

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Request for STA for Pamalu, HI Earth Station KA269 to Provide IOT and TT&C for Horizons 3e (S2947) Satellite

1. Applicant

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



File # SES-STA-20180828-02519
 Call Sign KA269 Grant Date 9-24-18
 (or other identifier)
 Term Dates From: 9-25-18 To: 10-25-18
 Approved: [Signature]

2. Contact	
Name: Cynthia J. Grady	Phone Number: 703-559-6949
Company: Intelsat US LLC	Fax Number: 202-944-7870
Street: 7900 Tysons One Place	E-Mail: cynthia.grady@intelsat.com
City: McLean	State: VA
Country: USA	Zipcode: 22102 -
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? <input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other (please explain):	
4b. Fee Classification CGX - Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input type="radio"/> Use Prior to Grant	<input type="radio"/> Change Station Location <input checked="" type="radio"/> Other
6. Requested Use Prior Date	
7. CityPaumalu	8. Latitude (dd mm ss.s h) 21 40 24.0 N

9. State HI	10. Longitude (dd mm ss.s h) 158 2 16.0 W
11. Please supply any need attachments. Attachment 1: STA Request Attachment 2: Exhibit A Attachment 3: Attachment 3:	
12. 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, commencing September 25, 2018, to use its Paumalu, Hawaii C-band earth station, call sign KA269, to provide telemetry, tracking, and command during in-orbit testing of Horizons 3e (S2947) at 164.0 E.L and TT&C during the drift of Horizons 3e to its final location of	
13. 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 <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing Susan H. Crandall	15. Title of Person Signing Asst. General Counsel, Intelsat Corporation
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).	

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12. Description

Intelsat License LLC herein requests a grant of Special Temporary Authority for 30 days, commencing September 25, 2018, to use its Paumalu, Hawaii C-band earth station, call sign KA269, to provide telemetry, tracking, and command during in-orbit testing of Horizons 3e (S2947) at 164.0 E.L and TT&C during the drift of Horizons 3e to its final location of 169.0 E.L. Horizons 3e is expected to be launched on September 18, 2018.

By Applicant: Intelsat License LLC-
File No.: SES-STA-20180828-02519
Call Sign: KA269
Special Temporary Authority (STA)



File # SES-STA-20180828-02519
KA269
Call Sign KA269 Grant Date 9-25-18
(or other identifier)
Term Dates
From: 9-25-18 To: 10-25-18
Approved: [Signature]

Intelsat License LLC ("Intelsat") - is granted a special temporary authority for 30 days, beginning September 25, 2018 to operate its C-band earth station in Paumalu, Hawaii to provide telemetry, tracking, and command (TT&C) services during in-orbit testing ("IOT") of Horizons 3e (S2947) at 164.0°E.L. orbital location and TT&C during the drift of Horizon 3e to its permanent location of 169.0° E.L. orbital location, using the following frequencies and frequency bands: 4197.75 MHz, 4198.25 MHz, 4198.75 MHz, and 4199.25 MHz (space-to-Earth), and 6421.50 – 6425.0 MHz, and 5850.00 – 5853.5 MHz bands (Earth-to-space) under the following conditions:

1. All operators of satellites will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs, currently the 24x7 contact information for the Intelsat Horizon 3e is as follows: Phone: (703) 559-770 I - East Coast Operations Center (primary); (310) 525-5591 - West Coast Operations Center (back-up). Request to speak with Harry Burnham or Kevin Bell.
2. All operations under this grant of special temporary authority shall be on an unprotected and non-harmful interference basis. Intelsat 's E950307 shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radio communication system.
3. 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.
4. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future Intelsat License LLC applications.
5. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Intelsat License LLC-s risk.
6. This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261.

Prepared By

COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Prepared For

**Intelsat License LLC
Paumalu, Hawaii**

Temporary Transmit-Only Earth Station
Operation Dates: 09/05/2018 - 11/28/2018

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations. Verbal and written coordination was conducted with the below listed carriers on July 05, 2018.

Company

AT&T Corp.
County of Kauai Department of Police
Federal Communication Commission
Hawaii State
Hawaiian Electric Company, Inc
Hawaiian Telcom, Inc.
Honolulu City & County Dept of Info Tech
NEXSTAR BROADCASTING, INC.
University of Hawaii

There are no unresolved interference objections with the station contained in these applications.

The following section presents the data pertinent to frequency coordination of the earth station that was circulated to all carriers within its coordination contours.

COMSEARCH
Earth Station Data Sheet
 19700 Janelia Farm Boulevard, Ashburn, VA 20147
 (703)726-5500 <http://www.comsearch.com>

Date: 07/05/2018
 Job Number: 180705COMSGE06

Administrative Information

Status: TEMPORARY (Operation from 09/05/2018 to 11/29/2018)
 Call Sign: TEMP11
 Licensee Code: INTELS
 Licensee Name: Intelsat License LLC

Site Information

PAUMALU, HI

Venue Name
 Latitude (NAD 83): 21° 40' 16.0" N
 Longitude (NAD 83): 158° 2' 16.0" W
 Climate Zone: A
 Rain Zone: 4
 Ground Elevation (AMSL): 46.22 m / 151.6 ft

Link Information

Satellite Type: Geostationary
 Mode: TO - Transmit-Only
 Modulation: Digital
 Satellite Arc: 190° W to 196° West Longitude
 Azimuth Range: 239.4° to 244.7°
 Corresponding Elevation Angles: 46.0° / 40.5°
 Antenna Centerline (AGL): 9.8 m / 32.2 ft

Antenna Information

Transmit - FCC32

Manufacturer: Vertex
 Model: 9 meter
 Gain / Diameter: 53.5 dBi / 9.0 m
 3-dB / 15-dB Beamwidth: 1.00° / 2.00°

Max Available RF Power (dBW/4 kHz): 8.5
 (dBW/MHz): 32.5

Maximum EIRP (dBW/4 kHz): 62.0
 (dBW/MHz): 86.0
 (dBW):

Interference Objectives: Long Term: -154.0 dBW/4 kHz 20%
 Short Term: -131.0 dBW/4 kHz 0.0025%

Frequency Information

Transmit 6.1 GHz

Emission / Frequency Range (MHz): 850KFXD - 1M20FXD / 5850.0 - 5853.5
 850KFXD - 1M20FXD / 6421.5 - 6425.0

Max Great Circle Coordination Distance: 219.8 km / 136.5 mi
 Precipitation Scatter Contour Radius: 100.0 km / 62.1 mi

Coordination Values	PAUMALU, HI	
Licensee Name	Intelsat License LLC	
Latitude (NAD 83)	21° 40' 16.0" N	
Longitude (NAD 83)	158° 2' 16.0" W	
Ground Elevation (AMSL)	46.22 m / 151.6 ft	
Antenna Centerline (AGL)	9.8 m / 32.2 ft	
Antenna Model	Vertex 9 meter	
Antenna Mode	Transmit 6.1 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	8.5 (dBW/4 kHz)	

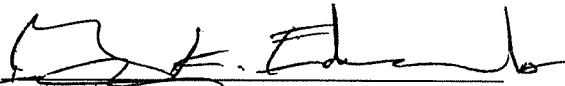
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	108.98	-10.00	212.25
5	0.00	112.58	-10.00	212.25
10	0.00	116.08	-10.00	212.25
15	0.00	119.48	-10.00	212.25
20	0.00	122.47	-10.00	212.25
25	0.00	124.97	-10.00	212.25
30	0.00	127.24	-10.00	212.25
35	0.93	130.02	-10.00	159.61
40	4.90	135.30	-10.00	100.00
45	4.66	136.65	-10.00	100.00
50	5.33	138.44	-10.00	100.00
55	10.31	144.07	-10.00	100.00
60	12.64	146.63	-10.00	100.00
65	13.70	147.25	-10.00	100.00
70	14.23	146.67	-10.00	100.00
75	14.89	145.53	-10.00	100.00
80	16.04	144.17	-10.00	100.00
85	17.34	142.29	-10.00	100.00
90	20.49	140.95	-10.00	100.00
95	22.10	138.00	-10.00	100.00
100	23.74	134.62	-10.00	100.00
105	24.97	130.75	-10.00	100.00
110	25.02	126.32	-10.00	100.00
115	25.68	121.97	-10.00	100.00
120	25.80	117.41	-10.00	100.00
125	26.41	112.88	-10.00	100.00
130	25.85	108.15	-10.00	100.00
135	25.90	103.49	-10.00	100.00
140	25.88	98.80	-10.00	100.00
145	25.09	94.09	-10.00	100.00
150	23.79	89.43	-10.00	100.00
155	22.73	84.84	-10.00	100.00
160	20.68	80.41	-10.00	100.00
165	17.01	76.38	-10.00	100.00
170	15.70	72.30	-10.00	100.00
175	14.89	68.27	-10.00	100.00
180	14.33	64.31	-10.00	100.00
185	13.08	60.74	-10.00	100.00

Coordination Values		PAUMALU, HI	
Licensee Name		Intelsat License LLC	
Latitude (NAD 83)		21° 40' 16.0" N	
Longitude (NAD 83)		158° 2' 16.0" W	
Ground Elevation (AMSL)		46.22 m / 151.6 ft	
Antenna Centerline (AGL)		9.8 m / 32.2 ft	
Antenna Model		Vertex 9 meter	
Antenna Mode		Transmit 6.1 GHz	
Interference Objectives: Long Term		-154.0 dBW/4 kHz	20%
Short Term		-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	8.5 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	12.12	57.28	-10.00	100.00
195	11.14	54.10	-10.00	100.00
200	9.85	51.39	-10.00	100.00
205	7.69	49.61	-10.00	100.00
210	7.38	46.47	-9.68	100.00
215	6.55	43.89	-9.06	100.00
220	6.40	41.20	-8.37	100.00
225	6.45	38.73	-7.70	100.00
230	5.69	37.43	-7.33	100.00
235	2.64	38.90	-7.75	126.20
240	0.27	40.47	-8.18	213.18
245	0.00	40.51	-8.19	219.76
250	0.00	40.80	-8.27	219.43
255	0.00	41.59	-8.47	218.55
260	0.00	42.84	-8.80	217.20
265	0.00	44.53	-9.22	215.46
270	0.00	46.59	-9.71	213.44
275	0.00	48.99	-10.00	212.25
280	0.00	51.66	-10.00	212.25
285	0.00	54.58	-10.00	212.25
290	0.00	57.69	-10.00	212.25
295	0.00	60.97	-10.00	212.25
300	0.00	64.37	-10.00	212.25
305	0.00	67.89	-10.00	212.25
310	0.00	71.50	-10.00	212.25
315	0.00	75.17	-10.00	212.25
320	0.00	78.90	-10.00	212.25
325	0.00	82.66	-10.00	212.25
330	0.00	86.45	-10.00	212.25
335	0.00	90.25	-10.00	212.25
340	0.00	94.05	-10.00	212.25
345	0.00	97.84	-10.00	212.25
350	0.00	101.60	-10.00	212.25
355	0.00	105.32	-10.00	212.25

Certification

I hereby certify that I am the technically qualified person responsible for the preparation of the frequency coordination data contained in this report. I am familiar with Parts 101 and 25 of the FCC Rules and Regulations and I have either prepared or reviewed the frequency coordination data submitted with this report, and that it is complete and correct to the best of my knowledge and belief.

BY: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: July 24, 2018



INTELSAT.

Envision. Connect. Transform.

August 28, 2018

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

Re: Request for Special Temporary Authority
Paumalu, Hawaii Earth Station KA269

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)¹ for 30 days, commencing September 25, 2018, to use its Paumalu, Hawaii C-band earth station—call sign KA269—to provide telemetry, tracking, and command (“TT&C”) during in-orbit testing (“IOT”) of Horizons 3e (S2947) at 164.0° E.L and TT&C during the drift of Horizons 3e to its final location of 169.0° E.L. Horizons 3e is expected to be launched on September 18, 2018.² The IOT and drift are expected to last approximately 3 months.

The proposed operations will be performed using the following frequencies and frequency bands: 6421.5-6425.0 MHz and 5850.0-5853.5 MHz in the uplink (LHCP/V); and 4197.75 MHz, 4198.25 MHz, 4198.75 MHz, and 4199.25 MHz in the downlink (LHCP/V). The proposed operations will be coordinated with all operators of satellites that use the same frequency bands and are in the drift path or are potentially affected by these operations at the IOT location. All operators of potentially affected satellites will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs.

The 24x7 contact information for the Horizons 3e mission is as follows:

Ph.: (703) 559-7701 – East Coast Operations Center (primary)
(310) 525-5591 – West Coast Operations Center (back-up)

Request to speak with Harry Burnham or Kevin Bell.

In further support of this request, Intelsat herewith attaches Exhibit A, which contains technical information that demonstrates that the operation of the earth station will be compatible with its electromagnetic environment and will not cause harmful interference into any lawfully operating

¹ Intelsat has filed its STA request, an FCC Form 159, a \$200.00 filing fee, and this supporting letter electronically via the International Bureau’s Filing System (“IBFS”).

² The permanent orbital location for Horizons 3e will be 169.0° E.L. *See Policy Branch Information; Actions Taken*, Report No. SAT-01313, File No. SAT-MOD-20170622-00093 (April 27, 2018) (Public Notice).

Ms. Marlene H. Dortch
August 28, 2018
Page 2

terrestrial facility. In the extremely unlikely event that harmful interference should occur due to transmissions to or from its earth station, Intelsat will take all reasonable steps to eliminate the interference.

Grant of this STA request will allow Intelsat to help launch and test the Horizons 3e satellite. This, in turn, will help provide additional capacity to customers at the 169.0° E.L. orbital location and thereby promotes the public interest.

Please direct any questions regarding this STA request to the undersigned at (703) 559-6949.

Respectfully submitted,

/s/ Cynthia J. Grady

Cynthia J. Grady
Regulatory Counsel
Intelsat US LLC

cc: Paul Blais