

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Intelsat License LLC

Application to Modify Authorization for
Galaxy 12 (S2422)

File No. SAT-MOD- _____

**APPLICATION OF INTELSAT LICENSE LLC
TO MODIFY AUTHORIZATION FOR GALAXY 12**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.117 of the rules of the Federal Communications Commission (“FCC” or “Commission”),¹ hereby seeks to modify the authorization for Galaxy 12 (Call Sign S2422), a C-band satellite operating at 129.0° W.L.² Specifically, Intelsat seeks to extend the license term for the Galaxy 12 satellite, and a previously granted waiver,³ through December 31, 2023.

¹ 47 C.F.R. § 25.117.

² See PanAmSat Licensee Corp., Application to Launch and Operate a Replacement C-Band Fixed-Satellite Service Space Station, File Nos. SAT-LOA-20000929-00136, SAT-AMD-20021107-00203 (granted Mar. 27, 2003); *as modified by Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00327, File No. SAT-MOD-20050815-00159 (Oct. 21, 2005); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00340, File No. SAT-MOD-20051206-00262 (Jan. 27, 2006); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00553, File No. SAT-MOD-20080630-00133 (Sept. 5, 2008); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00730, File Nos. SAT-MOD-20100120-00013, SAT-AMD-20100514-00102 (Oct. 22, 2010); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00902, File No. SAT-MOD-20111011-00197 (Sept. 28, 2012). The licenses originally held by PanAmSat Licensee Corp. were assigned in 2005 to Intelsat North America, which later changed its name to Intelsat Licensee LLC.

³ Specifically, to the extent necessary, Intelsat seeks an extension of the previously granted waiver of 47 C.F.R. § 25.283(c). See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-00902, File No. SAT-MOD-20111011-00197 (Sept. 28, 2012). The FCC recently revised rule 25.283(c) to remove the word “all” and thus permit a *de minimis* residual amount of fuel that cannot be vented, which may obviate the need to extend the previously granted waiver.

In accordance with the requirements of the Commission's rules,⁴ this application has been filed electronically as an attachment to FCC Form 312. Intelsat incorporates by reference all required technical information in the Schedule S previously provided to the FCC for operation at 129.0° W.L.⁵ Consistent with Section 1.62 of the Commission's rules,⁶ Intelsat will continue to operate the Galaxy 12 satellite pursuant to the terms and conditions of its expiring license until such time as the Commission makes a determination with respect to this request.

I. REQUEST FOR EXTENSION OF LICENSE TERM

Intelsat seeks to extend the license term for the Galaxy 12 satellite, and a previously granted waiver,⁷ through December 31, 2023. The Galaxy 12 satellite commenced operation on May 5, 2003.⁸ Pursuant to Sections 25.121(a) and (d)(1) of the Commission's rules, the license term for Galaxy 12 will expire on May 4, 2018.⁹ This expiration date is well before the expected end of service life of the satellite, which was most recently estimated to be March 1, 2019, assuming no inclined orbit operation; inclined orbit operation would extend Galaxy 12's expected end of service life an additional four or more years. To accommodate the potential for inclined orbit operation of Galaxy 12, Intelsat is requesting that the license term be extended through December 31, 2023. To the extent the satellite's projected end of service life is extended in the future, Intelsat will seek an additional extension of the license term.

⁴ 47 C.F.R. § 25.117(c).

⁵ See 47 C.F.R. § 25.114; *Application of Intelsat License LLC to Modify Authorization for Galaxy 12 (S2422)*, File No. SAT-MOD-20111011-00197, Schedule S (filed Oct. 11, 2011).

⁶ 47 C.F.R. § 1.62 (permitting continued operations by a licensee where there is a proper and timely pending application for renewal of the license).

⁷ See *supra* n. 3.

⁸ See PanAmSat License Corp., Application for Special Temporary Authority, File No. SAT-STA-20031224-00366, at 1 (filed Dec. 24, 2003); Letter from Joseph A. Godles, Attorney for PanAmSat Licensee Corp., to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 1, 2003).

⁹ 47 C.F.R. §§ 25.121(a), (d)(1).

II. REQUEST FOR EXTENSION OF WAIVER

To the extent necessary, Intelsat requests that the waiver of Section 25.283(c) of the Commission's rules, previously granted Galaxy 12 be extended.¹⁰ At the time of the prior grant, this rule required an applicant to demonstrate that all stored energy will be vented at the spacecraft's end of life. The FCC recently revised Section 25.283(c) to remove the word "all" and thus permit a *de minimis* residual amount of fuel that cannot be vented, which may obviate the need to extend the previously granted waiver.

III. POST-MISSION DISPOSAL PLAN

At the end of the Galaxy 12 mission, Intelsat will dispose of the satellite by moving it to an altitude of at least 267.9 kilometers above the geostationary arc. For that purpose, 16 kilograms of fuel has been reserved.

In calculating the disposal orbit, Intelsat used simplifying assumptions as permitted under the Commission's *Orbital Debris Report and Order*.¹¹ The effective area to mass ratio ($Cr \cdot A/M$) of the Galaxy 12 spacecraft is $0.031 \text{ m}^2/\text{kg}$, resulting in a minimum perigee disposal altitude under the Inter-Agency Space Debris Coordination Committee formula of 267.9 kilometers above the geostationary arc. Accordingly, the Galaxy 12 planned disposal orbit complies with the FCC's rules.

The reserved fuel figure was determined by the spacecraft manufacturer and provided for in the propellant budget. This figure was calculated taking into account the expected mass of the satellite at the end of life and the required delta-velocity to achieve the desired orbit. The fuel gauging uncertainty has been taken into account in these calculations.

¹⁰ See 47 C.F.R. §§ 25.114(d)(14)(ii), 25.283(c); *Application of Intelsat License LLC to Modify Authorization for Galaxy 12 (S2422)*, Stamp Grant, File No. SAT-MOD-20111011-00197, Condition 2 (Sept. 25, 2012).

¹¹ See *Mitigation of Orbital Debris*, Second Report and Order, 19 FCC Rcd 11567 (2004).

Additionally, at the completion of the mission and upon disposal of the spacecraft, Intelsat will ensure the removal of all stored energy on the spacecraft by depleting all propellant tanks except those containing an oxidizing agent per previous waiver grant, venting all pressurized systems, and by leaving the batteries in a permanent discharge state.

IV. PUBLIC INTEREST SHOWING

Grant of this modification application to extend the license term will serve the public interest by enabling customers to continue receiving service from Galaxy 12 at the 129.0° W.L. orbital location. The Galaxy 12 satellite's subsystems and solar panels are functioning normally, and there are no single points of failure on Galaxy 12 that would result in an inability to de-orbit the satellite. Additionally, the satellite's telemetry, tracking, and command functions are operating normally and all the payload is operational. Extending the license term will promote the continued efficient use of orbital resources and is consistent with recent decisions by the Commission to extend satellite license terms.¹²

¹² See e.g., *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01156, File No. SAT-MOD-20160219-00019 (May 6, 2016) (granting license extension for Intelsat 1R, a station-kept satellite, based on the satellite's current projected end of service including future inclined orbit operation); *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01254, File Nos. SAT-MOD-20170523-00077, SAT-AMD-20170613-00089 (July 21, 2017) (granting license extension for Galaxy C3, a station-kept satellite, based on same).

V. **CONCLUSION**

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

Respectfully submitted,

Intelsat License LLC

By: /s/ Susan H. Crandall

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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*.¹ In December 2009 and October 2011, the Commission also approved *pro forma* changes in Intelsat’s foreign ownership.² There have been no other material changes to Intelsat’s foreign ownership since the date of the *Intelsat-Serafina Order*.

¹ *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).

² *See Intelsat North America LLC, Intelsat LLC, PanAmSat Licensee Corp., PanAmSat H-2 Licensee Corp., and Intelsat New Dawn Company, Ltd., Applications for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20091125-00128, SAT-T/C-20091125-00124, SAT-T/C-20091125-00127, SAT-T/C-20091125-00125, SAT-T/C-20091125-00126, SES-T/C-20091125-01505, SES-T/C-20091125-01502, SES-T/C-20091125-01506, SES-T/C-20091125-01504 and SES-T/C-20091125-01503 (granted Dec. 3, 2009); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011).

Exhibit B

FCC Form 312, Response to Question 36: Cancelled Authorizations

Intelsat License LLC (“Intelsat”) has never had an FCC license “revoked.” However, on June 26, 2000, the International Bureau “cancelled” two Ka-band satellite authorizations issued to a former Intelsat entity, PanAmSat Licensee Corp. (“PanAmSat”),¹ based on the Bureau’s finding that PanAmSat had not satisfied applicable construction milestones.² In that same order, the Bureau denied related applications to modify the cancelled authorizations. PanAmSat filed an application for review of the Bureau’s decision, which the Commission denied, and subsequently filed an appeal with the United States Court of Appeals for the District of Columbia Circuit, which was dismissed in January 2003 at PanAmSat’s request. Notwithstanding the fact that the Bureau’s action does not seem to be the kind of revocation action contemplated by question 36, Intelsat is herein making note of the decision in the interest of absolute candor and out of an abundance of caution. In any event, the Bureau’s action with respect to PanAmSat does not reflect on Intelsat’s basic qualifications, which are well-established and a matter of public record.

¹ All licenses previously held by PanAmSat Licensee Corp. have been assigned to Intelsat License LLC. *See* IBFS File Nos. SAT-ASG-20101203-00252 (granted Dec. 23, 2010), SES-ASG-20101203-0150 (granted Dec. 20, 2010), and SES-ASG-20101206-01502 (granted Dec. 20, 2010).

² *See PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 18720 (IB 2000).

Exhibit C
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 Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat Connect Finance S.A., a Luxembourg company. Intelsat Connect Finance S.A. is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat Investments S.A., a Luxembourg company. Intelsat Investments S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Intelsat 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-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011) ("*Intelsat Pro Forma*"). On May 16, 2012, the International Bureau granted an application to transfer control of Intelsat pursuant to a public offering of newly issued voting shares by Intelsat, subsequent voting share sales by current shareholders and possible private placements of newly issued voting shares. *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, DA 12-768 (rel. May 16, 2012). This change of control has not yet been fully consummated.