SAT-RPL-20120326-00061 S2863

Intelsat License LLC **INTELSAT 21** 

IB2012000901

GRANTED\* International Bureau

File# SAT-RPL- 20120326-00061

Call Sign <u>\$2863</u> Grant Date <u>07/12/12</u>

(or other identifier)

see From conditions

Term Dates conditions Approved by OMB 3060-0678

Date & Time Filed: Mar 26 2012 9:24:36:763PM

\* with conditions

Approved:

Stephen J. Duall Chief, Satellite Policy Branch

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

FCC Use Only

## APPLICANT INFORMATION

Callsign/Satellite ID: S2863

File Number: SAT-RPL-20120326-00061

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

Authority to Launch and Operate Replacement Satellite, Intelsat 21, at 58.0 W.L.

1-8.	Legal	Name	of App	olicant

Name:

Intelsat License LLC

Phone Number:

202-944-7848

DBA Name:

Fax Number:

202-944-7870

Street:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

-3006

3400 International Drive, N.W.

City:

Washington

State:

DC

Country:

**USA** 

Zipcode:

20008

Attention:

Susan H. Crandall

The application of Intelsat License LLC (Intelsat) for authority to construct, launch and operate a geostationary orbit space station, to be known as Intelsat 21, at the 58.0° W.L. orbital location, IBFS File No. SAT-RPL-20120326-00061, IS GRANTED. Accordingly, Intelsat is granted authority to operate Intelsat 21 at the 58.0° W.L. orbital location to provide Fixed-Satellite Services (FSS) in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) frequency bands. In addition, Intelsat is authorized to conduct telemetry, tracking, and command (TT&C) operations at 58.0° W.L. using the following center frequencies: 11451.25/11453.25 MHz (space-to-Earth), 11451.75/11453.75 MHz (spaceto-Earth), and 13750.5 MHz /13994.5 MHz (Earth-to-space). Operations under this grant shall be in accordance with the technical specifications set forth in Intelsat's application, Federal Communications Commission (Commission) rules not waived herein, and are subject to the following conditions:

- Intelsat shall prepare the necessary information, as may be required, for submission to the 1. International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. Intelsat shall be held responsible for all cost-recovery fees associated with ITU filings. We also note that 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, by successfully completing coordination agreements. 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 C.F.R. § 25.111(b).
- 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 shall operate Intelsat 21 at the 58.0° W.L. in compliance with all existing or future coordination agreements for this location.
- While at the 58.0° W.L. orbital location, Intelsat shall maintain the Intelsat 21 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
- 5. Intelsat's request for a waiver of Section 25.210(a)(3) of the Commission's rules, 47 C.F.R. § 25.210(a)(3), IS GRANTED. Section 25.210(a)(3) requires all FSS space stations used for domestic service in the 3700-4200 MHz and 5925-6425 MHz bands to be capable of switching polarization sense upon ground command. The Commission requires polarity-switching capability for two reasons: (1) to provide U.S.-licensed satellites with the flexibility to operate at different orbital locations, and (2) to mitigate potential interference between adjacent fixed-satellite systems transmitting analog television signals. This waiver grant is based upon a finding that the ability to switch polarization is not currently necessary to protect other satellites at adjacent orbital locations from harmful interference, because there is no co-frequency C-band space station operating within two degrees of Intelsat's proposed location. Intelsat states that the nearest co-frequency C-band space stations are Intelsat 707 located at 53° W.L., Intelsat 805 and Galaxy 11, both located at the nominal orbital location of 55.5° W.L., and Amazonas-1 and 2, located at 61° W.L.<sup>1</sup> As a condition to the grant of this waiver, Intelsat must accommodate future satellite networks that are compliant with Section 25.210(a)(3). Further, Intelsat must operate Intelsat 21 pursuant to any existing or future coordination agreements for this location.
- Intelsat's request for a waiver of Section 25.210(i)(1) of the Commission's rules, 47 C.F.R. § 25.210(i)(1), IS GRANTED. 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

<sup>&</sup>lt;sup>1</sup> Legal Narrative at 5; Engineering Statement at pages 4 and 5.

gain of the antenna in the assigned frequency band will be at least 30 dB within its primary coverage area. Intelsat states that the 30 dB requirement is not met within a limited portion of the coverage areas of the Intelsat 21's West Hemi vertically polarized receive beam. Intelsat states that the level of isolation of the non-compliant Intelsat 21 beam has a cross-polarization isolation of at least 27 dB within limited regions of its primary coverage area. Intelsat reports that 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. We agree that waiver in this instance will not produce a significant increase in interference, except to the applicant itself. As a condition to the grant of this waiver, Intelsat shall claim no more protection from interference from other licensed radio-communication systems operating in accordance with the Commission's rules than if its antennas met Section 25.210(i) of the rules.

- 7. Intelsat's request for a waiver of Section 25.202(g) of the Commission's rules, 47 C.F.R. §25.202(g), IS GRANTED. Section 25.202(g) requires "telemetry, tracking and telecommand (TT &C) functions for U.S. domestic satellites shall be conducted at either or both edges of the allocated band(s). Frequencies, polarization and coding shall be selected to minimize interference into other satellite networks and within their own satellite system." Intelsat requests this waiver for the proposed use of 13750.5 MHz and 13994.5 MHz for command frequencies that are outside of the 14.0-14.5 GHz portion of the satellite's Ku-band payload. This waiver grant is based upon the following findings:
  - (a) Operation of Intelsat 21's command frequencies in the 14.0-14.5 GHz band at the nominal 58° W.L. orbital location will increase the risk of interference with the operations of Intelsat 16 and, for a period of time, Intelsat 9, which currently operate in the 14.0-14.5 GHz band at the nominal 58° W.L. orbital location.
  - (b) Intelsat has previously coordinated the use of 13.75-14.0 GHz at the nominal 58° W.L. orbital location.

As a condition to grant of this waiver, Intelsat must accommodate future space station networks that are compliant with Section 25.202(g). Further, Intelsat must operate Intelsat 21 pursuant to any existing or future coordination agreements for this location.

- 8. 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 (US&P) communicating with the Intelsat 21 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's (NTIA's) Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee (FAS).<sup>5</sup>
- 9. Operations of any earth station in the US&P communicating with the Intelsat 21 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, which specifies a minimum antenna diameter of 4.5 meters and a minimum and maximum equivalent isotropically radiated power (e.i.r.p.).

<sup>5</sup> Footnote US337 requires that earth stations operating in the 13.75-13.8 GHz frequency band shall be coordinated through NTIA's IRAC's FAS to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration Tracking and Data Relay Satellite System. 47 C.F.R. § 2.106, US337.

<sup>&</sup>lt;sup>2</sup> Legal Narrative at 4; Engineering Statement at pages 6 and 7, and Exhibit 5D.

<sup>&</sup>lt;sup>3</sup> Engineering Statement at 6.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> Footnote US356 places a restriction on a minimum antenna diameter of 4.5 meters and the e.i.r.p. that should be on FSS operations in order to protect government operations in the band, including manned space flight. 47 C.F.R. § 2.106, US356.

Operations of any earth station located outside the US&P communicating with the Intelsat-16 space station in the 13.75-14.0 GHz frequency band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter as small as 1.2 meters for earth stations of a geostationary satellite orbit network.<sup>7</sup>

- 10. Operators of earth stations accessing the Intelsat 21 space station in the 13.75 14.0 GHz frequency 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.<sup>8</sup>
- 11. Intelsat's request for waivers of footnote NG104 of the United States Table of Allocations, 47 C.F.R. § 2.106, and of footnote 2 to Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 2.202(a), in order to use the 11.45-11.70 GHz frequency band to offer domestic services on a non-interference basis in the United States ARE 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 11.45-11.70 GHz frequency band and thus are not capable of causing interference into fixed stations operating in this band. Furthermore, because Intelsat has agreed to accept any level of interference from fixed stations into its receive-only earth stations' operations in these bands, fixed station operators are not be required to coordinate their station operations with the space station operator's receive-only earth stations' operations. 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.
- 12. Intelsat shall operate its earth stations in the 11.45-11.70 GHz band that provide domestic service in the United States on an unprotected, non-interference basis relative to fixed stations and, as such, Intelsat may not cause harmful interference to, or claim protection from, fixed stations to which

<sup>&</sup>lt;sup>7</sup> Footnote 5.502 to the ITU Radio Regulations establishes minimum antenna diameters for earth stations of geostationary and non-geostationary satellite networks, and places certain restrictions on either the minimum e.i.r.p. or the power flux density (p.f.d.) levels produced by earth stations operating in the 13.75-14.0 GHz frequency band.

NASA's TRMM satellite system radar in the 13.793-13.805 GHz frequency 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 frequency 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 21 space station in the 13.75 - 14.0 GHz frequency band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.

<sup>&</sup>lt;sup>9</sup> The Commission previously granted a waiver of Footnote NG104 to permit domestic operations in the 11.45-11.7 GHz band at 58° W.L. via Intelsat 9 – the satellite that will be replaced by Intelsat 21. See PanAmSat Licensee Corp., Application for Authority to Use Extended Ku-band Frequencies for Domestic Service, Order and Authorization, 20 FCC Rcd 14642 (Int'l Bur. 2005). The conditions placed on the domestic operations of Intelsat 21 in the 11.45-11.7 GHz frequency band are the same as those that were placed on the domestic operations of Intelsat 9 in this band.

<sup>&</sup>lt;sup>10</sup> See Legal Narrative at 7 and 8.

<sup>&</sup>lt;sup>11</sup> See id., 20 FCC Rcd at 14646.

frequencies in the 11.45-11.70 GHz band have either already been assigned, or to which frequencies in the 11.45-11.70 GHz band may be assigned at a later date.

- 13. Intelsat is required to inform its customers, in writing, including end-users receiving service from resellers accessing capacity on the Intelsat 21 space station, that domestic service in the United States in the 11.45-11.70 GHz band 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.
- 14. Intelsat's use of the 11.45-11.7 GHz frequency band 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.
- 15. Operations of Intelsat 21 to or from the United States shall comply with the power levels specified in Section 25.212 of the Commission's rules, 47 C.F.R. § 25.212, unless Intelsat coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation of the 58.0° W.L. orbital location. Intelsat shall inform the Commission of the power levels it has coordinated. In addition, Intelsat must inform all affected earth station operators that Section 25.220 of the Commission's rules applies to operations that exceed the power levels specified in Section 25.212. In no event shall the uplink power density level of Intelsat 21's digital carriers exceed -38.7 dBW/Hz and the downlink EIRP density of such carriers exceed -31.2 dBW/Hz for the C-band. Further, in no event shall the uplink power density of Intelsat 21's digital carriers in the 11450-11700 MHz band exceed -20 dBW/Hz and in the 11700-12200 band exceed -20 dBW/Hz for the Brazilian beam and -18.9 dBW/Hz for the Mexico beam.
- 16. Intelsat 21 must begin providing service at the 58.0° W.L. orbital location in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to Space), 11.45-12.2 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands before the satellite it is replacing, Intelsat 9 (Call Sign S2380), discontinues service at the 58.0° W.L. orbital location. Failure to meet this milestone shall render this authorization to operate in these frequency bands NULL and VOID.
- 17. The license term for the space station is 15 years and will begin on the date that Intelsat certifies to the Commission that Intelsat 21 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 Intelsat 21 being placed into operation at the 58.0° W.L. orbital location.
- 18. Intelsat is afforded 30 days from the date of release of this grant and authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
- 19. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 of the Commission's rules or applications for reconsideration under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the public notice indicating that this action was taken.

Call Sign S2863 Grant Date 07/12/12

(or other identifier)

See Prom Conditions

To: conditions

To: conditions

Approved: Stephen J. Duall
Chief, Satellite Policy Brant

9-16. Name of Contact Representative

Name:

Intelsat License LLC

Phone Number:

202-944-7848

Company:

Intelsat Corporation

Fax Number:

202-944-7870

Street:

3400 International Drive, N.W.

E-Mail:

susan.crandall@intelsat.com

City:

Washington

State:

DC

Country:

**USA** 

Zipcode:

20008

-3006

Susan H. Crandall Attention:

Relationship:

Legal Counsel

## **CLASSIFICATION OF FILING**

17. Choose the buttonnext to the classification that applies to thisfiling for both questions a. and b. Choose only one for 17a and only one for 17b.

(N/A) a1. Earth Station

a2. Space Station

h.

o 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

6 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

o b11. Replacement Satellite Application – new frequency bands (Not eligible for streamlined processing)

6 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:	(b) File number of pending application:	
Not Applicable	Not Applicable	

# TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	e 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)			
<del>_</del>			
21. STATUS: Choose thebutton next to the applicable status. Choose only one.	22. If earth station applicant, check all that apply. Not Applicable		
○ Common Carrier ○ Non-Common Carrier			
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one.Are these		
O Connected to a Public Switched Network Not connected	to a Public Switched Network		
24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all a	pplicable 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.
of. Non-Geostationary Space Station
o 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  Not Applicable apply.)
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.

# O 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?	♥ Yes ♥ No
30. Is the applicant an alien or the representative of an alien?	O Yes ⊚ No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes ⊚ No O 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?	O Yes ⊗ No O 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 O No O 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.	
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 explination 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 explination of circumstances.	O Yes O No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing 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	O 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 exhinit, an explanation of the circumstances.	O Yes O 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.
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.
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 replacement C/Ku-band satellite, to be known as Intelsat 21, at the 58.0 W.L. orbital location. Intelsat 21 is scheduled for launch on a Sea Launch vehicle early in the third quarter of 2012 and will

Narrative & Exhibits

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.	<b>⊚</b> 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.	O 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.	<b>o</b> c

### 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.)		
<ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> <li>Corporation</li> </ul>		
O Governmental Entity		
Other (please specify) Limited Liability Company		
45. Name of Person Signing Susan H. Crandall	46. Title of Person Signing Asst. General Counsel, Intelsat Corporation	
47. Please supply any need attachments.		
1: 2:	3:	
,		
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).		

Completed Schedule S

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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 replacement C/Ku-band satellite, to be known as Intelsat 21, at the 58.0 W.L. orbital location. Intelsat 21 is scheduled for launch on a Sea Launch vehicle early in the third quarter of 2012 and will replace the Intelsat 9 satellite (call sign S2380), which is currently operating at 58.0 W.L