S2947

SAT-STA-20180905-00066

IB2018005397

Horizons-3 License LLC

GRANTED\* International Bureau

File # SAT-STA-2018 0905-00066

Call Sign 52947 Grant Date 10/11/18

(or other identifier)

Approved:

10/17/18

Term Dates Period of 60 days

Approved by OMB 3060-0678

Date & Time Filed: Sep 5 2018 12:30:53:983PM File Number: SAT-STA-20180905-00066

Callsign:

+with conditions

Stephen J. Duall Chief, Satellite Policy Branch

## 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 Special Temporary Authority to Conduct In-orbit Testing of the Horizons-3e Satellite, Call Sign S2947

1. Applicant

Name:

Horizons-3 License LLC

**Phone Number:** 

703-559-7848

**DBA Name:** 

Fax Number:

703-559-8539

Street:

7900 Tysons One Place

E-Mail:

susan.crandall@intelsat.com

City:

McLean

State:

VA

Country:

USA

Zipcode:

22102

Attention:

Susan H. Crandall

#### ATTACHMENT TO GRANT

Intelsat License LLC IBFS File No. SAT-STA-20180905-00066

IBFS File No(s):	SAT-STA-20180905-00066 GRANTED-						
Licensee/Grantee:	Horizons-3 License LLC With Conditions						
Call Sign:	S2947						
Satellite Name:	Horizons 3e						
Orbital Location:	164.2° E.L.						
(required station-	(+/-0.05 degrees east/west)						
keeping tolerance)	*COMMISSION*						
Administration:	United States of America						
Nature of Service:	Fixed-Satellite Service (FSS)	International Bureau Satellite Division					
Scope of Grant:	Special temporary authority for a period of 60 days to perform in-orbit testing (IOT) of Horizons 3e at the 164.2° E.L. orbital location and to perform Telemetry, Tracking, and Command (TT&C) operations necessary to maintain Horizons 3e at 164.2° E.L. and to effect drift of Horizons 3e to its authorized orbital location at 169.0° E.L. upon completion of IOT.						
Service Area(s):	Not Applicable						
Frequencies:	Payload testing frequencies: 3700–4200 MHz (space-to-Earth) 5925-6425 MHz (Earth-to-space) 10.85-11.7 GHz (space-to-Earth) 12.2-12.75 MHz (space-to-Earth) 12.92-13.25 GHz (Earth-to-space) 13.75-14.5 GHz (Earth-to-space)  TT&C frequencies: 4197.75 MHz, 4198.25 MHz, 4198.75 MHz, and 4199.25 5850.0-5853.5 MHz and 6421.5-6425.0 MHz (Earth-to-sp	* 1					

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:

- 1. All operations under this grant of special temporary authority must be on an unprotected and non-harmful interference basis, *i.e.*, Intelsat must not cause harmful interference to, and must 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 Horizons 3e with existing geostationary space stations to ensure that no unacceptable interference results from its operations at the 164.2° E.L. orbital location or during drift from the 164.2° E.L. orbital location to the 169.0° E.L. orbital location.
- 4. Horizons 3e's operations at the 164.2° 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 Horizons 3e during the space station's drift from the 164.2° E.L. orbital location to the 169.0° E.L. orbital location.
- 6. During in-orbit testing, Intelsat must maintain the Horizons 3e space station within an east-west longitudinal station-keeping tolerance of  $\pm 0.05$  degrees of the 164.2° E.L. orbital location.

### ATTACHMENT TO GRANT

Intelsat License LLC IBFS File No. SAT-STA-20180905-00066

- 7. IOT operations for Horizons 3e must comply with the conditions imposed in IBFS File No. SAT-MOD-20170622-00093.<sup>1</sup>
- 8. Horizons-3's request that the waivers previously granted to operations of Horizons 3e at 169.0° E.L., particularly waivers of 47 CFR §§ 25.202(a)(1), 2.106, and 2.106, US245, be extended to IOT operations of the satellite at 164.2° E.L., is granted for the reasons set forth in the previous grant.²

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:	October 11, 2018	
Term Dates	<b>From:</b> October 17, 2018	To: period of 60 days

Approved:

Stephen J. Duall

Chief, Satellite Policy Branch

<sup>&</sup>lt;sup>1</sup> See Horizons-3 License LLC's Application for Authority to Modify the Authorization for Horizons 3e at 169.0° E.L., IBFS File No SAT-MOD-20170622-00093 (Grant stamp, April 24, 2018).

2. Contact	t			**************************************					
	Name:	Cynthia J. Grady	Phone Nu	amber:	7	03-559-	-6949		
Company: Intelsat US LLC		Intelsat US LLC	Fax Number:		7	703-559-8539			
	Street:	7900 Tysons One Place	E-Mail:		c	ynthia.g	ady@intelsa	at.com	
	City:	McLean	State:		,	VA			
	Country:	USA	Zipcode:		2	2102	-5972		
	Attention:		Relations	ship:	L	egal Co	ınsel		
<ul><li>If Yes</li><li>Gover</li></ul>	, complete and	with this application? attach FCC Form 159. If No Noncommercial educat  ():		for fee exempt	tion (see 47 C.	F.R.Sect	ion 1.1114).		
4b. Fee Cl	assification (	CRY - Space Station (Geostation	onary)						
5. Type Re	equest					***************************************			
O Chan	ge Station Loc	ation O E	xtend Expiration	Date	•	Other			
6. Tempor	ary Orbit Loca	tion		7. Requested	Extended Exp	iration [	Pate		

8. Description (If the complete description do	es not appear in this box	, please go to the end of t	the form to view it in its entirety.)		
Horizons-3 License LLC herein requests a grant of Special Temporary Authority for 60 days, beginning October 17, 2018 to conduct in-orbit testing of the Horizons 3e satellite (Call Sign S2947) at 164.2 E.L. and to drift the satellite to its permanent location of 169.0 E. L. Horizons 3e is scheduled to be launched on September 25, 2018. The IOT period is					
9. By checking Yes, the undersigned certifies th to a denial of Federal benefits that includes FCC 21 U.S.C. Section 862, because of a conviction 1.2002(b) for the meaning of "party to the	C benefits pursuant to Se for possession or distrib	ction 5301 of the Anti-Dution of a controlled subs	Orug Act of 1988,		
10. Name of Person Signing Cynthia J. Grady		11. Title of Person Sign Regulatory Counsel, Int			
12. Please supply any need attachments.	**************************************				
Attachment 1: STA Request	Attachment 2:		Attachment 3:		
		**************************************			
(U.S. Code, Title 18, Section	on 1001), AND/OR REV	OCATION OF ANY STA	Y FINE AND / OR IMPRISONMENT ATION AUTHORIZATION ode, 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-PERM, 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.

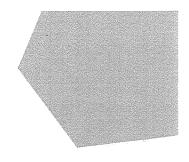
Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been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

# 8. Description

Horizons-3 License LLC herein requests a grant of Special Temporary Authority for 60 days, beginning October 17, 2018 to conduct in-orbit testing of the Horizons 3e satellite (Call Sign S2947) at 164.2 E.L. and to drift the satellite to its permanent location of 169.0 E.L. Horizons 3e is scheduled to be launched on September 25, 2018. The IOT period is expected to last approximately forty days and the drift to 169.0 E.L. is expected to last approximately ten days.





September 5, 2018

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

Re: Request for Special Temporary Authority to Conduct In-Orbit Testing of the Horizons 3e

Satellite; Call Sign S2947

Dear Ms. Dortch:

Horizons-3 License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")<sup>1</sup> for 60 days, beginning October 17, 2018, to conduct in-orbit testing ("IOT") of the Horizons 3e satellite (Call Sign S2947) at 164.2° E.L. and to drift the satellite to its permanent location of 169.0° E.L.<sup>2</sup> Horizons 3e is scheduled to be launched on September 25, 2018. The IOT period is expected to last approximately forty days and the drift to 169.0° E.L. is expected to last approximately ten days.

Horizons 3e IOT payload testing will be performed in the following frequency bands:

- 3700-4200 MHz, 10850-11700 MHz and 12200-12750 MHz (space-to-Earth); and
- 5925-6425 MHz, 12920-13250 MHz, and 13750-14500 MHz (Earth-to-space).

Telemetry, Tracking, and Command ("TT&C") services for Horizons 3e will be performed in the following center frequencies and frequency bands:

- 4197.75 MHz, 4198.25 MHz, 4198.75 MHz, and 4199.25 MHz (space-to-Earth); and
- 5850.0-5853.5 MHz and 6421.5-6425.0 MHz (Earth-to-space).

In support of its request, Intelsat submits the following information.

<sup>&</sup>lt;sup>1</sup> Intelsat has filed this STA request, an FCC Form 159, and a \$980.00 filing fee electronically via the International Bureau's Filing System.

<sup>&</sup>lt;sup>2</sup> See Policy Branch Information; Actions Taken, Report No. SAT-01313, File No. SAT-MOD-20170622-00093 (Apr. 27, 2018) (Public Notice). During the drift from 164.2° E.L. to 169.0° E.L., only the satellite's TT&C frequencies will be utilized.

Ms. Marlene H. Dortch September 5, 2018 Page 2

During the IOT of Horizons 3e, Intelsat will operate in the above referenced C- and Ku-bands. Intelsat has identified the operational satellites within +/-6 degrees of the IOT location. Coordination is ongoing with several operators to resolve potential interference issues. Intelsat expects to complete coordination discussions before launch of the Horizons 3e 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 164.2° E.L. Horizons 3e 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 Horizons 3e at 164.2° E.L. In addition, Intelsat is not aware of any system with an overlapping station-keeping volume with Horizons 3e at 164.2° E.L. that is the subject of an International Telecommunications Union ("ITU") filing and that is either in orbit or progressing towards launch.

Finally, Intelsat requests that the waivers previously granted to Horizons 3e at 169.0° E.L. be extended to the satellite at 164.2° E.L. In particular, Intelsat requests that the previously-granted waivers of Sections 25.202(a)(1), 2.106, and Footnote US245 of the U.S. Table of Allocations be extended to the satellite at 164.2° E.L., for the reasons previously set forth in the license grant.<sup>3</sup>

The IOT of Horizons 3e's C- and Ku-band payloads at 164.2° E.L. is a critical step in ensuring that the satellite will be fully operational at 169.0° E.L. This, in turn, will provide additional capacity to customers at the 169.0° 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,

/s/ Cynthia J. Grady

Cynthia J. Grady Regulatory Counsel Intelsat Corporation

cc: Stephen Duall Jay Whaley Cindy Spiers

<sup>&</sup>lt;sup>3</sup> See supra n.2.