

File # SAT - STA - 20091014 - 00110

Call Sign S2789 Grant Date 12/03/09

(or other identifier)

Term Dates Period of From 12/07/09 To: 30 days

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Policy Branch

Approved by OMB
3060-0678



* subject to conditions

Date & Time Filed: Oct 14 2009 5:56:23:236PM

File Number: SAT-STA-20091014-00110

Call sign:

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:
STA to Conduct IOT of Intelsat 15 (S2789)

1. Applicant

Name:	Intelsat North America 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-20091014-00110
Call Sign: S2789

Intelsat North America LLC (Intelsat North America) is granted special temporary authority (STA) for a period of 30 days, commencing December 7, 2009, to conduct in-orbit testing (IOT) of the Intelsat-15 Ku-/extended Ku-band geostationary orbit (GSO) space station at the 63.15° E.L. orbital location and to drift Intelsat-15 from 63.15° E.L. to its assigned orbital location of 85.15 ° E.L. after completion of IOT operations. Intelsat North America is authorized to use the 13.75-14.00 GHz (Earth-to-space), 14.00-14.50 GHz (Earth-to-space), 10.95-11.20 GHz (Space-to-Earth), 11.45-11.70 GHz (Space-to-Earth), and 12.5-12.75 GHz (Space-to-Earth) frequency bands for these operations. This authorization is granted in accordance with the terms, conditions, and technical specifications set forth in Intelsat North America's application, the Federal Communication Commission's rules, and is subject to the following conditions.

1. All operations shall be on an unprotected and non-harmful interference basis, i.e., Intelsat North America shall not cause harmful interference to, and shall 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 of Intelsat-15 during relocation or during operations at the 63.15° E.L. orbit location, Intelsat North America shall cease operations immediately upon notification of such interference and shall inform the Commission, in writing, immediately of such an event.
3. Intelsat North America's operations at 63.15 ° E.L. shall be limited solely to IOT operations and shall not include the provision of commercial services.
4. Intelsat North America shall coordinate its IOT and telemetry, tracking and telecommand ("TT&C") operations to ensure that no unacceptable interference results from its IOT operations at 63.15° E.L. or from its TT&C operations during the drift of Intelsat-15 from 63.15° E.L. to its assigned orbital location at 85.15° E.L.
5. Any action taken or expense incurred as a result of operations pursuant to this grant of STA is solely at Intelsat North America's own risk.
6. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, any earth station in the United States and its possessions (US&P) communicating with the Intelsat-15 space station in the 13.75-14.0 GHz frequency 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).¹
7. Operations of any earth station in the US&P communicating with the Intelsat-15 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, which specifies a minimum antenna diameter of 4.5 meters and a minimum equivalent isotropically radiated power (e.i.r.p.).² Operations of any earth station located outside the US&P communicating with the Intelsat-15 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) shall be


¹ Footnote US337 requires that earth stations operating in the 13.75-13.8 GHz frequency band shall be coordinated through NTIA's IRAC's FAS to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration Tracking and Data Relay Satellite System. 47 C.F.R. § 2.106, US337.

² Footnote US356 places a restriction on a minimum antenna diameter of 4.5 meters and the e.i.r.p. that should be on FSS operations in order to protect government operations in the band, including manned space flight. 47 C.F.R. § 2.106, US356.

Attachment to Grant
IBFS File No. SAT-STA-20091014-00110
Call Sign: S2789

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.³

8. Operators of earth stations accessing the Intelsat 15 space station in the 13.75-14.0 GHz frequency 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.⁴
9. Intelsat North America's use of the 10.95-11.2 GHz and the 11.45-11.7 GHz frequency 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.
10. In the 13.75-14.0 GHz band, 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.
11. The operation of the Intelsat-15 space station in the 11.45-11.7 GHz band is limited to international operations in accordance with footnote NG104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106 NG104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).
12. 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 * subject to conditions	File # <u>SAT- STA- 2009 1014- 00110</u>
	Call Sign <u>S2789</u> Grant Date <u>12 /03/09</u> (or other identifier)
	Term Dates period of From <u>12/07/09</u> To: <u>30 days</u>
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Policy Branch

³ Footnote 5.502 to the ITU Radio Regulations establishes minimum antenna diameters for earth stations of geostationary and non-geostationary satellite networks, and places certain restrictions on either the minimum e.i.r.p. or the power flux density (p.f.d.) levels produced by earth stations operating in the 13.75-14.0 GHz frequency band.

⁴ NASA's TRMM satellite system radar in the 13.793-13.805 GHz frequency band remains operational and is a highly valuable and visible United States asset with a broad range of international users. Accordingly, NTIA has requested cooperation from the Commission and non-Federal Government entities in providing assistance in reducing interference with the TRMM radar. Specifically, NTIA requests that FSS earth stations in the 13.793 - 13.805 GHz frequency band located south of 39° N. and east of 110° W. operate with emission levels below -150 dBW/600 kHz at the TRMM space station receiver. Letter from Frederick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, NTIA, to Don Abelson, Chief, International Bureau, FCC (February 28, 2002). Considering the secondary nature of the TRMM operation, NTIA's request is not a condition of this authorization. The Commission, however, urges all operators of earth stations accessing the Intelsat-15 space station in the 13.75 - 14.0 GHz frequency band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.

2. Contact	
Name:	Intelsat North America LLC
Company:	Intelsat North America LLC
Street:	c/o Intelsat Corporation
	3400 International Drive, N.W.
City:	Washington
Country:	USA
Attention:	Susan H. Crandall
Phone Number:	202-944-7848
Fax Number:	202-944-7870
E-Mail:	susan.crandall@intelsat.com
State:	DC
Zipcode:	20008 -
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 type="radio"/> Change Station Location	<input type="radio"/> Extend Expiration Date
	<input checked="" type="radio"/> 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 North America LLC herein requests a grant of STA for 30 days, from December 7, 2009 through January 5, 2010, to conduct IOT of Intelsat 15, call sign S2789, at 63.15 E. L. before drifting the satellite to its requested permanent location of 85.15 E.L. Intelsat 15 currently is scheduled to be launched on November 29, 2009, and will replace

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"; party to the application; for these purposes.

Yes No

10. Name of Person Signing
Susan H. Crandall

11. Title of Person Signing
Asst. 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.

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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 North America LLC herein requests a grant of STA for 30 days, from December 7, 2009 through January 5, 2010, to conduct IOT of Intelsat 15, call sign S2789, at 63.15 E.L. before drifting the satellite to its requested permanent location of 85.15 E.L. Intelsat 15 currently is scheduled to be launched on November 29, 2009, and will replace Intelsat 709, which will be redeployed after traffic transfer.

October 14, 2009

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



Re: Request for Special Temporary Authority to Conduct In-Orbit Testing
of Intelsat 15; Call Sign: S2789

Dear Ms. Dortch:

Intelsat North America LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")¹ for 30 days, from December 7, 2009 through January 5, 2010, to conduct in-orbit testing ("IOT") of Intelsat 15 (call sign S2789) at 63.15° E.L. in the bands 13750-14500 MHz (uplink) and 10950-11200 MHz, 11450-11700 MHz, and 12500-12750 MHz (downlink) before drifting the satellite to its requested permanent location of 85.15° E.L.² Intelsat 15 currently is scheduled to be launched on November 29, 2009, and will replace Intelsat 709, which will be redeployed after traffic transfer. In support of its request, Intelsat submits the following information.

During in-orbit testing of Intelsat 15, Intelsat will operate in the above referenced Ku-bands. Intelsat has coordinated the planned in-orbit testing of Intelsat 15 with all operators of satellites operating co-frequency up to six degrees away from 63.15° E.L. Specifically, Intelsat has internally coordinated the proposed testing with the following of its satellites: Intelsat 904 at 60° E.L., Intelsat 902 at 62° E.L., Intelsat 906 at 64.15° E.L., Intelsat 702 at 66° E.L., Intelsat 7 at 68.65° E.L., and Intelsat 10 at 68.5° E.L. In the unlikely event that harmful interference occurs, Intelsat will take all necessary steps to eliminate the interference.

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

¹ Intelsat has filed this STA request, an FCC Form 159 and an \$830.00 filing fee electronically via the International Bureau's Filing System.

² See *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00623, File No. SAT-LOA-20090410-00043 (Aug. 7, 2009) (Public Notice); *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00624, File No. SAT-AMD-20090528-00059 (Aug. 14, 2009) (Public Notice). This application is pending. During the drift from 63.15° E.L. to 85.15° E.L., only the satellite's TT&C frequencies will be utilized.


Ms. Marlene H. Dortch
October 14, 2009
Page 2

space stations. Intelsat 15 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 15. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 15 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

The in-orbit testing of Intelsat 15 at 63.15° E.L. is a critical step in ensuring that the satellite will be fully operational at 85.15° E.L. This, in turn, will ensure continuity of service at the nominal 85.0° E.L. location, and thereby promotes the public interest. Conducting in-orbit testing at 63.15° E.L., rather than at 85.15° E.L., also minimizes the period of Intelsat 15's co-location with Intelsat 709 and thus promotes safe station-keeping.

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

Sincerely,



Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

Cc: Robert Nelson
Karl Kensinger
Kathryn Medley
Stephen Duall