

File # SAT-LOA-20170524-00078
SAT-AMD-20170613-00086
Call Sign S3015 Grant Date 06/26/18
(or other identifier) Term Dates
From n/a To: n/a
Commission
20554
Stephen J. Duall
Chief, Satellite Policy Branch

In the Matter of)
)
Intelsat License LLC)
)
Application for Authority to Launch and)
Operate Galaxy 15R at 133° W.L.)

File Nos. SAT-LOA-20170524-00078 &
SAT-AMD-20170613-00086
Call Sign S3015

PETITION FOR CLARIFICATION OF O3B LIMITED

O3b Limited (“O3b”) requests clarification of the International Bureau’s grant of the above-referenced Intelsat License LLC (“Intelsat”) applications for the Galaxy 15R space station.¹ In response to concerns raised by O3b, the Commission incorporated into the Galaxy 15R Grant a condition relating to Intelsat’s use of spectrum in which Ka-band non-geostationary orbit (“NGSO”) fixed-satellite service (“FSS”) systems have primary status, the 18.8-19.3 GHz and 28.6-29.1 GHz bands (the “NGSO-Primary Band”). The condition requires Intelsat to either certify that it has reached a coordination agreement with the operator of a Ka-band NGSO system authorized to serve the United States or make a detailed technical showing regarding how Intelsat will ensure the Ka-band NGSO system is protected.² The language of the condition provides that such a showing must be made at least sixty days prior to the initial launch of a given NGSO FSS system.

O3b seeks clarification because the effect of this condition with respect to protection of the O3b system, which already operates in the NGSO-Primary Bands under a grant of U.S. market access, is not clear. Intelsat cannot submit the required showing with respect to O3b

¹ Intelsat License LLC, Call Sign S3015, File Nos. SAT-LOA-20170524-00078 & SAT-AMD-20170613-00086, grant-stamped May 10, 2018 (the “Galaxy 15R Grant”).

² *Id.*, Attachment to Grant at 5, ¶ 19 & n.5.

sixty days before the initial launch of the O3b NGSO system, as O3b's system has been operation since September 2014. Thus, applying the condition retroactively would make it impossible to meet. On the other hand, a purely prospective reading of the condition would be irrational, suggesting that Intelsat is obligated to provide a non-interference demonstration only with respect to future NGSO systems, and not with respect to the operational O3b network that is currently serving customers in the U.S. and around the globe.

To avoid any confusion arising from this language, O3b suggests the Commission modify Paragraph 19 of the Galaxy 15R Grant conditions by adding the underlined sentence below:

At least sixty days before the scheduled initial launch of each NGSO FSS satellite system licensed or granted market access in the United States to operate in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands, Intelsat must either: (1) notify the Commission in writing when an agreement has been reached with the NGSO satellite system operator, or (2) seek and obtain the Commission's approval of a modification of this license including detailed technical demonstrations of how Intelsat will protect the NGSO FSS satellite system. If neither condition is met, Intelsat must cease operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated. Intelsat must comply with either (1) or (2) above with respect to the NGSO FSS satellite system operated by O3b Limited at least sixty days before the scheduled launch of Galaxy 15R and must not commence operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated.

O3b informed Intelsat that it would be seeking this clarification of the Galaxy 15R Grant, and Intelsat has advised O3b that it has no objection to addition of the above sentence as proposed by O3b.

Accordingly, O3b requests that the Commission reissue the Galaxy 15R Grant with the clarifying change discussed above.

Respectfully submitted,

O3B LIMITED

Of Counsel

Karis A. Hastings
SatCom Law LLC
1317 F Street, N.W., Suite 400
Washington, D.C. 20004
karis@satcomlaw.com

By: /s/ Suzanne H. Malloy
Vice President, Regulatory Affairs
O3b Limited
900 17th Street, N.W.
Washington, D.C. 20006

June 11, 2018

CERTIFICATE OF SERVICE

I hereby certify that on this 11th day of June, 2018, I caused a true and correct copy of the foregoing "Petition for Clarification of O3b Limited" to be sent by first class mail, postage prepaid, to the following:

Susan H. Crandall
Cynthia J. Grady
Intelsat Corp.
7900 Tysons One Place
McLean, VA 22102-5972

Maureen C. McLaughlin
Vice President, Public Policy
Iridium Satellite LLC
1750 Tysons Boulevard, Suite 1400
McLean, VA 22102

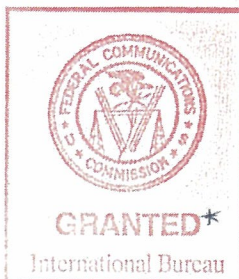
Carlos M. Nalda
LMI Advisors, LLC
2550 M Street, N.W., Suite 345
Washington, D.C. 20037
Counsel to Eutelsat S.A.

Jennifer D. Hindin
Wiley Rein LLP
1776 K Street, N.W.
Washington, D.C. 20006
Counsel to Intelsat License LLC

Scott Blake Harris
V. Shiva Goel
Harris, Wiltshire & Grannis LLP
1919 M Street, N.W., 8th Floor
Washington, D.C. 20036
Counsel to Iridium Satellite LLC

/s/ Suzanne Malloy
Suzanne Malloy

S3015 SAT-LOA-20170524-00078 IB2017001400
Intelsat License LLC
Galaxy 15R



*with conditions

File # SAT-LOA-20170524-00078

Call Sign S3015 Grant Date 05/10/18

(or other identifier)

From See conditions Term Dates see conditions To: conditions

Approved: Stephen J. Durrill

Chief, Satellite Policy Branch

Approved by OMB
3060-0678

* see also
SAT-AMD-20170613-00086

Date & Time Filed: May 24 2017 5:39:37:020PM
File Number: SAT-LOA-20170524-00078
Callsign/Satellite ID: S3015

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	FCC Use Only
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Application for Authority to Launch and Operate Galaxy 15R, a Replacement Satellite With New Frequencies, at 133.0 W.L.


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		

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Intelsat License LLC

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Re-issued June 26, 2018

IBFS File No(s):	SAT-LOA-20170524-00078, SAT-AMD-20170613-00086	<p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	Intelsat License LLC	
Call Sign:	S3015	
Satellite Name:	Galaxy 15R	
Orbital Location: (required station-keeping tolerance)	133.0° W.L. (+/- 0.05 degrees east/west)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	<p>Authority to construct, deploy, and operate a C-, Ku-, and Ka-band geostationary orbit (GSO) space station¹</p> <p>Denial of Petition to Defer or Deny filed by Eutelsat S.A. (see footnote 1) Denial of Petition to Deny filed by Iridium Satellite LLC (see footnote 6)</p>	
Previous Grant(s):	N/A	
Service Area(s):	<p>Schedule S Tech Report, SAT-LOA-20170524-00078, at 5-9. Schedule S Tech Report, SAT-AMD-20170613-00086, at 5-10.</p>	
Frequencies:	<p>3700-4200 MHz (space-to-Earth) 5925-6425 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-11.7 GHz (space-to-Earth) 11.7-12.2 GHz (space-to-Earth) 13.75-14.5 GHz (Earth-to-space) 17.8-19.3 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 27.5-29.1 GHz (Earth-to-space) 29.25-30.0 GHz (Earth-to-space)</p> <p>Tracking, telemetry and command center frequencies:</p>	

¹ Eutelsat S.A. (Eutelsat) filed a petition to defer consideration of Galaxy 15R’s Ku- and Ka-band frequencies to assess the impact of Eutelsat’s impending requests for U.S. market access and, to the extent possible, coordinate Intelsat’s proposed operations with the earlier French filings; or in the alternative, subject to Eutelsat’s request for U.S. market access in available Ku-band and Ka-band FSS frequencies at 133° W.L., deny mutually exclusive portions of the Intelsat Application. Petition to Defer or Deny, In Part, Of Eutelsat S.A. (filed Dec. 26, 2017) (Eutelsat Petition). Intelsat responded to Eutelsat’s petition, stating that ITU priority is not a precondition to grant and that it “fully appreciates and accepts the inherent risks in seeking authorization to operate at 133.0° W.L. considering France’s earlier ITU filings in Ku- and Ka-band frequencies at that location,” and that it “is prepared to work in good faith with Eutelsat to coordinate the two companies’ satellite networks.” Intelsat Response (filed Jan. 12, 2018) at 3-5. In the *First Space Station Licensing Reform Order, Second Order on Reconsideration*, the Commission stated that “it will license satellites at orbital locations at which another Administration has ITU priority, and furthermore, if a later-filed market access request—with or without ITU priority—is mutually exclusive with an earlier-filed, granted application, it may be dismissed absent a coordination agreement between the applicants, however, it will issue the earlier-filed authorization subject to the outcome of the international coordination process, and emphasized that the Commission is not responsible for the success or failure of the required international coordination.” *Amendment of the Commission’s Space Station Licensing Rules & Policies*, Second Order on Reconsideration, 31 FCC Rcd. 9398, 9410, para. 32 (2016), citing to the *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10870, para. 295 (2003). Applying this policy to the facts at hand, we find that neither rule nor precedent support Eutelsat’s petition to defer consideration of or deny portions of the Galaxy 15R application. If Intelsat elects to accept this authorization, it does so subject to conditions 1 and 3.

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4197.75, 4198.25, 4198.75, and 4199.25 MHz (space-to-Earth); 5926.75 MHz and 6424.5 MHz (Earth-to-space)
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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. 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. Intelsat must operate Galaxy 15R at the 133.0° W.L. orbital location in compliance with all existing or future coordination agreements for this location. In the absence of a coordination agreement, such operations must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required coordination.
4. Intelsat must maintain the Galaxy 15R space station within an east/west longitudinal station-keeping tolerance of ± 0.05 degrees of the 133.0° W.L. orbital location.
5. The operations of Galaxy 15R 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 133.0° W.L. orbital location. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 133.0° W.L. involving approved communications with U.S.-licensed earth stations.
6. Intelsat's request for waiver of footnote NG52 of the United States Table of Allocations, 47 CFR § 2.106, to use the 10.95-11.2 GHz and 11.45-11.7 GHz bands to offer domestic services on an unprotected, non-interference basis in the United States is GRANTED, as conditioned. We find that waiver does not undermine the purpose of the rules because the waiver involves only earth stations that are receive-only in the 10.95-11.2 GHz and 11.45-11.7 GHz bands and thus are not capable of causing interference into fixed stations operating in these bands. Furthermore, because Intelsat has agreed to accept any level of interference from fixed stations into receive operations of its earth stations in these bands, fixed station operators will not be required to coordinate their station operations with Intelsat's earth stations' operations.² Under these circumstances, we determine that an additional coordination burden is not placed upon fixed station operators and their ability to expand service in the future would not be restricted in any manner.³ Grant here, as conditioned, is consistent with prior Commission precedent.⁴

² See Legal Narrative, IBFS File No SAT-LOA-20170524-00078 at 4-5.

³ *PanAmSat Licensee Corp. Application for Authority to Use the Extended Ku-Band Frequencies for Domestic Service*, Order and Authorization, 20 FCC Rcd 14642, 14646 (Sat. Div., Int'l Bur., 2005).

⁴ The Intelsat 9 space station, which is currently authorized to operate at 43.1° W.L., has this waiver as a condition of its current authorization. See IBFS File No. SAT-MOD-20120703-00110. On a number of other occasions, the Commission has authorized downlink of domestic service to customer receive-only earth stations in the 10.95-11.2 GHz and 11.45-11.7

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- a. Intelsat's space-to-Earth transmissions in the 10.95-11.2 GHz and 11.45-11.7 GHz bands that provide domestic service are on an unprotected, non-harmful interference basis relative to fixed stations. As such, Intelsat must not cause harmful interference to, or claim protection from, fixed stations to which frequencies in the 10.95-11.2 GHz and 11.45-11.7 GHz bands have either been already assigned, or to which frequencies in the 10.95-11.2 GHz and 11.45-11.7 GHz bands may be assigned at a later date. Intelsat must terminate operations in the 10.95-11.2 GHz and 11.45-11.7 GHz bands upon notification that its operations are causing interference to fixed stations operating in this band, and must immediately inform the Commission, in writing, of such an event.
 - b. Intelsat must inform its customers, in writing, including end-users receiving service from resellers accessing capacity on the Galaxy 15R space station, that domestic service in the 10.95-11.2 GHz and 11.45-11.7 GHz bands is being provided on an uncoordinated basis, and that the potential exists that future licensed fixed stations may cause harmful interference to these unprotected earth stations.
7. Operations in the 10.95-11.2 GHz and 11.45-11.7 GHz frequency 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. Although not a condition to this authorization, we also note that RAS frequently makes use of observations (passive) in bands not allocated to the RAS service. This practice is a result of scientifically valuable signals being subject to the Doppler Effect and shifted in frequency outside radio astronomy-allocated bands. For assistance with coordination or information about RAS sites, please contact the NSF Spectrum Management Unit: esm@nsf.gov.
 8. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 CFR § 2.106, US337, any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-13.8 GHz (Earth-to-space) frequency band is required to coordinate through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration (NASA) Tracking and Data Relay Satellite System, including manned space flight.
 9. In the 13.75-14.0 GHz (Earth-to-space) frequency band, receiving space stations in the FSS must not claim protection from radiolocation transmitting stations operating in accordance with footnote US356 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US356.
 10. Operations of any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-14.0 GHz (Earth-to-space) frequency band must comply with footnote US356 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and recommended minimum and maximum

GHz bands, subject to conditions. *PanAmSat Licensee Corp. Application for Authority to Use the Extended Ku-Band Frequencies for Domestic Service*, Order and Authorization, 20 FCC Rcd 14642 (Sat. Div., Int'l Bur., 2005); *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite service at the 83° W.L. Orbital Location*, Order And Authorization, 20 FCC Rcd 919, 921-922, para. 9 (Sat. Div., Int'l Bur., 2004); *EchoStar Satellite LLC Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite Service at the 109° W.L. Orbital Location*, Order and Authorization, 20 FCC Rcd 930 (Sat. Div., Int'l Bur., 2004); *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite Service at the 121° W.L. Orbital Location*, Order And Authorization, 20 FCC Rcd 942 (Sat. Div., Int'l Bur., 2004).

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equivalent isotropically radiated powers (e.i.r.p.). Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-14.0 GHz (Earth-to-space) frequency band must be consistent with No. 5.502 to the ITU Radio Regulations, which specifies a mandatory minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.

11. Operations of any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.77-13.78 GHz (Earth-to-space) frequency band must comply with footnote US357 to United States Table of Frequency Allocations, 47 CFR § 2.106, US357, which specifies that the maximum e.i.r.p. density of emissions not exceed 71 dBW in any 6 MHz band within the 13.77-13.78 GHz (Earth-to-space) frequency band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 15R space station in the 13.77-13.78 GHz (Earth-to-space) frequency band must comply with No. 5.503 of the ITU Radio Regulations, which specifies a required maximum e.i.r.p. density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.
12. Operations of Galaxy 15R in the 14.47-14.5 GHz (Earth-to-space) frequency band is subject to the terms of footnote US342 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US342, which urge applicants to take all practicable steps to protect the radio astronomy service from harmful interference. For assistance with coordination or information about RAS sites, please contact the NSF Spectrum Management Unit: esm@nsf.gov.
13. Intelsat's request for a waiver of Section 2.106 of the U.S. Table of Frequency Allocations, 47 CFR § 2.106, to permit operations in the 17.8-18.3 GHz band, is MOOT. Recent changes made to the U.S. Table of Frequency Allocations adopted in FCC 17-122 now permit communications in the 17.8-18.3 GHz frequency band with non-Federal GSO FSS systems on a secondary basis. Operation of Galaxy 15R in the 17.8-18.3 GHz band is on an unprotected, non-harmful interference basis, that is, Intelsat must not cause harmful interference to any authorized fixed users, nor can Intelsat claim protection from harmful interference caused by any authorized fixed users. Intelsat must terminate operations immediately upon notification of harmful interference.
14. The power flux-density (PFD) at the Earth's surface produced by the emissions from the Galaxy 15R space station in the 17.8-19.3 GHz and 19.7-20.2 GHz frequency bands (space-to-Earth), must not exceed the applicable power flux-density limits contained in sections 25.138(a)(6), 25.140(a)(3)(iii), and 25.208, 47 CFR §§ 25.138(a)(6), 25.140(a)(3)(iii), and 25.208, and in Article 21 of the ITU Radio Regulations.
15. Intelsat must coordinate its space-to-Earth operations in the 17.8-19.3 GHz and 19.7-20.2 GHz frequency bands with U.S. Federal systems in accordance with footnote US334 to the United States Table of Frequency Allocations, 47 CFR § 2.106, prior to being used. The use of space-to-Earth operations in the 17.8-19.3 GHz, and 19.7-20.2 GHz bands must be in accordance with any signed coordination agreement reached between Intelsat and U.S. Federal operators. Two weeks prior to the start of any operations in the 17.8-19.3 GHz, or 19.7-20.2 GHz bands, Intelsat must provide contact information for a 24/7 point of contact for the resolution of any harmful interference to Jimmy Nguyen, Email: Jimmy.Nguyen@us.af.mil.
16. Operations of the Galaxy 15R space station in the 17.8-18.3 GHz band must not cause harmful interference to, nor claim protection from, present and future Federal GSO and NGSO systems. Intelsat must terminate operations immediately upon notification of harmful interference.
17. Intelsat's request for a waiver of Footnote NG165 to Section 2.106 of the United States Table of Frequency Allocations, 47 CFR § 2.106, NG165, is MOOT. Recent changes made to the U.S. Table of

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Frequency Allocations adopted in FCC 17-122 now permit communications in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands with non-Federal GSO FSS systems on a secondary basis.

18. Operations of the Galaxy 15R space station in the 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) frequency bands must not cause harmful interference to, or claim interference protection from, primary NGSO FSS systems. Intelsat must terminate operations immediately upon notification of harmful interference.
19. No later than sixty days before the scheduled initial launch of each NGSO FSS satellite system licensed or granted market access in the United States to operate in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands, Intelsat must either: (1) notify the Commission in writing when an agreement has been reached with the NGSO satellite system operator, or (2) seek and obtain the Commission's approval of a modification of this license including detailed technical demonstrations of how Intelsat will protect the NGSO FSS satellite system. If neither condition is met, Intelsat must cease operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated.⁵ With respect to any NGSO FSS system licensed or granted market access in the United States that commences operations prior to the scheduled launch of Galaxy 15R, Intelsat must comply with either (1) or (2) above and must not commence operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated.⁶
20. Communications between U.S.-licensed earth stations and Galaxy 15R in the 27.5-28.35 GHz (Earth-to-space) frequency band are secondary with respect to Upper Microwave Flexible Use Service (UMFUS) operations, except for FSS operations associated with earth stations authorized pursuant to 47 CFR § 25.136, and will comply with any determinations set forth in the Spectrum Frontiers proceeding (GN Docket 14-177).
21. The 29.25-29.5 GHz band is designated for uplinks for FSS systems using geostationary satellites and for feeder uplinks for Mobile Satellite Systems using non-geostationary orbit satellites on a co-primary basis. Communications between U.S.-licensed earth stations and the Galaxy 15R space station in the 29.25-29.5

⁵ O3b Limited and SES Americom, Inc. (O3b/SES) filed an informal objection to the Galaxy 15R application, citing what they refer to as two fundamental defects: (1) the lack of a substantive showing that Galaxy 15R proposed operations in the 28.6-29.1 GHz and 18.8-19.3 GHz bands will not interfere with existing and future NGSO systems; and, (2) failure to include a demonstration that proposed operations of Galaxy 15R will be compatible with operations of other GSO FSS networks in certain Ka-band frequency segments. On December 27, 2017, Intelsat submitted a supplement that updated the Galaxy 15R application engineering statement with a two-degree spacing analysis pursuant to Section 25.140(a)(3)(v) of the Commission's rules, 47 CFR § 25.140(a)(3)(v). Additionally, in its January 12 Response, Intelsat stated that it would not oppose a decision to place the Ka-band frequencies identified in the Galaxy 15R Application on further public notice, should the Commission determine this is necessary. In its reply to Intelsat's Response, O3b/SES argue that because Intelsat neither included this analysis in the original Galaxy 15R filings nor sought a waiver of the rule to justify noncompliance, its application should be dismissed. We find that as to (1), the Commission's rules do not require, as part of its application, a GSO system to provide a particular showing to demonstrate that its system will not interfere with existing and future NGSO systems; however, as part of this grant, we impose specific conditions regarding Intelsat's protection of NGSO systems, which address the concerns raised by O3b/SES. As to (2), we find that Intelsat's updated engineering statement fulfills the requirements of Section 25.140(a)(3)(v), thus, this objection by O3b/SES is similarly denied.

⁶ This sentence clarifies the effect of the condition with respect to protection of the O3b system, which already operates in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands on a primary basis under a grant of U.S. market access, and with respect to any other NGSO system that becomes operational prior to the launch of Galaxy 15R. See Petition for Clarification of O3b Limited (filed June 11, 2017).

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GHz band must comply with Sections 25.258 and 25.278 of the Commission's rules. 47 CFR §§ 25.258 and 25.278.⁷

22. Prior to commencing operations with the Galaxy 15R space station, Intelsat must file with the Commission the information required by Section 25.172 of the Commission's rules, 47 CFR § 25.172.
23. Galaxy 15R must begin providing service at the 133.0° W.L. orbital location in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands before the satellite it is replacing, Galaxy 15 (Call Sign S2387), discontinues service at the 133.0° W.L. orbital location. Failure to meet this condition will render this authorization to operate in these frequency bands NULL and VOID.
24. The 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz, 13.75-14.0 GHz, 17.8-19.3 GHz, 19.7-20.2 GHz, 27.5-29.1 GHz, and 29.25-30.0 GHz frequencies are included on Galaxy 15R, but are not on the Galaxy 15 satellite it is replacing. Authorization to operate in these frequency bands is subject to the following requirements:
 - a. Intelsat must post a surety bond in satisfaction of 47 CFR §§ 25.165(a)(2) & (b) no later than June 11 2018, and thereafter maintain on file a surety bond requiring payment in the event of a default in an amount, at minimum, determined according to the formula set forth in 47 CFR § 25.165(a)(2); and
 - b. Intelsat must launch the space station, position it in its assigned orbital location, and operate it in accordance with the station authorization no later than May 10, 2023, 47 CFR § 25.164(a).

This authorization will be null and void automatically, without further Commission action if Intelsat fails to comply with any of these requirements. Failure to comply with the milestone requirement of 47 CFR § 25.164(a) will also result in forfeiture of Intelsat's surety bond. By May 25, 2023, Intelsat must either demonstrate compliance with its milestone requirement or notify the Commission in writing that the requirement was not met. 47 CFR § 25.164(f).

25. The license term for the space station is 15 years and will begin on the date that Intelsat certifies to the Commission that Galaxy 15R has been successfully placed into orbit and its operations fully conform to the terms and conditions of this authorization. Intelsat is directed to file its certification of commencement of operation with the Commission within five business days of Galaxy 15R being placed into operation at the 133.0° W.L. orbital location.

⁷ Iridium Satellite LLC (Iridium) filed a petition to deny the Galaxy 15R application to the extent it seeks authority to operate the Galaxy 15R in the 29.25-29.3 GHz band, stating that Intelsat's application does not contain sufficient information about Intelsat's planned operations in the band, even though that information is required by the Commission's rules and necessary for Iridium to determine whether Intelsat's proposal would be consistent with its obligations as a licensee. In the alternative, Iridium requests that the Commission explicitly condition any authority to operate in the 29.25-29.3 GHz band on Intelsat's successful coordination with Iridium. Petition to Deny of Iridium Satellite LLC (filed Dec. 22, 2017). In its application, Intelsat notes that the 29.25-29.3 GHz band is allocated to MSS feeder links and FSS on a co-primary basis, and that earth station uplink operation in this band will require coordination with the incumbent MSS feeder link operator. Engineering at 1, n.2. Furthermore, Intelsat replied to Iridium's petition, pointing out that, in addition to its reference to the coordination requirement in its application, Section 25.278 of the Commission's rules, 47 CFR § 25.278, already requires that geostationary fixed-satellite service systems in the frequency bands that are licensed to non-geostationary satellite systems for feeder link operations shall coordinate their operations with the licensees of such non-geostationary satellite systems, and that its Galaxy 15R Application provides all the information required by FCC rules. Response of Intelsat License LLC (filed Jan. 12, 2018) (Intelsat Response). Iridium replied that Intelsat was vague about the description of its system and needed to provide more information. Reply of Iridium Satellite LLC (filed Jan. 22, 2018). We agree with Intelsat that our rules already require coordination with the incumbent MSS feeder link operator, which in this case is Iridium, and further that no additional information is required other than that submitted for coordination. Thus, we deny Iridium's petition to deny the Galaxy 15R application.

ATTACHMENT TO GRANT

Intelsat License LLC

IBFS File Nos. SAT-LOA-20170524-00078, SAT-AMD-20170613-00086

****Re-issued June 26, 2018****

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:	May 10, 2018
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Term Dates	From: see conditions	To: see conditions
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Approved:



Stephen J. Duall
Chief, Satellite Policy Branch

9-16. Name of Contact Representative

Name:	Jennifer D. Hindin	Phone Number:	202-719-4975
Company:	Wiley Rein LLP	Fax Number:	202-719-7049
Street:	1776 K Street, NW	E-Mail:	jhindin@wileyrein.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	22102 -5972
Attention:	Jennifer D. Hindin	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.

a.

- (N/A) a1. Earth Station
 a2. Space Station

b.

- b1. Application for License of New Station
(N/A) b2. Application for Registration of New Domestic Receive-Only Station
(N/A) b3. Amendment to a Pending Application
(N/A) b4. Modification of License or Registration
(N/A) b5. Assignment of License or Registration
(N/A) b6. Transfer of Control of License or Registration
(N/A) b7. Notification of Minor Modification
(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
 b10. Replacement Satellite Application - no new frequency bands
 b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)
 b12. Petition for Declaratory Ruling to be Added to the Permitted List
(N/A) b13. Other (Please specify)

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):

17c. Fee Classification BNY – Space Station (Geostationary)

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

(a) Call sign of station:
Not Applicable

19. If this filing is an amendment to a pending application enter:

(a) Date pending application was filed:

Not Applicable

(b) File number of pending application:

Not Applicable

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.
Not Applicable

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.

(N/A) a. Fixed Earth Station
(N/A) b. Temporary-Fixed Earth Station
(N/A) c. 12/14 GHz VSAT Network
(N/A) d. Mobile Earth Station
 e. Geostationary Space Station.
 f. Non-Geostationary Space Station
 g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Not Applicable

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.) Not Applicable

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?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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

<p>35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<p>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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<p>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.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>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</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>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.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

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 25.114 of the rules of the Federal Communications Commission, hereby applies to launch and operate a C-band replacement satellite with new Ku-band frequencies, to be known as Galaxy 15R, at the 133.0 W.L. orbital location. Galaxy 15R is scheduled for launch in 2Q 2022 and, after traffic

Legal

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

Engineering

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.

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25 – 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

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 25.114 of the rules of the Federal Communications Commission, hereby applies to launch and operate a C-band replacement satellite with new Ku-band frequencies, to be known as Galaxy 15R, at the 133.0 W.L. orbital location. Galaxy 15R is scheduled for launch in 2Q 2022 and, after traffic transition, will replace the Galaxy 15 satellite (call sign S2387), which is currently operating at 133.0 W.L. Galaxy 15R will operate on a non-common carrier basis.

S3015 SAT-AMD-20170613-00086 IB2017001543
Intelsat License LLC
Galaxy 15R



*with conditions

File # SAT-AMD-20170613-00086

** see also
SAT-LOA-20170524-00078

Call Sign S3015 Grant Date 05/10/18
(or other identifier)

From see conditions Term Dates see conditions
To: conditions

Approved by OMB
3060-0678

Approved: Stephen J Duall

Stephen D. Duall
Chief, Satellite Policy Branch

Date & Time Filed: Jun 13 2017 2:00:00:400PM
File Number: SAT-AMD-20170613-00086

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:

Amendment to Application for Authority to Launch and Operate Galaxy 15R, A Replacement Satellite with New Frequencies, at 133.0 W.L.

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-LOA-20170524-00078, SAT-AMD-20170613-00086

Re-issued June 26, 2018

IBFS File No(s):	SAT-LOA-20170524-00078, SAT-AMD-20170613-00086	<p align="center">GRANTED – With Conditions</p>  <p align="center">International Bureau Satellite Division</p>
Licensee/Grantee:	Intelsat License LLC	
Call Sign:	S3015	
Satellite Name:	Galaxy 15R	
Orbital Location: (required station-keeping tolerance)	133.0° W.L. (+/- 0.05 degrees east/west)	
Administration:	United States of America	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Authority to construct, deploy, and operate a C-, Ku-, and Ka-band geostationary orbit (GSO) space station ¹ Denial of Petition to Defer or Deny filed by Eutelsat S.A. (see footnote 1) Denial of Petition to Deny filed by Iridium Satellite LLC (see footnote 6)	
Previous Grant(s):	N/A	
Service Area(s):	Schedule S Tech Report, SAT-LOA-20170524-00078, at 5-9. Schedule S Tech Report, SAT-AMD-20170613-00086, at 5-10.	
Frequencies:	3700-4200 MHz (space-to-Earth) 5925-6425 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-11.7 GHz (space-to-Earth) 11.7-12.2 GHz (space-to-Earth) 13.75-14.5 GHz (Earth-to-space) 17.8-19.3 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 27.5-29.1 GHz (Earth-to-space) 29.25-30.0 GHz (Earth-to-space) Tracking, telemetry and command center frequencies:	

¹ Eutelsat S.A. (Eutelsat) filed a petition to defer consideration of Galaxy 15R’s Ku- and Ka-band frequencies to assess the impact of Eutelsat’s impending requests for U.S. market access and, to the extent possible, coordinate Intelsat’s proposed operations with the earlier French filings; or in the alternative, subject to Eutelsat’s request for U.S. market access in available Ku-band and Ka-band FSS frequencies at 133° W.L., deny mutually exclusive portions of the Intelsat Application. Petition to Defer or Deny, In Part, Of Eutelsat S.A. (filed Dec. 26, 2017) (Eutelsat Petition). Intelsat responded to Eutelsat’s petition, stating that ITU priority is not a precondition to grant and that it “fully appreciates and accepts the inherent risks in seeking authorization to operate at 133.0° W.L. considering France’s earlier ITU filings in Ku- and Ka-band frequencies at that location,” and that it “is prepared to work in good faith with Eutelsat to coordinate the two companies’ satellite networks.” Intelsat Response (filed Jan. 12, 2018) at 3-5. In the *First Space Station Licensing Reform Order, Second Order on Reconsideration*, the Commission stated that “it will license satellites at orbital locations at which another Administration has ITU priority, and furthermore, if a later-filed market access request—with or without ITU priority—is mutually exclusive with an earlier-filed, granted application, it may be dismissed absent a coordination agreement between the applicants, however, it will issue the earlier-filed authorization subject to the outcome of the international coordination process, and emphasized that the Commission is not responsible for the success or failure of the required international coordination.” *Amendment of the Commission’s Space Station Licensing Rules & Policies, Second Order on Reconsideration*, 31 FCC Rcd. 9398, 9410, para. 32 (2016), citing to the *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10870, para. 295 (2003). Applying this policy to the facts at hand, we find that neither rule nor precedent support Eutelsat’s petition to defer consideration of or deny portions of the Galaxy 15R application. If Intelsat elects to accept this authorization, it does so subject to conditions 1 and 3.

ATTACHMENT TO GRANT

Intelsat License LLC

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	4197.75, 4198.25, 4198.75, and 4199.25 MHz (space-to-Earth); 5926.75 MHz and 6424.5 MHz (Earth-to-space)
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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. 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. Intelsat must operate Galaxy 15R at the 133.0° W.L. orbital location in compliance with all existing or future coordination agreements for this location. In the absence of a coordination agreement, such operations must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required coordination.
4. Intelsat must maintain the Galaxy 15R space station within an east/west longitudinal station-keeping tolerance of ± 0.05 degrees of the 133.0° W.L. orbital location.
5. The operations of Galaxy 15R 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 133.0° W.L. orbital location. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 133.0° W.L. involving approved communications with U.S.-licensed earth stations.
6. Intelsat's request for waiver of footnote NG52 of the United States Table of Allocations, 47 CFR § 2.106, to use the 10.95-11.2 GHz and 11.45-11.7 GHz bands to offer domestic services on an unprotected, non-interference basis in the United States is GRANTED, as conditioned. We find that waiver does not undermine the purpose of the rules because the waiver involves only earth stations that are receive-only in the 10.95-11.2 GHz and 11.45-11.7 GHz bands and thus are not capable of causing interference into fixed stations operating in these bands. Furthermore, because Intelsat has agreed to accept any level of interference from fixed stations into receive operations of its earth stations in these bands, fixed station operators will not be required to coordinate their station operations with Intelsat's earth stations' operations.² Under these circumstances, we determine that an additional coordination burden is not placed upon fixed station operators and their ability to expand service in the future would not be restricted in any manner.³ Grant here, as conditioned, is consistent with prior Commission precedent.⁴

² See Legal Narrative, IBFS File No SAT-LOA-20170524-00078 at 4-5.

³ *PanAmSat Licensee Corp. Application for Authority to Use the Extended Ku-Band Frequencies for Domestic Service*, Order and Authorization, 20 FCC Rcd 14642, 14646 (Sat. Div., Int'l Bur., 2005).

⁴ The Intelsat 9 space station, which is currently authorized to operate at 43.1° W.L., has this waiver as a condition of its current authorization. *See* IBFS File No. SAT-MOD-20120703-00110. On a number of other occasions, the Commission has authorized downlink of domestic service to customer receive-only earth stations in the 10.95-11.2 GHz and 11.45-11.7

ATTACHMENT TO GRANT

Intelsat License LLC

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- a. Intelsat's space-to-Earth transmissions in the 10.95-11.2 GHz and 11.45-11.7 GHz bands that provide domestic service are on an unprotected, non-harmful interference basis relative to fixed stations. As such, Intelsat must not cause harmful interference to, or claim protection from, fixed stations to which frequencies in the 10.95-11.2 GHz and 11.45-11.7 GHz bands have either been already assigned, or to which frequencies in the 10.95-11.2 GHz and 11.45-11.7 GHz bands may be assigned at a later date. Intelsat must terminate operations in the 10.95-11.2 GHz and 11.45-11.7 GHz bands upon notification that its operations are causing interference to fixed stations operating in this band, and must immediately inform the Commission, in writing, of such an event.
 - b. Intelsat must inform its customers, in writing, including end-users receiving service from resellers accessing capacity on the Galaxy 15R space station, that domestic service in the 10.95-11.2 GHz and 11.45-11.7 GHz bands is being provided on an uncoordinated basis, and that the potential exists that future licensed fixed stations may cause harmful interference to these unprotected earth stations.
7. Operations in the 10.95-11.2 GHz and 11.45-11.7 GHz frequency 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. Although not a condition to this authorization, we also note that RAS frequently makes use of observations (passive) in bands not allocated to the RAS service. This practice is a result of scientifically valuable signals being subject to the Doppler Effect and shifted in frequency outside radio astronomy-allocated bands. For assistance with coordination or information about RAS sites, please contact the NSF Spectrum Management Unit: esm@nsf.gov.
 8. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 CFR § 2.106, US337, any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-13.8 GHz (Earth-to-space) frequency band is required to coordinate through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration (NASA) Tracking and Data Relay Satellite System, including manned space flight.
 9. In the 13.75-14.0 GHz (Earth-to-space) frequency band, receiving space stations in the FSS must not claim protection from radiolocation transmitting stations operating in accordance with footnote US356 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US356.
 10. Operations of any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-14.0 GHz (Earth-to-space) frequency band must comply with footnote US356 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and recommended minimum and maximum

GHz bands, subject to conditions. *PanAmSat Licensee Corp. Application for Authority to Use the Extended Ku-Band Frequencies for Domestic Service*, Order and Authorization, 20 FCC Rcd 14642 (Sat. Div., Int'l Bur., 2005); *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite service at the 83° W.L. Orbital Location*, Order And Authorization, 20 FCC Rcd 919, 921-922, para. 9 (Sat. Div., Int'l Bur., 2004); *EchoStar Satellite LLC Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite Service at the 109° W.L. Orbital Location*, Order and Authorization, 20 FCC Rcd 930 (Sat. Div., Int'l Bur., 2004); *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-Band Frequencies in the Fixed-Satellite Service at the 121° W.L. Orbital Location*, Order And Authorization, 20 FCC Rcd 942 (Sat. Div., Int'l Bur., 2004).

ATTACHMENT TO GRANT

Intelsat License LLC

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equivalent isotropically radiated powers (e.i.r.p.). Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 15R space station in the 13.75-14.0 GHz (Earth-to-space) frequency band must be consistent with No. 5.502 to the ITU Radio Regulations, which specifies a mandatory minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.

11. Operations of any earth station in the United States and its possessions communicating with the Galaxy 15R space station in the 13.77-13.78 GHz (Earth-to-space) frequency band must comply with footnote US357 to United States Table of Frequency Allocations, 47 CFR § 2.106, US357, which specifies that the maximum e.i.r.p. density of emissions not exceed 71 dBW in any 6 MHz band within the 13.77-13.78 GHz (Earth-to-space) frequency band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 15R space station in the 13.77-13.78 GHz (Earth-to-space) frequency band must comply with No. 5.503 of the ITU Radio Regulations, which specifies a required maximum e.i.r.p. density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.
12. Operations of Galaxy 15R in the 14.47-14.5 GHz (Earth-to-space) frequency band is subject to the terms of footnote US342 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US342, which urge applicants to take all practicable steps to protect the radio astronomy service from harmful interference. For assistance with coordination or information about RAS sites, please contact the NSF Spectrum Management Unit: esm@nsf.gov.
13. Intelsat's request for a waiver of Section 2.106 of the U.S. Table of Frequency Allocations, 47 CFR § 2.106, to permit operations in the 17.8-18.3 GHz band, is MOOT. Recent changes made to the U.S. Table of Frequency Allocations adopted in FCC 17-122 now permit communications in the 17.8-18.3 GHz frequency band with non-Federal GSO FSS systems on a secondary basis. Operation of Galaxy 15R in the 17.8-18.3 GHz band is on an unprotected, non-harmful interference basis, that is, Intelsat must not cause harmful interference to any authorized fixed users, nor can Intelsat claim protection from harmful interference caused by any authorized fixed users. Intelsat must terminate operations immediately upon notification of harmful interference.
14. The power flux-density (PFD) at the Earth's surface produced by the emissions from the Galaxy 15R space station in the 17.8-19.3 GHz and 19.7-20.2 GHz frequency bands (space-to-Earth), must not exceed the applicable power flux-density limits contained in sections 25.138(a)(6), 25.140(a)(3)(iii), and 25.208, 47 CFR §§ 25.138(a)(6), 25.140(a)(3)(iii), and 25.208, and in Article 21 of the ITU Radio Regulations.
15. Intelsat must coordinate its space-to-Earth operations in the 17.8-19.3 GHz and 19.7-20.2 GHz frequency bands with U.S. Federal systems in accordance with footnote US334 to the United States Table of Frequency Allocations, 47 CFR § 2.106, prior to being used. The use of space-to-Earth operations in the 17.8-19.3 GHz, and 19.7-20.2 GHz bands must be in accordance with any signed coordination agreement reached between Intelsat and U.S. Federal operators. Two weeks prior to the start of any operations in the 17.8-19.3 GHz, or 19.7-20.2 GHz bands, Intelsat must provide contact information for a 24/7 point of contact for the resolution of any harmful interference to Jimmy Nguyen, Email: Jimmy.Nguyen@us.af.mil.
16. Operations of the Galaxy 15R space station in the 17.8-18.3 GHz band must not cause harmful interference to, nor claim protection from, present and future Federal GSO and NGSO systems. Intelsat must terminate operations immediately upon notification of harmful interference.
17. Intelsat's request for a waiver of Footnote NG165 to Section 2.106 of the United States Table of Frequency Allocations, 47 CFR § 2.106, NG165, is MOOT. Recent changes made to the U.S. Table of

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Frequency Allocations adopted in FCC 17-122 now permit communications in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands with non-Federal GSO FSS systems on a secondary basis.

18. Operations of the Galaxy 15R space station in the 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) frequency bands must not cause harmful interference to, or claim interference protection from, primary NGSO FSS systems. Intelsat must terminate operations immediately upon notification of harmful interference.
19. No later than sixty days before the scheduled initial launch of each NGSO FSS satellite system licensed or granted market access in the United States to operate in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands, Intelsat must either: (1) notify the Commission in writing when an agreement has been reached with the NGSO satellite system operator, or (2) seek and obtain the Commission's approval of a modification of this license including detailed technical demonstrations of how Intelsat will protect the NGSO FSS satellite system. If neither condition is met, Intelsat must cease operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated.⁵ With respect to any NGSO FSS system licensed or granted market access in the United States that commences operations prior to the scheduled launch of Galaxy 15R, Intelsat must comply with either (1) or (2) above and must not commence operations in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands pursuant to this license until such time as compliance is demonstrated.⁶
20. Communications between U.S.-licensed earth stations and Galaxy 15R in the 27.5-28.35 GHz (Earth-to-space) frequency band are secondary with respect to Upper Microwave Flexible Use Service (UMFUS) operations, except for FSS operations associated with earth stations authorized pursuant to 47 CFR § 25.136, and will comply with any determinations set forth in the Spectrum Frontiers proceeding (GN Docket 14-177).
21. The 29.25-29.5 GHz band is designated for uplinks for FSS systems using geostationary satellites and for feeder uplinks for Mobile Satellite Systems using non-geostationary orbit satellites on a co-primary basis. Communications between U.S.-licensed earth stations and the Galaxy 15R space station in the 29.25-29.5

⁵ O3b Limited and SES Americom, Inc. (O3b/SES) filed an informal objection to the Galaxy 15R application, citing what they refer to as two fundamental defects: (1) the lack of a substantive showing that Galaxy 15R proposed operations in the 28.6-29.1 GHz and 18.8-19.3 GHz bands will not interfere with existing and future NGSO systems; and, (2) failure to include a demonstration that proposed operations of Galaxy 15R will be compatible with operations of other GSO FSS networks in certain Ka-band frequency segments. On December 27, 2017, Intelsat submitted a supplement that updated the Galaxy 15R application engineering statement with a two-degree spacing analysis pursuant to Section 25.140(a)(3)(v) of the Commission's rules, 47 CFR § 25.140(a)(3)(v). Additionally, in its January 12 Response, Intelsat stated that it would not oppose a decision to place the Ka-band frequencies identified in the Galaxy 15R Application on further public notice, should the Commission determine this is necessary. In its reply to Intelsat's Response, O3b/SES argue that because Intelsat neither included this analysis in the original Galaxy 15R filings nor sought a waiver of the rule to justify noncompliance, its application should be dismissed. We find that as to (1), the Commission's rules do not require, as part of its application, a GSO system to provide a particular showing to demonstrate that its system will not interfere with existing and future NGSO systems; however, as part of this grant, we impose specific conditions regarding Intelsat's protection of NGSO systems, which address the concerns raised by O3b/SES. As to (2), we find that Intelsat's updated engineering statement fulfills the requirements of Section 25.140(a)(3)(v), thus, this objection by O3b/SES is similarly denied.

⁶ This sentence clarifies the effect of the condition with respect to protection of the O3b system, which already operates in the 18.8-19.3 GHz and 28.6-29.1 GHz frequency bands on a primary basis under a grant of U.S. market access, and with respect to any other NGSO system that becomes operational prior to the launch of Galaxy 15R. See Petition for Clarification of O3b Limited (filed June 11, 2017).

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GHz band must comply with Sections 25.258 and 25.278 of the Commission's rules. 47 CFR §§ 25.258 and 25.278.⁷

22. Prior to commencing operations with the Galaxy 15R space station, Intelsat must file with the Commission the information required by Section 25.172 of the Commission's rules, 47 CFR § 25.172.
23. Galaxy 15R must begin providing service at the 133.0° W.L. orbital location in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands before the satellite it is replacing, Galaxy 15 (Call Sign S2387), discontinues service at the 133.0° W.L. orbital location. Failure to meet this condition will render this authorization to operate in these frequency bands NULL and VOID.
24. The 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz, 13.75-14.0 GHz, 17.8-19.3 GHz, 19.7-20.2 GHz, 27.5-29.1 GHz, and 29.25-30.0 GHz frequencies are included on Galaxy 15R, but are not on the Galaxy 15 satellite it is replacing. Authorization to operate in these frequency bands is subject to the following requirements:
 - a. Intelsat must post a surety bond in satisfaction of 47 CFR §§ 25.165(a)(2) & (b) no later than June 11 2018, and thereafter maintain on file a surety bond requiring payment in the event of a default in an amount, at minimum, determined according to the formula set forth in 47 CFR § 25.165(a)(2); and
 - b. Intelsat must launch the space station, position it in its assigned orbital location, and operate it in accordance with the station authorization no later than May 10, 2023, 47 CFR § 25.164(a).

This authorization will be null and void automatically, without further Commission action if Intelsat fails to comply with any of these requirements. Failure to comply with the milestone requirement of 47 CFR § 25.164(a) will also result in forfeiture of Intelsat's surety bond. By May 25, 2023, Intelsat must either demonstrate compliance with its milestone requirement or notify the Commission in writing that the requirement was not met. 47 CFR § 25.164(f).

25. The license term for the space station is 15 years and will begin on the date that Intelsat certifies to the Commission that Galaxy 15R has been successfully placed into orbit and its operations fully conform to the terms and conditions of this authorization. Intelsat is directed to file its certification of commencement of operation with the Commission within five business days of Galaxy 15R being placed into operation at the 133.0° W.L. orbital location.

⁷ Iridium Satellite LLC (Iridium) filed a petition to deny the Galaxy 15R application to the extent it seeks authority to operate the Galaxy 15R in the 29.25-29.3 GHz band, stating that Intelsat's application does not contain sufficient information about Intelsat's planned operations in the band, even though that information is required by the Commission's rules and necessary for Iridium to determine whether Intelsat's proposal would be consistent with its obligations as a licensee. In the alternative, Iridium requests that the Commission explicitly condition any authority to operate in the 29.25-29.3 GHz band on Intelsat's successful coordination with Iridium. Petition to Deny of Iridium Satellite LLC (filed Dec. 22, 2017). In its application, Intelsat notes that the 29.25-29.3 GHz band is allocated to MSS feeder links and FSS on a co-primary basis, and that earth station uplink operation in this band will require coordination with the incumbent MSS feeder link operator. Engineering at 1, n.2. Furthermore, Intelsat replied to Iridium's petition, pointing out that, in addition to its reference to the coordination requirement in its application, Section 25.278 of the Commission's rules, 47 CFR § 25.278, already requires that geostationary fixed-satellite service systems in the frequency bands that are licensed to non-geostationary satellite systems for feeder link operations shall coordinate their operations with the licensees of such non-geostationary satellite systems, and that its Galaxy 15R Application provides all the information required by FCC rules. Response of Intelsat License LLC (filed Jan. 12, 2018) (Intelsat Response). Iridium replied that Intelsat was vague about the description of its system and needed to provide more information. Reply of Iridium Satellite LLC (filed Jan. 22, 2018). We agree with Intelsat that our rules already require coordination with the incumbent MSS feeder link operator, which in this case is Iridium, and further that no additional information is required other than that submitted for coordination. Thus, we deny Iridium's petition to deny the Galaxy 15R application.

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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:	May 10, 2018	
Term Dates	From: see conditions	To: see conditions

Approved:

Stephen J. Duall
Chief, Satellite Policy Branch

9-16. Name of Contact Representative

Name:	Jennifer D. Hindin	Phone Number:	202-719-4975
Company:	Wiley Rein LLP	Fax Number:	202-719-7049
Street:	1776 K Street, NW	E-Mail:	jhindin@wileyrein.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20006-
Attention:	Jennifer D. Hindin	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 CWY – Space Station Amendment (Geostationary)

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

(a) Call sign of station:
S3015

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:

05/24/2017

(b) File number:

SATLOA2017052400078

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?	<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?
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

Yes No

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 25.116 of the rules of the Federal Communications Commission, hereby amends its pending application to launch and operate a C-band replacement satellite with new Ku-band frequencies, to be known as Galaxy 15R, at the 133.0 W.L. orbital location, to add Ka-band frequencies. Specifically, Intelsat is

Legal

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

Engineering

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).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PER, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

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 25.116 of the rules of the Federal Communications Commission, hereby amends its pending application to launch and operate a C-band replacement satellite with new Ku-band frequencies, to be known as Galaxy 15R, at the 133.0 W.L. orbital location, to add Ka-band frequencies. Specifically, Intelsat is amending the Application to add Ka-band frequencies 17800-19300 MHz, 19700-20200 MHz, 27500-29100 MHz, and 29250-30000 MHz.