

S2704 SAT-MOD-20170331-00057 IB2017000890
Intelsat License LLC
Intelsat 5

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File # SAT-MOD-20170331-00057

Call Sign S2704 Grant Date 05/04/17
(or other identifier)

Term Dates see
From 04/30/17 To: conditions

Approved: *Stephen J. Duall*

Stephen J. Duall
Chief, Satellite Policy Branch

Approved by OMB
3060-0678

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:
Fleet Management Notice of Modification of Authorization for Intelsat 5 (S2704)

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 No. SAT-MOD-20170331-00057

IBFS File No(s):	SAT-MOD-20170331-00057	<p>REISSUED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	Intelsat License LLC	
Call Sign:	S2704	
Satellite Name:	Intelsat 5	
Orbital Location: (required station-keeping tolerance)	156.9° E.L. (+/- 0.05 degrees east/west)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Reissue of Intelsat 5 license following fleet management operations to reflect the technical parameters and conditions under which Intelsat 5 must be operated at the 156.9° E.L. orbital location, 0.10° from the 157.0° E.L. orbital location specified in the previous grant, ¹ pursuant to 47 CFR § 25.118(e).	
Service Area(s):	Asia, Pacific, Australia	
Frequencies:	3700-4200 MHz (space-to-Earth) 11.45-11.7 GHz (space-to-Earth) 5925-6425 MHz (Earth-to-space) 14.0-14.5 GHz (Earth-to-space) Telemetry/Tracking and Command: 13.999 GHz, 14.498 GHz (Earth-to-space), 11.451 GHz, 11.452 GHz, 11.454 GHz (space-to-Earth)	
<p>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:</p> <ol style="list-style-type: none"> 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 for this space station, in accordance with the ITU Radio Regulations. Intelsat shall be responsible for all cost-recovery fees associated with 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 coordination of the frequency assignments with other administrations. <i>See</i> 47 CFR § 25.111(b). 2. Intelsat must maintain the Intelsat 5 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees of the 156.9° E.L. orbital location. 3. Intelsat must operate Intelsat 5 at the 156.9° E.L. orbital location in accordance with any existing or future coordination agreements for this location. 4. 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. 5. Intelsat’s operation of the Intelsat 5 space station in the 11.45-11.7 GHz band is 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 		

¹ *See Intelsat Licensee LLC, Application for Modification of the Intelsat 5 Authorization to Specify Operation at the 157° E.L. Orbital Location, et. al., Order and Authorization, 30 FCC Rcd 2703 (2015).*

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adjacent bands from harmful interference, consistent with footnote US74.

6. Intelsat's operation of the Intelsat 5 space station in the 11.45-11.7 GHz band is limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations, 47 CFR § 2.106, NG52.

7. The operations of Intelsat 5 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 156.9° E.L. orbital location. Intelsat must also comport with the maximum power limits indicated in its application. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 156.9° E.L. involving approved communications with U.S.-licensed earth stations.

8. Operation of Intelsat 5 in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.45-11.7 GHz (space-to-Earth), and 14.0-14.25 GHz (Earth-to-space) frequency bands will be subject to coordination and notification pursuant to the ITU Radio Regulations with respect to space stations which are not U.S. licensed or for which operation pursuant to Section 25.137 has not been authorized.

9. Intelsat's request for a waiver of Section 25.114(c)(4)(vi)(A) of the Commission's rules, 47 CFR § Section 25.114(c)(4)(vi)(A),² IS GRANTED. Section 25.114(c)(4)(vi)(A) requires predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. With respect to Intelsat 5's TT&C bicone antenna and the uplink power control (ULPC) antenna, shown in Exhibits 2I, 2L, 2M and 2N, Intelsat indicates that the satellite manufacturer did not provide the beam patterns for these antennas in the required form. We find, however, that Exhibits 2I, 2L, 2M and 2N, together with the descriptive characterization provided on pages 1 and 2 of the Engineering Statement, fulfill the requirements of Section 25.114(c)(4)(vi)(A).

10. Intelsat's operation of the Intelsat 5 space station at the 156.9° E.L. orbital location in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.45-11.7 GHz (space-to-Earth), and 14.0-14.25 GHz (Earth-to-space) frequency bands, 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.

11. This authorization is without prejudice to any determination on Intelsat's replacement expectancy at 157° E.L. in the 10.95-11.2 GHz, 11.7-11.95 GHz, 12.5-12.75 GHz, and 14.25-14.5 GHz bands, which were on Intelsat 706 at 157.0° E.L., but are not on Intelsat 5.

12. Nothing in this grant extends the license term for Intelsat 5, which expires on December 31, 2020. See IBFS File No. SAT-MOD-20121002-00176.

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.

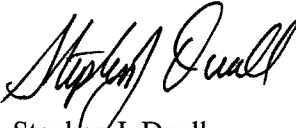
This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

² In 2013, the Commission re-designated Section 25.114(d)(3) as Section 25.114(c)(4)(vi)(A). See *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Report and Order, 28 FCC Rcd 12403, 12434 (2013).

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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:	May 4, 2017	
Term Dates	From: April 30, 2017	To: see conditions

Approved:

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:	22102-5972
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

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:
S2704

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:

SATMOD2012100200176

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.

- Using U.S. licensed satellites
- 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:

- 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.

- 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.

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 25.118(e) of the rules of the Federal Communications Commission, hereby submits a fleet management notice to modify the Intelsat 5 (S2704) authorization from the currently authorized orbital location of 157.0 E.L. to 156.9 E.L. Intelsat seeks to relocate Intelsat 5, an in-orbit C- and Ku-band 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).

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