

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Request for Special Temporary Authority for Clarksburg Maryland Earth Station KA275

1. Applicant

Name:	Intelsat North America 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		



File # SES-STA-20100616-00708

Call Sign KA275 Grant Date 6/25/2010
(or other identifier)

Term Dates
From 6/24/2010 To: 6/30/2010

Approved: [Signature]
Chief Satellite Engrs Br.

2. Contact

Name:	Intelsat North America LLC	Phone Number:	202-944-7848
Company:		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	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 CGX – Fixed Satellite Transmit/Receive Earth Station

5. Type Request

- Use Prior to Grant Change Station Location Other

6. Requested Use Prior Date

7. City Clarksburg

8. Latitude
(dd mm ss.s h) 39 13 7.4 N

9. State MD	10. Longitude (dd mm ss.s h) 77 16 10.9 W
11. Please supply any need attachments. Attachment 1: Exhibit B Attachment 2: Exhibit A Attachment 3: STA Request	
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.) <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">Intelsat North America LLC herein requests a grant of Special Temporary Authority for seven days, from June 24, 2010 through June 30, 2010, to use its Clarksburg, Maryland C-band earth station -- call sign KA275 -- to communicate with the Galaxy 15 satellite while it is located from 129.5 W.L. to 128.5 W.L.</div>	
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. <input checked="" type="radio"/> Yes <input type="radio"/> No	
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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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.

EXHIBIT B

Analysis of Change of Uplink Interference Potential Resulting From the Proposed KA275 Transmissions

Satellite Name	Orbital Location (degrees)	Minimum Orbital separation during test	Off-axis EIRP density with the antenna pointed at the G15 licensed location (133.0° W.L.) assuming FCC permitted power density of -2.7 dBW/4 kHz	Maximum Off-axis EIRP density during the test (input power density of -14.7 dBW/4 kHz)	Decrease in uplink interference compared to operations at licensed location
AMC-11	131	1.5	18.77	9.90	8.88
AMC-10	135	5.5	18.77	-4.21	22.98

EXHIBIT A: CHARACTERISTICS OF THE PROPOSED TRANSMISSIONS

Table 1. Transmission characteristics corresponding to the maximum carrier bandwidth of 10 MHz: Carriers 1 to 8

		Carrier 1	Carrier 2	Carrier 3	Carrier 4	Carrier 5	Carrier 6	Carrier 7	Carrier 8
Polarization	:	H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V
U/L carrier frequency	:	5965	6005	6045	6085	6125	6165	6205	6245
D/L carrier frequency	:	3740	3780	3820	3860	3900	3940	3980	4020
Transmit e.i.r.p.	dBW	76.6	70.9	76.9	71.3	75.5	76.5	77.3	77
Occupied bandwidth	KHz	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
Antenna Diameter	meter	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Total e/s uplink eirp through HPA	dBW	76.6	70.9	76.9	71.3	75.5	76.5	77.3	77.0
Peak antenna gain	dB	59.8	59.8	59.9	59.9	60.0	60.1	60.1	60.2
Losses from HPA to antenna feed.	dB	1	1	1	1	1	1	1	1
Power density per 4 kHz	dBW	-16.2	-21.9	-16.0	-21.6	-17.5	-16.5	-15.8	-16.2
EIRP density per 4 kHz	dBW/4kHz	42.6	36.9	42.9	37.3	41.5	42.5	43.3	43.0
Required power at HPA output port	dBW	17.8	12.1	18.0	12.4	16.5	17.4	18.2	17.8

Table 2. Transmission characteristics corresponding to the maximum carrier bandwidth of 10 MHz: Carriers 9 to 16

		Carrier 9	Carrier 10	Carrier 11	Carrier 12	Carrier 13	Carrier 14	Carrier 15	Carrier 16
Polarization	:	H/V	H/V	H/V	H/V	V/H	V/H	V/H	V/H
U/L carrier frequency	:	6285	6325	6365	6405	5945	5985	6025	6065
D/L carrier frequency	:	4060	4100	4140	4180	3720	3760	3800	3840
Transmit e.i.r.p.	dBW	77.1	75.4	77.2	77.7	78.5	77.6	76.7	77.7
Occupied bandwidth	KHz	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
Antenna Diameter	meter	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Total e/s uplink eirp through HPA	dBW	77.1	75.4	77.2	77.7	78.5	77.6	76.7	77.7
Peak antenna gain	dB	60.2	60.3	60.3	60.4	60.2	60.3	60.4	60.4
Losses from HPA to antenna feed.	dB	1	1	1	1	1	1	1	1
Power density per 4 kHz	dBW	-16.1	-17.9	-16.1	-15.7	-14.7	-15.7	-16.6	-15.7
EIRP density per 4 kHz	dBW/4kHz	43.1	41.4	43.2	43.7	44.5	43.6	42.7	43.7
Required power at HPA output port	dBW	17.9	16.1	17.9	18.3	19.3	18.3	17.3	18.3

Table 3. Transmission characteristics corresponding to the maximum carrier bandwidth of 10 MHz: Carriers 17 to 24

		Carrier 17	Carrier 18	Carrier 19	Carrier 20	Carrier 21	Carrier 22	Carrier 23	Carrier 24
Polarization	:	V/H	V/H	V/H	V/H	V/H	V/H	V/H	V/H
U/L carrier frequency	:	6105	6145	6185	6225	6265	6305	6345	6385
D/L carrier frequency	:	3880	3920	3960	4000	4040	4080	4120	4160
Transmit e.i.r.p.	dBW	77.9	77.9	77.3	77.6	78.1	75.8	77.2	76.3
Occupied bandwidth	KHz	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
10 log BW	DB-Hz	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Antenna Diameter	meter	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Total e/s uplink eirp through HPA	dBW	77.9	77.9	77.3	77.6	78.1	75.8	77.2	76.3
Peak antenna gain	dB	60.5	60.5	60.6	60.6	60.7	60.8	60.8	60.9
Losses from HPA to antenna feed.	dB	1	1	1	1	1	1	1	1
Power density per 4 kHz	dBW	-15.6	-15.6	-16.3	-16.0	-15.6	-17.9	-16.6	-17.5
EIRP density per 4 kHz	dBW/4kHz	43.9	43.9	43.3	43.6	44.1	41.8	43.2	42.3
Required power at HPA output port	dBW	18.4	18.4	17.7	18.0	18.4	16.0	17.4	16.4

June 16, 2010

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



Re: Request for Special Temporary Authority
Clarksburg, Maryland Earth Station KA275

Dear Ms. Dortch:

Intelsat North America LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")¹ for seven days, from June 24, 2010 through June 30, 2010, to use its Clarksburg, Maryland C-band earth station -- call sign KA275 -- to communicate with the Galaxy 15 satellite while it is located from 129.5° W.L. to 128.5° W.L. As the Commission is aware, on April 5, 2010, the Galaxy 15 satellite suffered an anomaly of unknown origin. Due to this anomaly, the satellite has drifted outside of its authorized +/- 0.05° East/West station-keeping box pursuant to STA.² Intelsat will utilize the transmissions contemplated herein in a second attempt to disable the communications payload on the Galaxy 15 satellite. Intelsat will take this action only if all ongoing efforts to regain control of Galaxy 15 have not been successful by June 24.

From June 24, 2010 through June 30, 2010, during one or more periods of up to three hours each day, the earth station will be transmitting simultaneously to the 24 transponders of the Galaxy 15 satellite. There will be one 10 MHz carrier transmitted to each of the transponders. The characteristics of these carriers, including the exact frequencies and corresponding power density and EIRP density are provided in Exhibit A of this application.

The carriers transmitted will be within the antenna's licensed parameters and will generate at 131° W.L., or at any other location occupied by a non-Intelsat

¹ Intelsat has filed its STA request, an FCC Form 159, a \$175.00 filing fee and this supporting letter electronically via the International Bureau's Filing System ("TBFS").

² See *Policy Branch Information, Actions Taken*, Report No. SAT-00682, File No. SAT-STA-20100409-00071 (Apr. 16, 2010) (Public Notice); *Actions Taken*, Report No. SAT-00687, File No. SAT-STA-20100430-00087 (May 7, 2010) (Public Notice); *Actions Taken*, Report No. SAT-00698, File No. SAT-STA-20100601-00118 (Jun. 11, 2010) (Public Notice).

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satellite, an off-axis EIRP density that is within levels mandated by the FCC's two-degree spacing requirements. As such, the operations of other lawfully permitted terrestrial radio communication facilities will not be subject to electromagnetic interference levels above the levels that they would receive for normal operation of the earth station in accordance with the terms of its license.

In support of this, Intelsat has conducted an interference analysis with respect to non-Intelsat geostationary satellites with C-band operations up to six degrees from the Galaxy 15 satellite during the relevant time period. The results of these analyses, reported in Exhibit B, indicate that there will be a reduction of uplink interference to SES's AMC-11 satellite at 131.04° W.L., compared to the interference level resulting from the applicable off-axis EIRP density levels of Section 25.218 of the FCC's rules (corresponding to a power density level of -2.7 dBW/4kHz transmitted by an antenna just meeting the specifications in Section 25.209 of the FCC's rules). The uplink interference level into the other relevant SES satellite – AMC-10 – will also be reduced as the proposed operations will be further away from those satellites. Intelsat has provided SES with the emergency contacts listed below in the event that harmful interference occurs.

ESOC Satellite Control Center – (202) 944-7701

Knut Tjonneland, Director, Satellite Engineering – (202) 438-1527

Grant of this STA request will allow Intelsat to attempt for a second time to disable the communications payload on the Galaxy 15 satellite should ongoing attempts to regain control of the spacecraft prove unsuccessful. If such an attempt to disable the communications payload is successful, it will greatly reduce the likelihood of Galaxy 15 causing potential interference into the operations of other satellites, thereby promoting the public interest.

Intelsat agrees to accept the following condition, which was included in Intelsat's prior grant of special temporary authority to use the KA275 earth station in an attempt to disable the Galaxy 15 satellite's communications payload.³

All operations shall be on an unprotected and non-harmful interference basis, i.e., Intelsat North America LLC, shall not cause harmful interference to, and shall not claim protection from, interference caused

³ Request for Special Temporary Authority for Clarksburg, MD Earth Station KA275, File No. SAT-STA-20100426-00084 (stamp grant with conditions Apr. 29, 2010).

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to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.

Please direct any questions regarding this STA request to the undersigned at (202) 944-7848.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'S. Crandall', written in a cursive style.

Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

Cc: Kathryn Medley