Change Site ID “TTSA900B” to “2”

Please see Exhibit 2 for the mark-up of the current license which shows the modifications requested above.

V. Request to Utilize New Site ID Designations to Simplify Point of Communications Section D)

Upon completion of entering all Schedule B information the following new Point of Communications information should be present in the Point of Communications

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Section D) of the license:

- 1) 1 to Permitted Space Station List
- 2) 1 to SES-4 (S2828) @ 22 degrees W.L. (Netherlands Licensed)
- 3) 1 to NSS-9 (S2756) @ 177 W.L. (Netherlands Licensed)
- 4) 2 to Permitted Space Station List
- 5) 3 to Permitted Space Station List

All prior entries currently in Section D) should then be deleted. Please see Exhibit 2 for the mark-up of the current license which shows the modifications requested above.

VI. Request to Change Address and Simplify the Site Location(s) Section A)

Upon completion of entering all Schedule B information the following new Site Location(s) information should be present in the Site Location(s) Section A) of the license:

#	Site ID	Address
1)	1	C-band Remote ESVs U.S. and International Waters 11707 S Sam Houston Parkway W, Suite A Houston, Texas 77031
2)	2	Ku-band Remote ESVs U.S. and International Waters 11707 S Sam Houston Parkway W, Suite A Houston, Texas 77031
3)	3	Ku-band Remote VSATs CONUS, Alaska, Hawaii and U.S Territories 11707 S Sam Houston Parkway W, Suite A Houston, Texas 77031

All prior entries currently in Section A) should then be deleted on the IBFS Site tab. Please see Exhibit 2 for the mark-up of the current license which shows the modifications requested above.

That completes all changes being requested to simplify the license. It is noted that this simplification process requires no changes to Sections B) or C) of the license.

Questions with respect to any of the above may be directed to James G. Lovelace at (281) 606-0117 or james.lovelace@marlink.com.