

S2401

SAT-MOD-20121026-00188

IB2012002511

Intelsat License LLC  
INTELSAT 706



\*with conditions

File # SAT-MOD-20121026-00188

Call Sign S2401 Grant Date 08/06/14

(or other identifier)

Term Dates See

From 08/06/14 To: Conditions

Approved: Stephen J. Duall

Stephen J. Duall  
Chief, Satellite Policy Branch

Approved by OMB  
3060-0678

Date & Time Filed: Oct 26 2012 2:14:36:993PM  
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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 to Relocate Intelsat 706 to 157.0 E.L. (S2401)

1-8. Legal Name of Applicant

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

**Intelsat License LLC**  
**IBFS File No. SAT-MOD-20121026-00188**  
**Call Sign: S2401**

The application of Intelsat License LLC (Intelsat), IBFS File No. SAT-MOD-20121026-00188, to modify the authorization for its Intelsat 706 space station (Call Sign S2401) is GRANTED.<sup>1</sup> Specifically, Intelsat is authorized to operate Intelsat 706 in inclined orbit mode<sup>2</sup> at the 157.0° E.L. orbital location to provide Fixed-Satellite Service (FSS) in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 12.5-12.75 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands.<sup>3</sup> Additionally, Intelsat is authorized to perform telemetry, tracking, and command (TT&C) operations necessary to maintain the Intelsat 706 space station at the 157.0°E.L. orbital location using the following center frequencies: 6173.7 MHz and 6176.3 MHz (Earth-to-space); 3947.5 MHz, 3948.0 MHz, 3952.5 MHz, and 3952.0 MHz (space-to-Earth). Operations under this authorization must be in accordance with the terms, conditions, and technical specifications set forth in Intelsat's application and the Federal Communications Commission's rules, not waived herein, and are subject to the following conditions:

1. Intelsat must prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of 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, coordination agreements are successfully completed. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments with other Administrations. 47 C.F.R. § 25.111(b).

2. While at the 157.0° E.L. orbital location, Intelsat must maintain the Intelsat 706

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<sup>1</sup> The application was placed on Public Notice as accepted for filing on November 30, 2012. *See Policy Branch Information, Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-00915 (IBFS File No. SAT-MOD-20121026-00188).

<sup>2</sup> On July 20, 2011, Intelsat notified the Commission of the commencement of inclined orbit operations for Intelsat 706. *See* Letter from Susan H. Crandall, Intelsat Corp., to Marlene H. Dortch, FCC (dated July 20, 2011). The last north-south station-keeping maneuver occurred on July 18, 2011. *Id.*

<sup>3</sup> Intelsat was previously authorized to operate Intelsat 706 at the 72.1° E.L. orbital location. IBFS File No. SAT-MOD-20100511-00098 (granted Mar. 25, 2011). Subsequently, Intelsat was granted special temporary authority (STA) to relocate Intelsat 706 to and operate it at 72.0° E.L. IBFS File No. SAT-STA-20110810-00159 (granted Aug. 18, 2011). Intelsat 706 remained at 72.0° E.L. through August 16, 2012. IBFS File Nos. SAT-STA-20110912-00177, SAT-STA-20111010-00196, SAT-STA-20111107-00214, SAT-STA-20111209-00237, SAT-STA-20120109-00002), SAT-STA-20111230-00253, SAT-STA-20120207-00014, and SAT-STA-20120801-00123. Intelsat 706 relocated to and operated at the 157.0° E.L. orbital location pursuant to grants of STA from August 16, 2012 through August 6, 2014. IBFS File Nos. SAT-STA-20120810-00127; SAT-STA-20120910-00146; SAT-STA-20121008-00179; SAT-STA-20121107-00193; SAT-STA-20121210-00214; SAT-STA-20130107-00004; SAT-STA-20130206-00017; SAT-STA-20130408-00057; SAT-STA-20130607-00081; SAT-STA-20130807-00103; SAT-STA-20131017-00120; SAT-STA-20131204-00144; SAT-STA-20140203-00012; SAT-STA-20140403-00037; and SAT-STA-20140604-00056.

space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.

3. 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.

4. Intelsat must operate the Intelsat 706 space station at the 157.0° E.L. orbital location in compliance with all existing or future coordination agreements for that location.

5. Intelsat's request that the Part 25 waivers originally granted to the Intelsat 706 spacecraft, Sections 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i) and 25.211(a) of the Commission's rules, 47 C.F.R. §§ 25.202(g), 25.210(a)(1), 25.210(a)(3), 25.210(i) and 25.211(a), continue to apply at the 157.0° E.L. orbital location, is granted subject to the conditions imposed in the original grant.<sup>4</sup>

6. Intelsat's operation of the Intelsat 706 space station in the 10.95-11.2 GHz and 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.

7. Intelsat's operation of the Intelsat 706 space station in the 10.95-11.2 GHz and 11.45-11.7 GHz frequency bands is limited to international operations in accordance with footnote NG 52 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 52.

8. Intelsat 706 is not authorized to provide FSS in the 12.5-12.7 GHz frequency band in International Telecommunication Union (ITU) Region 2.

9. Intelsat 706 is not authorized to provide FSS in the 12.7-12.75 GHz frequency band in the space-to-Earth direction in ITU Region 2.<sup>5</sup>

10. Intelsat's operation of the Intelsat 706 space station in the 14.47-14.5 GHz frequency band is subject to US342 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US342, which states that services operating in the 14.47-14.5 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.

11. Intelsat must comply with the power levels specified in Section 25.212, 47 C.F.R. § 25.212, unless it coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation of the 157.0° E.L. orbital location. Intelsat must inform the Commission of the power levels it has coordinated. In addition, Intelsat must inform all affected earth station operators that Section 25.220 of the Commission's rules applies to operations that exceed the power levels specified in Section 25.212. Regardless of Intelsat's coordination agreements, in no event shall: (1) the uplink power density of the Intelsat 706 digital carriers operating in the 5925-6425 MHz and 14.0-14.5 GHz bands exceed -38.7 dBW/Hz and -45 dBW/Hz, respectively; (2) the downlink

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<sup>4</sup> *Intelsat LLC*, Memorandum Opinion Order and Authorization, 15 FCC Rcd 15460 (2000).

<sup>5</sup> In its application, Intelsat states: "For operations in the 12500-12750 MHz frequency band, Intelsat accepts the following condition: Use of the 12500-12750 MHz frequency band is not permitted for fixed-satellite service in the space-to-Earth direction in Region 2." Application Narrative at 6.

EIRP density of the Intelsat 706 digital carriers operating in the 3700-4200 MHz band exceed -32 dBW/Hz; (3) the downlink EIRP density of the Intelsat 706 digital carriers operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, and 12.5-12.75 GHz bands exceed -20 dBW/Hz.

12. Intelsat's operation of Intelsat 706 at the 157.0° E.L. orbital location in the C-band frequencies of 3700-4200 MHz (space-to-Earth), and 5925-6425 MHz (Earth-to-space); and the Ku- and extended Ku-band frequencies of 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space); is subject to the following conditions:


(a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization (ITSO) that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.

(b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.

13. Nothing in this authorization extends the license term for this space station, Call Sign S2401, which expires on July 18, 2016.

14. Intelsat is afforded 30 days from the date of release of this action to decline this grant of authority as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

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. Petitions for reconsideration under Section 1.106 of the Commission's rules or applications for reconsideration 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 public notice indicating that this action was taken.

 <b>GRANTED*</b> International Bureau *with conditions	<b>File #</b> <u>SAT-MOD-2012 1026-00188</u>
	<b>Call Sign</b> <u>S2401</u> <b>Grant Date</b> <u>08/06/14</u> (or other identifier)
	<b>From</b> <u>08/06/14</u> <b>Term Dates</b> <u>see</u> <b>To:</b> <u>conditions</u>
	<b>Approved:</b> <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

9-16. Name of Contact Representative

<b>Name:</b>	Jennifer D. Hindin	<b>Phone Number:</b>	202-719-4975
<b>Company:</b>	Wiley Rein LLP	<b>Fax Number:</b>	
<b>Street:</b>	1776 K Street, NW	<b>E-Mail:</b>	jhindin@wileyrein.com
<b>City:</b>	Vienna	<b>State:</b>	VA
<b>Country:</b>	USA	<b>Zipcode:</b>	22181-
<b>Attention:</b>		<b>Relationship:</b>	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



**TYPE OF SERVICE**

<p>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:</p> <p><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)</p>	
<p>21. STATUS: Choose the button next to the applicable status. Choose only one.</p> <p><input type="radio"/> Common Carrier    <input checked="" type="radio"/> Non-Common Carrier</p>	<p>22. If earth station applicant, check all that apply.</p> <p><input type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> Using Non-U.S. licensed satellites</p>
<p>23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:</p> <p><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</p>	
<p>24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).</p> <p><input checked="" 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.)</p> <p>Frequency Lower:    Frequency Upper: (Please specify additional frequencies in an attachment)</p>	

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?	<input type="radio"/> Yes <input checked="" type="radio"/> No
30. Is the applicant an alien or the representative of an alien?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> 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?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> 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?  
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

Yes  No

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 706 (Call Sign S2401) satellite. Specifically, this modification seeks permanent authority to relocate Intelsat 706 to, and to operate the satellite at, 157.0 E.L. in inclined orbit

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

Beams.zip

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  
Asst. 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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**43. Description. (Summarize the nature of the application and the services to be provided).**

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 706 (Call Sign S2401) satellite. Specifically, this modification seeks permanent authority to relocate Intelsat 706 to, and to operate the satellite at, 157.0 E.L. in inclined orbit mode.