

S2253 SAT-STA-20140310-00029 IB2014000441
Intelsat License LLC
Galaxy 11



File # SAT-STA-20140310-00029

Call Sign S2253 Grant Date 07/17/14

(or other identifier)

Term Dates period of 180 days

From 03/11/14

To:

Approved by OMB
3060-0678

Approved: Stephen J. Duall

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

Date & Time Filed: Mar 10 2014 4:18:39:083PM
File Number: SAT-STA-20140310-00029
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:
180-Day STA Extension to Operate Galaxy 11 at 55.6 W.L. (S2253)

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		

Attachment to Grant
IBFS File No. SAT-STA-20140310-00029
Call Sign S2253

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20140310-00029, is GRANTED. Specifically, Intelsat is authorized, for a period of 180 days, commencing on March 11, 2014, to continue to conduct Telemetry, Tracking, and Command (TT&C) operations with the Galaxy 11 space station (Call Sign S2253) necessary to maintain the Galaxy 11 space station at the 55.6° W.L. orbital location using the following center frequencies: 14.0005 GHz and 14.4985 GHz (Earth to space), and 11.701 GHz and 11.702 GHz (space to Earth). Intelsat is also authorized to operate Galaxy 11 in the 10.95-11.2 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth), and 13.75-14.5 GHz (Earth-to-space) frequency bands to provide Fixed-Satellite Service from the 55.6° W.L. orbital location. Operations under this authorization must be in accordance with the technical specifications set forth in Intelsat's application and Federal Communication Commission rules not waived herein, and are subject to the following conditions:

1. All operations under this authorization must be on an unprotected and non-harmful interference basis, *i.e.*, the Galaxy 11 space station shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station. In the event of any harmful interference, Intelsat shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
2. Intelsat must operate the Galaxy 11 space station at the 55.6° W.L. orbital location in compliance with all existing or future coordination agreements.
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. While at the 55.6° W.L. orbital location, Intelsat must maintain the Galaxy 11 spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
5. Intelsat's use of the 10.95-11.2 GHz frequency band is subject to Footnote US211 to the 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.
6. Intelsat's use of the 10.95-11.2 GHz frequency band is limited to international operations in accordance with footnote NG 104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).
7. In the 13.75-14.0 GHz band (Earth-to-space), receiving space stations in the Fixed-Satellite Service shall not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.
8. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US337, any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.0 GHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's (NTIA's) Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space

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Administration Tracking and Data Relay Satellite System, including manned space flight.

9. Operations of any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.0 GHz band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated powers (EIRP). Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.0 GHz band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.

10. Operations of any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.77-13.78 GHz band (Earth-to-space) shall comply with footnote US357 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US357, which specifies that a required maximum EIRP density of emissions not exceed 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 11 space station in the 13.77-13.78 GHz band (Earth-to-space) shall comply with footnote 5.503 to the ITU Radio Regulations, which specifies a required maximum EIRP density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.

11. Operators of earth stations accessing the Galaxy 11 space station in the 13.75-14.00 GHz band are encouraged to cooperate voluntarily with the National Aeronautics and Space Administration (NASA) in order to facilitate continued operation of NASA's Tropical Rainfall Measuring Mission (TRMM) satellite.

12. Pursuant to footnote US342 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, services operating in the 14.47-14.50 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.

13. Intelsat must comply with the power levels specified in Section 25.212 of the Commission's rules, 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 55.6° W.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. In no event shall the uplink input power spectral density level of Galaxy 11's digital carriers exceed -45 dBW/Hz into the antenna and the downlink EIRP density of such carriers exceed -21 dBW/Hz for the Ku-band.

14. Intelsat's operation of Galaxy 11 at the 55.6° W.L. orbital location in the 10.95-11.2 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth), and 13.75-14.5 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

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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.

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.

16. Grant of this authorization is without prejudice to any determination that the Commission may make regarding Intelsat's pending application in IBFS File No. SAT-MOD-20121018-00184.

17. Intelsat is afforded thirty days from the date of release of this grant and authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.

18. 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. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

 GRANTED* International Bureau *with conditions	File # <u>SAT-STA-20140310-00029</u>
	Call Sign <u>S2253</u> Grant Date <u>07/17/14</u> (or other identifier)
	Term Dates period of From <u>03/11/14</u> To: <u>180 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:	c/o 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
2014-09-06 00:00:00.0

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 an additional 180 days, commencing March 11, 2014, of the Special Temporary Authority previously granted Intelsat to drift Galaxy 11 (S2253) from 55.5 W.L. to 55.6 W.L. and operate the satellite temporarily at 55.6 W.L. prior to permanently relocating the satellite to 44.8 W.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
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

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

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.

March 10, 2013

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



Re: Request for Further Extension of Special Temporary Authority to Drift Galaxy 11 to, and Operate at, 55.6° W.L. (304.4° E.L.); Call Sign: S2253

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests an additional 180 days, commencing March 11, 2014, of the Special Temporary Authority previously granted Intelsat ("STA")¹ to drift Galaxy 11 (S2253) from 55.5° W.L. to 55.6° W.L. and operate the satellite temporarily at 55.6° W.L. prior to permanently relocating the satellite to 44.8° W.L.² Intelsat will continue to operate Galaxy 11 in the 13750 – 14500 MHz, 10950 – 11200 MHz and 11700 – 12200 MHz frequency bands and will provide TT&C using the 14000.5 MHz, 14498.5 MHz, 11701 MHz, and 11702 MHz frequencies. Due to an administrative oversight, Intelsat inadvertently utilized the wrong grant date of its current authorization in calculating the STA's end date and is filing this further extension request outside of the required three business days before expiration.³

Intelsat currently operates Galaxy 11 at 55.6° W.L. and Intelsat 805 at 55.5° W.L.⁴ Intelsat 27, which was supposed to replace Intelsat 805, failed to launch successfully in March 2013. As such, Intelsat notified the

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

² See *Policy Branch Information; Actions Taken*, Report No. SAT-00979, File No. SAT-STA-20130829-00019 (Nov. 8, 2013) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-00934, File No. SAT-STA-20130102-0001 (Mar. 1, 2013) (Public Notice). Intelsat has a pending application to modify the license for Galaxy 11 to allow it to be redeployed to 44.8° W.L. See *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00918, File No. SAT-MOD-20121018-00184 (Dec. 14, 2012) (Public Notice).

³ See 47 C.F.R. § 25.120(a). To the extent necessary, Intelsat respectfully requests a waiver of the three-business day requirement.

⁴ See *Policy Branch Information; Actions Taken*, Report No. SAT-00764, File No. SAT-MOD-20101102-00229 (Mar. 11, 2011) (Public Notice) and *Applications of Intelsat LLC for Authority to Operate and Further*

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Commission that Galaxy 11's redeployment to 44.8° W.L. would be delayed until the second half of 2015.⁵

Intelsat will continue to operate Galaxy 11 at 55.6° W.L. in accordance with Intelsat's coordination agreements concerning the nominal 55.5° W.L. location. The only co-frequency satellites located within plus or minus three degrees of 55.6° W.L. are Intelsat satellites.

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. Galaxy 11 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 Galaxy 11 at 55.6° W.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Galaxy 11 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

The continued operation of Galaxy 11 at 55.6° W.L. will help to ensure the safe station-keeping of the two Intelsat satellites at the nominal 55.5° W.L. location. Accordingly, grant of this STA extension request is in the public interest.

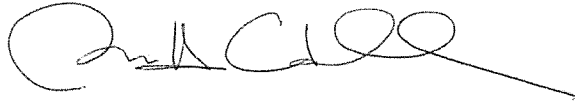
Construct, Launch, and Operate C-Band and Ku-Band Satellites that Form a Global Communications System in Geostationary Orbit, 15 FCC Rcd 15460, 15529 (Appendix C) (2000) (Memorandum Opinion and Order and Authorization), *recon. denied*, 15 FCC Rcd 25234 (2000) (Order on Reconsideration).

⁵ See Letter from Susan H. Crandall, Intelsat License LLC, to Ms. Marlene H. Dortch, FCC, File No. SAT-MOD-20121018-00184 (Mar. 14, 2013).

Ms. Marlene H. Dortch
March 10, 2013
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For the reasons set forth herein, Intelsat respectfully requests that the Commission expeditiously grant this further extension request.

Sincerely,

A handwritten signature in black ink, appearing to read 'Susan H. Crandall', with a long horizontal line extending to the right.

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

Cc: Stephen Duall
Jay Whaley
Cindy Spiers