

S2405 SAT-MOD-20190207-00009 IB2019000272  
Intelsat License LLC  
Intelsat 901



File # SAT-MOD-20190207-00009

Call Sign S2405 Grant Date 06/20/19

(or other identifier)

Term Dates

From 06/20/19 To: 12/21/21

Approved by OMB  
3060-0678

Approved: *Stephen J. Duall*

*Stephen J. Duall*  
Chief, Satellite Policy Branch

Date & Time Filed: Feb 7 2019 4:35:53:293PM  
File Number: SAT-MOD-20190207-00009

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 901 (S2405)

1-8. Legal Name of Applicant

<b>Name:</b>	Intelsat License LLC	<b>Phone Number:</b>	703-559-7848
<b>DBA Name:</b>		<b>Fax Number:</b>	703-559-8539
<b>Street:</b>	c/o Intelsat US LLC 7900 Tysons One Place	<b>E-Mail:</b>	susan.crandall@intelsat.com
<b>City:</b>	McLean	<b>State:</b>	VA
<b>Country:</b>	USA	<b>Zipcode:</b>	22102 -5972
<b>Attention:</b>	Susan H. Crandall		

**ATTACHMENT TO GRANT**  
**Intelsat License LLC**  
**IBFS File No. SAT-MOD-20190207-00009**

<b>IBFS File No(s):</b>	SAT-MOD-20190207-00009	<p><b>GRANTED – With Conditions</b></p>  <p><b>International Bureau Satellite Division</b></p>
<b>Licensee/Grantee:</b>	Intelsat License LLC	
<b>Call Sign:</b>	S2405	
<b>Satellite Name:</b>	Intelsat 901	
<b>Orbital Location: (required station-keeping tolerance)</b>	27.5° W.L. (+/- 0.05 degrees east-west station keeping)	
<b>Administration:</b>	United States of America	
<b>Nature of Service:</b>	Fixed-Satellite Service (FSS)	
<b>Scope of Grant:</b>	<p>Authority to (1) raise Intelsat 901's orbit to 300 km above the geostationary arc; (2) dock with Space Logistics' MEV-1 space station (S2990); (3) redeploy Intelsat 901 as a combined vehicle stack (CVS) with MEV-1 at the 27.5° W.L. orbital location instead of its currently authorized orbital location of 29.5° W.L.; and (4) provide fixed-satellite service via Intelsat 901 at 27.5°W.L. using the 3625-4200 MHz (space-to-Earth), 5850-6425 MHz (Earth-to-space), 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) frequency bands. Additional authority is granted to conduct telemetry, tracking, and command functions for Intelsat 901 using the center frequencies of 3947.5 MHz, 3948.0 MHz, 3952.0 MHz, and 3952.5 MHz (space-to-Earth), and 6173.7 MHz and 6176.3 MHz (Earth-to-space) to facilitate orbit raising, and once docked with the MEV-1 space station, authority to use those TT&amp;C frequencies necessary to communicate satellite health and telemetry data.</p>	
<b>Previous Grant(s):</b>	<ul style="list-style-type: none"> <li>• Modification of the authorization for the Intelsat 901 space station to specify operations at the 29.5° W.L. orbital location instead of at Intelsat 901's currently authorized orbital location of 18.0° W.L. to provide Fixed-Satellite Service using the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 10.95-11.2 GHz, 11.45-11.7 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. IBFS File No. SAT-MOD-20170831-00126 (granted Dec. 13, 2017).</li> <li>• Modification of the Intelsat 901 satellite authorization to extend the license term through December 31, 2021. IBFS File No. SAT-MOD-20160906-00088 (granted Nov. 3, 2016).</li> <li>• Modification of the Intelsat 901 satellite authorization to deploy the Intelsat 901 satellite at the 342.0° E.L. orbital location rather than at the 62.0° E.L orbital location. IBFS File No. SAT-MOD-20010509-00037 (granted Aug. 31, 2001).</li> <li>• Authority to construct, launch and operate a satellite at 62.0° E.L. in the 3625-4200 and 5850-6425 MHz C-band frequency bands and 10.95-11.20, 11.45-11.70, and 14.00-14.50 GHz Ku-band frequency bands. IBFS File No. SAT-LOA-20000119-00019 (granted Aug. 2, 2000), 15 FCC Rcd 15460 (2000).</li> </ul>	
<b>Service Area(s):</b>	See Engineering Statement at 2.	
<b>Frequencies:</b>	<p>3625-4200 MHz (space-to-Earth)  5850-6425 MHz (Earth-to-space)  10.95-11.2 GHz (space-to-Earth)  11.45-11.7 GHz (space-to-Earth)  14.0-14.5 GHz (Earth-to-space)</p> <p><u>Telemetry, Tracking &amp; Control (TT&amp;C):</u>  3947.5 MHz, 3948.0 MHz, 3952.0 MHz, and 3952.5 MHz (space-to-Earth)  6173.7 MHz and 6176.3 MHz (Earth-to-space)</p>	

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**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 prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. Intelsat will be held 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, 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 of other administrations. See 47 CFR § 25.111(b).
2. Intelsat must operate the Intelsat 901 space station at the 27.5° W.L. orbital location in compliance with all existing or future coordination agreements for that location. In the absence of a coordination agreement, such communications must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required coordination.
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. While at the 27.5° W.L. orbital location, the Intelsat 901 spacecraft must be maintained, pursuant to a contractual arrangement with Space Logistics, with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
5. Intelsat 901 may only use its TT&C frequencies during orbit-raising maneuvers. After docking with the Space Logistics MEV-1 space station, Intelsat 901 may not engage in any station-keeping or attitude control maneuvers.
6. The operations of Intelsat 901 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 27.5° W.L. orbital location. Intelsat must also comport with the maximum power limits indicated in existing or future coordination agreements at 27.5° 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 27.5° W.L. involving approved communications with U.S.-licensed earth stations.
7. Intelsat's use of the 3625-3650 MHz (space-to-Earth) frequency band is subject to footnote US107, which limits FSS operations within the United States in the 3600-3650 MHz band on a primary basis to earth stations authorized prior to, or granted as a result of an application filed prior to, July 23, 2015 and constructed within 12 months of initial authorization. Additionally, applications filed after July 23, 2015 to modify these earth stations will not be accepted except for changes in polarization, antenna orientation, or ownership; and increases in antenna size for interference mitigation purposes. All other Fixed-Satellite Service earth station operations in the 3625-3650 MHz band must be on a secondary basis.
8. Communications between U.S.-licensed earth stations and Intelsat 901 in the 3625-3650 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 the 3600-3650 MHz band is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis.
9. Communications between U.S. licensed earth stations and the Intelsat 901 space station in the 3650-3700 MHz (space-to-Earth) frequency band are subject to footnote NG185 of the United States Table of

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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.


10. Communications between U.S. licensed earth stations and the Intelsat 901 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.
11. Operations of Intelsat 901 in the 5850-5925 MHz (Earth-to-space) frequency band are 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
12. Operations in the 10.95-11.2 GHz 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.
13. Intelsat's use of the 10.95-11.2 GHz and 11.45-11.7 GHz frequency bands is limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations, 47 CFR § 2.106 NG52.
14. Operations of Intelsat 901 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.
15. Intelsat's operations of the Intelsat 901 space station at the 27.5° W.L. orbital location are subject to the following additional 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 and Thirty-seventh 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 and Thirty-seventh Assembly of Parties, as amended.
16. Nothing in this authorization extends the license term for Call Sign S2405, which ends on December 21, 2021.
17. 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 901 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).

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<b>Action Date:</b>	June 20, 2019	
<b>Term Dates</b>	<b>From:</b> June 20, 2019	<b>To:</b> December 21, 2021
<b>Approved:</b>	 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>	202-719-7207
<b>Street:</b>	1776 K Street, NW	<b>E-Mail:</b>	jhindin@wileyrein.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20006-3006
<b>Attention:</b>	Jennifer D. Hindin	<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

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)