

S2253 SAT-STA-20170120-00007 IB2017000160  
Intelsat License LLC  
Galaxy 11



File # SAT-STA-20170120-00007  
Call Sign S2253 Grant Date 03.01.17  
(or other identifier)  
Term Dates period of  
From 02.28.17 To: 90 days  
Approved: *Stephen J. Duall*

Approved by OMB  
3060-0678

Date & Time Filed: Jan 20 2017 8:54:14:376PM  
File Number: SAT-STA-20170120-00007  
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:  
90-Day STA Extension to Drift and Operate Galaxy 11 (Call Sign S2253)

1. Applicant

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

**ATTACHMENT TO GRANT**  
 Intelsat License LLC  
 IBFS File No. SAT-STA-20170120-00007

<b>IBFS File No(s):</b>	SAT-STA-20170120-00007	<p><b>GRANTED – With Conditions</b></p>  <p><b>International Bureau Satellite Division</b></p>
<b>Licensee/Grantee:</b>	Intelsat License LLC	
<b>Call Sign:</b>	S2253	
<b>Satellite Name:</b>	Galaxy 11	
<b>Orbital Location: (required station-keeping tolerance)</b>	45.0 ° E.L. and 44.9 ° E.L. (+/- 0.05 degrees east/west)	
<b>Administration:</b>	United States of America	
<b>Nature of Service:</b>	Fixed Satellite Service	
<b>Scope of Grant:</b>	Special temporary authority for a period of 90 days to continue to: (1) conduct telemetry, tracking, and command operations necessary to drift the Galaxy 11 space station from the 60.1° E.L. orbital position, first to the 45.0° E.L. orbital position, and then to the 44.9° E.L. orbital location, and to maintain it at these locations; and, (2) provide fixed-satellite service via Galaxy 11, first at the 45.0° E.L. orbital location, and then during the drift to, and upon arrival at, the 44.9° E.L. orbital location.	
<b>Service Area(s):</b>	See IBFS File No. SAT-MOD-20160803-00077, Item S6 of Schedule S and accompanying .gxt files	
<b>Frequencies:</b>	During the drift to and at 45.0 ° E.L. and 44.9 ° E.L.: 13750-14500 MHz (Earth-to-space) 10950-11200 MHz (space-to-Earth) 11700-12200 MHz (space-to-Earth)  TT&C center frequencies: 14000.5 MHz and 14498.5 MHz (Earth-to-space) 11701 MHz and 11702 MHz (space-to-Earth)	

**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:**

1. Operations pursuant to this authority 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. 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.
3. Intelsat must operate Galaxy 11 at the 45.0 ° E.L. and 44.9 ° E.L. orbital locations in compliance with all existing or future coordination agreements for this location.
4. While at the 45.0 ° E.L. and 44.9 ° E.L. locations, Intelsat must maintain the Galaxy 11 spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
5. The United States remains the licensing administration of the Galaxy 11 spacecraft and its communications payloads for purposes of International Telecommunication Union (ITU) Radio Regulation 18.1 and is the administration responsible for the operations of Galaxy 11. Intelsat will operate Galaxy 11 at the nominal 45.0° E.L. orbital position pursuant to Germany's EUROPESTAR-BSS-45E and EUROPESTAR-45E-A filings. The U.S. Administration will not object to use of the Galaxy 11 satellite by the German Administration for claiming bringing into use or continuing the use of orbital assignments at 45.0° E.L. This grant does not in any way express a view concerning, or agreement as to, the validity or lack of validity of any ITU filing at or in the vicinity of the 45.0° E.L. orbital

**ATTACHMENT TO GRANT**  
Intelsat License LLC  
IBFS File No. SAT-STA-20170120-00007

location.

6. The operations of Galaxy 11 and associated earth stations must comport with the applicable uplink limits in 47 CFR §§ 25.138, 25.211, 25.218, 25.221, 25.222, 25.226, and/or 25.227 of the Commission's rules, and the applicable downlink limits in 47 CFR §§ 25.138 and/or 25.212 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 nominal 45.0° E.L. orbital location. Intelsat must also comport with the maximum power limits indicated in its application. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of the nominal 45.0° E.L. orbital location involving approved communications with U.S.-licensed earth stations.
7. 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 US 74.
8. Intelsat's use of the 10.95-11.2 GHz frequency 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.
9. 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.
10. 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 Administration Tracking and Data Relay Satellite System, including manned space flight
11. 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 US 356 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 recommended 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.
12. 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 US 357 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 exceeded 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 13.75-14.0 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.
13. 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.

**ATTACHMENT TO GRANT**  
Intelsat License LLC  
IBFS File No. SAT-STA-20170120-00007

14. 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 issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 2.106, 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.

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).

<b>Action Date:</b>	March 1, 2017
---------------------	---------------

<b>Term Dates</b>	<b>From:</b> February 28, 2017	<b>To:</b> Period of 90 days
-------------------	--------------------------------	------------------------------

**Approved:**



Stephen J. Duall  
Chief, Satellite Policy Branch

2. Contact

<b>Name:</b>	Cynthia J. Grady	<b>Phone Number:</b>	703-559-6949
<b>Company:</b>	Intelsat Corporation	<b>Fax Number:</b>	703-559-8539
<b>Street:</b>	7900 Tysons One Place	<b>E-Mail:</b>	cynthia.grady@intelsat.com
<b>City:</b>	McLean	<b>State:</b>	VA
<b>Country:</b>	USA	<b>Zipcode:</b>	22102 -5972
<b>Attention:</b>		<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 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  
45.0 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 an additional 90 days of the Special Temporary Authority previously granted Intelsat to drift Galaxy 11 (Call Sign S2253) from 60.1 E.L. to 45.0 E.L., operate temporarily at 45.0 E.L., then to drift Galaxy 11 from 45.0 E.L. to 44.9 E.L., and operate at its final location of 44.9 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  
Cynthia J. Grady

11. Title of Person Signing  
Regulatory 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](mailto: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.**

January 20, 2017

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

Re: Request for Extension of Special Temporary Authority to Drift and Operate Galaxy 11 at 45.0° E.L. and 44.9° E.L.; Call Sign: S2253

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests an additional 90 days of the Special Temporary Authority (“STA”)<sup>1</sup> previously granted Intelsat to drift Galaxy 11 (Call Sign S2253) from 60.1° E.L. to 45.0° E.L., operate temporarily at 45.0° E.L., then to drift Galaxy 11 from 45.0° E.L. to 44.9° E.L., and operate at its final location of 44.9° E.L.<sup>2</sup> Specifically, Intelsat seeks an STA extension to continue operating the telemetry, tracking, and command (“TT&C”) and communications frequencies on the Galaxy 11 satellite at 45.0° E.L., and during the drift from 45.0° E.L. to 44.9° E.L. The Galaxy 11 frequencies are as follows:

TT&C: 14000.5 MHz, 14498.5 MHz, 11701 MHz, and 11702 MHz; and  
Communications: 13750 – 14500 MHz, 10950 – 11200 MHz, and 11700 – 12200 MHz.

The Galaxy 11 satellite is currently operating at 45.0° E.L. under STA<sup>3</sup> and is licensed permanently to operate at 44.9° E.L.<sup>4</sup> Intelsat is currently transferring a portion of the customer traffic currently carried on Intelsat 12, located at 45.0° E.L.,<sup>5</sup> to Galaxy 11. Once the traffic transfer is complete Galaxy 11 will continue drifting, while operating its communications frequencies, to its final location of 44.9° E.L. At both locations and during the drift to 44.9° E.L., Intelsat will continue to operate the communications payload in conformance with its coordination agreements concerning the nominal 45.0° E.L. location.

---

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

<sup>2</sup> Pursuant to Section 1.62 of the Commission’s rules, Intelsat will continue operations consistent with the terms and conditions of its existing STA pending action on this request.

<sup>3</sup> See *Policy Branch Information; Actions Taken*, Report No. SAT-01158, File No. SAT-STA-20160210-00017 (May 13, 2016) (Public Notice).

<sup>4</sup> See *Policy Branch Information; Actions Taken*, Report No. SAT-01201, File No. SAT-MOD-20160803-00077 (Nov. 18, 2016) (Public Notice).

<sup>5</sup> Intelsat 12 is licensed by the United Kingdom.



Ms. Marlene H. Dortch  
January 20, 2017  
Page 2

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 except when Galaxy 11 is temporarily co-located with Intelsat 12 during traffic transition. 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 45.0° E.L. or 44.9° E.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Galaxy 11 at either location that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

Intelsat will continue to operate Galaxy 11 in the 11.7-12.2 GHz band at the nominal 45.0° E.L against Germany's EUROPESTAR-BSS-45E filing, and the 3700-4200 MHz, 5925-6425 MHz, 10.95-11.2 GHz, 11.7-12.2 GHz, and 13.75-14.5 GHz bands against Germany's EUROPESTAR-45E-A filing, in conformance with relevant coordination agreements.

Grant of this STA extension request is in the public interest because it will allow Intelsat to complete the transition of customer traffic from Intelsat 12 and provide additional capacity at the nominal 45.0° E.L. 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 Corporation

cc: Stephen Duall  
Jay Whaley  
Cindy Spiers