# Before the Federal Communications Commission Washington, DC 20554

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In the Matter of	
Intelsat License LLC	File No. SAT-RPL-
Application for Authority to Launch and Operate Intelsat 33e, a Replacement Satellite With New Frequencies, at 60.0° E.L. (300.0° W.L.)	

# APPLICATION FOR AUTHORITY TO LAUNCH AND OPERATE INTELSAT 33e, A REPLACEMENT SATELLITE WITH NEW FREQUENCIES, AT 60.0° E.L.

Intelsat License LLC ("Intelsat"), pursuant to Section 25.114 of the Federal Communications Commission's ("FCC" or "Commission") rules, hereby applies to launch and operate a C/Ku/Ka-band replacement satellite with new frequencies, to be known as Intelsat 33e, at the 60.0° E.L. orbital location. Intelsat 33e, one of Intelsat's EPIC<sup>NG</sup> platform satellites, is scheduled for launch in the third quarter of 2016 and, after traffic transition, will replace the Intelsat 904 satellite (call sign S2408), which is currently operating at 60.0° E.L. Intelsat 33e will operate on a non-common carrier basis.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.114.

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<sup>&</sup>lt;sup>2</sup> See Intelsat LLC, Applications to Modify Authorizations, File No. SAT-MOD-20011221-00140 (stamp grant issued Mar. 22, 2002) ("Intelsat 904 Authorization"). During traffic transition, Intelsat 904 and Intelsat 33e will occupy the same station-keeping box. Following traffic transition, and subject to receipt of FCC approval, Intelsat 904 will be redeployed to a different location. Intelsat will file an application to relocate the Intelsat 904 satellite as soon as possible after determining a redeployment plan that best meets customer needs.

<sup>&</sup>lt;sup>3</sup> Section 310(b) is not applicable to this license because Intelsat 33e, like all other satellites licensed to Intelsat, will operate on a non-common carrier basis. *See Applications of The News Corp. Ltd. and The DIRECTV Group, Inc. (Transferors) and Constellation, LLC, Carlyle* 

As demonstrated below, Intelsat is legally and technically qualified to launch and operate its proposed replacement satellite with new frequencies. Moreover, grant of this application will serve the public interest by ensuring continuity of service to customers in the C- and Ku-bands at the 60.0° E.L. orbital location and by adding new C-, Ku-, and Ka-band capacity at the location. In accordance with the Commission's requirements.<sup>4</sup> this application has been filed electronically as an attachment to FCC Form 312 and Schedule S.

#### I. INTELSAT IS QUALIFIED TO HOLD THE AUTHORIZATION REQUESTED **HEREIN**

#### A. Legal Qualifications

Intelsat is legally qualified to hold the space station authorization requested in this application. The information provided in the attached Form 312 demonstrates Intelsat's compliance with the Commission's basic legal qualifications. In addition, Intelsat already holds multiple Commission satellite licenses, and its "legal qualifications are a matter of record" before the Commission.<sup>5</sup>

#### **B.** Technical Qualifications

In the attached Form 312, Schedule S, and Engineering Statement, Intelsat demonstrates that it is technically qualified to hold the authorization requested herein. Specifically, Intelsat

PanAmSat I, LLC, Carlyle PanAmSat II, LLC, PEP PAS, LLC and PEOP PAS, LLC (Transferees) for Authority to Transfer Control of PanAmSat Licensee Corp., Public Notice, 19 FCC Rcd 15,424, 15,425 (n.5) (Int'l Bur. 2004).

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. § 25.114(c).

<sup>&</sup>lt;sup>5</sup> See Constellation, LLC, Carlyle PanAmSat I, LLC, Carlyle PanAmSat II, LLC, PEP PAS, LLC, and PEOP PAS, LLC, Transferors and Intelsat Holdings, Ltd., Transferee, Consolidated Application for Authority to Transfer Control of PanAmSat Licensee Corp. and PanAmSat H-2 Licensee Corp., Memorandum Opinion and Order, FCC 06-85, ¶ 23 (rel. June 19, 2006) ("The Commission previously has determined that PanAmSat and Intelsat are qualified to hold licenses.").

provides the information currently required by Section 25.114 of the Commission's rules. In addition, the Engineering Statement provides information on Intelsat's compliance with the Commission's orbital debris mitigation rules.<sup>6</sup>

## C. Waiver Requests

Intelsat requests waiver of the following technical rules: (1) Section 25.210(f), which requires full frequency reuse for Intelsat 33e's use of the 12500 – 12600 MHz and 13750 – 13850 MHz bands;<sup>7</sup> and (2) Section 25.210(i)(1), which requires antenna-cross-polarization isolation such that the ratio of the on-axis co-polar gain to the on-axis cross-polar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area.<sup>8</sup>

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown." Good cause exists if "special circumstances warrant a deviation from the general rule and such deviation will serve the public interest" better than adherence to the general rule. In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy." As shown below, there is good cause for each of the requested technical waivers.

<sup>&</sup>lt;sup>6</sup> Mitigation of Orbital Debris, Second Report and Order, 19 FCC Rcd 11,567 (2004).

<sup>&</sup>lt;sup>7</sup> 47 C.F.R. § 25.210(f).

<sup>&</sup>lt;sup>8</sup> 47 C.F.R. § 25.210(i)(1).

<sup>&</sup>lt;sup>9</sup> 47 C.F.R. § 1.3; WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

<sup>&</sup>lt;sup>10</sup> Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

<sup>&</sup>lt;sup>11</sup> WAIT Radio, 418 F.2d at 1159.

# i. Request for Waiver of Section 25.210(f)

To the extent necessary, Intelsat requests a waiver of Section 25.210(f) of the Commission's rules, which requires full frequency reuse in the 10700 – 12700 MHz and 13750 – 14500 MHz bands. Specifically, Intelsat 33e employs full frequency reuse through the use of orthogonal polarization within the same beam and/or through the use of spatially isolated beams with the exception of the 12500 – 12600 MHz and 13750 – 13850 MHz bands. As such, Intelsat 33e is compliant with Section 25.210(f) of the Commission's rules in all bands except for 12500 – 12600 MHz and 13750 – 13850 MHz. In total, the Intelsat 33e satellite utilizes 7650 MHz of uplink and downlink spectrum of which only 2.6% is not fully reused.

In this case, there is good cause for granting the requested waiver. The full frequency reuse requirements of Section 25.210(f) were designed to ensure that satellites maximize the use of their transponder capacity to benefit the public. The 12500 – 12600 MHz and 13750 – 13850 MHz frequency bands were added to the satellite to address a specific customer requirement. Full frequency reuse in these bands was not possible, however, because the launch mass constraint on the satellite would have been exceeded had Intelsat included the necessary hardware that would have permitted full frequency reuse in the 12500 – 12600 MHz and 13750 – 13850 MHz bands. This mass constraint resulted in Intelsat using 12500 – 12600 MHz and 13750 – 13850 MHz in only one polarization.

Intelsat's waiver request applies to a *de minimis* portion of Intelsat 33e's bandwidth – only 2.6% – that is not compliant with Section 25.210(f), and will allow Intelsat to meet additional customer demand that would otherwise likely go unserved. Accordingly, there is good cause for waiver of Section 25.210(f) in this case.

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<sup>&</sup>lt;sup>12</sup> Licensing of Space Stations in the Domestic Fixed Satellite Service and Related Revisions to Part 25 of the Rules and Regulations, Report and Order, 54RR2d 577, ¶ 69 (1983).

#### ii. Request for Waiver of Section 25.210(i)(1)

To the extent necessary, Intelsat requests a waiver of Section 25.210(i)(1) of the Commission's rules, which requires that satellites be designed to provide a cross-polarization isolation such that the ratio of the on-axis co-polar gain to the on-axis cross-polar gain of the antenna in the assigned frequency band will be at least 30 dB within its primary coverage area.

Good cause exists to waive the cross-polarization isolation requirement of Section 25.210(i)(1) because a failure to meet the requirement does not adversely affect any other operator. The FCC previously has acknowledged that non-compliance results only in self-interference and granted waivers in similar situations. Moreover, the Commission has recently proposed to eliminate this requirement entirely. In this case, the level of isolation of the non-compliant Intelsat 33e beams is equal to or greater than 22 dB. This level was the best that the satellite manufacturer could achieve without causing excessive degradation in the performance of the beam and/or in the size of the beams' coverage area. Intelsat has taken this level of

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 $<sup>^{13}</sup>$  See AMC-15 Ku-Band Circular Polarization Amendment, File No. SAT-AMD-20030422-00069, Attachment Terms and Conditions of Authorization ( $\P$  5) (Aug. 18, 2004).

<sup>&</sup>lt;sup>14</sup> See, e.g., Applications of INTELSAT LLC; For Authority to Operator, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, 15 FCC Rcd 15,460, 15,503 (¶ 109) (2000); New Skies Satellites N.V.; Petition for Declaratory Ruling, Order, 17 FCC Rcd 10,369, 10,376-377 (¶ 19) (2002); Star One S.A. Petition for Declaratory Ruling to Add the Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, Order, 19 FCC Rcd 16,334, 16,339 (¶ 12) (2004).

<sup>&</sup>lt;sup>15</sup> Comprehensive Review of Licensing and Operating Rules for Satellite Services, Further Notice of Proposed Rulemaking, IB Docket No. 12-267, FCC 14-142 at ¶ 181 (rel. Sept. 30, 2014).

isolation into account in its planned operations. Accordingly, Commission precedent supports a grant of Intelsat's requested waiver of Section 25.210(i)(1) for Intelsat 33e. 16

## **D.** Operational Frequencies

The following chart shows the frequencies that will be used by the Intelsat 33e satellite at 60.0° E.L. and the frequencies that are currently used by the Intelsat 904 satellite at 60.0° E.L.

Frequency Band (MHz)	Intelsat 33e (60° E.L.)	Intelsat 904 (60° E.L.)
3625 – 4200	√	(00 <b>L.L.</b> ) √
5850 - 6425	V	$\sqrt{}$
6425 – 6725	V	
10950 - 11200		
$11200 - 11450^*$		
11450 – 11700	√	V
11700 – 12200	V	
12500 - 12600		
13750 – 13850	V	
14000 - 14500		
17300 - 17800		
18300 - 20200		
28100 - 30000	V	

<sup>\*</sup> Intelsat is not seeking authority to use this band at 60.0° E.L.

All of the existing frequencies licensed on Intelsat 904 are also on Intelsat 33e. In addition, Intelsat 33e contains new frequencies at 6425 – 6725 MHz, 11200 – 11450 MHz, <sup>17</sup> 11700 –

<sup>&</sup>lt;sup>16</sup> See Application to Launch and Operate Intelsat 17, a Replacement Satellite, at 66.0 E.L., IBFS File No. SAT-LOA-20100726-00167 (stamp grant Nov. 17, 2010; re-issued stamp grant with further conditions Dec. 17, 2010).

<sup>&</sup>lt;sup>17</sup> Intelsat is not seeking authority to use this band at 60.0° E.L.

12200 MHz, 12500 - 12600 MHz, 13750 - 13850 MHz, 17300 - 17800 MHz,  $^{18}$  18300 - 20200 MHz, and 28100 - 30000 MHz that are not on the Intelsat 904 satellite.  $^{19}$ 

# E. The Intelsat 33e Satellite Will Operate Only in Regions 1 and 3

Intelsat understands that the 12500 – 12600 MHz frequency band on the Intelsat 33e satellite is not allocated for FSS GSO operations in Region 2. Further, there are restrictions on use of the 17300 – 17800 MHz, 18800 – 19300 MHz, and 19300 – 19700 MHz frequency bands in Region 2. In addition, Intelsat understands that many frequency bands on the Intelsat 33e satellite are allocated for international inter-continental systems only within the U. S. Table of Frequency Allocations. The Intelsat 33e satellite will operate at the 60.0° E.L. orbital location, which allows service to Regions 1 and 3 only. Intelsat's operations in the 12500 – 12600 MHz, 17300 – 17800 MHz, 18800 – 19300 MHz, and 19300 – 19700 MHz frequency bands are consistent with the frequency allocations in Regions 1 and 3. The Intelsat 33e satellite will not be capable of providing service to the United States from the 60.0° E.L. orbital location. Because Intelsat 33e will not operate in Region 2, the frequency restrictions and conditions in the U.S. Table of Frequency Allocations are not applicable to the requested authority. Intelsat understands that waivers of the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, may be

 $<sup>^{18}</sup>$  The Intelsat 33e satellite will utilize the 17300-17550 MHz band as an FSS uplink. Intelsat does not request authority to provide direct-broadcast satellite service ("DBS").

<sup>&</sup>lt;sup>19</sup> As explained on page 9 of the Engineering Statement, Intelsat plans to support operations in the 11700 – 12200 MHz and 17300 –17800 MHz bands with the ITU filings of the Administration of the United Kingdom and the Administration of Papua New Guinea. Intelsat requests that the United States state its non-objection to the use of the United Kingdom's and Papua New Guinea's filings for operation of the Intelsat 33e satellite, in accordance with ITU Circular Letter CR/333 (May 2, 2012).

<sup>&</sup>lt;sup>20</sup> To the extent necessary, Intelsat seeks waiver of any Region 2 requirements in the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106.

required for operations in the United States and would seek all appropriate waivers prior to any relocation of the satellite in the future to provide service to the United States.

# F. Milestone Demonstration and Request for Bond Reduction

Intelsat 33e will be subject to the milestone and bond posting requirements set forth in Sections 25.164 and 25.165 of the Commission's rules because the 6425 – 6725 MHz, 11700 – 12200 MHz, 12500 – 12600 MHz, 13750 – 13850 MHz, 17300 – 17800 MHz, 18300 – 20200 MHz, and 28100 – 30000 MHz frequencies are included on Intelsat 33e but are not on the Intelsat 904 satellite it is replacing. In accordance with Section 25.164(c)-(e) of the Commission's rules, Intelsat incorporates by reference the confidential copy of its construction contract (along with the request for confidential treatment under Section 0.457 and 0.459 of the FCC's rules previously submitted as part of its application for launch and operating authority for Intelsat 27<sup>24</sup> to demonstrate that it has met the first milestone required of a geostationary satellite.

The Commission allows GSO licensees to reduce their bond amounts by 25 percent each time they meet a satellite milestone.<sup>25</sup> Accordingly, Intelsat requests that the Commission

<sup>&</sup>lt;sup>21</sup> 47 C.F.R. §§ 25.164 and 25.165.

<sup>&</sup>lt;sup>22</sup> 47 C.F.R. § 25.164(c).(e).

 $<sup>^{23}</sup>$  47 C.F.R. §§ 0.457 and 0.459.

<sup>&</sup>lt;sup>24</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00904, File No. SAT-LOA-20110610-00105 (Oct. 12, 2012) (Public Notice). Intelsat 33e is part of the multiple satellite package covered in that construction contract.

<sup>&</sup>lt;sup>25</sup> 47 C.F.R. § 25.165(d); Amendment of the Commission's Space Station Licensing Rules and Policies, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, ¶ 172 (2003); Amendment of the Commission's Space Station Licensing Rules and Policies, First Order on Reconsideration and Fifth Report and Order, 19 FCC Rcd 12637, ¶ 48 (2004) (reducing GSO bond requirement to \$3 million but noting that "GSO licensees will

determine that the first milestone for Intelsat 33e has been satisfied and reduce the \$3,000,000 bond amount by 25 percent to \$2,250,000.

## II. GRANT OF THIS APPLICATION WILL SERVE THE PUBLIC INTEREST

The Commission recognizes a "replacement expectancy" in orbital locations in order to protect the large investments made by satellite operators. The agency has stated,

[G]iven the huge costs of building and operating satellite space stations, there should be some assurance that operators will be able to continue to serve their customers. The Commission has therefore stated that, when the orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will generally authorize the replacement satellite at the same location. <sup>26</sup>

In this case, Intelsat holds a replacement expectancy for the 60.0° E.L. orbital location because the Commission authorized Intelsat to operate Intelsat 904 at that location.<sup>27</sup>

In addition, grant of this application will serve the public interest by ensuring continuity of service to consumers from the nominal 60° E.L. orbital location. Intelsat stands ready to deploy a replacement satellite to the 60.0° E.L. orbital location before Intelsat 904 reaches the end of its useful life or is relocated, and, as noted above, has made concrete steps toward constructing Intelsat 33e. The Commission has stated that granting replacement applications

continue to be allowed to reduce their bond amount by 25 percent each time they meet a milestone."); *Star One S.A.*, *Petition for Declaratory Ruling to Add the Star One C1 Satellite a 65° W.L. to the Permitted Space Station List*, 19 FCC Rcd 16334, ¶ 15 (Int'l Bur. 2004) ("Licensees may reduce the amount of the bond upon meeting each milestone.").

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<sup>&</sup>lt;sup>26</sup> Columbia Communications Corporation Authorization to Launch and Operate a Geostationary C-band Replacement Satellite in the Fixed-Satellite Service at 37.5° W.L., Memorandum Opinion and Order, 16 FCC Rcd 20176, ¶ 7 (2001) (citing Assignment of Orbital Locations to Space Stations in Domestic Fixed-Satellite Service, Memorandum Opinion and Order, 3 FCC Rcd 6972, n.31 (1988) and GE American Communications, Inc., Order and Authorization, 10 FCC Rcd 13775, ¶ 6 (Int'l Bur. 1995)).

<sup>&</sup>lt;sup>27</sup> See Intelsat 904 Authorization, supra n.2.

ensures that service will be provided to consumers as efficiently as possible because the current licensee will be familiar with the service requirements and, given its experience, should be able to deploy a replacement satellite in the shortest possible time. <sup>28</sup>

In addition, the Intelsat 33e satellite will allow Intelsat to greatly expand its service offering in the region, for the benefit of consumers. The expansion of capacity and additional services available on the Intelsat 33e satellite will serve the public interest.

## III. INTELSAT ACCEPTS SECTION 316 PETITION CONDITIONS

Intelsat understands and accepts that its license to operate Intelsat 33e at  $60.0^{\circ}$  E.L., with the exception of the 6425-6725 MHz, 13750-13850 MHz, 17300-17800 MHz, 18300-20200 MHz, and 28100-30000 MHz frequencies, will be conditioned as follows:

- (a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization ("ITSO") that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.
- (b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended <sup>29</sup>

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<sup>&</sup>lt;sup>28</sup> See Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, 18 FCC Rcd 1962, ¶ 83 (2003) ("Repairing or even replacing a malfunctioning satellite, for all its complexity, requires less time than designing and constructing a new system. Even in the worst case where a satellite is destroyed, a licensee can ordinarily replace a lost satellite with a ground spare at the next available launch window, or procure a technically identical satellite in an expedient manner since it would have already completed the complex design process.").

<sup>&</sup>lt;sup>29</sup> See Petition of the Int'l. Telecomms. Satellite Org. under Section 316 of the Commc'ns Act, as amended, IB 06-137, File No. SAT-MSC-20060710-00076, Order of Modification, 23 FCC Rcd 2764, 2769-71 (¶¶11-13) (Int'l Bur. 2008).

# IV. <u>ITU COST RECOVERY</u>

Intelsat is aware that processing fees are currently charged by the ITU for satellite filings, and will submit a signed declaration that it unconditionally accepts all ITU cost-recovery responsibility for the Intelsat 33e satellite.<sup>30</sup>

# V. <u>CONCLUSION</u>

Based on the foregoing, Intelsat respectfully requests that the Commission grant this replacement satellite application.

Respectfully submitted,

/s/ Susan H. Crandall

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March 27, 2015

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<sup>&</sup>lt;sup>30</sup> 47 C.F.R. § 25.111(d).

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

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

<sup>&</sup>lt;sup>2</sup> 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-20110812-00948, 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"), based on the Bureau's finding that PanAmSat had not satisfied applicable construction milestones. 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.

<sup>&</sup>lt;sup>3</sup> 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).

<sup>&</sup>lt;sup>4</sup> 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:

Michael McDonnell, Chairman Franz Russ, Deputy Chairman Michelle Bryan, Secretary Simon Van De Weg, Director, Finance

#### Board of Managers:

Michael McDonnell 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 (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 transaction has not yet been consummated.