

S2404 SAT-STA-20180703-00050 IB2018003421
Intelsat License LLC



*with conditions

File # SAT-STA-20180703-00050

Call Sign S2404 Grant Date 09/20/18
(or other identifier)

From 09/20/18 Term Dates period of 180 days To: 180 days

Approved: Stephen J. Duall

Approved by OMB
3060-0678

Date & Time Filed: Jul 3 2018 9:41:29:906AM
File Number: SAT-STA-20180703-00050
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 STA to Drift and Operate Intelsat 805 at 169.1 E.L., Call Sign S2404

1. Applicant

Name: Intelsat License LLC
DBA Name:
Street: c/o Intelsat US LLC
7900 Tysons One Place
City: McLean
Country: USA
Attention: Susan H. Crandall

Phone Number: 703-559-7848
Fax Number: 703-559-8539
E-Mail: susan.crandall@intelsat.com
State: VA
Zipcode: 22102 -5972

ATTACHMENT TO GRANT
Intelsat License LLC.
IBFS File No. SAT-STA-20180703-00050

IBFS File No(s):	SAT-STA-20180703-00050	<div>GRANTED – With Conditions</div> <div></div> <div>International Bureau Satellite Division</div>
Licensee/Grantee:	Intelsat License LLC	
Call Sign:	S2404	
Satellite Name:	Intelsat 805	
Orbital Location: (required station-keeping tolerance)	169.1° E.L. (+/- 0.05 degrees east/west station keeping)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service; Telemetry, Tracking, and Command (TT&C)	
Scope of Grant:	Special temporary authority for a period of 180 days to (1) conduct TT&C operations necessary to drift Intelsat 805 from the 169.0° E.L. orbital location to the 169.1° E.L. orbital location, and (2) provide fixed-satellite service from 169.1° 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	
Service Area	Australia, Eastern Asia, Japan, Western North America. <i>See</i> IBFS File No. SAT-AMD-20151120-00077, Engineering Statement at 2.	
Frequencies:	3400-4200 MHz (space-to-Earth) 5850-6650 MHz (Earth-to-space) 12.5-12.75 GHz (space-to-Earth) 14.0-14.25 GHz (Earth-to-space) TT&C center frequencies: 3947.5 MHz; 3948.0 MHz; 3950.0 MHz; 3952.0 MHz (space-to-Earth) 6173.7 MHz; 6176.3 MHz; 12198.75 MHz (Earth-to-space)	
Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:		
<div>1. Operations pursuant to this special temporary authority must be on an unprotected and non-harmful interference basis, i.e., the Intelsat 805 space station must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating station. In the event of any harmful interference, Intelsat must cease operations immediately upon notification of such interference, and must inform the Commission, in writing, immediately of such an event.</div> <div>2. 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.</div> <div>3. Intelsat must operate Intelsat 805 at the 169.1° E.L. orbital location in compliance with all existing or future coordination agreements for this location. In the absence of a coordination agreement, such communications must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required conditions.</div> <div>4. While at the 169.1° E.L. orbital location, Intelsat must maintain the Intelsat 805 spacecraft with an east/west station-keeping tolerance of +/- 0.05 degrees.</div> <div>5. The operations of Intelsat 805 and associated earth stations must comport with the applicable uplink and downlink limits in 47 CFR § 25.140(a)(3) of the Commission's rules, unless Intelsat coordinates any non-conforming operations with the operations of U.S.-licensed geostationary orbit space stations within 6 degrees of the 169.1° E.L. orbital location. Intelsat must also comport with the maximum power limits indicated in existing or future coordination agreements at 169.1° E.L. Non-conforming operation must</div>		

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also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 169.1° E.L. involving approved communications with U.S.-licensed earth stations.

6. Use of the 3400-3600 MHz (space-to-Earth) frequency band is not permitted for non-Federal FSS in the United States Table of Frequency Allocations, 47 C.F.R. § 2.106. Intelsat must not permit any earth station in the United States or its possessions to operate with the Intelsat 805 space station in the 3400-3600 MHz (space-to-Earth) frequency band.¹
7. Intelsat must inform its customers and operators using the 3400-3600 MHz (space-to-Earth) frequency band of the potential for interference from U.S. government operations worldwide.
8. Intelsat's use of the 3600-3650 MHz (space-to-Earth) band is subject to GN Docket No. 12-354, which limits FSS communications within the United States in the 3600-3650 MHz band on a primary basis to existing earth stations or to new earth stations within 10 miles of existing earth stations.² All other FSS earth station operations in the band 3600-3650 MHz must be on a secondary basis.
9. Intelsat's use of the 3600-3650 MHz (space-to-Earth) band is subject to footnote US245 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US245, which states that the 3600-3650 MHz use of the non-Federal FSS is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis.
10. Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG185 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG185, which states that the 3650-3700 MHz use of the non-Federal FSS is limited to international inter-continental systems.
11. Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG169 of the United States Table of Frequency Allocations, which states that after December 1, 2000, operations on a primary basis by the FSS (space-to-Earth) in the band 3650-3700 MHz must be limited to grandfathered earth stations. All other FSS earth station operations in the band 3650-3700 MHz must be on a secondary basis.
12. Use of the 5850-5925 MHz frequency band shall comply with the terms of footnote US245 to the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, US245, and Section 2.108 of the Commission's rules, 47 C.F.R. § 2.108, which states that the 5850-5925 MHz use of the non-Federal fixed-satellite service is limited to international, intercontinental satellite systems and is subject to case-by-case electromagnetic compatibility analysis. Intelsat shall not claim protection from radiolocation transmitting stations operating in accordance with footnote G2.³
13. Intelsat is directed to bear in mind the needs of the passive services when operating the Intelsat 805 space station in the 6425-6650 MHz frequency band pursuant to Footnote 5.458 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, Footnote 5.458.

¹ Intelsat previously stated that the 3400-3600 MHz band would not be used in the United States. *See* Legal Narrative, IBFS File No. SAT-MOD-20151020-00072, at 9.

² *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, GN Docket No. 12-354, Notice of Proposed Rulemaking and Order, 27 FCC Rcd 15594, 15646, ¶ 168 (2012).

³ For technical information of these radiolocation systems, *see* NTIA Report 83-115, Spectrum Resource Assessment in the 5650-5925 MHz Band, and NTIA Report 00-373, Measured Occupancy of 5850-5925 MHz and Adjacent 5-GHz Spectrum in the United States at <http://www.its.bldrdoc.gov/pub/pubs.php>.

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Intelsat License LLC.
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14. Intelsat's request that the prior waivers granted to Intelsat 805 for Sections 2.106, 25.114(d)(14)(ii), 25.202(g), 25.210(f), and 25.283(c) of the Commission's rules be extended to the operation of Intelsat 805 at 169.1° E.L. is GRANTED,⁴ subject to the conditions in the prior grants.⁵
15. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Intelsat's own risk.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned. This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action Date:	September 20, 2018
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Term Dates	From: September 20, 2018	To: period of 180 days
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Approved:



Stephen J. Duall
Chief, Satellite Policy Branch

⁴ We note that Section 25.202(a)(1) has been changed, and no longer applies, and Sections 25.210(a)(3) and 25.210(i)(1) have been removed. Thus, Intelsat's request to extend the waiver for these rules is not needed. In addition, Intelsat requested a waiver of Condition 19 in the Horizons 3e grant, which requires Intelsat 805 to continue providing service at the 169.0° E.L. orbital location until Horizons 3e begins providing services there. Letter from Cynthia J. Grady, Regulatory Counsel, Intelsat US LLC, to Marlene H. Dortch, Secretary, FCC, at 2 n.6 (dated July 3, 2018) (citing IBFS File No. SAT-MOD-20170622-00093). We find that the waiver is not needed, in this instance, because the condition is designed to deter warehousing and Intelsat 805's move to the 169.1° E.L. orbital location does not raise warehousing concerns since Intelsat will continue to provide the same service at 169.1° E.L. as it did at 169.0° E.L.

⁵ See IBFS File Nos. SAT-MOD-20151020-00072, SAT-AMD-20151120-00077, grant stamp Feb. 24, 2016; *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 25234.

2. Contact	
Name: Cynthia J. Grady Company: Intelsat US LLC Street: 7900 Tysons One Place City: McLean Country: USA Attention:	Phone Number: 703-559-6949 Fax Number: 703-559-8539 E-Mail: cynthia.grady@intelsat.com State: VA Zipcode: 22102 -5972 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? <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	
6. Temporary Orbit Location 169.1 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 of the Special Temporary Authority, commencing August 10, 2018, to drift Intelsat 805 (S2404) from 169.0 E.L. to, and operate at, 169.1 E.L. Specifically, Intelsat seeks STA to operate the telemetry, tracking, and command and communications frequencies on the Intelsat 805 during the drift from 169.0 E.

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
Cynthia J. Grady

11. Title of Person Signing
Regulatory Counsel, Intelsat US LLC

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.

8. Description

Intelsat License LLC herein requests 180 days of the Special Temporary Authority, commencing August 10, 2018, to drift Intelsat 805 (S2404) from 169.0 E.L. to, and operate at, 169.1 E.L. Specifically, Intelsat seeks STA to operate the telemetry, tracking, and command and communications frequencies on the Intelsat 805 during the drift from 169.0 E.L. to 169.1 E.L. and on-station at 169.1 E.L.

July 3, 2018

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, 169.1° E.L.;
Call Sign: S2404

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests 180 days of the Special Temporary Authority (“STA”),¹ commencing August 10, 2018, to drift Intelsat 805 (S2404) from 169.0° E.L. to, and operate at, 169.1° E.L. Specifically, Intelsat seeks STA to operate the telemetry, tracking, and command (“TT&C”) and communications frequencies on the Intelsat 805 during the drift from 169.0° E.L. to 169.1° E.L. and on-station at 169.1° E.L. The drift is expected to take approximately one week. Intelsat will be filing shortly a permanent application for this redeployment.

Intelsat 805’s TT&C frequencies are: 6173.7 MHz, 6176.3 MHz, and 12198.75 MHz in the uplink; and 3947.5 MHz, 3948.0 MHz, 3950.0 MHz, and 3952.0 MHz in the downlink. Intelsat 805’s communications frequencies are: 5850-6650 MHz and 14000-14250 MHz in the uplink; and 3400-4200 MHz and 12500-12750 MHz in the downlink.

The Intelsat 805 satellite is currently operating at 169.0° E.L.² In order to bridge any gaps in service that will occur between the start of inclined orbit operation of Intelsat 805³ and the arrival of Horizons 3e

¹ Intelsat has filed this STA request, an FCC Form 159, and a \$945.00 filing fee electronically via the International Bureau’s Filing System.

² See *Policy Branch Information; Actions Taken*, Report No. SAT-01139, File No. SAT-MOD-20151020-00072 (Feb. 26, 2016) (Public Notice).

³ See Letter from Cynthia J. Grady, Regulatory Counsel, Intelsat Corporation, to Marlene H. Dortch, Secretary, FCC, File No. SAT-MOD-20151020-00072 (June 27, 2017).

(S2947),⁴ JCSAT-RA (S2960) will be nominally collocated with Intelsat 805.⁵ Both Intelsat 805 and JCSAT-RA will operate at the nominal 169° E.L. until the arrival of Horizons 3e later this year.⁶

Grant of this modification application will not result in increased risk of harmful interference. As noted above, Intelsat will operate the above listed TT&C and communications frequencies during the drift, and will follow industry practices for coordinating transmissions during the relocation process. During the drift to 169.1° E.L. Intelsat will continue to operate the TT&C frequencies and communications payload in conformance with its coordination agreements concerning the nominal 169° E.L. location. Should any interference occur during the drift, Intelsat will take all reasonable steps to eliminate such interference. Additionally, Intelsat will operate Intelsat's communications payload and TT&C frequencies at 169.1° E.L. in conformance with existing coordination agreements and the Federal communications Commission's ("FCC" or "Commission") rules governing operations vis-à-vis adjacent locations.

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 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 805 at 169.1° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 805 at either location that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

In addition, Intelsat requests that the waiver previously granted to Intelsat 805 at 169.0° E.L. be extended to the satellite at 169.1° E.L. Specifically, Intelsat requests that the waiver of Sections 2.106,

⁴ See *Policy Branch Information; Actions Taken*, Report No. SAT-01313, File No. SAT-MOD-20170622-00093 (Apr. 27, 2018).

⁵ JCSAT-RA is currently operating at 128.0° E.L. Contingent on receipt of Commission authority, JCSAT-RA will to be relocated to 169.0° E.L. See *Policy Branch Information; Actions Taken*, Report No. SAT-01211, File No. SAT-LOA-20160411-00035 (Jan. 27, 2017) (Public Notice).

⁶ Out of an abundance of caution, and to the extent necessary, Intelsat requests a waiver of Condition 19 of the Horizons 3e grant, which requires that Intelsat 805 continue providing service from 169.0° E.L. in the 3700-4200 MHz, 5925-3425 MHz, 10.85-11.7 GHz, 12.5-12.75 GHz, and 14.0-14.25 GHz bands until Horizons 3e begins providing services at 169.0° E.L. See Horizons-3 License LLC Application to Modify Authorization for Horizons 3e Satellite (S2947), File No. SAT-MOD-20170622-00093 (condition #19, stamp grant issued Apr. 25, 2018 by Stephen J. Duall). Intelsat is seeking to move Intelsat 805 one tenth of a degree to accommodate the arrival of JCSAT-RA at 169.0° E.L. and ensure safe station-keeping of the satellites located at nominal 169° E.L. This accommodation will allow Intelsat to continue providing continuity of service to customers at nominal 169° E.L. until Horizons 3e arrives. As such, to the extent a waiver is required, grant would serve the public interest.

Ms. Marlene H. Dortch
July 3, 2018
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25.114(d)(14)(ii), 25.202(a)(1), 25.202(g), 25.210(a)(3), 25.210(i)(1), 25.210(f),⁷ and 25.283(c) of the Commission's rules be extended to the satellite at 169.1° E.L. for the reasons previously set forth.⁸

Grant of this STA request is in the public interest because it will allow Intelsat to ensure continuity of service at the nominal 169° E.L. orbital location. For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this STA request. Please direct any questions regarding this request to the undersigned at (703) 559-6949.

Sincerely,

/s/ Cynthia J. Grady

Cynthia J. Grady
Regulatory Counsel
Intelsat US LLC

cc: Stephen Duall
Jay Whaley
Cindy Spiers

⁷ Intelsat 805 previously obtained a waiver of Section 25.210(g)(1), which required full frequency reuse. This requirement is now included in Section 25.210(f).

⁸ See *Policy Branch Information; Actions Taken*, Report No. SAT-01139, File No. SAT-MOD-20151020-00072 (Feb. 26, 2016) (Public Notice).