

S2863 SAT-STA-20120711-00114 IB2012001661
Intelsat License LLC
Intelsat 21



*with conditions

File # SAT-STA-20120711-00114

Call Sign S2863 Grant Date 08/23/12
(or other identifier)

Term Dates period of
From 08/28/12 To: 30 days

Approved by OMB
3060-0678

Approved: *Stephen J. Duall*
Stephen J. Duall
Chief Satellite Policy Branch

Date & Time Filed: Jul 11 2012 2:50:39:370PM
File Number: SAT-STA-20120711-00114
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
STA to Conduct IOT of Intelsat 21 (Call Sign S2863)

1. Applicant

Name:	Intelsat License LLC	Phone Number:	202-944-7848
DBA Name:		Fax Number:	202-944-7870
Street:	c/o Intelsat Corporation 3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20008 -3006
Attention:	Susan H. Crandall		

Attachment to Grant
IBFS File No. SAT-STA-20120711-00114
Call Sign S2863

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20120711-00114, is GRANTED. Accordingly, Intelsat is authorized for a period of 30 days, commencing on August 28, 2012, to conduct in-orbit testing of the Intelsat 21 space station (Call Sign S2863) at the 51.3° W.L. orbital location using the 3700 – 4200 MHz (space-to-Earth), 5925 – 6425 MHz (Earth-to-space), 11.45 – 11.70 GHz (space-to-Earth), 11.7 – 12.2 GHz (space-to-Earth), and 14.0 – 14.5 GHz (Earth-to-space) frequency bands. Additionally, Intelsat is granted authority to conduct telemetry, tracking, and command (TT&C) operations using center frequencies of 11.45125 GHz (space-to-Earth), 11.45175 GHz (space-to-Earth), 11.45325 GHz (space-to-earth), 11.45375 (space-to-Earth), 13.9945 GHz (Earth-to-space), and 13.7505 GHz (Earth-to-space) necessary to maintain Intelsat 21 at 51.3° W.L. and to drift the Intelsat 21 space station to its authorized location of 58.0° W.L. Operations under this authorization must be in accordance with the terms and conditions contained in Intelsat's application and the Federal Communications Commission's rules not waived herein, and are subject to the following conditions:

1. All operations under this grant of special temporary authority shall be on an unprotected and non-harmful interference basis, *i.e.*, Intelsat shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station.
2. In the event of any harmful interference under this grant of special temporary authority, Intelsat shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
3. Intelsat shall coordinate the operations of Intelsat 21 with existing geostationary space stations to ensure that no unacceptable interference results from its operations at the 51.3° W.L. orbital location or during drift to the 58.0° W.L. orbital location.
4. Intelsat 21's operations at 51.3° W.L. shall be limited to IOT in the 3700 – 4200 MHz (space-to-Earth), 5925 – 6425 MHz (Earth-to-space), 11.45-11.70 GHz (space-to-Earth), 11.7 – 12.2 GHz (space-to-Earth), and 14.0 – 14.5 GHz (Earth-to-space) frequency bands and shall not include the provision of commercial services.
5. Intelsat shall operate only the TT&C frequencies on Intelsat 21 during the space station's drift from the 51.3° W.L. orbital location to the 58.0° W.L. orbital location.
6. During in-orbit testing, Intelsat shall maintain the Intelsat 21 space station within an east-west longitudinal station-keeping tolerance of ± 0.05 degrees of the 51.3° W.L. orbital location.
7. Intelsat's request that the Part 25 technical waivers previously granted to the Intelsat 21 space station continue to apply to during IOT at the 51.3° W.L. orbital location and during the drift to the 58.0° W.L. orbital location IS GRANTED.¹
8. IOT operations in the 3700 – 4200 MHz (space-to-Earth), 5925 – 6425 MHz (Earth-to-space), 11.45-11.70 GHz (space-to-Earth), 11.7 – 12.2 GHz (space-to-Earth), and 14.0 – 14.5 GHz


¹ See *Policy Branch Information Actions Taken*, Public Notice, Report No. SAT-00882, DA No. 12-1126 (Jul. 13, 2012); see also *PanAmSat Licensee Corp., Application for Authority to Use Extended Ku-band Frequencies for Domestic Service*, Order and Authorization, 20 FCC Red 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 in these bands for Intelsat 9 - the satellite that will be replaced by Intelsat 21.

Attachment to Grant
IBFS File No. SAT-STA-20120711-00114
Call Sign S2863

(Earth-to-space) at 51.3° W.L. must comply with the conditions imposed in IBFS File No. SAT-RPL-20120326-00061 (granted July 13, 2012).

9. Any action taken or expense incurred as a result of operations pursuant to this grant of special temporary authority is at Intelsat's own risk.

10. 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.

 GRANTED * International Bureau *with conditions	File # <u>SAT-STA-20120711-00114</u>
	Call Sign <u>S2863</u> Grant Date <u>08/23/12</u> (or other identifier)
	From <u>08/28/12</u> Term Dates period of To: <u>30 days</u>
	Approved: <u><i>Stephen J. Duall</i></u> Stephen J. Duall Chief, Satellite Policy Branch

2. Contact

Name:	Susan H. Crandall	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
Attention:	Susan H. Crandall	Relationship:	Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number SATRPL2012032600061 or Submission ID

4a. 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):

4b. Fee Classification CRY – Space Station (Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location

7. Requested Extended Expiration Date

8. Description (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 herein requests a grant of Special Temporary Authority for 30 days, from August 28, 2012 through September 26, 2012, to conduct in-orbit testing of Intelsat 21 (Call Sign S2863) at 51.3 W.L. in the bands 3700-4200 MHz (downlink), 5925-6425 MHz (uplink), 11450-11700 MHz, 11700-12200 MHz (downlink), and 14000-14500 MHz (uplink), and

9. 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

10. Name of Person Signing
Susan H. Crandall

11. Title of Person Signing
Asst. General Counsel, Intelsat Corporation

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2:

Attachment 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).

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.

8. Description

Intelsat License LLC herein requests a grant of Special Temporary Authority for 30 days, from August 28, 2012 through September 26, 2012, to conduct in-orbit testing of Intelsat 21 (Call Sign S2863) at 51.3 W.L. in the bands 3700-4200 MHz (downlink), 5925-6425 MHz (uplink), 11450-11700 MHz, 11700-12200 MHz (downlink), and 14000-14500 MHz (uplink), and to drift the satellite to its permanent location of 58.0 W.L. Intelsat 21 currently is scheduled to be launched on August 16, 2012.

July 11, 2012

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554



Re: Request for Special Temporary Authority to Conduct In-Orbit
Testing of Intelsat 21 (File No. SAT-RPL-20120326-00061)
Call Sign S2863

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")¹ for 30 days, from August 28, 2012 through September 26, 2012, to conduct in-orbit testing ("IOT") of Intelsat 21 (Call Sign S2863) at 51.3° W.L. in the bands 3700-4200 MHz (downlink), 5925-6425 MHz (uplink), 11450-11700 MHz, 11700-12200 MHz (downlink), and 14000-14500 MHz (uplink), and to drift the satellite to its permanent location of 58.0° W.L.² Intelsat 21 currently is scheduled to be launched on August 16, 2012. In support of its request, Intelsat submits the following information.

During in-orbit testing of Intelsat 21, Intelsat will operate in the above referenced C- and Ku-bands. To Intelsat's knowledge, the only co-frequency satellites within plus/minus six degrees of 51.3° W.L. are Intelsat 707 at 53.0° W.L., Intelsat 805 at 55.5° W.L., Galaxy 11 at 55.5° W.L., Intelsat 1R at 50.0° W.L., NSS 703 at 47.05° W.L., TDRS 3 at 49.0° W.L., and Inmarsat 3-F4 at 54.0° W.L. Intelsat currently is in coordination discussions with SES World Skies, the operator of NSS 703; Inmarsat, the operator of Inmarsat 3-F4; and the United States Government, the operator of TDRS 3, regarding the Intelsat 21

¹ Intelsat has filed this STA request, an FCC Form 159 and an \$830.00 filing fee electronically via the International Bureau's Filing System.

² See *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00862, File No. SAT-RPL-20120326-00061 (Apr. 27, 2012) (Public Notice). During the drift from 51.3° W.L. to 58.0° W.L., only the satellite's TT&C frequencies will be utilized. The TT&C frequencies are 13994.5 MHz (V) and 13750.5 MHz (LHCP) (Earth-to-space); and 11451.25 MHz (V and LHCP), 11451.75 MHz (V and LHCP), 11453.25 MHz (V and LHCP) and 11453.75 MHz (V and LHCP) (space-to-Earth).

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IOT. With regard to the remaining spacecraft, Intelsat will internally coordinate the proposed testing with the operations of these satellites.

In the unlikely event that harmful interference occurs, Intelsat will take all necessary steps to eliminate the interference.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collision with large debris or other operational space stations during in-orbit testing at 51.3° W.L. Intelsat 21 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another satellite. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Intelsat 21. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 21 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

Intelsat also requests that the waivers of Section 25.202(g) and footnote 2 to Section 25.202(a)(1) and footnote NG104 of the U.S. Table of Frequency Allocations requested in the pending application also apply during IOT at 51.3° W.L. and during the drift to 58.0° W.L.³

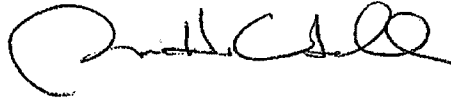
The in-orbit testing of Intelsat 21 at 51.3° W.L. is a critical step in ensuring that the satellite will be fully operational at 58.0° W.L. This, in turn, will ensure continuity of service to customers at the 58.0° W.L. location, and thereby promotes the public interest.

³ *Intelsat License LLC, Application for Authority to Launch and Operate Intelsat 21, a Replacement Satellite, at 58.0° W.L.*, File No. SAT-RPL-20120326-00061 at 6-8 (filed Mar. 26, 2012)

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For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan H. Crandall". The signature is fluid and cursive, with a large initial "S" and "C".

Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

cc: Robert Nelson
Kathryn Medley
Stephen Duall
Jay Whaley