Approved by OMB
3060−0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
180−Day STA to Test 1.2m SeaTel Antenna at Napa, CA

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		

"With conditions"

FEDERAL COMMUNICATIONS COMMISSION

GRANTED
International Bureau

File # SES-STA-20110510-00570

Call Sign N/A Grant Date 06/24/2011
(or other identifier)

Term Dates
From 06/24/2011 To: 12/21/2011

Approved: Paul E Blaich

Conditions:
Applicant: Intelsat License LLC
File Number: SES-STA-20110510-00570

Intelsat License LLC (Intelsat) is granted, under the following conditions, Special Temporary Authority for 180 days, from 6/24/2011 through 12/21/2011, to operate an Earth terminal as described in Exhibit A of the SES-STA-20110510-00570 filing. Based on the following conditions:

1. Grant authorized to operate a 1.2 meter Ku-band antenna located at Intelsat Napa, California teleport with Galaxy-16 on 14002-14038 MHz (uplink)at eirp density of -25.8 dBW/4 kHz (or not to exceed 47 CFR 25.218 limits) and 11702-11738 MHz (downlink) from June 24, 2011 through December 21, 2011 to test a 1.2 meter antenna.

2. Pursuant to Section 1.62 of the Commission's rules, continued operation of this station with Galaxy-16 under SES-STA-20110510-00569 granted to 6/23/2011 continued in effect until grant of this authorization.

"With conditions"

File # SES-STA-20110510-00570

Call Sign N/A Grant Date 06/24/2011
(or other identifier)

Term Dates
From 06/24/2011 To: 12/21/2011

Approved: Paul E Blaes

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 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. CityNapa	8. Latitude (dd mm ss.s h) 38 14 24.0 N

9. State CA	10. Longitude (dd mm ss.s h) 122 16 48.0 W

11. Please supply any need attachments.

Attachment 1: STA Request Attachment 2: Exhibit A 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 180 days to test a 1.2 meter Ku-band antenna located at its Napa, California teleport. Specifically, Intelsat intends to use this antenna to communicate with its Galaxy 16 satellite at 99.0 W.L.

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 ( ) No

14. Name of Person Signing Susan H. Crandall	15. Title of Person Signing Asst. Gen. 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).

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.

May 10, 2011

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

INTELSAT

Re: Request for Special Temporary Authority
Napa, California C/Ku-band Earth Station Testing

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority[1] for 180 days to test a 1.2 meter Ku-band antenna.[2] Specifically, Intelsat intends to communicate with its Galaxy 16 satellite at 99.0° W.L. in the following frequencies: 14002-14038 MHz (uplink) and 11702-11738 MHz (downlink).[3] During the testing, the antenna will be located at Intelsat's Napa, California teleport.

Intelsat seeks to test the feasibility of the antenna for certain services. Because the proposed testing will assist Intelsat in meeting customer demand for service, grant of this STA request is in the public interest.

In support of this request, Intelsat is attaching Exhibit A, which contains information showing that the operation of the earth station will be compatible with its electromagnetic environment and will not cause harmful interference into any lawfully operating facility. Specifically, Annex 1 and Section a) of Annex 2 of Exhibit A provide the characteristics of the proposed transmissions. The transmitted eirp density of -25.8 dBW/4 kHz will be less than the value of -14 dBW/4kHz at which the antenna complies with Section 25.218 of the FCC's rules, according to the statement provided by the antenna manufacturer and reproduced in Section b), Annex 2 of Exhibit A.

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

[2] The Ku-band antenna that will be tested is mounted on the back of a 2.4 meter C-band antenna, with a switchable feed. Intelsat intends to seek separate authority to utilize the C-band antenna portion of this combined device.

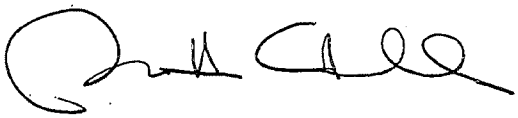
[3] Intelsat is simultaneously filing a 30-day STA request in order to begin testing on May 25, 2011.

Intelsat Corporation
3400 International Drive NW, Washington DC 20008-3006 USA **www.intelsat.com** T +1 202-944-6800 F +1 202-944-7898

The radiation levels generated by the antenna will be within safety limits, according to a statement provided by the antenna manufacturer and reproduced in Section c), Annex 2 of Exhibit A. In the extremely unlikely event that harmful interference should occur, Intelsat will take all reasonable steps to eliminate the interference.

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

Respectfully submitted,



Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

cc: Paul Blais

EXHIBIT A

ANNEX 1

CHARACTERISTICS OF THE PROPOSED TRANSMISSIONS

Antenna location	***Intelsat Napa Teleport***
LONGITUDE (deg, min, sec- *NAD 83*))	237° 43' 12" East
LATITUDE (deg, min, sec- *NAD 83*))	38° 14' 24" North
ANTENNA HEIGHT IN METERS:	3
GROUND ELEVATION(AMSL)	10
ANTENNA LOCATION:	GROUND
GROUND:	
ROOF (Meters)	
BUILDING HEIGHT (Meters)	

Antenna Characteristics	
ANTENNA SIZE & GAIN	
SIZE	1.2m
TX GAIN	43.0 dBi @ 14.25 GHz
RX GAIN	41.6 dBi @ 12.5 GHz
ANTENNA MODEL	5009
ANTENNA MANUFACTURER	SEATEL

MAXIMUM HPA POWER	16W
TOTAL EIRP FOR ALL CARRIERS	55.04 dBW

SATELLITES ARC TO COORDINATE	99°W
SATELLITES DESIRED:	G-16

UPLINK FREQUENCIES:	14002 – 14038 MHz
DOWNLINK FREQUENCIES:	11702 – 11738 MHz

Uplink carrier parameters			
TYPE OF SERVICE (broadcast data TTC)	Data		
DATA RATE(S):	166 kbps		
MODULATION:	QPSK		
POLARIZATION	VERTICAL		
FORWARD ERROR CODING RATE:	0.660		
OCCUPIED BANDWIDTH	0.163 MHz		
UPLINK EIRP PER CARRIER	38.0		

Downlink Carrier Parameters			
TYPE OF SERVICE (broadcast data TTC)	Data		
DATA RATE(S):	265 kbps		
POLARIZATION:			
MODULATION:	HORIZONTAL		
OCCUPIED BANDWIDTH	0.218 MHz		

ANNEX 2

ADDITIONAL INFORMATION REGARDING THE PROPOSED TRANSMISSIONS

a) Transmitted eirp density levels

Link budget indicates we will be transmitting at -25.4 dBW/4kHz

b) Antenna manufacturer statement regarding compliance with Section 25.218 of the FCC Rules

From: Jim Hatcher [mailto:Jim.Hatcher@cobham.com]
Sent: Thursday, May 05, 2011 11:15 AM
To: Halsey, Matthew; LaMastus, Jeff; Zeitvogel, Barney
Subject: RE: STA issues CRM:0045013
Matt,
Here is our response from the Chief Engineer

For C-band, the FCC 25.218 EIRPsd limits for digital transmissions are the same as the FCC 25.221 limits which we presently meet with an input EIRPsd limit of -7 dBW/4kHz.

For Ku band, the FCC 25.218 limits for digital transmissions are the same as the FCC 25.222 limits which we presently meet with an input EIRPsd limit of -14 dBW/4kHz for a 1.2m antenna and -16.3 dBW/4kHz for a 1.0 m antenna.

Jim Hatcher
Product Manager
Sea Tel Products
Cobham Satcom
Marine Systems
(925) 798-7979 Ext. 215
Jim.hatcher@Cobham.com

c) Radiation Hazard Exposure

Maximum Safe RF Exposure Power Levels

Antenna Diameter Meters	Antenna Area cm^2		Typical BUC Power Watts	Peak Power Density mW/cm^2		Max Safe BUC Power Watts	Peak Power Density mW/cm^2
0.6	2,827		8	2.8		25	8.8
1	7,854		8	1.0		75	9.5
1.2	11,310		25	2.2		100	8.8
1.5	17,671		25	1.4		150	8.5
1.8	25,447		25	1.0		250	9.8
2	31,416		100	3.2		300	9.5
2.4	45,239		200	4.4		450	9.9
3.6	101,788		200	2.0		1000	9.8
8797 (2.0)	30,500		100	3.3		300	9.8
9797 (2.4)	42,450		200	4.7		400	9.4

Notes:

The Peak Power Density shown above, assumes a 100 percent duty cycle modulation of the BUC or RF power amplifier, at maximum capacity. The nominal power level setting for operating within a network is always limited to a value between 50 and 75 percent of the maximum capacity of the amplifier to prevent spurious transmissions. Additionally, typical network system transmissions are duty cycle modulated between 1 and 10 percent to accommodate multiple users. These two factors reduce the average power level of the RF transmissions by a factor of 13 to 200 times lower than the already safe levels tabulated above.

Any system equiped with a BUC or RF power amplifier equal to or less than the 'Max Safe BUC Power' stated above, is gaurenteed to be safe outside the confines of the radome walls.