

S2750
Intelsat License LLC
Intelsat 16

SAT-STA-20140827-00095

IB2014001729



File # SAT-STA-20140827-00095

Call Sign S2750 Grant Date 10/2/14

(or other identifier)

Term Dates period of
From 10/10/14 To: 30 days

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Satellite Policy Branch

Approved by OMB
3060-0678

Date & Time Filed: Aug 27 2014 3:10:26:360PM
File Number: SAT-STA-20140827-00095
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 30-Day STA to Drift and Operate Intelsat 16 at 79.0 W.L., Call Sign S2750

1. Applicant

| | | | |
|-------------------|---|----------------------|-----------------------------|
| Name: | Intelsat License LLC | Phone Number: | 703-559-7848 |
| DBA Name: | | Fax Number: | 703-559-8538 |
| 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-20140827-00095
Call Sign S2750

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20140827-00095, is GRANTED. Intelsat is authorized, for a period of 30 days, commencing October 10, 2014, to conduct Telemetry, Tracking, and Command (TT&C) operations with the Intelsat 16 space station (Call Sign S2750) necessary to drift the space station from the 76.0° W.L. orbital location to the 79.0° W.L. orbital location, and to maintain Intelsat 16 upon its arrival at the 79.0° W.L. orbital location, using the following center frequencies: 14499.5 MHz and 13997.5 MHz (Earth-to-space); 12198.25 MHz and 12198.75 MHz (space-to-Earth). Intelsat is also authorized, on a temporary basis, to provide Fixed-Satellite Service (FSS) via Intelsat 16 at the 79.0° W.L. orbital location in the 11.7–12.2 GHz (space-to-Earth) and 13.75–14.5 GHz (Earth-to-space) frequency bands.¹ 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. 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.
2. Intelsat must coordinate the operations of Intelsat 16 with existing geostationary space stations to ensure that no unacceptable interference results from its operations during drift to the 79.0° W.L. orbital location.
3. Intelsat must operate only the TT&C frequencies on Intelsat 16 during the space station's drift from the 76.0° W.L. orbital location to the 79.0° W.L. orbital location.
4. Intelsat must maintain full operational control of the Intelsat 16 space station at all times.
5. While at the 79.0° E.L. orbital location, Intelsat must maintain the Intelsat 16 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
6. 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.
7. Intelsat must coordinate the operations of Intelsat 16 with existing geostationary space stations to ensure that no unacceptable interference results from its operations at the 79.0° E.L. orbital location.
8. Intelsat must operate Intelsat 16 at the 79.0° E.L. orbital location in accordance with any existing coordination agreements for this location.
9. In the 13.75-14.0 GHz band (Earth-to-space), receiving space stations in the Fixed-Satellite Service must not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.

¹ The Intelsat 16 space station also includes the 10.7-11.45 GHz and 12.75-13.25 frequency bands, but Intelsat states that it does not intend to use these frequencies at the 79.0° W.L. orbital location, thus we do not authorize Intelsat to use these frequencies at this orbital location.

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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 Intelsat 16 space station in the 13.75-14.0 GHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration (NASA) Tracking and Data Relay Satellite System, including manned space flight.

11. Operators of earth stations accessing the Intelsat 16 space station in the 13.75-14.0 GHz band are encouraged to cooperate voluntarily with NASA in order to facilitate continued operation of the NASA Tropical Rainfall Measuring Mission (TRMM) satellite.²

12. Operations of any earth station in the United States and its possessions communicating with the Intelsat 16 space station in the 13.75-14.0 GHz band (Earth-to-space) must 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 the maximum equivalent isotropically radiated powers (EIRP).of any emission should be at least 68 dBW and should not exceed 85 dBW. Operations of any earth station located outside the United States and its possessions communicating with the Intelsat 16 space station in the 13.75-14.0 GHz band (Earth-to-space) must 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.

13. Operations of any earth station in the United States and its possessions communicating with the Intelsat 16 space station in the 13.77-13.78 GHz band (Earth-to-space) must 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.³ Operations of any earth station located outside the United States and its possessions communicating with the Intelsat 16 space station in the 13.77-13.78 GHz band (Earth-to-space) must 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.

14. Any action taken or expense incurred as a result of operations pursuant to this grant of


² NASA's TRMM satellite system radar in the 13.793-13.805 GHz 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 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 16 space station in the 13.75-14.0 GHz band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.

³ Footnote US357 places a restriction on FSS earth station operations in order to protect government operations in the band, including manned space flight. 47 C.F.R. § 2.106, US357.

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special temporary authority is at Intelsat's own risk.

15. 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.

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|  GRANTED * International Bureau *with conditions | File # <u>SAT-STA-20140827-00095</u> |
| | Call Sign <u>S2750</u> Grant Date <u>10/2/14</u> (or other identifier) |
| | Term Dates <u>period of</u> From <u>10/10/14</u> To: <u>30 days</u> |
| | Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch |
| | |

| | |
|--|---------------------------------------|
| 2. Contact | |
| Name: | Susan H. Crandall |
| Company: | Intelsat Corporation |
| Street: | 7900 Tysons One Place |
| City: | McLean |
| Country: | USA |
| Attention: | |
| Phone Number: | 703-559-7848 |
| Fax Number: | 703-559-8538 |
| E-Mail: | susan.crandall@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 SATSTA2014050200046 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 79.0 W.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 grant of Special Temporary Authority for 30 days, commencing October 10, 2014, to drift Intelsat 16 to, and operate at, 79.0 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-PER, 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.

August 27, 2014

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 and Operate Intelsat 16 at 79.0° W.L.; Call Sign: S2750

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests grant of Special Temporary Authority (“STA”)¹ for 30 days, commencing October 10, 2014, to drift Intelsat 16 (S2750) to, and operate at, 79.0° W.L. Once the satellite is on-station (and during the drift to 79.0° W.L.), Intelsat will operate the following TT&C frequencies: 13997.5 MHz, 14499.5 MHz, 12198.25 MHz, and 12198.75 MHz. On-station at 79.0° W.L, Intelsat will operate Intelsat 16 in the 13750 – 14500 MHz and 11700 – 12200 MHz frequency bands.² Intelsat seeks this STA in order to meet the temporary demands of its customers, SKY Mexico and SKY Brazil.

Intelsat 16 is currently authorized operate at 76.0° W.L.³ Intelsat is concurrently filing a 180-day STA request to operate Intelsat 16 at 79.0° W.L.

Intelsat will operate Intelsat 16 at 79.0° W.L. on a non-interference/non-protected basis. As the Commission is aware, DIRECTV Enterprises, LLC (“DIRECTV”) currently holds the license to operate in Ku-band at 78.8° W.L. (“DIRECTV KU-78.8W License”).⁴ DIRECTV fully supports this request to allow Intelsat 16 to operate at 79.0° W.L.

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 Although Intelsat 16 also includes the bands 12750-13250 MHz and 10700-11450 MHz, Intelsat is not seeking authority to operate in these bands in this request.

³ See *Policy Branch Information; Actions Taken*, Report No. SAT-01029, File No. SAT-STA-20140502-00046 (July 18, 2014) (Public Notice). Intelsat 16 is permanently licensed to operate at 58.0° W.L. See *Policy Branch Information; Actions Taken*, Report No. SAT-00610, File No. SAT-LOA-20080416-00085 (June 5, 2009) (Public Notice).

⁴ See *Policy Branch Information; Actions Taken*, Report No. SAT-01002, File No. SAT-MOD-20130718-00096 (Mar. 14, 2014) (Public Notice).

Ms. Marlene H. Dortch
August 27, 2014
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The Intelsat 16 drift is expected to take two weeks and Intelsat expects the satellite to be on-station at 79.0° W.L. on or about October 24, 2014. The drift will be coordinated with all operators of co-frequency satellites in the drift path. 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 space stations. Intelsat 16 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.

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 16 at 79.0° W.L. Finally, Intelsat is not aware of any system that has an overlapping station-keeping volume with Intelsat 16 at 79.0° W.L. that is the subject of an ITU filing and that is either in orbit or progressing towards launch.⁵

The temporary operation of Intelsat 16 at 79.0° W.L. will help satisfy customer demand at that location. Accordingly, grant of this STA request is in the public interest.

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

Sincerely,



Susan H. Crandall
Associate General Counsel
Intelsat Corporation

Cc: Stephen Duall
Jay Whaley
Cindy Spiers

⁵ To the extent necessary, Intelsat and SKY Mexico will coordinate the station-keeping of Intelsat 16 and SkyMexico-1 following the latter satellite's launch.