

S2750 SAT-LOA-20080416-00085 IE2008000902
Intelsat LLC
Intelsat 16

Approved by OMB
3060-0678

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File Number: SAT-LOA-20080416-00085
Callsign/Satellite ID: S2750

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Authority to Launch and Operate a Satellite at 58.1 W.L.

1-8. Legal Name of Applicant

Name: Intelsat North America LLC Phone Number: 202-944-7848
DBA Name: DBA Name: 202-944-7870
Street: c/o Intelsat Corporation E-Mail: susan.crandall@intelsat.com
3400 International Drive, N.W.
City: Washington State: DC
Country: USA Zipcode: 20008 -3006
Attention: Susan H Crandall



File # SAT-LOA-20080416-00085

Call Sign S2750 Grant Date 05/29/09
(or other identifier)

Term Dates

From see conditions To: see conditions

Approved:

Stephen J. Duall

Stephen J. Duall
Chief, Policy Branch

* subject to conditions

Attachment to Grant
IBFS File No. SAT-LOA-20080416-00085
Call Sign: S2750
May 29, 2009

Intelsat North America LLC's (Intelsat's) application, IBFS SAT-LOA-20080416-00085, to construct, launch, and operate an extended Ku/conventional Ku-band Fixed Satellite Service (FSS) space station (Call Sign: S2750) at the 58.1° W.L. orbital location is GRANTED.¹ Accordingly, Intelsat is authorized to operate the Intelsat-16 space station at the 58.1° W.L. orbital location using the 13.75-14.5 GHz (Earth-to-space) and 11.7-12.2 GHz (Space-to-earth) frequency bands in accordance with the technical specifications set forth in its application, the Federal Communication Commission's (Commission's) rules, and the following conditions:

1. Intelsat shall maintain its space station within an east-west longitudinal station-keeping tolerance of $\pm 0.05^\circ$ of its assigned 58.1° W.L. orbital location.
2. As part of its application, Intelsat submitted evidence that it had met the first three milestones required for a geostationary satellite pursuant to Section 25.164 of our rules, 47 C.F.R. § 25.164, and requested that the bond requirement pursuant to Section 25.165, 47 C.F.R. § 25.165, of our rules be reduced accordingly. Intelsat supplemented that information on March 9, 2009. Based on the evidence provided, the Satellite Division finds that Intelsat has satisfied the first three milestones (execute a binding non-contingent contract for construction, complete the critical design review, and commence construction) required for a geostationary satellite. The milestone and bond requirements are adjusted accordingly.
 - a. Intelsat's space station at the 58.1° W.L. orbital location must be launched and placed into operation in accordance with the technical parameters and terms and conditions of this authorization within two years following the date of this authorization (May 29, 2011); and
 - b. Intelsat must file a bond with the Commission in the amount of \$750,000, pursuant to the procedures set forth in Public Notice, DA 03-2602, 18 FCC Rcd 16283 (2003), within 30 days of the date of this grant (June 28, 2009).

Failure to meet either of these dates shall render this authorization null and void.

3. Intelsat shall prepare all necessary information that may be required for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification procedures for this space station, in accordance with the ITU Radio Regulations. Intelsat shall be held responsible for all cost recovery fees associated with these ITU filings. No protection from interference caused by radio stations authorized by other Administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual Administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect
4. Intelsat's request for waiver of Section 25.114(d)(3) of the Commission's rules, 47 C.F.R. § 25.114(d)(3), IS GRANTED. Section 25.114(d)(3) requires predicted space station antenna gain contour(s) for each transmit and each receive antenna beam. The rules also require this information to be submitted in .gxt format. The main purpose of the antenna gain contour diagrams is to allow evaluation of the potential for harmful interference with other operators and

¹ Intelsat's application was placed on Public Notice as accepted for filing on July 11, 2008 and again on February 13, 2009 to include additional frequencies not included in the July 11, 2008 public notice. Policy Branch Information, Satellite Space Applications Accepted for Filing, Public Notice, Report No. SAT-00537 (rel. July 11, 2008). Policy Branch Information, Satellite Space Applications Accepted for Filing, Public Notice, Report No. SAT-00579 (rel. Feb. 13, 2009). No comments were filed in response to this application.

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services in the frequency band. It also facilitates the applicant's preparation of information that may be required for submission to the International Telecommunication Union (ITU) to initiate and complete coordination procedures. Intelsat complied with the rule for all beams except Omni directional and wide coverage antennas. Diagrams (Exhibits 6L, 6M, 6O, and 6P) for those antennas were not prepared in accordance with the requirements in Section 25.114(d)(3) of the Commission's rules because the space station manufacturer did not provide contours in the required form. While Intelsat's format submission did not comply with the rule, in this limited instance, we were able to complete our technical review of the antenna gain contour information and determine that the Intelsat-16 space station meets the Commission's technical requirements.

5. 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.
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-16 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).²
7. Operations of any earth station in the US&P communicating with the Intelsat-16 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.).³ Operations of any earth station located outside the US&P communicating with the Intelsat-16 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter as small as 1.2 meters for earth stations of a geostationary satellite orbit network.⁴
8. Operators of earth stations accessing the Intelsat-16 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.⁵

² 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.

³ 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.

⁴ 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.

⁵ 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 -

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9. The license term for this space station, Call Sign S2750, is fifteen years and will begin to run on the date that Intelsat certifies to the Commission that the satellite has been successfully placed into orbit and its operation fully conforms to the terms and conditions of this authorization. Intelsat is directed to file its certification with the Chief, Satellite Division, International Bureau within 10 business days after the space station commences operations at its assigned location.
10. 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.
11. 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 Sections 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within thirty days of the date of the public notice indicating that this action was taken.



*subject to conditions

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Call Sign S2750 Grant Date 05/29/09
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Chief, Policy Branch

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-16 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.

9-16. Name of Contact Representative

Name: Intelsat North America LLC Phone Number: 202-944-7848
 Company: Intelsat North America LLC Fax Number: 202-944-7870
 Street: c/o Intelsat Corporation E-Mail: susan.crandall@intelsat.com
 3400 International Drive, N.W.
 City: Washington State: DC
 Country: USA Zipcode: 20008 -3006
 Attention: Susan H Crandall Relationship: Legal Counsel

CLASSIFICATION OF FILING

17. Choose the buttonnext to the classification that applies to thisfiling for both questions a. and b. Choose only one for 17a and only one for 17b.

- a.
 (N/A) a1. Earth Station
 a2. Space Station

b.

- b1. Application for License of New Station (N/A)
- b2. Application for Registration of New Domestic Receive-Only Station (N/A)
- b3. Amendment to a Pending Application (N/A)
- b4. Modification of License or Registration (N/A)
- b5. Assignment of License or Registration (N/A)
- b6. Transfer of Control of License or Registration (N/A)
- b7. Notification of Minor Modification (N/A)
- b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- b10. Replacement Satellite Application - no new frequency bands
- b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)
- b12. Petition for Declaratory Ruling to be Added to the Permitted List (N/A)
- b13. Other (Please specify)

<p>17c. 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):</p>	<p>17c. Fee Classification BNY – Space Station (Geostationary)</p>
<p>18. If this filing is in reference to an existing station, enter: (a) Call sign of station: Not Applicable</p>	<p>19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: Not Applicable (b) File number of pending application: Not Applicable</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:

- a. Fixed Satellite
- b. Mobile Satellite
- c. Radiodetermination Satellite
- d. Earth Exploration Satellite
- e. Direct to Home Fixed Satellite
- f. Digital Audio Radio Service
- g. Other (please specify)

21. STATUS: Choose the button next to the applicable status. Choose only one.

- Common Carrier
- Non-Common Carrier

22. If earth station applicant, check all that apply.
Not Applicable

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

- Connected to a Public Switched Network
- Not connected to a Public Switched Network
- N/A

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).

- a. C-Band (4/6 GHz)
- b. Ku-Band (12/14 GHz)
- 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.

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

26. TYPE OF EARTH STATION FACILITY: Not Applicable

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.) Not Applicable

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.

<p>29. Is the applicant a foreign government or the representative of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>30. Is the applicant an alien or the representative of an alien?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>31. Is the applicant a corporation organized under the laws of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned 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?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>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 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?</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p>
<p>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.</p>	

BASIC QUALIFICATIONS

<p>35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.</p>	<p style="text-align: right;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p> <p style="text-align: right;">Technical Exhibit</p>
<p>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.</p>	<p style="text-align: right;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p> <p style="text-align: right;">Exhibits</p>
<p>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.</p>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>
<p>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</p>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>
<p>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.</p>	<p style="text-align: right;"> <input type="radio"/> Yes <input checked="" type="radio"/> No </p>

<p>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.</p>	<p>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"; party to the application; for these purposes.</p>
<p>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.</p>	<p>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?</p>

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.)

Inelsat North America LLC hereby applies for authority to launch and operate a Ku-band satellite, to be called Intelsat 16, at the 58.1 W.L. orbital location, where it will be nominally co-located with Intelsat 9 (formerly known as PAS-9).

Legal Narrative

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

B

C

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.

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.

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.

<p>44. Applicant is a (an): (Choose the button next to applicable response.)</p> <p> <input type="radio"/> Individual <input type="radio"/> Unincorporated Association <input type="radio"/> Partnership <input type="radio"/> Corporation <input type="radio"/> Governmental Entity <input checked="" type="radio"/> Other (please specify) Limited Liability Company </p>	
<p>45. Name of Person Signing Susan H. Crandall</p>	<p>46. Title of Person Signing Asst. General Counsel, Intelsat Corporation</p>
<p>47. Please supply any need attachments.</p> <p>1:</p> <p>2:</p> <p>3:</p>	
<p>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).</p>	

Completed Schedule S

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