

S2939 SAT-STA-20161101-00104 IB2016002408
Intelsat License LLC
IS 33e



File # SAT-STA-20161101-00104
Call Sign S2939 Grant Date 11/17/16
(or other identifier)
Term Dates period of
From 11/09/16 To: 30 days
Approved: Stephen J. Duall

Approved by OMB
3060-0678

Date & Time Filed: Nov 1 2016 4:25:13:386PM
File Number: SAT-STA-20161101-00104
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY
FOR OFFICIAL USE ONLY


APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Request for Further Extension of 30-Day STA to Conduct IOT of the Intelsat 33e Satellite, Call Sign S2939

1. Applicant

| | | | |
|-------------------|---------------------------------------------------|----------------------|-----------------------------|
| Name: | Intelsat License LLC | Phone Number: | 703-559-7848 |
| DBA Name: | | Fax Number: | 703-559-8539 |
| Street: | c/o Intelsat Corporation 7900 Tysons One Place | E-Mail: | susan.crandall@intelsat.com |
| City: | McLean | State: | VA |
| Country: | USA | Zipcode: | 22102 -5972 |
| Attention: | Susan H. Crandall | | |

ATTACHMENT TO GRANT
 Intelsat License LLC
 IBFS File No. SAT–STA–20161101–00104

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IBFS File No(s): | SAT–STA–20161101–00104 | GRANTED – With Conditions  International Bureau Satellite Division |
| Licensee/Grantee: | Intelsat License LLC | |
| Call Sign: | S2939 | |
| Satellite Name: | Intelsat 33e | |
| Orbital Location: (required station-keeping tolerance) | 59.55° E.L. (+/- 0.05 degrees east/west) | |
| Administration: | United States of America | |
| Nature of Service: | Fixed-Satellite Service (FSS) | |
| Scope of Grant: | Special temporary authority for a period of 30 days to continue to perform in-orbit testing (IOT) of Intelsat 33e at the 59.55° E.L. orbital location and to continue to perform Telemetry, Tracking, and Command (TT&C) operations necessary to maintain Intelsat 33e at 59.55° E.L. and to effect drift of Intelsat 33e to its authorized orbital location at 60.0° E.L. upon completion of IOT. | |
| Service Area(s): | Not Applicable | |
| Frequencies: | Payload testing frequencies: 3625–4200 MHz (space-to-Earth) 5850–6725 MHz (Earth-to-space) 10.95–11.2 GHz (space-to-Earth) 11.2–11.45 GHz (space-to-Earth) ¹ 11.45–12.2 GHz (space-to-Earth) 12.5–12.6 GHz (space-to-Earth) 13.75–13.85 GHz (Earth-to-space) 18.3–20.2 GHz (space-to-Earth) 14.0–14.5 GHz (Earth-to-space) 17.3–17.8 GHz (Earth-to-space) 28.1–30.0 GHz (Earth-to-space) TT&C center frequencies: 4197.25 MHz, 4197.75 MHz, 4198.25 MHz, and 4198.75 MHz (space-to-Earth); and 6422.00 MHz, 6424.5 MHz, 5850.5 MHz, and 5853.0 MHz (Earth-to-space) | |
| <p>Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission’s rules not waived herein. This grant is also subject to the following conditions:</p> <ol style="list-style-type: none"> 1. All operations under this grant of special temporary authority must be on an unprotected and non-harmful interference basis, <i>i.e.</i>, Intelsat must 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 must cease operations immediately upon notification of such interference and must inform the Commission, in writing, immediately of such an event. 3. Intelsat must coordinate the operations of Intelsat 33e with existing geostationary space stations to ensure that no unacceptable interference results from its operations at the 59.55° E.L. orbital location or during drift from the 59.55° E.L. orbital location to the 60.0° E.L. orbital location. | | |

¹ We note that Intelsat did not seek authority, and is not licensed, to operate in this frequency band at 60.0° E.L. Nonetheless, Intelsat requests authority to perform IOT in this band.


ATTACHMENT TO GRANT
Intelsat License LLC
IBFS File No. SAT-STA-20161101-00104

4. Intelsat 33e's operations at the 59.55° E.L. orbital location must be limited to IOT and must not include the provision of commercial services.
5. Intelsat must operate only the TT&C frequencies on Intelsat 33e during the space station's drift from the 59.55° E.L. orbital location to the 60.0° E.L. orbital location.
6. During in-orbit testing, Intelsat must maintain the Intelsat 33e space station within an east-west longitudinal station-keeping tolerance of ±0.05 degrees of the 59.55° E.L. orbital location.
7. IOT operations for Intelsat 33e must comply with the conditions imposed in IBFS File No. SAT-LOA-20150327-00016.²
8. Intelsat's request that the previously granted waivers of Sections 25.210(f) and 25.210(i)(1) of the Commission's rules, 47 CFR §§ 25.210(f) and 25.210(i)(1), be extended to the satellite at 59.55° E.L, is GRANTED, for the reasons set forth in the previous grant.³

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

| | | |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Action Date: | November 17, 2016 | |
| Term Dates | From: November 9, 2016 | To: period of 30 days |
| Approved: |  Stephen J. Duall Chief, Satellite Policy Branch | |

² See Intelsat License LLC's Application for Authority to Construct, Deploy, and Operate a C-, Ku-, and Ka-band satellite, Intelsat 33e, at 60.0° E.L., IBFS File No. SAT-LOA-20150327-00016 (Grant stamp, February 25, 2016).

³ *Id.*

2. Contact

| | | | |
|-------------------|-----------------------|----------------------|----------------------------|
| Name: | Cynthia J. Grady | Phone Number: | 703-559-6949 |
| Company: | Intelsat Corporation | Fax Number: | 703-559-8538 |
| Street: | 7900 Tysons One Place | E-Mail: | cynthia.grady@intelsat.com |
| City: | McLean | State: | VA |
| Country: | USA | Zipcode: | 22102 -5972 |
| Attention: | | 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 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 an additional 30 days of the Special Temporary Authority previously granted Intelsat to conduct in-orbit testing of the Intelsat 33e satellite (Call Sign S2939) at 59.55 E.L. and to drift the satellite to its permanent location of 60.0 E.L.

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
Cynthia J. Grady

11. Title of Person Signing
Regulatory 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

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

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

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

November 1, 2016

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

Re: Request for Further Extension of Special Temporary Authority to Conduct In-Orbit Testing of Intelsat 33e; Call Sign S2939

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests an additional 30 days of the Special Temporary Authority (“STA”)¹ previously granted Intelsat to conduct in-orbit testing (“IOT”) of the Intelsat 33e satellite (Call Sign S2939) at 59.55° E.L. and to drift the satellite to its permanent location of 60.0° E.L.² Intelsat 33e was launched on August 24, 2016. Due to a malfunction of the satellite’s main thruster, the expected commencement of IOT has been delayed. The IOT period is expected to take approximately 45 days; and the drift to 60.0° E.L. is expected to last approximately four days.

Intelsat 33e IOT payload testing will be performed in the following frequency bands:

- 3625 – 4200 MHz, 10950 – 11200 MHz, 11200 – 11450 MHz,³ 11450 – 12200 MHz, 12500 – 12600 MHz, and 18300 – 20200 MHz, (space-to-Earth);
- 5850 – 6725 MHz, 13750 – 13850 MHz, 14000 – 14500 MHz, 17300 – 17800 MHz, and 28100 – 30000 MHz (Earth-to-space).

Telemetry, Tracking, and Command (“TT&C”) services for Intelsat 33e will be performed in the following center frequencies:

- 4197.25 MHz, 4197.75 MHz, 4198.25MHz, and 4198.75 MHz (space-to-Earth);
- 6422.00 MHz, 6424.5 MHz, 5850.5 MHz, and 5853.0 MHz (Earth-to-space).

¹ Intelsat has filed this STA request, an FCC Form 159, and a \$945.00 filing fee electronically via the International Bureau's Filing System.

² See *Policy Branch Information; Actions Taken*, Report No. SAT-01195, File No. SAT-STA-20161003-00095 (Oct. 21, 2016) (Public Notice); *Policy Branch Information; Actions Taken*, Report No. SAT-01178, File No. SAT-STA-20160722-00069 (Aug. 5, 2016) (Public Notice); See *Policy Branch Information; Actions Taken*, Report No. SAT-01139, File No. SAT-LOA-20150327-00016 (Feb. 26, 2016) (Public Notice). During the drift from 59.55° E.L. to 60.0° E.L., only the satellite’s TT&C frequencies will be utilized.

³ Intelsat did not seek authority, and is not licensed, to operate in this band at 60.0° E.L.

Ms. Marlene H. Dortch
November 1, 2016
Page 2

During the IOT of Intelsat 33e, Intelsat will continue to operate in the above referenced C-, Ku-, and Ka-bands. Intelsat has identified the operational satellites within +/-6 degrees of the IOT location. Coordination is ongoing with several operators of such satellites to resolve potential interference issues. Intelsat expects to complete coordination discussions before launch of the Intelsat 33e satellite. 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 IOT at 59.55° E.L. Intelsat 33e 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 33e at 59.55° E.L. In addition, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 33e at 59.55° E.L. that is the subject of an International Telecommunications Union ("ITU") filing and that is either in orbit or progressing towards launch.

Intelsat's IOT operations in the 12500 – 12600 MHz, 17300 – 17800 MHz, 18800 – 19300 MHz, and 19300 – 19700 MHz frequency bands at the 59.55° E.L. orbital location will only occur in Regions 1 and 3, consistent with the frequency allocations in Regions 1 and 3.

Finally, Intelsat requests that the waivers previously granted to Intelsat 33e at 60.0° E.L. continue to be extended to the satellite at 59.55° E.L. In particular, Intelsat requests that the previously-granted waivers of Sections 25.210(f) and 25.210(i)(1) be extended to the satellite at 59.55° E.L., for the reasons previously set forth in the previous grant.

The IOT of Intelsat 33e's C-, Ku-, and Ka-band payloads at 59.55° E.L. is a critical step in ensuring that the satellite will be fully operational at 60.0° E.L. This, in turn, will provide additional capacity to customers at the 60.0° E.L. location, and thereby promotes the public interest.

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

Sincerely,



Cynthia J. Grady
Regulatory Counsel
Intelsat Corporation

cc: Stephen Duall
Jay Whaley
Cindy Spiers