Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of Intelsat License LLC Application for Authority to Launch and Operate Intelsat 20, a Replacement Satellite With New Frequencies, at 68.5º E.L.	File No. SAT-RPL- _____

APPLICATION FOR AUTHORITY TO LAUNCH AND OPERATE INTELSAT 20, A REPLACEMENT SATELLITE WITH NEW FREQUENCIES, AT 68.5º E.L.

Intelsat License LLC ("Intelsat"), pursuant to Section 25.114 of the Federal Communications Commission's ("FCC" or "Commission") rules,[1] hereby applies to launch and operate a C/Ku/Ka-band replacement satellite with new frequencies, to be known as Intelsat 20, at the 68.5º E.L. orbital location. Intelsat 20 is scheduled for launch on an Ariane 5 vehicle in the second or third quarter of 2012. Intelsat 20 will replace the C- and Ku-band satellites Intelsat 10 (call sign S2382), which is currently operating at 68.5º E.L.[2] and Intelsat 7 (call sign S2229), which is currently operating at 68.65° E.L.[3] The Ka-band frequencies on Intelsat 20 are new

[1] 47 C.F.R. § 25.114.

[2] *See PanAmSat Licensee Corp. Application for authority to launch and operate a replacement hybrid fixed-satellite service space station at 68.5 E.L. known as PAS-24*, Order and Authorization, 16 FCC Rcd 13145 (2001).

[3] *See Policy Branch Information; Actions Taken*, Report No. SAT-00222, File No. SAT-MOD-20040405-00078 (June 18, 2004) (Public Notice).

frequencies at 68.5° E.L. available for assignment pursuant to the Commission's first come, first served process.[4] Intelsat 20 will operate on a non-common carrier basis.[5]

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 at the 68.5º E.L. orbital location. In accordance with the Commission's requirements,[6] this application has been filed electronically as an attachment to FCC Form 312 and Schedule S.

I. INTELSAT IS QUALIFIED TO HOLD THE SATELLITE 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.[7]

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[4] *Policy Branch Information Actions Taken*, Report No. SAT-00594, DA 09-674, File No. SAT-LOA-19970904-00082 (Apr. 3, 2009) (Public Notice) (announcing that Ka-band frequencies at 68.5° E.L. were available for reassignment).

[5] Section 310(b) is not applicable to this license because Intelsat 20, 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 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 (note5) (Int'l Bur. 2004).

[6] 47 C.F.R. § 25.114(c).

[7] *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, 21 FCC Rcd 7368, 7381(¶ 23) (2006) ("The Commission previously has determined that PanAmSat and Intelsat are qualified to hold licenses.").

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 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.[8]

C. Waiver Requests

Intelsat requests waiver of the following technical rules:

> (1) Section 25.210(i)(1), which specifies cross polarization isolation requirements within the primary coverage area; and
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> (2) Section 25.114(d)(3), which specifies that predicted antenna gain contours for each transmit and each receive antenna beam and nominal orbital location requested be supplied in a certain format.

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown."[9] 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.[10] In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy."[11] As shown below, there is good cause for each of the requested technical waivers.

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[8] *Mitigation of Orbital Debris*, Second Report and Order, 19 FCC Rcd 11,567 (2004).

[9] 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

[10] *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

[11] *WAIT Radio*, 418 F.2d at 1159.

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

Intelsat requests waiver of Section 25.210(i)(1) of the Commission's rules. Section 25.210(i)(1) 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. As explained more fully on page 8 and Exhibits 5D-1 through 5D-4 of the attached Engineering Statement, the 30 dB requirement is not met within a limited portion of the coverage areas of Intelsat 20's receive and transmit Ka-band beams.

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.[12] The FCC previously has acknowledged that non-compliance increases only self-interference and granted waivers to other operators in similar situations.[13] In this case, the minimum level of isolation of the non-compliant Intelsat 20 beams is equal to or greater than 20 dB. This level was the best that the satellite manufacturer could achieve without causing excessive degradation in the co-polarized gain of the beam and/or in the size of its coverage area. Intelsat has taken this level of isolation into account in its planned operations. Accordingly,

[12] *See AMC-15 Ku-Band Circular Polarization Amendment,* File No. SAT-AMD-20030422-00069, Attachment Terms and Conditions of Authorization (¶ 5) (Aug. 18, 2004).

[13] *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 65º W.L. to the Permitted Space Station List*, Order, 19 FCC Rcd 16,334, 16,339 (¶ 12) (2004).

Commission precedent supports a grant of Intelsat's requested waiver of Section 25.210(i)(1) for Intelsat 20.[14]

2. Request for Waiver of Section 25.114(d)(3)

Intelsat also requests waiver of Section 25.114(d)(3), which requires that predicted antenna gain contours be supplied in a particular format. Intelsat requests a waiver of the format requirement with respect to Intelsat 20's omni command and telemetry antennas.

Good cause also exists for grant of this waiver request. As explained in the Engineering Statement, the omni antennas are typically utilized during on-station emergencies or when the spacecraft is in transfer orbit following launch. In these operating modes, the pointing of these antennas varies with respect to the Earth. Therefore, the spacecraft manufacturer typically does not provide the gain patterns of the omni command and telemetry antennas in the format prescribed in Section 25.114(d)(3) of the Commission's rules. However, the Engineering Statement describes how the gain diagrams of the omni antennas are to be interpreted. The Commission has in the past considered the antenna gain diagrams, together with the descriptive characterization provided in the Engineering Statement, to be sufficient in fulfilling the requirements of Section 25.114(d)(3).[15] Accordingly, Commission precedent supports a grant of Intelsat's requested waiver of Section 25.114(d)(3) for Intelsat 20.

[14] *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).

[15] *See Application to Launch and Operate Intelsat 15 at 85.15° W.L.*, File No. SAT-LOA-20090410-00043 (stamp grant issued Nov. 25, 2009).

D. Operational Frequencies

The following chart shows the FSS frequencies that will be used by the Intelsat 20 satellite at 68.5º E.L., as well as the FSS frequencies that are currently used by the Intelsat 10 satellite at 68.5° E.L. and the Intelsat 7 satellite at 68.65° E.L.

Frequency Band (MHz)	Intelsat 7	Intelsat 10	Intelsat 20
5925 – 6425		✓	✓
6425 – 6675	✓		✓
6675 – 6725	✓		
3400 – 3700	✓		
3700 – 4200		✓	✓
13750 – 14000	✓		✓
14000 – 14250	✓	✓	✓
14250 – 14500		✓	✓
10950 – 11200	✓		✓
11450 – 11700	✓	✓	✓
12250 – 12500		✓	
12500 – 12750		✓	✓
29500 – 30000			✓
19700 - 20200			✓

All of the existing frequencies on Intelsat 10 or Intelsat 7 except for the 6675-6725 MHz, 3400-3700 MHz, and 12250-12500 MHz band are also on Intelsat 20. In addition, Intelsat 20 contains new Ka-band frequencies at 29500-30000 MHz and 19700-20200 MHz that are not on either the Intelsat 10 or Intelsat 7 satellites.[16]

E. Milestone Demonstration and Request for Bond Reduction

Intelsat 20 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 29500-30000 MHz and

[16] Intelsat will submit to the FCC the materials required for the United States to make an ITU filing for these frequencies.

19700-20200 MHz frequency bands are on Intelsat 20 but are not on either the Intelsat 10 or Intelsat 7 satellites.[17]

In accordance with Section 25.164(c)-(e) of the Commission's rules,[18] Intelsat is providing with this application the following documentation to demonstrate that it has met the first three milestones required of a geostationary satellite:

> (1) a confidential copy of its construction contract (along with a request for confidential treatment under Section 0.457 and 0.459 of the FCC's rules[19]);
>
> (2) a signed statement from David J. Kim, Executive Director, Intelsat-20, Space Systems Loral, attesting to completion of Critical Design Review and attesting that physical construction of the satellite has commenced;
>
> (3) a signed statement from Jean-Luc Froeliger, Senior Director, Space Systems Acquisition, of Intelsat that as of October 10th, 2011, Intelsat has made the payments identified for months 1 through 23 in the Intelsat-20 Payment Schedule, which is Exhibit E2-1 to the confidential Fixed Price Contract for the Intelsat-19 and Intelsat-20 Satellite Programs between Space Systems/Loral and Intelsat Corporation dated June 12th, 2009; and
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> (4) photographs evidencing that physical construction of the satellite has commenced.

The Commission allows GSO licensees to reduce their bond amounts by 25 percent each time they meet a satellite milestone.[20] Accordingly, Intelsat requests that the Commission

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[17] 47 C.F.R. §§ 25.164 and 25.165.

[18] 47 C.F.R. § 25.164(c)-(e).

[19] 47 C.F.R. §§ 0.457 and 0.459.

[20] 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 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 65º 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.").

determine that the first three milestones for Intelsat 20 have been satisfied and reduce the $3,000,000 bond amount by 75 percent to $750,000.

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.[21]

In this case, Intelsat holds a replacement expectancy for C- and Ku-band frequencies at the nominal 68.5º E.L. orbital location. As demonstrated in the attached Engineering Statement and FCC Form 312, Schedule S, Intelsat 20 is technically consistent with the Intelsat satellites currently operating at the nominal 68.5° E.L. location, taking into account that operation in the 29500-30000 MHz and 19700-20200 MHz bands will rely on filings still to be submitted to the ITU.[22]

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[21] *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)).

[22] *Amendment of the Commission's Space Station Licensing Rules and Policies*, 18 FCC Rcd 10760 ¶ 257 (2003) ("We do not require replacement satellites to be technically 'identical' to the existing satellite. We recognize that next-generation satellites will incorporate satellites with technical advancements made since the previous generation satellite was launched. We do not intend to change this policy, which facilitates state-of-the-art systems. Rather, we will continue to assess only whether operations of the replacement satellite will be consistent with our international coordination obligations pursuant to regulations promulgated by the International Telecommunication Union.") (internal citations omitted).

In addition, grant of this application will serve the public interest by ensuring continuity of service to consumers from the nominal 68.5° E.L. orbital location. Intelsat stands ready to deploy a replacement satellite to the 68.5º E.L. orbital location before Intelsat 10 and Intelsat 7 reach the end of their useful lives or are relocated and, as noted above, has made concrete steps toward constructing Intelsat 20.

The Commission has stated that granting replacement applications 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.[23]

Finally, Intelsat 20 will also offer expanded capacity to customers at the 68.5º E.L. orbital location using the Ka-band. This expansion of capacity also serves the public interest by making new service available to customers.

III. ITU COST RECOVERY

Intelsat is aware that processing fees are currently charged by the ITU for satellite filings, and that Commission applicants are responsible for any and all fees charged by the ITU.[24] Intelsat is aware of and unconditionally accepts this requirement and responsibility to pay any ITU cost recovery fees associated with the ITU filings that the Commission makes on behalf of

[23] *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*, Report and Order and Notice of Proposed Rulemaking18 FCC Rcd 1962, ¶ 83 (2003) ("[r]epairing 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.").

[24] *See Implementation of ITU Cost Recovery Charges for Satellite Network Filings*, Public Notice, DA 01-2435 (Oct. 19, 2001).

Intelsat for the satellite proposed in this Application, as well as any ITU filings associated with any satellite system for which Intelsat may request authorization at a later date.

IV. 10950-11200 MHZ, 11450-11700 MHZ, 12500-12750 MHZ, AND 13750-14000 MHZ FREQUENCY BANDS

Intelsat understands that operations in the 10950-11200 MHz, 11450-11700 MHz, 12500-12750 MHz, and 13750-14000 MHz frequency bands are subject to certain limitations and obligations, which Intelsat accepts and will fulfill. Specifically, for operations in the 10950-11200 MHz frequency band, Intelsat accepts the following conditions:

- Operations in the 10.95-11.2 GHz frequency band shall comply with the terms of footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference.

- Operations in the 10.95-11.2 GHz frequency band is limited to international operations in accordance with footnote NG 104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).

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

- Intelsat's use of the 11450-11700 MHz band (space-to-Earth) is subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.

- The operation of the Intelsat 20 space station in the 11450-11700 MHz band (space-to-Earth) is limited to international operations in accordance with footnote NG 104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).

In the 12500-12750 MHz frequency band, Intelsat accepts the following condition:

- Use of the 12.5-12.75 GHz frequency band is not permitted for fixed-satellite service in the space-to-Earth direction in Region 2.

In the 13750-14000 MHz frequency band, Intelsat accepts the following conditions:

- In the 13750-14000 MHz band (Earth-to-space), receiving space stations in the fixed-satellite service shall not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.

- Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, any earth station in the United States and its possessions communicating with the Intelsat 20 space station in the 13750-14000 MHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's ("NTIA") Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee ("FAS") to minimize interference to the National Aeronautics and Space Administration Tracking and Data Relay Satellite System, including manned space flight.

- Operations of any earth station in the United States and its possessions communicating with the Intelsat 20 space station in the 13750-14000 MHz band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356 which specifies a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated powers (e.i.r.p.). Operations of any earth station located outside the United States and its possessions communicating with the Intelsat 20 space station in the 13750-14000 MHz band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.

- Operators of earth stations accessing the Intelsat 20 space station in the 13750-14000 MHz band are encouraged to cooperate voluntarily with the National Aeronautics and Space Administration (NASA) in order to facilitate continued operation of NASA's Tropical Rainfall Measuring Mission (TRMM) satellite.[25]

[25] NASA's TRMM satellite system radar in the 13.793-13.805 GHz band remains operational and is a highly valuable and visible United States asset with a broad range of international users. Accordingly, NTIA has requested cooperation from the Commission and non-Federal Government entities in providing assistance in reducing interference with the TRMM radar. Specifically, NTIA requests that FSS earth stations in the 13.793 - 13.805 GHz band located south of 39° N. and east of 110° W. operate with emission levels below —150 dBW/600 kHz at the TRMM space station receiver. Letter from Frederick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, NTIA, to Don Abelson, Chief, International Bureau, FCC (February 28, 2002). Considering the secondary nature of the TRMM operation, NTIA's request is not a condition of this authorization. The Commission, however, urges all operators of earth stations accessing the Intelsat 20 space station in the 13.75 - 14.0 GHz band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.

V. CONCLUSION

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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October 24, 2011

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*.[26] In December 2009, the Commission also approved the *pro forma* changes in Intelsat's foreign ownership.[27] There have been no other material changes to Intelsat's foreign ownership since the date of the *Intelsat-Serafina Order*.

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[26] *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).

[27] *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).

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"),[28] based on the Bureau's finding that PanAmSat had not satisfied applicable construction milestones.[29] 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.

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[28] 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).

[29] *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
Flavien Bachabi, Deputy Chairman
Phillip Spector, Secretary
Simon Van De Weg, Director, Finance

Board of Managers:

Michael McDonnell
Flavien Bachabi
Phillip Spector

The 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 Subsidiary Holding Company S.A., a Luxembourg company. Intelsat Subsidiary Holding Company S.A. is wholly owned by Intelsat Phoenix Holdings S.A., a Luxembourg company. Intelsat Phoenix Holdings S.A. is wholly owned by Intelsat Intermediate Holding Company S.A., a Luxembourg company. Intelsat Intermediate Holding Company S.A. 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 S.A., a Luxembourg company. Intelsat S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Intelsat Global Subsidiary S.A., a Luxembourg company. Intelsat Global Subsidiary S.A. is wholly owned by Intelsat Global S.A., a Luxembourg company ("Intelsat Global", formerly "Serafina Holdings Limited"). Each of these entities may be contacted at the following address: 4 rue Albert Borschette, L-1246 Luxembourg.

Intelsat Global's ownership was approved by the Commission in the *Intelsat-Serafina Order*, has not changed materially 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*").