

S2404 SAT-STA-20151002-00068 IB2015001818
Intelsat License LLC
IS 805



File # SAT-STA-20151002-00068
Call Sign 32404 Grant Date 11/25/15
(or other identifier)
Term Dates period of
From 12/1/2015 To: 180 days
Approved: Stephen J. Duall

Approved by OMB
3060-0678

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Callsign:

*with conditions

Stephen J. Duall
Chief, Satellite Policy Branch

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 STA to Drift and Operate Intelsat 805 at 169.0 E.L., Call Sign S2404

1. Applicant

Name:	Intelsat License LLC	Phone Number:	703-559-7848
DBA Name:		Fax Number:	703-559-8539
Street:	c/o Intelsat Corporation 7900 Tysons One Place	E-Mail:	susan.crandall@intelsat.com
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102 -5972
Attention:	Susan H. Crandall		

Intelsat License LLC
IBFS File No. SAT–STA–20151002–00068
Call Sign S2404

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT–STA–20151002–00068, is GRANTED.¹ Intelsat is authorized, for a period of 180 days, commencing December 1, 2015, to conduct Telemetry, Tracking, and Command (TT&C) operations necessary to drift the Intelsat 805 space station from the 55.5° W.L. orbital location to the 169.0° E.L. orbital location and to maintain the Intelsat 805 space station (Call Sign S2404) at the 169.0° E.L. orbital location using the following center frequencies: 3947.5 MHz, 3948.0 MHz, 3950 MHz, 3952.0 MHz, 3952.5 MHz, and 12.501 GHz (space-to-Earth), and 6173.7 MHz, and 6176.3 MHz (Earth-to-space). Intelsat is also authorized, on a temporary basis, to provide Fixed-Satellite Service (FSS) via Intelsat 805 at 169.0° E.L. in the 3400-4200 MHz (space-to-Earth), 5850-6650 MHz (Earth-to-space), 12.5-12.75 GHz (space-to-Earth), and 14.0-14.25 GHz (Earth-to-space) frequency bands. 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 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. Intelsat must coordinate the operations of Intelsat 805 with existing geostationary space stations to ensure that no unacceptable interference results from its operations at the 169.0° E.L. orbital location.
4. Intelsat must maintain full operational control of the Intelsat 805 space station at all times.
5. 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.
6. Intelsat must operate Intelsat 805 at the 169.0° E.L. orbital location in compliance with all existing or future coordination agreements for this location.
7. While at the 169.0° E.L. orbital location, Intelsat must maintain the Intelsat 805 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
8. Intelsat's request that the prior waivers granted for Intelsat 805 for Sections 25.202(a)(1), 25.202(g), 25.210(a)(3), 25.210(i)(1), and 25.210(f) of the Commission's rules be extended to the operation of Intelsat 805 at 169.0° E.L.; is GRANTED, subject to the conditions in the original grant.²
9. Intelsat's request for waivers of Sections 25.202(a)(1) and 2.106 of the Commission's rules, 47 C.F.R. §§ 25.202(a)(1) and 2.106, which allocate 12.5–12.7 GHz to Fixed Service (FS) and Broadcast Satellite Service (BSS), and 12.7–12.75 GHz to FS, Mobile Service, and FSS (Earth-to-space)

¹ The application was placed on Public Notice as accepted for filing on October 16, 2015. *See Policy Branch Information, Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-01112, (IBFS File No. SAT–STA–20151002–00068).


² *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*, Memorandum Opinion and Order and Authorization, 15 FCC Rcd 15460, at Appendix C (2000), *recon. denied*, 15 FCC Rcd 24234. We note that one of the original waived rules, Section 25.210(g)(1), 47 C.F.R. § Section 25.210(g)(1), which required full frequency reuse, is now included in Section 25.210(f), 47 C.F.R. § Section 25.210(f).

Intelsat License LLC
IBFS File No. SAT-STA-20151002-00068
Call Sign S2404

in International Telecommunication Union (ITU) Region 2, is GRANTED. Intelsat's operations in these bands at the 169.0° E.L. orbital location will be solely in Region 3, in which the 12.5-12.75 GHz band is allocated to FSS in the space-to-Earth direction, and thus conforms to the International Table of Frequency Allocations. Further, under the ITU Region 2 BSS Plan, there is at least 15 degrees of orbital separation between Intelsat 805 at 169.0° E.L. and the nearest possible BSS network that could provide service to any portion of the ITU Region 2, so it is unlikely that operations of Intelsat 805 will interfere with any BSS networks in Region 2. Moreover, Intelsat 8 is presently authorized to provide FSS at the 169.0° E.L. orbital location in the 12.25-12.75 GHz (space-to-Earth) frequency band, on a non-interference, non-protected basis to any earth station in ITU Region 2.³

10. 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.

11. 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-20151002-00068</u>
	Call Sign <u>S2404</u> Grant Date <u>11/25/15</u> (or other identifier)
	Term Dates period of From <u>12/1/15</u> To: <u>180 days</u>
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

³ See IBFS File No. SAT-MOD-20120619-00100, as amended by IBFS File No. SAT-AMD-20120815-00131, granted August 9, 2013.

2. Contact

Name:	Susan H. Crandall	Phone Number:	703-559-7848
Company:	Intelsat Corporation	Fax Number:	703-559-8538
Street:	7900 Tysons One Place	E-Mail:	susan.crandall@intelsat.com
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102 -5972
Attention:		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
169.0 E.L.

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 180 days, commencing December 1, 2015, of Special Temporary Authority to drift Intelsat 805 (Call Sign S2404) from 55.5 W.L. to 169.0 E.L. and operate the satellite temporarily at 169.0 E.L.

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
Associate Gen. 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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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.

October 2, 2015

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

Re: Request for Special Temporary Authority to Drift Intelsat 805 to, and Operate at, 169.0° E.L.
Call Sign: S2404

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests 180 days, commencing December 1, 2015, of Special Temporary Authority (“STA”)¹ to drift Intelsat 805 (Call Sign S2404) from 55.5° W.L. to 169.0° E.L. and operate the satellite temporarily at 169.0° E.L.

The Intelsat 805 satellite is currently operating at 55.5° W.L.² Subject to receipt of FCC approval, the satellite will be relocated to 169.0° E.L.—with an anticipated drift start date of December 1, 2015. The drift of the Intelsat 805 satellite is expected to take approximately three months. Intelsat is relocating the Intelsat 805 satellite following traffic transfer to the recently-launched Intelsat 34.

During the drift of the Intelsat 805 satellite, Intelsat will utilize only the satellite’s telemetry, tracking, and control (“TT&C”) frequencies and will follow industry practices for coordinating TT&C transmission during the relocation process. The specific TT&C frequencies are: 3947.5 MHz, 3948.0 MHz, 3950 MHz, 3952.0 MHz, 3952.5 MHz, 6173.7 MHz, 6176.3 MHz and 12501 MHz.

Once on-station at 169.0° E.L., Intelsat will also operate on the following communications frequencies: 3400 – 4200 MHz, 5850 – 6650 MHz, 12500 – 12750 MHz, and 14000 – 14250 MHz.

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 on-station at 169.0°

¹ Intelsat has filed this STA request, an FCC Form 159, and a \$930.00 filing fee electronically via the International Bureau’s Filing System.

² See *In the Matter of Intelsat LLC, Application to Modify Authorization for Intelsat 805 to Allow the Provision of Fixed-Satellite Service Between Non-U.S. Points in the 12.7-12.75 GHz Frequency Band*, Order and Authorization, File No. SAT-MOD-200209191-00178 (rel. Feb. 18, 2004).

E.L., Intelsat will operate the communications payload in conformance with its coordination agreements concerning the nominal 169.0° E.L. location.

Further, Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collisions with large debris or other operational space stations. Intelsat 805 will be temporarily located at the same orbital location as Intelsat 8 (Call Sign S2460)³ during traffic transition. Intelsat 8 is currently operating at 169.0° E.L., but will be relocated, subject to receipt of FCC approval, after traffic transition has been completed. 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 805 at 169.0° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 805 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

In support of this STA, Intelsat requests the prior waivers granted for Intelsat 805⁴ for Sections 25.202(a)(1),⁵ 25.202(g), 25.210(a)(3), 25.210(i)(1), and 25.210(f)⁶ be extended to Intelsat 805 at 169.0° E.L. To the extent necessary, Intelsat also requests a waiver of Sections 25.202(a)(1) and 2.106, which allocate 12500 – 12700 MHz to Fixed Service (“FS”) and Broadcast Satellite Service (“BSS”), and 12700 – 12750 MHz to FS, Mobile Service (“MS”), and Fixed Satellite Service (“FSS”) (Earth-to-space) in International Telecommunication Union (“ITU”) Region 2.

Under Section 1.3 of the Commission’s rules, the Commission has authority to waive its rules “for good cause shown.”⁷ Good cause exists if “special circumstances warrant a deviation from the general rule and such deviation will serve the public interest” better than adherence to the general rule.⁸ In determining whether waiver is appropriate, the Commission should “take into account considerations of hardship, equity, or more effective implementation of overall policy.”⁹ As shown below, there is good cause for each of the requested technical waivers.

Good cause exists to waive Sections 25.202(a)(1) and 2.106 for Intelsat 805’s Ku-band payload for the 12500 – 12750 MHz frequency band. The purpose of Sections 25.202(a)(1) and 2.106 is to harmonize the use of spectrum and thereby reduce harmful interference to allocated services within ITU Region 2.

³ See *Policy Branch Information; Actions Taken*, Report No. SAT-00 00883, File No. SAT-MOD-20120619-00100 (Public Notice) (Aug. 16, 2013).

⁴ 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).

⁵ The existing waiver of Section 25.202(a)(1) applies only to C-bands frequencies on Intelsat 805.

⁶ Intelsat 805 previously obtained a waiver of Section 25.210(g)(1), which required full frequency reuse. See *supra* n. 4. This requirement is now included in Section 25.210(f).

⁷ 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

⁸ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

⁹ *WAIT Radio*, 418 F.2d at 1159.

Ms. Marlene H. Dortch
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At 169.0° E.L., Intelsat 805's Ku-band coverage will be solely in Region 3, where 12500 – 12750 MHz is allocated to the FSS in the space-to-Earth direction. As such, Intelsat 805's FSS downlink use of the 12500 – 12750 MHz band at 169.0° E.L conforms to the International Table of Frequency Allocations. The proposed use therefore will not cause harmful interference to FS, BSS, or FSS in ITU Region 2.

Moreover, Intelsat 805's operations in the 12500 – 12750 MHz frequency band will not impact other space stations. According to the ITU Region 2 BSS Plan, which allocates the 12200 – 12700 MHz band to BSS, no BSS assignment can be located further west than 175.2° W.L.¹⁰ As a result, there would be at least 15.8° of orbital separation between Intelsat 805 at 169.0° E.L. and the nearest BSS network that could provide service to any portion of ITU Region 2. With this large orbital separation, there would be no risk of harmful interference to BSS networks from the operation of Intelsat 805 in the 12500 – 12700 MHz frequency band.

Given these particular facts, the additional waiver sought herein is plainly appropriate. Grant of this STA request is in the public interest because it will allow Intelsat to meet customer demand at 169.0° E.L.

For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this STA request. Please direct any questions regarding this supplement to the undersigned at (703) 559-7848.

Sincerely,



Susan H. Crandall
Associate General Counsel
Intelsat Corporation

cc: Stephen Duall
Jay Whaley
Cindy Spiers

¹⁰ International Telecommunications Union, Radio Regulations Vol. 2 Appendices 477 (2012).