

S2409 SAT-MOD-20170502-00069 IB2017001232
Intelsat License LLC
Intelsat 905



*with conditions

File # SAT-MOD-20170502-00069

Call Sign S2409 Grant Date 08/24/17
(or other identifier)

Term Dates
From 07/19/17 To: 11/30/24

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Satellite Policy Branch

** see also
SAT-AMD-20170623-00097

Approved by OMB
3060-0678

Date & Time Filed: May 2 2017 2:53:19:863PM
File Number: SAT-MOD-20170502-00069

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:
Application to Modify Authorization for Intelsat 905 Satellite (S2409)


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		

ATTACHMENT TO GRANT

Intelsat License LLC

IBFS File Nos. SAT-MOD-20170502-00069 and SAT-AMD-20170623-00097

IBFS File No(s):	SAT-MOD-20170502-00069; SAT-AMD-20170623-00097	<p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	Intelsat License LLC	
Call Sign:	S2409	
Satellite Name:	Intelsat 905	
Orbital Location: (required station-keeping tolerance)	24.5° W.L. (+/- 0.05 degrees east-west station keeping)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Extension of the authority to provide FSS via the Intelsat 905 space station at 24.5° W.L. through November 30, 2024.	
Previous Grant(s):	Intelsat LLC, Application to Construct, Launch, and Operate Intelsat 905, File No. SAT-LOA-20000119-00023 (granted Aug. 2, 2000); Intelsat LLC, Intelsat 905 Modification, File No. SAT-MOD-20020315-00037 (granted May 15, 2002); Intelsat North America LLC, Request for Waiver of Rule for Intelsat 905, File No. SAT-MOD-20050610-00120 (granted Sept. 30, 2005).	
Service Area(s):	See IBFS File No. SAT-AMD-20170623-00097, Schedule S Tech Report at 5-31.	
Frequencies:	3625-4200 MHz (space-to-Earth) 5850-6425 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-11.7 (space-to-Earth) 14.0-14.5 GHz (Earth-to-space)	

Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:

1. Intelsat must operate Intelsat 905 at the 24.5° W.L. orbital location in accordance with any existing or future coordination agreements for this location.
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. While at the 24.5° W.L. orbital location, Intelsat must maintain the Intelsat 905 spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
4. The operations of Intelsat 905 and associated earth stations must comport with the applicable uplink and downlink limits in 47 CFR § 25.140(a)(3) of the Commission's rules, unless Intelsat coordinates any non-conforming operations with the operations of U.S.-licensed geostationary orbit space stations within 6 degrees of the 24.5° W.L. orbital location. Intelsat must also comport with the maximum power limits indicated in existing or future coordination agreements at 24.5° 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 24.5° W.L. involving approved communications with U.S.-licensed earth stations.
5. Intelsat's use of the 3600-3650 MHz (space-to-Earth) band within the United States is subject to GN Docket No. 12-354, which limits FSS communications in the United States in the 3600-3650 MHz band on a primary basis to existing earth stations or to new earth stations within 10 miles of existing earth stations. All other FSS earth station operations in the 3600-3650 band MHz band in the United States must be on a secondary basis.
6. Communications between U.S.-licensed earth stations and Intelsat 905 in the 3600-3650 MHz (space-to-Earth) frequency band are subject to footnote US245 of the United States Table of Frequency Allocations, 47 CFR § 2.106, US245, which states that the use of non-Federal Fixed-Satellite Service in

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Intelsat License LLC

IBFS File Nos. SAT-MOD-20170502-00069 and SAT-AMD-20170623-00097

- the 3600-3650 MHz band is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis.
7. Communications between U.S. licensed earth stations and the Intelsat 905 space station in the 3650-3700 MHz (space-to-Earth) frequency band are subject to footnote NG185 of the United States Table of Frequency Allocations, 47 CFR § 2.106, NG185, which states that the use of the non-Federal Fixed-Satellite Service in the 3650-3700 MHz band is limited to international inter-continental systems.
 8. Communications between U.S. licensed earth stations and the Intelsat 905 space station in the 3650-3700 MHz (space-to-Earth) frequency band are subject to footnote NG169 of the United States Table of Frequency Allocations, 47 CFR § 2.106, NG169, which states that after December 1, 2000, operations on a primary basis by the Fixed-Satellite Service (space-to-Earth) in the 3650-3700 MHz frequency band shall be limited to grandfathered earth stations. All other Fixed-Satellite Service earth station operations in the 3650-3700 MHz frequency band shall be on a secondary basis.
 9. Operations of Intelsat 905 in the 5850-5925 MHz (Earth-to-space) frequency band is subject to the terms of footnote US245 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US245, which limits the use of the non-Federal fixed-satellite service in this band to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis.
 10. Operations in the 10.95-11.2 and 11.45-11.7 GHz bands are subject to footnote US211 to the United States Table of Frequency Allocations, 47 CFR § 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.
 11. Intelsat's request for waiver of footnote NG52 of Section 2.106 is GRANTED as conditioned. Consistent with previous waivers granted to Intelsat 905,¹ we find that, with respect to the domestic use of the 10.95-11.2 and 11.45-11.7 GHz bands, waiver of footnote NG52 of Section 2.106 would not undermine the rule's purpose because receive-only earth stations are not capable of causing interference into fixed stations operating in the same frequency band. Furthermore, Intelsat cannot claim protection from interference caused to it by fixed stations operating in the 10.95-11.2 and 11.45-11.7 GHz bands.
 - a) Intelsat's space-to-Earth transmissions in the 10.95-11.2 and 11.45-11.7 GHz bands that provide domestic service are on an unprotected, non-harmful interference basis relative to fixed stations and, as such, Intelsat must not cause harmful interference to, or claim protection from, fixed stations to which frequencies in the 10.95-11.2 and 11.45-11.7 GHz bands have either been already assigned, or to which frequencies in the 10.95-11.2 and 11.45-11.7 GHz bands may be assigned at a later date. Intelsat must terminate operations in the 10.95-11.2 and 11.45-11.7 GHz bands upon notification that its operations are causing harmful interference to fixed stations operating in this band, and must immediately inform the Commission, in writing, of such an event.
 - b) Intelsat is required to inform its customers, in writing, including end-users receiving service from resellers accessing capacity on the Intelsat 905 space station, that domestic service in the United States in the 10.95-11.2 and 11.45-11.7 GHz bands is being provided on an unprotected basis, and is therefore subject to interference from fixed stations authorized to operate in the 10.95-11.2 and 11.45-11.7 GHz bands
 12. Operations of Intelsat 905 in the 14.47-14.5 GHz (Earth-to-space) frequency band is subject to the terms of footnotes 5.149 and US342 to the United States Table of Frequency Allocations, 47 CFR § 2.106, 5.149, US342, which urge applicants to take all practicable steps to protect the radio astronomy service from harmful interference.

¹ See Intelsat North America LLC, Request for Waiver of Rule for Intelsat 905, File No. SAT-MOD-20050610-00120 (granted Sept. 30, 2005).

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- 13. The license term for Call Sign S2409 is extended from July 18, 2017, through November 30, 2024.
- 14. Upon expiration of the license term, Intelsat is responsible for the proper disposal of Intelsat 905 by moving it to a minimum altitude of 283.3 kilometers above the geostationary arc.²
- 15. Within 30 days of completion of the end-of-life maneuvers, Intelsat shall send a letter to the Chief, Satellite Division, International Bureau, indicating the apogee and perigee of the Intelsat 905 disposal orbit.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action Date:	August 24, 2017
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Term Dates	From: July 19, 2017	To: November 30, 2024.
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Approved:



Stephen J. Duall
Chief, Satellite Policy Branch

² See Application Narrative at 3.

9-16. Name of Contact Representative

Name:	Jennifer D. Hindin	Phone Number:	202-719-4975
Company:	Wiley Rein LLP	Fax Number:	202-719-7207
Street:	1776 K Street, N.W.	E-Mail:	jhindin@wileyrein.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20006-
Attention:	Jennifer D. Hindin	Relationship:	

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

17c. Is a fee submitted with this application?

- If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).
- Governmental Entity Noncommercial educational licensee
- Other (please explain):

17d.

Fee Classification BFY – Space Station Modification (Geostationary)

18. If this filing is in reference to an existing station, enter:

(a) Call sign of station:
S2409

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:

(a) Date pending application was filed: (b) File number:

SATMOD2005061000120

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. <input type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier</p>	<p>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</p>
<p>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</p>	
<p>24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s). <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.) 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? Yes No
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

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 905 satellite (Call Sign S2409), a C- and Ku-band satellite operating at 24.5 W.L. Specifically, Intelsat seeks to extend the license term for the Intelsat 905 satellite,

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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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.

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 905 satellite (Call Sign S2409), a C- and Ku-band satellite operating at 24.5 W.L. Specifically, Intelsat seeks to extend the license term for the Intelsat 905 satellite, and a previously granted waiver, through November 30, 2024.