

File # SAT-STA-20140502-00047

Call Sign S2704 Grant Date 10/10/14

(or other identifier) Term Dates 180 days

From 10/10/14 To:

Approved: Stephen J. Duall

Stephen J. Duall  
Chief, Satellite Policy Branch

Approved by OMB  
3060-0678



Date & Time Filed: May 2 2014 3:57:55:500PM  
File Number: SAT-STA-20140502-00047  
Callsign:

FEDERAL COMMUNICATIONS COMMISSION  
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY  
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
Request for 180-Day Special Temporary Authority to Drift and Operate Intelsat 5, Call Sign S2704

I. Applicant

<b>Name:</b>	Intelsat License LLC	<b>Phone Number:</b>	202-944-7848
<b>DBA Name:</b>		<b>Fax Number:</b>	202-944-7870
<b>Street:</b>	c/o Intelsat Corporation 3400 International Drive, N.W.	<b>E-Mail:</b>	susan.crandall@intelsat.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20008 -3006
<b>Attention:</b>	Susan H. Crandall		

<b>2. Contact</b>	
<b>Name:</b> Susan H. Crandall	<b>Phone Number:</b> 202-944-7848
<b>Company:</b> Intelsat Corporation	<b>Fax Number:</b> 202-944-7870
<b>Street:</b> 3400 International Drive, N.W.	<b>E-Mail:</b> susan.crandall@intelsat.com
<b>City:</b> Washington	<b>State:</b> DC
<b>Country:</b> USA	<b>Zipcode:</b> 20008 --3006
<b>Attention:</b> Susan H. Crandall	<b>Relationship:</b> Legal Counsel
(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 SATMOD2012100200176 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    CRY – Space Station (Geostationary)	
5. Type Request	
<input checked="" type="radio"/> Change Station Location <input type="radio"/> Extend Expiration Date <input type="radio"/> Other	
7. Requested Extended Expiration Date	
6. Temporary Orbit Location	

8. 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.)

Intelsat License LLC herein requests Special Temporary Authority for 180 days, commencing upon grant, to drift Intelsat 5 (call sign S2704) from 50.15 E.L. to 157.0 E.L., and to operate the satellite at 157.0 E.L. in the C- and Ku-bands, where it will replace the Intelsat 706 satellite that currently is scheduled to be de-orbited in November 2014.

9. 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  No

10. Name of Person Signing  
Susan H. Crandall

11. Title of Person Signing  
Assoc. General Counsel, Intelsat Corporation

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2:

Attachment 3:

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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**Intelsat License LLC**  
**IBFS File No. SAT-STA-20140502-00047**  
**Call Sign S2704**

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20140502-00047, as supplemented, is GRANTED.<sup>1</sup> Specifically, Intelsat is authorized, for a period of 180 days, commencing October 10, 2014, to provide Fixed-Satellite Service (FSS) via Intelsat 5 (Call Sign S2704), in inclined orbit,<sup>2</sup> at the 157.0° E.L. orbital location in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.45-11.7 GHz (space-to-Earth), and 14.0-14.25 GHz (Earth-to-space) frequency bands.<sup>3</sup> Intelsat is also authorized to conduct Telemetry, Tracking, and Command (TT&C) operations with the Intelsat 5 space station necessary to maintain Intelsat 5 at the 157.0° E.L. orbital location using the following center frequencies: 14.498 GHz and 13.999 GHz (Earth-to-space); 11.451 GHz, 11.452 GHz, and 11.454 GHz (space-to-Earth).<sup>4</sup> Operations under this authorization must be in accordance with the technical specifications contained in Intelsat's application and the Federal Communications Commission's rules not waived herein, and are subject to the following conditions:

1. While at the 157.0° E.L. orbital location, Intelsat must maintain the Intelsat 5 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
2. Intelsat must operate Intelsat 5 at the 157.0° E.L. orbital location in accordance with any existing or future coordination agreements for this location.
3. In connection with the provision of service in any particular country, Intelsat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
4. Intelsat's operation of the Intelsat 5 space station in the 11.45-11.7 GHz band is

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<sup>1</sup> The application was placed on Public Notice as accepted for filing on May 30, 2014. *See Policy Branch Information, Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-01018 (IBFS File No. SAT-STA-20140502-00047). On September 19, 2014, ABS Global, Ltd. submitted late-filed comments to this application for special temporary authority. *See Comments of ABS Global, Ltd. submitted by Arlene Kahng, General Counsel for ABS (dated Sept. 19, 2014)*. On September 29, 2014, Intelsat submitted a reply to ABS's comments. *See Response of Intelsat License LLC, submitted by Jennifer D. Hindin, Counsel for Intelsat License LLC (dated September 29, 2014)*. On October 2, 2014, ABS submitted a reply to Intelsat's comments. *See Reply of ABS Global, Ltd. submitted by Arlene Kahng, General Counsel for ABS (dated Oct. 2, 2014)*. ABS's comments are more appropriately addressed in the context of a regular license. In any event, there is no public interest reason to require Intelsat to cease service to the customers currently served by IS-706. This is particularly so because operations using Intelsat 5 will continue pursuant to fully coordinated and notified ITU filings.

<sup>2</sup> On October 24, 2012, Intelsat notified the Commission of the commencement of inclined orbit operations for Intelsat 5. Letter from Susan H. Crandall, Intelsat Corp., to Marlene H. Dortch, FCC (dated Oct. 24, 2011). The last north/south station-keeping maneuver occurred on October 12, 2012. *Id.*

<sup>3</sup> Intelsat's application originally requested the use of the 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth), and 12.75-13.25 GHz (Earth-to-space) frequency bands, which are subject to the FSS Plan contained in Appendix 30B of the ITU Radio Regulations, and for which there is no U.S. ITU filing at the 157.0° E.L. location. Intelsat subsequently withdrew those bands from this application. *See Letter from Susan Crandall, Assistant General Counsel, Intelsat Corp., to Marlene H. Dortch, Secretary, FCC, (dated Sept. 15, 2014), available in IBFS File No. SAT-STA-20140502-00047.*

<sup>4</sup> Intelsat drifted Intelsat 5 from the 50.15° E.L. orbital location to the 157.0° E.L. orbital location pursuant to a 30-day STA. IBFS File No. SAT-STA-20140501-00044 (granted May 29, 2014). Intelsat was granted two extensions for this STA: IBFS File No. SAT-STA-20140620-00072 (granted Jun. 25, 2014); and IBFS File No. SAT-STA-20140722-00088 (granted Jul. 24, 2014).

**Intelsat License LLC**  
**IBFS File No. SAT-STA-20140502-00047**  
**Call Sign S2704**

subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.

5. Intelsat's operation of the Intelsat 5 space station in the 11.45-11.7 GHz band is limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG52.

6. Intelsat's operation of the Intelsat 5 space station at the 157.0° E.L. orbital location in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.45-11.7 GHz (space-to-Earth), and 14.0-14.25 GHz (Earth-to-space) frequency bands; is subject to the following conditions:

(a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization (ITSO) that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.

(b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.

7. Grant of this special temporary authority is without prejudice to any action on IBFS File Nos. SAT-MOD-20121002-00176 or SAT-MOD-20140829-00097.

8. Any action taken or expense incurred as a result of operations pursuant to this grant of special temporary authority is at Intelsat's own risk.

9. 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.



File # SAT-STA-20140502-00047

Call Sign S2704 Grant Date 10/10/14

(or other identifier)

Term Dates period of  
From 10/10/14 To: 180 days

Approved: Stephen J. Duall

Stephen J. Duall  
Chief, Satellite Policy Branch

May 2, 2014

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554



Re: Request for Special Temporary Authority to Drift and Operate Intelsat 5  
Call Sign S2704

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests Special Temporary Authority ("STA")<sup>1</sup> for 180 days, commencing upon grant, to drift Intelsat 5 (call sign S2704) from 50.15° E.L. to 157.0° E.L., and to operate the satellite at 157.0° E.L. in the C- and Ku-bands, where it will replace the Intelsat 706 satellite that currently is scheduled to be de-orbited in November 2014. Intelsat also seeks to extend the Intelsat 5 license term for the duration of this STA request.<sup>2</sup> Intelsat expects shortly to file an application for modification of the Intelsat 5 license to allow for its permanent operation at 157.0° E.L.

Intelsat 5 currently is operating at 50.15° E.L. pursuant to Special Temporary Authority.<sup>3</sup> Subject to receipt of FCC approval, Intelsat 5 will be relocated to 157.0° E.L.—with the drift starting June 1, 2014 and the satellite on-station in early October 2014.<sup>4</sup>

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<sup>1</sup> Intelsat has filed this STA request, an FCC Form 159 and an \$860.00 filing fee electronically via the International Bureau's Filing System.

<sup>2</sup> Intelsat has a pending application to modify the Intelsat 5 license to extend the license term through December 31, 2020. *See Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00937, File No. SAT-MOD-20121002-00176 (Mar. 15, 2013) (Public Notice).

<sup>3</sup> *See Policy Branch Information; Actions Taken*, Report No. SAT-00973. File No. SAT-STA-20130808-00105, (Sept. 20, 2013) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00972, File No. SAT-STA-20130717-00095 (Sept. 6, 2013) (Public Notice). *Policy Branch Information; Actions Taken*, Report No. Intelsat has a pending request to extend the STA for 120 more days. *See Intelsat License LLC Request for Extension of STA*, File No. SAT-STA-20140226-00028 (filed Feb. 26, 2014).

Ms. Marlene H. Dortch  
May 2, 2014  
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During the drift of Intelsat 5 from 50.15° E.L. to 157.0° E.L., Intelsat will utilize only the satellite's TT&C frequencies and will follow industry practices for coordinating TT&C transmissions during the relocation process. The specific TT&C frequencies are as follows:

Uplink:

14498 MHz (H)  
13999 MHz (RHCP)

Downlink:

11451 MHz (H, V and RHCP)  
11452 MHz (H, V and RHCP)  
11454 MHz (RHCP and LHCP)

Once located at 157.0° E.L., Intelsat also will operate the satellite's communications frequencies as set forth below:

Uplink:

5925-6425 MHz  
12750-13250 MHz<sup>5</sup>  
14000-14250 MHz

Downlink:

3700-4200 MHz  
10700-10950 MHz<sup>5</sup>  
11200-11450 MHz<sup>5</sup>  
11450-11700 MHz

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<sup>4</sup> Intelsat has filed a 30-day STA request to begin drifting Intelsat 5 on June 1, 2014. See *Intelsat License LLC Request for Special Temporary Authority*, File No. SAT-STA-20140501-00044 (filed May 1, 2014).

<sup>5</sup> The bands 12750-13250 MHz, 10700-10950 MHz, and 11200-11450 MHz will be used on a non-protected, non-interference basis at 157.0° E.L., as there is no U.S. ITU filing for these Appendix 30B frequencies at this location.



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Grant of this STA request is in the public interest because it will allow Intelsat to offer continuity of service to customers at 157.0° E.L. that are currently on Intelsat 706. As noted above, Intelsat 706 is expected to be de-orbited in November of this year.

Grant of this STA request will not result in increased risk of harmful interference. As noted above, Intelsat will operate only the above listed TT&C frequencies during the drift, and will coordinate its TT&C transmissions with operators of satellites in the drift path. Should any interference occur during the drift, Intelsat will take all reasonable steps to eliminate such interference. Once Intelsat 5 is on-station at 157.0° E.L., Intelsat will operate the communications payload in conformance with its coordination agreements related to that location.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collision with large debris or other operational space stations. Intelsat 5 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another satellite.<sup>6</sup> Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Intelsat 5 at 157.0° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 5 at 157.0° E.L. that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

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<sup>6</sup> Intelsat expects to move Intelsat 706 slightly outside of the nominal 157.0° E.L. location prior to the arrival of Intelsat 5. Intelsat expects shortly to file for FCC approval of this temporary redeployment.

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For the reasons set forth herein, Intelsat respectfully requests that the Commission expeditiously grant this request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Susan H. Crandall". The signature is fluid and cursive, with a large initial "S" and a long horizontal stroke at the end.

Susan H. Crandall  
Associate General Counsel  
Intelsat Corporation

cc: Stephen Duall  
Jay Whaley  
Cindy Spears