

Before the  
**Federal Communications Commission**  
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application to Modify Authorization for  
Intelsat 901 (S2405)

File No. SAT-MOD- \_\_\_\_\_

**APPLICATION OF INTELSAT LICENSE LLC  
TO MODIFY AUTHORIZATION FOR INTELSAT 901**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“Commission” or “FCC”), 47 C.F.R. § 25.117, hereby seeks to modify the authorization for the Intelsat 901 satellite (Call Sign S2405). Specifically, this modification application seeks authority to raise the spacecraft to 300 km above the geostationary arc; to dock with MEV-1 (S2990);<sup>1</sup> to redeploy Intelsat 901—as a combined vehicle stack (“CVS”) with MEV-1—to 27.5° W.L.; and to operate at that location. This modification application further requests authorization for Intelsat 901 to operate on the 3625-3700 MHz and 5850-5925 MHz bands at 27.5° W.L. in addition to its existing licensed C- and Ku-band frequencies.

In accordance with the requirements of the Commission’s rules,<sup>2</sup> this application has been filed electronically as an attachment to FCC Form 312. Intelsat provides the technical

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<sup>1</sup> See *Policy Branch Information; Actions Taken*, Report No. SAT-01289, File No. SAT-LOA-20170224-00021 (Dec. 8, 2017) (Public Notice).

<sup>2</sup> 47 C.F.R. § 25.117(c).

information relating to the proposed modification on Schedule S and in narrative form, as contained in the attached Engineering Statement, pursuant to Section 25.114 of the Commission's rules.<sup>3</sup>

## **I. PROPOSED MODIFICATION**

Intelsat requests authority to raise Intelsat 901 to 300 km above the geostationary arc; to dock with MEV-1;<sup>4</sup> and to redeploy Intelsat 901—as a CVS with MEV-1—to, and operate at, 27.5° W.L. on the geostationary arc. Intelsat 901 currently is licensed to operate at 29.5° W.L. using the 3700-4200 MHz, 5925-6425 MHz, 10950-11200 MHz, 11450-11700 MHz, and 14000-14500 MHz frequency bands.<sup>5</sup> Intelsat expects to raise Intelsat 901 to 300 km above the geostationary arc after the successful launch of MEV-1, which is currently scheduled for launch in the first half of 2019. Once Intelsat 901 is 300 km above the geostationary arc, the MEV-1 will rendezvous and dock with the satellite. Finally, after successful docking, the CVS will be reinserted into geostationary orbit and will operate at 27.5° W.L.

During the Intelsat 901 orbit raising, Intelsat will utilize only the satellite's telemetry, tracking, and control ("TT&C") frequencies and will follow industry practices for coordinating

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<sup>3</sup> *Id.* § 25.114.

<sup>4</sup> The FCC previously granted Space Logistics, LLC ("Space Logistics"), a wholly-owned subsidiary of Northrup Grumman Innovation Systems, Inc., the authority to perform rendezvous, proximity operations, and docking with Intelsat 901 at 300 km above the geostationary arc and deferred a decision on Space Logistics' request to insert the CVS into geostationary orbit. *See* Stamp Grant, Space Logistics, Application, File No. SAT-LOA-20170224-00021 (granted in part Dec. 5, 2017). Space Logistics will file, contemporaneously with this request, a separate application seeking authority to insert the CVS into geostationary orbit at 27.5° W.L.

<sup>5</sup> *See Policy Branch Information; Actions Taken*, Report No. SAT-01290, File No. SAT-MOD-20170831-00126 (Dec. 15, 2017) (Public Notice). Although Intelsat 901 is capable of operating in the 3625-3700 MHz and 5850-5925 MHz bands, Intelsat did not seek authority to operate in those bands at 29.5° W.L.

TT&C transmissions. After the successful docking of MEV-1 and Intelsat 901, Intelsat 901 will not engage in any station-keeping or attitude control maneuvers. Space Logistics, the licensee of MEV-1, will perform all station-keeping and attitude control of the CVS pursuant to a contractual agreement with Intelsat. Intelsat will continue to operate Intelsat 901's communications payloads and TT&C payloads necessary to communicate satellite health and telemetry data. Only TT&C frequencies will be used during the insertion of the CVS into the geostationary arc. As stated in the Space Logistics application, the company will coordinate TT&C transmissions during the reinsertion process.<sup>6</sup> Once Intelsat 901 has arrived at 27.5° W.L., Intelsat 907 (Call Sign S2411), which currently is operating at 27.5° W.L.,<sup>7</sup> is expected to be redeployed.

Intelsat further requests authority to operate from the 27.5° W.L. orbital location using existing frequencies licensed on Intelsat 901, as well as frequencies in the 3625-3700 MHz and 5850-5925 MHz bands, which are not currently licensed for use by Intelsat 901. Intelsat has received Commission approval to operate on the 3625-3700 MHz and 5850-5925 MHz bands at 27.5° W.L. using Intelsat 907.<sup>8</sup> The following chart identifies frequencies licensed for operation by Intelsat 901 at 29.5° W.L., frequencies requested for operation by Intelsat 901 at 27.5° W.L., and frequencies licensed for operation by Intelsat 907 at 27.5° W.L.

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<sup>6</sup> See Application of Space Logistics, LLC for Authority to Launch and Operate a Mission Extension Vehicle, Call Sign S2990, File No. SAT-LOA-20170224-00021, Legal Narrative, at 7 (filed Feb. 24, 2017).

<sup>7</sup> See *Policy Branch Information; Actions Taken*, Report No. SAT-01299, File No. SAT-MOD-20171023-00142 (Jan. 26, 2018) (Public Notice).

<sup>8</sup> *Id.*

	<b>Intelsat 901 29.5° W.L.</b>	<b>Intelsat 901 27.5° W.L.</b>	<b>Intelsat 907 27.5° W.L.</b>
3625-3700 MHz		✓	✓
3700-4200 MHz	✓	✓	✓
5850-5925 MHz		✓	✓
5925-6425 MHz	✓	✓	✓
10950-11200 MHz	✓	✓	✓
11450-11700 MHz	✓	✓	✓
14000-14500 MHz	✓	✓	✓

The Intelsat 901 satellite, controlled by Intelsat, will continue to use the following TT&C frequencies: 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). Space Logistics, pursuant to a contractual agreement with Intelsat, will use the following TT&C frequencies for CVS station-keeping and attitude control maneuvers: 3944.5 MHz and 3955.5 MHz (space-to-Earth); 6170.0 MHz and 6180.0 MHz (Earth-to-space).<sup>9</sup>

## **II. PUBLIC INTEREST SHOWING**

Grant of this modification application is in the public interest because it will allow Intelsat to maximize the use of on-orbit assets by extending the life of Intelsat 901 through use of a mission extension vehicle and to add capacity at the nominal 27.5° W.L. orbital location. Intelsat will operate Intelsat 901's communications payload and TT&C frequencies and, in coordination with Space Logistics, operate the CVS's TT&C frequencies at 27.5° W.L., in

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<sup>9</sup> Intelsat and Space Logistics have coordinated the operation of Intelsat 901 and MEV-1 as a combined vehicle stack at the 27.5° W.L. orbital location. Intelsat has no objection to the FCC authorizing MEV-1 to operate on the following frequencies, which are licensed for operation by Intelsat 901 at 29.5° W.L., requested for operation by Intelsat 901 at 27.5° W.L., and licensed for operation by Intelsat 907 at 27.5° W.L.: 3944.5 MHz and 3955.5 MHz (space-to-Earth); and 6170.0 MHz and 6180.0 MHz (Earth-to-space).

conformance with existing coordination agreements and the FCC's rules governing operations vis-à-vis adjacent locations.

### **III. INTELSAT ACCEPTS SECTION 316 PETITION CONDITIONS**

Intelsat understands and accepts that its license to operate Intelsat 901 at 27.5° W.L. will be conditioned as follows:

- (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.<sup>10</sup>

### **IV. 3625-3650 MHZ, 3650-3700 MHZ, 5850-5925 MHZ, 10950-11200 MHZ, AND 11450-11700 MHZ FREQUENCY BANDS**

Intelsat understands that operations in the 3625-3650 MHz, 3650-3700 MHz, 5850-5925 MHz, 10950-11200 MHz, and 11450-11700 MHz frequency bands are subject to certain limitations and obligations, which Intelsat accepts and will fulfill. Specifically, for operation in the 3625-3650 MHz frequency band, Intelsat accepts the following condition:

- Intelsat's use of the 3625-3650 MHz (space-to-Earth) band is subject to footnote US245 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106 US245, which states that the use of the non-Federal fixed-satellite service in the 3600-3650 MHz band is limited to international inter-continental systems.

In the 3650-3700 MHz frequency band, Intelsat accepts the following condition:

- Intelsat's use of the 3650-3700 MHz (space-to-Earth) band is subject to footnote NG185 of the United States Table of Frequency Allocations, 47 C.F.R. § 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.

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<sup>10</sup> See *Petition of the Int'l. Telecomms. Satellite Org. under Section 316 of the Commc'ns Act, as Amended*, Order of Modification, 23 FCC Rcd 2764, 2769-71 ¶¶ 11-13 (Int'l Bur. 2008).

In the 5850-5925 MHz frequency band, Intelsat accepts the following condition:

- Intelsat's use of the 5850-5925 MHz band (Earth-to-space) is subject to footnote US245 of the United States Table of Frequency Allocations, 47 C.F.R. §2.106, US245, which states that the use of 5850-5925 MHz by the non-Federal fixed-satellite service is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis. Intelsat shall not claim protection from radiolocation transmitting stations operating in accordance with footnote G2.

In the 10950-11200 MHz frequency band, Intelsat accepts the following conditions:

- Operations in the 10950-11200 MHz frequency band shall comply with the terms of 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.
- Operations in the 10950-11200 MHz frequency band are limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations, 47 C.F.R. 2.106, NG52.

In the 11450-11700 MHz frequency band, Intelsat accepts the following condition:

- Intelsat's use of the 11450-11700 MHz band (space-to-Earth) 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.

## **V. REQUEST FOR GRANT WITHOUT BOND**

Because Intelsat 901 is already in-orbit and operating, and because Intelsat 901 will operate at 27.5° W.L using only frequencies already authorized for use on Intelsat 907 at that location, grant of this modification application is not subject to milestone conditions, and Intelsat is not required to post a bond under Sections 25.164(a) and 25.165 of the Commission's rules.<sup>11</sup>

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<sup>11</sup> See 47 C.F.R. §§ 25.164(a) and 25.165.

**VI. CONCLUSION**

For the reasons set forth above, Intelsat respectfully requests that the Commission grant this modification application.

Intelsat License LLC

By: /s/ Susan H. Crandall

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February 7, 2019

## Exhibit A

### FCC Form 312, Response to Question 34: Foreign Ownership

The Commission previously approved foreign ownership in Intelsat License LLC (“Intelsat”), in the Intelsat-Serafina Order.<sup>1</sup> In 2012, the International Bureau authorized the transfer of control of Intelsat.<sup>2</sup> There have been no other material changes to Intelsat’s foreign ownership since the date of the Intelsat-Serafina Order.

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<sup>1</sup> *Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22,151 (2007).

<sup>2</sup> *In the Matter of Intelsat Global Holdings, S.A., Applications to Transfer Control of Intelsat Licenses and Authorizations from BC Partners Holdings Limited to Public Ownership*, Order, 27 FCC Rcd 5,226 (2012). The transfer of control was fully consummated on June 14, 2018. *See* Letter from Jennifer D. Hindin, Counsel for Intelsat, to Marlene H. Dortch, FCC, IB Docket No. 11-205 (filed June 14, 2018).



**Exhibit B**  
**FCC Form 312, Response to Question 40:**  
**Officers, Directors, and Ten Percent or Greater Shareholders**

The officers and directors/managers of Intelsat License LLC are as follows:

Officers:

Jacques Kerrest, Chairman  
Franz Russ, Deputy Chairman  
Michelle Bryan, Secretary  
Mirjana Hervy, Director, Finance

Board of Managers:

Jacques Kerrest  
Franz Russ  
Michelle Bryan

The business address of all Intelsat License LLC officers and members of the Board of Managers is: 4 rue Albert Borschette L-1246 Luxembourg.

Intelsat License LLC is a Delaware limited liability company that is wholly owned by Intelsat License Holdings LLC, also a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Ventures S.à r.l., a Luxembourg company, which is in turn wholly owned by Intelsat Alliance LP, a Delaware limited partnership. Intelsat Alliance LP is indirectly wholly owned by Intelsat Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat Connect Finance S.A., a Luxembourg company, which in turn is wholly owned by Intelsat Envision Holdings LLC, a Delaware limited liability company. Intelsat Envision Holdings LLC is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat Investments S.A., a Luxemburg company, which in turn is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Investment Holdings S.à r.l., a Luxembourg company. Intelsat Investment Holdings S.à r.l. is wholly owned by Intelsat S.A., a Luxembourg company. Each of these entities may be contacted at the following address: 4 rue Albert Borschette, L-1246 Luxembourg.

Intelsat S.A.'s ownership was approved by the Commission as part of the *Intelsat-Serafina Order* and the recent Intelsat Pro Forma and is incorporated by reference. *See Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22,151 (2007) ("*Intelsat-Serafina Order*"); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20180627-00048, SAT-T/C-20180627-00049, SES-T/C-20180627-01430, SES-T/C-20180627-01436, SES-T/C-20180627-01433 (granted June 29, 2018), 0008216564 (granted June 28, 2018) and 0037-EX-TU-2018 (granted June 29, 2018).