

S2750

SAT-MOD-20150105-00003

IB2015000015

Intelsat License LLC
INTELSAT 16



File # SAT-MOD-20150105-00003

Call Sign S2750 Grant Date 04/16/15
(or other identifier)

From 04/16/15 Term Dates see conditions
To: conditions

Approved: Stephen J. Dwall
Stephen J. Dwall
Chief, Satellite Policy Branch

Approved by OMB
3060-0678

Date & Time Filed: Jan 5 2015 4:53:37:566PM
File Number: SAT-MOD-20150105-00003

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Modification Application to Operate Intelsat 16 at 79.0 W.L.; Call Sign S2750

1-8. Legal Name of Applicant

Name:	Intelsat License LLC	Phone Number:	703-559-7848
DBA Name:		Fax Number:	703-559-8539
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-MOD-20150105-00003
Call Sign S2750

The application of Intelsat License LLC (Intelsat) to modify the authorization for the Intelsat 16 space station, IBFS File No. SAT-MOD-20150105-00003, is GRANTED. Accordingly, Intelsat is authorized to provide Fixed-Satellite Service (FSS) via the Intelsat 16 space station (Call Sign S2750) at the 79.0° W.L. orbital location, instead of its currently authorized orbital location at 58.1° W.L.,¹ in the 11.7–12.2 GHz (space-to-Earth) and 14.0–14.5 GHz (Earth-to-space) frequency bands.² Intelsat is also authorized to conduct Telemetry, Tracking, and Command (TT&C) operations necessary to maintain Intelsat 16 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). 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. While at the 79.0° W.L. orbital location, Intelsat must maintain the Intelsat 16 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
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 Intelsat 16 at the 79.0° W.L. orbital location in accordance with any existing and future coordination agreements for this location.
4. The operations of Intelsat 16 and associated earth stations must comport with the applicable uplink limits in 47 C.F.R. §§ 25.211, 25.212, 25.218, 25.222, 25.226, and/or 25.227, and the downlink limit in 47 C.F.R. § 25.212(c)(2), unless Intelsat coordinates any non-conforming operation with the operations of U.S.-licensed GSO space stations within 6 degrees of 79° W.L. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 79° W.L. involving approved communications with U.S.-licensed earth stations.
5. Intelsat's request for a waiver of Section 25.114(c)(4)(vi)(A), 47 C.F.R. § 25.114(c)(4)(vi)(A), is GRANTED. Section 25.114(c)(4)(vi)(A) requires predicted space station antenna gain contour(s) for each transmit and receive antenna beam. The rule also requires that this information be submitted in a GIMS-readable format. Intelsat's application indicates that with respect to Intelsat 16's TC&R Global Horn, WCA and Omni beams (Exhibits 2F, 2G, 2J, 2H, and 2K in the Engineering Statement), the beam patterns were not prepared in accordance with the parameters specified in Section 25.114(c)(4)(vi)(A) of the Commission's rules because the satellite manufacturer did not provide contours in the required format. We find, however, that Exhibits 2F, 2G, 2J, 2H, and 2K, together with the descriptive characterization provided on page 5 of the Engineering Statement, fulfill the requirements of Section 25.114(c)(4)(vi)(A).
6. Pursuant to footnote US337 of the United States Table of Frequency Allocations,

¹ See IBFS File No. SAT-LOA-20080416-00085.

² The Intelsat 16 space station also includes the 10.7-11.45 GHz, 12.75-13.25, and 13.75-14.0 GHz frequency bands, but Intelsat states that it does not intend to use these frequencies at the 79.0° W.L. orbital location, except for the 13997.5 MHz frequency used for uplink TT&C. We do not authorize Intelsat to use these frequencies at this orbital location, except for the 13997.5 MHz TT&C frequency as specified herein.

Intelsat License LLC
IBFS File No. SAT-MOD-20150105-00003
Call Sign S2750

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.

7. 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 the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356, which specifies that in the 13.75-14.0 GHz band, an earth station in the fixed-satellite service shall have a minimum antenna diameter of 4.5 m and the EIRP of any emission should be at least 68 dBW and should not exceed 85 dBW. 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. ITU Radio Regulation No. 5.43A does not apply. 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.

8. Nothing in this authorization extends the license term for this space station, Call Sign S2750, which expires on March 20, 2025. See IBFS File No. SAT-LOA-20080416-00085.

9. Intelsat is afforded 30 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.

10. 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.



*with conditions

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(or other identifier)

Term Dates see
From 04/16/15 To: conditions

Approved: _____

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

9-16. Name of Contact Representative

Name:	Susan H. Crandall	Phone Number:	703-559-7848
Company:	Intelsat Corporation	Fax Number:	703-559-8539
Street:	7900 Tysons One Place	E-Mail:	susan.crandall@intelsat.com
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102-5792
Attention:		Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- b3. Amendment to a Pending Application
- b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)
- (N/A) b11. Application for Earth Station to Access a Non-U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States
- (N/A) b12. Application for Database Entry
- b13. Amendment to a Pending Database Entry Application
- b14. Modification of Database Entry

<p>17c. Is a fee submitted with this application?</p> <p><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).</p> <p><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee</p> <p><input type="radio"/> Other (please explain):</p>	
<p>17d.</p> <p>Fee Classification BFY – Space Station Modification (Geostationary)</p>	
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: S2750</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:</p> <p>(a) Date pending application was filed:</p> <p>(b) File number: SATLOA2008041600085</p>

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:	
<input checked="" type="checkbox"/> a. Fixed Satellite <input type="checkbox"/> b. Mobile Satellite <input type="checkbox"/> c. Radiodetermination Satellite <input type="checkbox"/> d. Earth Exploration Satellite <input type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input type="checkbox"/> g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose only one. <input type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier	22. If earth station applicant, check all that apply. <input type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> Using Non-U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities: <input type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input checked="" type="radio"/> N/A	
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s). <input type="checkbox"/> a. C-Band (4/6 GHz) <input checked="" type="checkbox"/> b. Ku-Band (12/14 GHz) <input type="checkbox"/> c. Other (Please specify upper and lower frequencies in MHz.) Frequency Lower: Frequency Upper: (Please specify additional frequencies in an attachment)	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- a. Fixed Earth Station
- b. Temporary-Fixed Earth Station
- c. 12/14 GHz VSAT Network
- d. Mobile Earth Station
- e. Geostationary Space Station
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

- Transmit/Receive Transmit-Only Receive-Only N/A

"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- a -- authorization to add new emission designator and related service
- b -- authorization to change emission designator and related service
- c -- authorization to increase EIRP and EIRP density
- d -- authorization to replace antenna
- e -- authorization to add antenna
- f -- authorization to relocate fixed station
- g -- authorization to change frequency(ies)
- h -- authorization to add frequency
- i -- authorization to add Points of Communication (satellites & countries)
- j -- authorization to change Points of Communication (satellites & countries)
- k -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l -- authorization to change orbit location
- m -- authorization to perform fleet management
- n -- authorization to extend milestones
- o -- Other (Please specify)

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments. Yes No

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government? Yes No

30. Is the applicant an alien or the representative of an alien? Yes No N/A

31. Is the applicant a corporation organized under the laws of any foreign government? Yes No N/A

32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? Yes No N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? Yes No N/A

34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? Yes No
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

EngineeringStatement

36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances. Yes No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.

Yes No

38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances

Yes No

39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhibit, an explanation of the circumstances.

Yes No

40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.

41. 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

42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.

Yes No

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?

43. Description. (Summarize the nature of the application and the services to be provided). (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, pursuant to Section 25.117 of the rules of the Federal Communications Commission, hereby seeks to modify the authorization for the Intelsat 16 satellite (Call Sign S2750). Specifically, this modification application seeks authority to redeploy Intelsat 16 to 79.0 W.L. and to operate the satellite at 79.0 W.L.

Narrative & Exhibits

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

- Individual
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing
Susan H. Crandall

→

46. Title of Person Signing
Assoc. General Counsel, Intelsat Corporation

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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