


APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
STA Request for Aero Terminals at Fixed Locations

1. Applicant

| | | | |
|-------------------|--|----------------------|------------------------------|
| Name: | ISAT US Inc. | Phone Number: | 202-248-5150 |
| DBA Name: | | Fax Number: | |
| Street: | 1101 Connecticut Avenue NW Suite 1200 | E-Mail: | giselle.creaser@inmarsat.com |
| City: | Washington | State: | DC |
| Country: | USA | Zipcode: | 20036 |
| Attention: | Giselle Creaser | | |

File # SES-STA-20160211-00133
E120072
Call Sign E120072 Grant Date 2-19-16
(or other identifier)
Term Dates From: 2-22-16 To: 3-27-16
Approved: [Signature]



The stamp features the FCC logo on the left and the text "GRANTED International Bureau" on the right.

Applicant: ISAT US, Inc.
Call Sign: E120072
File No.: SES-STA-20160211-00133
Special Temporary Authority (STA)



File # SES-STA-20160211-00133
E120072
Call Sign E120072 Grant Date 2-19-16
(or other identifier)
Term Dates
From: 2-22-16 To: 3-24-16
Approved: [Signature]

ISAT US, Inc.(ISAT) is granted special temporary authority for thirty days beginning February 22, 2016, to operate 20 MCS-8000 or MCS-8200 terminal earth stations, at fixed locations within CONUS. All earth stations are authorized to operate with the Inmarsat-5 F2 satellite at the 55° W.L. orbital location in the 29.5-30.0 GHz (Earth-to-space) and 19.7-20.2 GHz (space-to-Earth) frequency bands. Operations must be in accordance with the technical specifications contained in ISAT's current authorization, IBFS File No. SES-LIC-20141030-00832, and are subject to the following conditions:

1. Operations under this grant of special temporary authority are on an unprotected, non-harmful interference basis, *i.e.*, while operating under this temporary authority ISAT must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating radiocommunication system. ISAT must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
2. ISAT US, Inc. must take all necessary measures to ensure that the antenna does not create potential exposure of humans to radio frequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Requirements for restrictions can be determined by predictions based on calculations, modeling or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/ofsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers. The licensee shall ensure installation of terminals by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the aircraft and equipment. A terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm² in accessible areas, such as at the exterior surface of the radome, shall have a label attached to the surface of the terminal warning about the radiation hazard and shall include thereon a diagram showing the regions around the terminal where the radiation levels could exceed 1.0 mW/cm².
3. The remote control point at Lino Lakes, MN (808 461-7104) must maintain be available 24 hours per day, seven days per week, with the authority and ability to terminate operations authorized, for discussing interference concerns with other licensees and U.S. Government agencies.
4. ISAT US, Inc. must maintain records of the following data for each earth station, a record of the location (*i.e.*, latitude/longitude/altitude), transmit frequency, channel bandwidth and satellite used shall be time annotated and maintained for a period of not less than one year. Records shall be recorded at time intervals no greater than one (1) minute while the antenna is transmitting. The operator shall make this data available, in the form of a comma delimited electronic spreadsheet, within 24 hours of a request from the Commission, NTIA, or a frequency coordinator for purposes of resolving harmful interference events. A description of the units (*i.e.*, degrees, minutes, MHz, etc.) in which the records values are recorded will be supplied along with the records.

5. Antenna elevation for all operations must be at least 5 degrees above the geographic horizon while the aircraft is on the ground.
6. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at ISAT US, Inc.'s risk.

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 or applications for review under Sections 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within thirty days of the date of the public notice indicating that this action was taken.

| | |
|---|--|
| 2. Contact | |
| Name: Giselle Creeser | Phone Number: 202-248-5150 |
| Company: ISAT US Inc. | Fax Number: |
| Street: 1101 Connecticut Avenue NW Suite 1200 | E-Mail: giselle.creeser@inmarsat.com |
| City: Washington | State: DC |
| Country: USA | Zipcode: 20036 - |
| Attention: | Relationship: Same |
| (If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.) | |
| 3. Reference File Number or Submission ID | |
| 4a. Is a fee submitted with this application? | |
| <input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). | |
| <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee | |
| <input type="radio"/> Other (please explain): | |
| 4b. Fee Classification CGV – Fixed Satellite VSAT System | |
| 5. Type Request | |
| <input type="radio"/> Use Prior to Grant | <input type="radio"/> Change Station Location <input checked="" type="radio"/> Other |
| 6. Requested Use Prior Date 02/22/2016 | |
| 7. City | 8. Latitude (dd mm ss.s h) 0 0 0.0 |

| | |
|---|---|
| 9. State | 10. Longitude (dd mm ss.s h) 0 0 0.0 |
| 11. Please supply any need attachments. Attachment 1: Exhibit A Attachment 2: Attachment 3: | |
| 12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) Request for special temporary authority to operate up to 20 aeronautical terminals at fixed locations within CONUS. | |
| 13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes. Yes <input checked="" type="radio"/> No <input type="radio"/> | |
| 14. Name of Person Signing Giselle Creeser | 15. Title of Person Signing Director, Regulatory |
| WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503). | |

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

Exhibit A

DESCRIPTION OF STA REQUEST

I. SUMMARY

ISAT US, Inc. (“ISAT US”) hereby requests special temporary authority (“STA”) to operate the two Earth station terminals types authorized under ISAT US’s blanket license for aeronautical terminals operating within the Inmarsat-5 Global Xpress network¹ (the “GX Terminals”) while at fixed locations within the continental United States (“CONUS”). ISAT US seeks to perform testing and demonstrations with the GX Terminals at various sites throughout the CONUS at fixed locations. The Commission previously granted the Aero License for operation of the GX Terminals mounted on aircraft, however ISAT US, by this STA, requests authority to operate 20 GX Terminals while at fixed locations on land within CONUS.

Grant of the requested STA will serve the public interest, convenience and necessity because it will enable ISAT US to conduct testing and demonstrations of the GX Terminals, consistent with the parameters described herein, without creating any risk of harmful interference. ISAT US respectfully requests the Commission grant this STA for a 30 day period beginning February 22, 2016.

II. DESCRIPTION OF STA REQUEST

Operations of the GX Terminals under this STA would be within the technical parameters of the existing Aero License for the GX Terminals and will be operated through the Lino Lakes Satellite Access Station authorized under call sign E120072.² The Inmarsat-5 F2 (“I5 F2”) and the Lino Lakes Satellite Access Station have both been authorized for U.S. market access from the 55° W.L. orbital location. Operations will be conducted in the following frequencies, which are the same as those already licensed by the Commission in the Aero License:

Transmit: 29.5-30.0 GHz

¹ See, ISAT US, Inc., Granted August 11, 2015, (Call Sign E140114; IBFS File No. SES-LIC-20141030-00832) (“*Aero License*”).

² See, Inmarsat Mobile Networks, Inc., Granted March 30, 2015, (Call Sign E120072; IBFS File No. SES-LIC-20120426-00397) (“*Lino Lakes Order*”).

Receive: 19.7 – 20.2 GHz

ISAT US incorporates by reference the technical parameters of the GX Terminals as set forth in the Aero License that show compliance with the off-axis EIRP density levels in Section 25.138 of the Commission's rules. The user terminal operations will be limited in number and locations and be closely monitored by the Inmarsat Network Operations Center (NOC) and various engineering teams associated with the GX network testing and demonstration campaign to ensure compliance with all conditions of the existing Aero License. The equipment will be marked to warn of potential radiation exposure, and the terminals will be in professionally installed locations. Radiation exposure prevention measures will be tailored to the specific location to ensure compliance with the Commission's radiation exposure limits. It is expected that the GX Terminals will be used starting February 22, 2016 for 30 days.