


APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
Request for STA - Inmarsat Global Xpress Lino Lakes, MN Gateway

I. Applicant

<b>Name:</b>	Inmarsat Hawaii Inc.	<b>Phone Number:</b>	202-248-5155
<b>DBA Name:</b>		<b>Fax Number:</b>	202-248-5186
<b>Street:</b>	1101 Connecticut Avenue NW Suite 1200	<b>E-Mail:</b>	diane.cornell@inmarsat.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20036
<b>Attention:</b>	Diane J Cornell		



File # SES-STA 20130604-00540  
 E 10072 Call Sign Grant Date 6-27-13  
 (or other identifier)  
 From 6-28-13 Term Dates To: 7-28-13  
 Approved: Paul E. Allen  
 GRANTED International Bureau

Inmarsat Hawaii Inc.  
E120072  
SES-STA-20130604-00540

Inmarsat Hawaii Inc., (Inmarsat) is granted special temporary authority, for 30 days, to test its Lino Lakes, MN, fixed earth station with the Anik F2 space station (S2626) located at the 111.1° W.L. orbital location in 29712-29748 MHz (Earth-to-space) frequency band. Testing is authorized under the following conditions.

- 1) All operations shall be on an unprotected, non-interference basis.
- 2) In the event of any harmful interference, cease operations immediately and inform the Commission, in writing, immediately.
- 3) All operations must be within the parameters of the frequency coordination report and the radiation hazard reports submitted under amended Inmarsat the, IBFS File Nos. SES-LIC-20120426-00397 application.
- 4) Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending Inmarsat application, IBFS File Nos. SES-LIC-20120426-00397 and SES-AMD-20120823-00781.
- 5) Space-to-earth operations in the 18512-18548 MHz frequency band are not authorized by this grant but must not cause interference other radio operators.
- 6) Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Inmarsat's risk.
- 7) Inmarsat must make all reasonable and customary measures to ensure that the earth station does not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the earth station when it is in operation. The earth station operator shall be responsible for assuring that individuals do not stray into the regions around the earth station where there is a potential for exceeding the maximum permissible exposure limits required by 47 C.F.R. §1.1310. This shall be accomplished by means of signs, caution tape, verbal warnings, placement of the earth station so as to minimize access to the hazardous region, and/or other appropriate means.
- 8) 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.



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<b>2. Contact</b>	
<b>Name:</b> Chris Murphy	<b>Phone Number:</b> 202-248-5158
<b>Company:</b> Inmarsat	<b>Fax Number:</b>
<b>Street:</b> 1101 Connecticut Ave., NW Suite 1200	<b>E-Mail:</b> chris.murphy@inmarsat.com
<b>City:</b> Washington	<b>State:</b> DC
<b>Country:</b> USA	<b>Zipcode:</b> 20036
<b>Attention:</b>	<b>Relationship:</b>
(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 SESLIC2012042600397 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 CGX – Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other	
6. Requested Use Prior Date 06/18/2013	
7. City/Lino Lakes	
8. Latitude (dd mm ss.s h) 45 7 56.0 N	

9. State MN	10. Longitude (dd mm ss.s h) 93 5 44.0 W
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.)  See Exhibit A.	
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"; party to the application; for these purposes.  Yes <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing Diane J Cornell	15. Title of Person Signing Director
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).	

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**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.**

### **Description of STA Request**

Inmarsat Hawaii Inc. (“Inmarsat Hawaii”) hereby requests special temporary authority (“STA”) to test its new Lino Lakes, Minnesota gateway earth station facility (the “Lino Lakes gateway”) which is in the final stages of construction.<sup>1</sup> The Lino Lakes gateway will provide essential TT&C and feeder link services for the Inmarsat I5-F2 satellite using a 13.2 meter antenna. The I5-F2 satellite is scheduled for launch in early 2014.

Inmarsat Hawaii currently has an earth station application pending, seeking authority for the Lino Lakes gateway antenna to communicate with the I5-F2 satellite.<sup>2</sup> Inmarsat needs to ensure that the Lino Lakes gateway antenna is operating properly well in advance of the I5-F2 satellite launch and arrival at the 55° W.L. orbital location. This application seeks STA to test the Lino Lakes gateway antenna with another satellite, Anik F2, located at the 111.1° W.L. orbital location.<sup>3</sup>

The antenna tests will consist of uplink transmissions only from the Lino Lakes gateway antenna. The transmissions will consist of continuous wave carriers from the Lino Lakes gateway antenna to the Anik F2 satellite at 111.1° W.L. The signals from the Lino Lakes gateway antenna will be transmitted down from the Anik F2 satellite to Telesat’s Winnipeg teleport facility in Canada using previously authorized frequencies and will be monitored and measured by Inmarsat in order to verify the Lino Lakes gateway earth station antenna performance (e.g., peak gain and side lobe patterns).

The below table provides the carrier parameters to be used for the Lino Lakes gateway antenna performance verification testing (uplink only).

	Uplink
Carrier designation	1K00NON
Allocated bandwidth	1 kHz
Transmit antenna diameter	13.2 m
Transmit antenna gain	69.2 dBi
Maximum uplink EIRP	70 dBW
Maximum satellite (downlink) EIRP	38.0 dBW

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<sup>1</sup> The Lino Lakes gateway consists of one 13.2 meter antenna. The antenna coordinates, listed on the STA application form, are latitude 45° 7' 56.0" N and longitude 93° 5' 44.0" W.

<sup>2</sup> See, File Nos. SES-LIC-20120426-00397; SES-AMD-20120823-00781; Call Sign E120072 (“Lino Lakes Application”).

<sup>3</sup> The Anik F2 satellite has been authorized to provide service in the United States permitting U.S. earth station operators authority to access the satellite. File No. SAT-PPL-20041004-00194; Call Sign S2646. See, Telesat Canada, Petition for Declaratory Ruling For Inclusion of Anik F2 on the Permitted Space Station List; Petition for Declaratory Ruling to Serve the U.S. Market Using Ka-band Capacity on Anik F2, Order, DA 02-3490, 17 FCC Rcd. 25,287 (Int’l Bur. 2002) as modified by Public Notice Report No. SAT-00268; DA No. 05-241 (Jan. 28, 2005).

FREQ 0	Out Bound Carriers
U/L Frequency	29712 - 29748 MHz
D/L Frequency	18512-1848 MHz (not requested)
Polarisation	RHCP Uplink RHCP Downlink (not requested)

The Anik F2 at 111.1° W.L. orbital location is within the arc covered by the Comsearch Frequency Analysis Coordination Report submitted with Lino Lakes Application.<sup>4</sup> Moreover, the proposed maximum EIRP density for testing operations is within the maximum EIRP density included in that Comsearch report.<sup>5</sup> Inmarsat Hawaii Inc. incorporates by reference the technical information contained in those prior filings.

Grant of the requested STA will serve the public interest, convenience and necessity because it will help ensure that this new earth station facility performs according to its design specifications and can reliably be used to control and communicate with the I5-F2 satellite. Inmarsat respectfully requests that the Commission grant STA beginning June 18, 2013 for period of 30 days.

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<sup>4</sup> See, Lino Lakes Application, File No. SES-LIC-20120426-00397, Exhibit E.

<sup>5</sup> See *Id.*

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<sup>4</sup> See, Lino Lakes Application, File No. SES-LIC-20120426-00397, Exhibit E.

<sup>5</sup> See *Id.*