

S2401 SAT-STA-20140627-00081 IB2014001288
Intelsat License LLC
Intelsat 706



File # SAT-STA-2014 0627-00081

Call Sign S2401 Grant Date 07/16/14
(or other identifier)

Term Dates period of
From 08/22/14 To: 30 days

Approved by OMB
3060-0678

Approved: Stephen J. Duall
Stephen J. Duall
Chief, Satellite Policy Branch

*with conditions

Date & Time Filed: Jun 27 2014 11:22:32:680AM
File Number: SAT-STA-20140627-00081
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY
FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Request for Special Temporary Authority to Drift Intelsat 706, Call Sign S2401

1. Applicant

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

Intelsat License LLC
IBFS File No. SAT-STA-20140627-00081
Call Sign S2401

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20140627-00081 is GRANTED.¹ Specifically, Intelsat is authorized, for a period of 30 days, commencing on August 22, 2014, to perform telemetry, tracking, and command operations necessary to drift Intelsat 706 from the 157.0° E.L. orbital location to the 156.9° E.L. orbital location, and maintain Intelsat 706 at 156.9° E.L., using the following frequencies: 6173.7 MHz and 6176.3 MHz (Earth-to-space): 3947.5 MHz, 3948.0 MHz, 3952.5 MHz, and 3952.0 MHz (space-to-Earth). Intelsat is also authorized to operate Intelsat 706 in inclined orbit mode during the drift to, and while operating at, the 156.9° E.L. orbital location, to provide Fixed-Satellite Service (FSS) in the 3700–4200 MHz (space-to-Earth), 5925–6425 MHz (Earth-to-space), 10.95–11.2 GHz, 11.45–11.7 GHz, and 12.5–12.75 GHz (space-to-Earth), and 14.0–14.5 GHz (Earth-to-space) frequency bands.² Operations under this authorization must be in accordance with the terms and conditions contained in Intelsat's application and the Federal Communications Commission's rules not waived herein, and are subject to the following conditions:

1. All operations under this grant of special temporary authority must be on an unprotected and non-harmful interference basis, *i.e.*, Intelsat must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating radiocommunication system.
2. In the event of any harmful interference as a result of the operations under this grant of special temporary authority, Intelsat must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
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 must operate Intelsat 706 at the 156.9° E.L. orbital location in compliance with all existing or future coordination agreements for this location.
5. While at the 156.9° E.L. orbital location, Intelsat must maintain the Intelsat 706 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
6. Intelsat's use of the 10.95-11.2 GHz and 11.45-11.7 GHz bands is 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.
7. Intelsat's operation of the Intelsat 706 space station in the 10.95-11.2 GHz and 11.45-11.7 GHz bands is limited to international operations in accordance with footnote NG 52 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 52.
8. Intelsat 706 is not authorized to provide FSS in the 12.5-12.70 GHz frequency band in

¹ We also grant Intelsat's request that the Part 25 technical waivers granted to the Intelsat 706 space station in its original license, Sections 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i) and 25.211(a) of the Commission's rules, 47 C.F.R. §§ 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i) and 25.211(a), continue to apply to the Intelsat 706 space station at the 156.9° E.L. orbital location. *See Applications of Intelsat LLC For Authority to Operate, and to Further Construct, Launch and Operate C-Band and Ku-Band Global Satellites That Form a Global Communications System in Geostationary Orbit*, 15 FCC Rcd 15460, Appendix C (2000) (*Memorandum Opinion and Order and Authorization*), *recon. denied*, 15 FCC Rcd 24234 (*Order on Reconsideration*).

² Although Intelsat 706 has the capability to transmit in the 11.7–11.95 GHz band, it does not seek authority to use these frequencies on Intelsat 706 either during the drift to or at the 156.9° E.L. orbital location, thus we do not authorize Intelsat to use the 11.7–11.95 GHz band frequencies during the drift to or upon arrival at 156.9° E.L.

Intelsat License LLC
IBFS File No. SAT-STA-20140627-00081
Call Sign S2401

International Telecommunication Union (ITU) Region 2.

9. Intelsat 706 is not authorized to provide FSS in the 12.70-12.75 GHz frequency band in the space-to-Earth direction in ITU Region 2.

10. Intelsat must comply with the power levels specified in Section 25.212, 47 C.F.R. § 25.212, unless it coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation of the 156.9° E.L. orbital location. Intelsat must inform the Commission of the power levels it has coordinated. In addition, Intelsat must inform all affected earth station operators that Section 25.220 of the Commission's rules applies to operations that exceed the power levels specified in Section 25.212. Regardless of Intelsat's coordination agreements, in no event shall: (1) the uplink power density of the Intelsat 706 digital carriers operating in the 5925-6425 MHz and 14.0-14.5 GHz bands exceed -38.7 dBW/Hz and -45 dBW/Hz, respectively; (2) the downlink EIRP density of the Intelsat 706 digital carriers operating in the 3700-4200 MHz band exceed -32 dBW/Hz; (3) the downlink EIRP density of the Intelsat 706 digital carriers operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, and 12.5-12.75 GHz bands exceed -20 dBW/Hz.

11. Intelsat's operation of Intelsat 706 at the 156.9° E.L. orbital location in the C-band frequencies of 3700-4200 MHz (space-to-Earth), and 5925-6425 MHz (Earth-to-space); and the Ku- and extended Ku-band frequencies of 10.95-11.2 GHz (space-to-Earth), 11.45-11.70 GHz (space-to-Earth), 12.5-12.75 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space); 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.

12. 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.

13. Grant of this authorization is without prejudice to any determination that the Commission may make regarding Intelsat's pending application for authority to operate Intelsat 706 at the 157.0° E.L. orbital location (IBFS File No. SAT-MOD-20121026-00188).

14. 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.

 GRANTED* International Bureau *with conditions	File # <u>SAT-STA-20140627-00081</u>
	Call Sign <u>S2401</u> Grant Date <u>07/16/14</u> (or other identifier)
	Term Dates period of From <u>08/22/14</u> To: <u>30 days</u>
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

2. Contact

Name:	Susan H. Crandall	Phone Number:	202-944-7848
Company:	Intelsat Corporation	Fax Number:	202-944-7870
Street:	3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20008 -3006
Attention:	Susan H. Crandall	Relationship:	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 or Submission ID

4a. Is a fee submitted with this application?

- If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).
- Governmental Entity Noncommercial educational licensee
- Other (please explain):

4b. Fee Classification CRY – Space Station (Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location

7. Requested Extended Expiration Date

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 30 days, commencing August 22, 2014, to drift Intelsat 706 (call sign S2401) from 157.0 E.L. to 156.9 E.L., where it will operate in the C- and Ku-bands in inclined orbit until traffic is transferred to Intelsat 5 and the satellite is de-orbited.

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"; 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).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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.

June 26, 2014

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



Re: Request for Special Temporary Authority to Drift and Operate
Intelsat 706
Call Sign S2401

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests Special Temporary Authority ("STA")¹ for 30 days, commencing August 22, 2014, to drift Intelsat 706 (call sign S2401) from 157.0° E.L. to 156.9° E.L., where it will operate in the C- and Ku-bands in inclined orbit² until traffic is transferred to Intelsat 5 and the satellite is de-orbited.³ Intelsat seeks authority to operate both the TT&C and communications frequencies on the satellite during the drift.

Intelsat 706 is currently operating at 157.0° E.L.⁴ Following receipt of FCC approval, Intelsat 706 will begin drifting naturally to 156.9° E.L. on August 22,

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

² Intelsat 706 began operating in inclined orbit mode in 2011. *See* Letter from Susan H. Crandall, Intelsat, to Marlene H. Dortch, FCC, Call Sign S2401 (filed July 20, 2011).

³ Intelsat 5 currently is drifting to 157.0° E.L. pursuant to STA. *See Policy Branch Information; Actions Taken*, Report No. SAT-01019, File No. SAT-STA-20140501-00044 (May 30, 2014) (Public Notice). Intelsat also has a pending 180-day STA request to drift and operate the satellite at 157.0° E.L. *See Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-01018, File No. SAT-STA-20140502-00047 (May 30, 2014) (Public Notice). Intelsat 706 is expected to be de-orbited in November 2014.

⁴ *See Policy Branch Information; Actions Taken*, Report No. SAT-01009, File No. SAT-STA-20140403-00037 (Apr. 11, 2014) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00995, File No. SAT-STA-20140203-00012 (Feb. 7, 2014) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00985, File No. SAT-STA-20131204-00144 (Dec. 13, 2013) (Public Notice); *Policy Branch Information; Actions Taken*,

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2014. It is expected to be on-station at that location in 30 days. As noted above, during the drift of Intelsat 706 from 157.0° E.L. to 156.9° E.L., Intelsat will operate both the satellite's TT&C frequencies and its communications frequencies.

The specific TT&C frequencies are as follows:

Uplink:

6173.7 (LHCP)
6176.3 (LHCP)

Downlink:

3947.5 (RHCP)
3948.0 (RHCP)
3952.5 (RHCP)
3952.0 (RHCP)

The specific communications frequencies are as follows:

3700 – 4200 MHz (space-to-Earth)
5925 – 6425 MHz (Earth-to-space)
10950 – 11200 MHz (space-to-Earth)
11450 – 11700 MHz (space-to-Earth)

Report No. SAT-00977, File No. SAT-STA-2013101700120 (Nov. 1, 2013) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00972, File Nos. SAT-STA-20130807-00103 and SAT-STA-20130607-00081 (Sept. 13, 2013) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00947, File No. SAT-STA-20130408-00057 (May 3, 2013) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00931, File No. SAT-STA-20130206-00017 (Feb. 15, 2013) (Public Notice). Intelsat has a pending application for modification of the Intelsat 706 license to allow the satellite to operate at 157.0° E.L. on a permanent basis. *See Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. 00915, File No. SAT-MOD-20121026-00188 (Nov. 30, 2012) (Public Notice).

12500 – 12750 MHz (space-to-Earth)
14000 – 14500 MHz (Earth-to-space)⁵

Grant of this STA request is in the public interest because it will allow Intelsat to move the inclined Intelsat 706 satellite out of the 157.0° E.L. box prior to the arrival of Intelsat 5, which will help ensure safe station-keeping of both satellites during traffic transfer. Customers on Intelsat 706 will not be adversely affected by the redeployment contemplated herein.

Grant of this STA request will not result in increased risk of harmful interference. Intelsat will coordinate the drift and continued operations with all potentially affected operators and all operations will conform to Intelsat's coordination agreements for the nominal 157.0° E.L. orbital location. Intelsat confirms that there are no co-frequency satellites between 157.0° E.L. and 156.9° E.L.

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 706 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. 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 706 at 156.9° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 706 at 156.9° E.L. that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

Intelsat requests that the Part 25 waivers originally granted to the Intelsat 706 spacecraft continue to apply at the 156.9° E.L. location, namely, the waivers of Sections 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i) and 25.211(a) of the Commission's rules.⁶


⁵ Although Intelsat 706 has the capability to transmit in the 11700 – 11950 MHz band, Intelsat does not seek authority to use these frequencies on Intelsat 706 either during the drift to or at the 156.9° E.L. orbital location.

⁶ See *Applications of Intelsat LLC for Authority to Operate and Further Construct, Launch, and Operate C-Band and Ku-Band Satellites that Form a Global Communications System in Geostationary Orbit*, 15 FCC Rcd 15460, 15529 (Appendix C) (2000) (Memorandum Opinion and Order and Authorization), *recon. denied*, 15 FCC Rcd 25234 (2000) (Order on Reconsideration).

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

Sincerely,

A handwritten signature in black ink, appearing to read "S. Crandall". The signature is fluid and cursive, with a large initial "S" and a long, sweeping underline.

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

cc: Stephen Duall
Jay Whaley
Cindy Spiers