

EXHIBIT A

FREQUENCY COORDINATION AND INTERFERENCE  
ANALYSIS REPORT

INTELSAT EARTH STATION E040286  
CLARKSBURG, MARYLAND

**EXHIBIT A**  
**Frequency Coordination**

**FREQUENCY COORDINATION AND INTERFERENCE  
ANALYSIS REPORT**

Prepared for:

**Intelsat LLC**  
**Clarksburg, Maryland**

**Satellite Earth Station**

Prepared By:  
**COMSEARCH**  
19700 Janelia Farm Boulevard  
Ashburn, Virginia 20147  
January 6, 2006

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## 1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

## 2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-receive earth station.

Company

None

No carriers reported potential interference cases.

### 3. SUPPLEMENTAL SHOWING

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.

Expedited coordination data for this earth station was e-mailed and/or faxed to the below listed carriers with a letter dated January 3, 2006.

#### Company

ACC LICENSEE, INC  
ACCELACOM-BALTIMORE LLC  
ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY  
AMFM RADIO LICENSES, LLC  
ARLINGTON COUNTY EMERGENCY COMM CTR  
AT&T CORP  
Airband Communications Inc  
American Personal Communications  
BUSINESS INFORMATION GROUP, INC.  
CBS Broadcasting Inc  
COMCAST CABLEVISION OF MARYLAND L.P.  
CRISPUS ATTUCKS ASSOCIATION  
Cellco Partnership- PA Region  
ERICSSON INC  
Enoch Pratt Free Library  
FLIGHT SYSTEMS  
FRANKLIN CNTY EMERGENCY MANAGEMENT AGENC  
GEORGE WASHINGTON UNIVERSITY  
M&T Bank  
MARYLAND, STATE OF - MDOT - MTA  
MONTGOMERY COUNTY DEPT OF TELECOMM  
NBC TELEMUNDO LICENSE CO.  
Network for Instructional TV, Inc.  
New Cingular Wireless PCS LLC - DC  
New Cingular Wireless PCS LLC -NE Reg  
PRINCE WILLIAM COUNTY  
ROADSTAR INTERNET, INC.  
Virginia Electric & Power Company  
WASHINGTON CABLE SYSTEMS INC  
WASHINGTON METRO AREA TRANSIT AUTHORITY  
WGN CONTINENTAL BROADCASTING CO  
WKYSFM, INC  
YORK COUNTY

## **4. EARTH STATION COORDINATION DATA**

This section presents the data pertinent to frequency coordination of the proposed 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: 01/05/2006  
Job Number: 060103COMSJC10

### Administrative Information

Status: ENGINEER PROPOSAL  
Call Sign:  
Licensee Code: INTNOA  
Licensee Name: Intelsat LLC

### Site Information

#### CLARKSBURG, MARYLAND

Venue Name:  
Latitude (NAD 83): 39° 13' 6.0" N  
Longitude (NAD 83): 77° 16' 16.0" W  
Climate Zone: A  
Rain Zone: 2  
Ground Elevation (AMSL): 150.0 m / 492.1 ft

### Link Information

Satellite Type: Geostationary  
Mode: TR - Transmit-Receive  
Modulation: Analog and Digital  
Satellite Arc: 6° W to 130° West Longitude  
Azimuth Range: 102.1° to 244.3°  
Corresponding Elevation Angles: 5.7° / 19.8°  
Antenna Centerline (AGL): 3.05 m / 10.0 ft

### Antenna Information

Manufacturer:  
Model:  
Gain / Diameter:  
3-dB / 15-dB Beamwidth:

#### Receive

Vertex/RSI  
2.4 Meter  
51.7 dBi / 2.4 m  
0.40° / 0.80°

#### Transmit

Vertex/RSI  
2.4 Meter  
54.6 dBi / 2.4 m  
0.30° / 0.60°

NON 6K59G7W to 36M0G7W

Max Available RF Power (dBW/4 kHz)  
(dBW/MHz)

-4.0	-30.0	-30.0
-4.0	-27.8	-6.0

Maximum EIRP (dBW/4 kHz)  
(dBW/MHz)  
(dBW)

50.6	24.6	24.6
50.6	26.8	48.6
50.6	26.8	64.1

Interference Objectives: Long Term -156.0 dBW/MHz 20%  
Short Term -146.0 dBW/MHz 0.01%

-151.0 dBW/4 kHz 20%  
-128.0 dBW/4 kHz 0.0025%

### Frequency Information

Emission / Frequency Range (MHz)

#### Receive 18.0 GHz

NON / 19700.0 - 20700.0  
6K59G7W - 36M0G7W / 19700.0 - 20700.0

#### Transmit 29.0 GHz

NON / 29500.0 - 30500.0  
6K59G7W - 36M0G7W / 29500.0 - 30500.0

Max Great Circle Coordination Distance  
Precipitation Scatter Contour Radius

265.2 km / 164.7 mi  
100.0 km / 62.1 mi

238.5 km / 148.2 mi  
100.0 km / 62.1 mi



# COMSEARCH

## Earth Station Data Sheet

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

### Coordination Values

### CLARKSBURG, MD

Licensee Name	Intelsat LLC		
Latitude (NAD 83)	39° 13' 6.0" N		
Longitude (NAD 83)	77° 16' 16.0" W		
Ground Elevation (AMSL)	150.0 m / 492.1 ft		
Antenna Centerline (AGL)	3.05 m / 10.0 ft		
Antenna Model	Vertex/RSI 2.4 Meter		
Antenna Mode	Receive 18.0 GHz		Transmit 29.0 GHz
Interference Objectives:	Long Term	-156.0 dBW/MHz 20%	-151.0 dBW/4 kHz 20%
	Short Term	-146.0 dBW/MHz 0.01%	-128.0 dBW/4 kHz 0.0025%
Max Available RF Power			-4.0 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 29.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.16	102.06	-10.00	100.00	-10.00	100.00
5	1.14	97.08	-10.00	100.00	-10.00	100.00
10	1.06	92.09	-10.00	100.00	-10.00	100.00
15	0.92	87.11	-10.00	100.00	-10.00	100.00
20	0.98	82.13	-10.00	100.00	-10.00	100.00
25	1.19	77.14	-10.00	100.00	-10.00	100.00
30	1.26	72.16	-10.00	100.00	-10.00	100.00
35	1.09	67.18	-10.00	100.00	-10.00	100.00
40	0.95	62.21	-10.00	100.00	-10.00	100.00
45	1.10	57.22	-10.00	100.00	-10.00	100.00
50	1.20	52.24	-10.00	100.00	-10.00	100.00
55	0.87	47.29	-9.87	100.00	-9.87	100.00
60	0.74	42.34	-8.67	107.48	-8.67	100.00
65	0.79	37.38	-7.32	108.59	-7.32	100.00
70	0.92	32.42	-5.77	107.34	-5.77	100.00
75	0.76	27.52	-3.99	118.91	-3.99	102.20
80	0.79	22.62	-1.86	123.25	-1.86	106.27
85	0.79	17.79	0.75	129.88	0.75	113.41
90	0.69	13.10	4.07	145.08	4.07	125.80
95	0.62	8.75	8.45	165.31	8.45	141.50
100	0.80	5.38	13.73	265.16	13.73	238.52
105	0.78	5.75	13.00	203.02	13.00	176.25
110	0.74	9.24	7.85	156.69	7.85	134.55
115	0.78	12.90	4.23	141.21	4.23	123.13
120	0.76	16.55	1.53	133.39	1.53	116.71
125	0.64	20.17	-0.62	132.26	-0.62	115.91
130	0.58	23.65	-2.34	130.38	-2.34	114.30
135	0.50	27.00	-3.78	130.08	-3.78	114.26
140	0.40	30.20	-5.00	133.66	-5.00	117.90
145	0.32	33.19	-6.03	137.21	-6.03	121.30
150	0.28	35.92	-6.88	138.21	-6.88	122.28
155	0.32	38.29	-7.58	133.14	-7.58	117.73
160	0.35	40.32	-8.14	128.98	-8.14	113.80
165	0.29	42.05	-8.60	132.56	-8.60	117.27
170	0.00	43.57	-8.98	139.01	-8.98	123.15
175	0.00	44.34	-9.17	138.48	-9.17	122.69
180	0.00	44.60	-9.23	138.30	-9.23	122.54
185	0.00	44.34	-9.17	138.48	-9.17	122.70

# COMSEARCH

## Earth Station Data Sheet

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

### Coordination Values

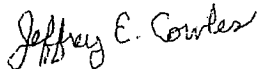
### CLARKSBURG, MD

Licensee Name	Intelsat LLC		
Latitude (NAD 83)	39° 13' 6.0" N		
Longitude (NAD 83)	77° 16' 16.0" W		
Ground Elevation (AMSL)	150.0 m / 492.1 ft		
Antenna Centerline (AGL)	3.05 m / 10.0 ft		
Antenna Model	Vertex/RSI 2.4 Meter		
Antenna Mode	Receive 18.0 GHz		
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%
	Short Term	-146.0 dBW/MHz	0.01%
Max Available RF Power	Transmit 29.0 GHz		
		-151.0 dBW/4 kHz	20%
		-128.0 dBW/4 kHz	0.0025%
		-4.0 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 29.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	43.57	-8.98	139.01	-8.98	123.15
195	0.35	42.00	-8.58	129.00	-8.58	113.11
200	0.82	39.91	-8.03	105.45	-8.03	100.00
205	1.10	37.63	-7.39	100.00	-7.39	100.00
210	1.15	35.21	-6.67	100.00	-6.67	100.00
215	1.08	32.60	-5.83	101.93	-5.83	100.00
220	1.22	29.59	-4.78	101.45	-4.78	100.00
225	1.26	26.45	-3.56	103.92	-3.56	100.00
230	1.20	23.31	-2.19	109.00	-2.19	100.00
235	1.27	20.66	-0.88	110.94	-0.88	100.00
240	1.45	18.83	0.13	109.56	0.13	100.00
245	1.65	18.16	0.52	105.87	0.52	100.00
250	1.68	18.96	0.05	103.92	0.05	100.00
255	1.70	20.94	-1.02	100.56	-1.02	100.00
260	1.95	23.60	-2.32	100.00	-2.32	100.00
265	2.14	26.95	-3.77	100.00	-3.77	100.00
270	2.28	30.76	-5.20	100.00	-5.20	100.00
275	2.40	34.86	-6.56	100.00	-6.56	100.00
280	2.51	39.16	-7.82	100.00	-7.82	100.00
285	2.60	43.59	-8.99	100.00	-8.99	100.00
290	2.69	48.12	-10.00	100.00	-10.00	100.00
295	2.80	52.72	-10.00	100.00	-10.00	100.00
300	3.03	57.34	-10.00	100.00	-10.00	100.00
305	3.29	62.01	-10.00	100.00	-10.00	100.00
310	3.55	66.73	-10.00	100.00	-10.00	100.00
315	3.56	71.50	-10.00	100.00	-10.00	100.00
320	3.48	76.29	-10.00	100.00	-10.00	100.00
325	3.44	81.08	-10.00	100.00	-10.00	100.00
330	3.23	85.88	-10.00	100.00	-10.00	100.00
335	2.90	90.67	-10.00	100.00	-10.00	100.00
340	2.58	95.44	-10.00	100.00	-10.00	100.00
345	2.13	100.19	-10.00	100.00	-10.00	100.00
350	1.60	104.89	-10.00	100.00	-10.00	100.00
355	1.29	107.05	-10.00	100.00	-10.00	100.00

## 5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Jeffrey E. Cowles  
Principal Frequency Planner  
COMSEARCH  
19700 Janelia Farm Blvd.  
Ashburn, Va. 20147

DATED: January 6, 2006

EXHIBIT B

RADIATION HAZARD REPORT

INTELSAT EARTH STATION E040286  
CLARKSBURG, MARYLAND

## Analysis of Non-Ionizing Radiation for a 2.4-Meter Earth Station System

This report analyzes the non-ionizing radiation levels for a 2.4-meter earth station system. The analysis and calculations performed in this report comply with the methods described in the FCC Office of Engineering and Technology Bulletin, No. 65 first published in 1985 and revised in 1997 in Edition 97-01. The radiation safety limits used in the analysis are in conformance with the FCC R&O 96-326. Bulletin No. 65 and the FCC R&O specifies that there are two separate tiers of exposure limits that are dependant on the situation in which the exposure takes place and/or the status of the individuals who are subject to the exposure. The Maximum Permissible Exposure (MPE) limits for persons in a General Population/Uncontrolled environment are shown in Table 1. The General Population/Uncontrolled MPE is a function of transmit frequency and is for an exposure period of thirty minutes or less. The MPE limits for persons in an Occupational/Controlled environment are shown in Table 2. The Occupational MPE is a function of transmit frequency and is for an exposure period of six minutes or less. The purpose of the analysis described in this report is to determine the power flux density levels of the earth station in the far-field, near-field, transition region, between the subreflector or feed and main reflector surface, at the main reflector surface, and between the antenna edge and the ground and to compare these levels to the specified MPEs.

Table 1. Limits for General Population/Uncontrolled Exposure (MPE)

Frequency Range (MHz)	Power Density (mW/cm <sup>2</sup> )
30-300	0.2
300-1500	Frequency (MHz)*(0.8/1200)
1500-100,000	1.0

Table 2. Limits for Occupational/Controlled Exposure (MPE)

Frequency Range (MHz)	Power Density (mW/cm <sup>2</sup> )
30-300	1.0
300-1500	Frequency (MHz)*(4.0/1200)
1500-100,000	5.0

Table 3. Formulas and Parameters Used for Determining Power Flux Densities

Parameter	Symbol	Formula	Value	Units
Antenna Diameter	D	Input	2.4	m
Antenna Surface Area	A <sub>surface</sub>	$\pi D^2 / 4$	4.52	m <sup>2</sup>
Feed Flange Diameter	D <sub>fa</sub>	Input	19.0	cm
Area of Feed Flange	A <sub>fa</sub>	$\pi D_{fa}^2 / 4$	283.53	cm <sup>2</sup>
Frequency	F	Input	30000	MHz
Wavelength	$\lambda$	300 / F	0.010000	m
Transmit Power	P	Input	100.00	W
Antenna Gain (dBi)	G <sub>es</sub>	Input	54.6	dBi
Antenna Gain (factor)	G	$10^{G_{es}/10}$	288403.2	n/a
Pi	$\pi$	Constant	3.1415927	n/a
Antenna Efficiency	$\eta$	$G\lambda^2 / (\pi^2 D^2)$	0.51	n/a

## 1. Far Field Distance Calculation

The distance to the beginning of the far field can be determined from the following equation:

$$\begin{aligned} \text{Distance to the Far Field Region} \quad R_{ff} &= 0.60 D^2 / \lambda \\ &= 345.6 \text{ m} \end{aligned} \quad (1)$$

The maximum main beam power density in the far field can be determined from the following equation:

$$\begin{aligned} \text{On-Axis Power Density in the Far Field} \quad S_{ff} &= G P / (4 \pi R_{ff}^2) \\ &= 19.215 \text{ W/m}^2 \\ &= 1.922 \text{ mW/cm}^2 \end{aligned} \quad (2)$$

## 2. Near Field Calculation

Power flux density is considered to be at a maximum value throughout the entire length of the defined Near Field region. The region is contained within a cylindrical volume having the same diameter as the antenna. Past the boundary of the Near Field region, the power density from the antenna decreases linearly with respect to increasing distance.

The distance to the end of the Near Field can be determined from the following equation:

$$\begin{aligned} \text{Extent of the Near Field} \quad R_{nf} &= D^2 / (4 \lambda) \\ &= 144.0 \text{ m} \end{aligned} \quad (3)$$

The maximum power density in the Near Field can be determined from the following equation:

$$\begin{aligned} \text{Near Field Power Density} \quad S_{nf} &= 16.0 \eta P / (\pi D^2) \\ &= 44.856 \text{ W/m}^2 \\ &= 4.486 \text{ mW/cm}^2 \end{aligned} \quad (4)$$

## 3. Transition Region Calculation

The Transition region is located between the Near and Far Field regions. The power density begins to decrease linearly with increasing distance in the Transition region. While the power density decreases inversely with distance in the Transition region, the power density decreases inversely with the square of the distance in the Far Field region. The maximum power density in the Transition region will not exceed that calculated for the Near Field region. The power density calculated in Section 1 is the highest power density the antenna can produce in any of the regions away from the antenna. The power density at a distance  $R_t$  can be determined from the following equation:

$$\begin{aligned} \text{Transition Region Power Density} \quad S_t &= S_{nf} R_{nf} / R_t \\ &= 4.486 \text{ mW/cm}^2 \end{aligned} \quad (5)$$

#### 4. Region between the Feed Assembly and the Antenna Reflector

Transmissions from the feed assembly are directed toward the antenna reflector surface, and are confined within a conical shape defined by the type of feed assembly. The most common feed assemblies are waveguide flanges, horns or subreflectors. The energy between the feed assembly and reflector surface can be calculated by determining the power density at the feed assembly surface. This can be determined from the following equation:

$$\begin{aligned} \text{Power Density at the Feed Flange} \quad S_{fa} &= 4000 P / A_{fa} & (6) \\ &= 1410.792 \text{ mW/cm}^2 \end{aligned}$$

#### 5. Main Reflector Region

The power density in the main reflector is determined in the same manner as the power density at the feed assembly. The area is now the area of the reflector aperture and can be determined from the following equation:

$$\begin{aligned} \text{Power Density at the Reflector Surface} \quad S_{\text{surface}} &= 4 P / A_{\text{surface}} & (7) \\ &= 88.419 \text{ W/m}^2 \\ &= 8.842 \text{ mW/cm}^2 \end{aligned}$$

#### 6. Region between the Reflector and the Ground

Assuming uniform illumination of the reflector surface, the power density between the antenna and the ground can be determined from the following equation:

$$\begin{aligned} \text{Power Density between Reflector and Ground} \quad S_g &= P / A_{\text{surface}} & (8) \\ &= 22.105 \text{ W/m}^2 \\ &= 2.210 \text{ mW/cm}^2 \end{aligned}$$

## 7. Summary of Calculations

Table 4. Summary of Expected Radiation levels for Uncontrolled Environment

Region	Calculated Maximum Radiation Power Density Level (mW/cm <sup>2</sup> )		Hazard Assessment
1. Far Field ( $R_{ff} = 345.6$ m)	$S_{ff}$	1.922	Potential Hazard
2. Near Field ( $R_{nf} = 144.0$ m)	$S_{nf}$	4.486	Potential Hazard
3. Transition Region ( $R_{nf} < R_t < R_{ff}$ )	$S_t$	4.486	Potential Hazard
4. Between Feed Assembly and Antenna Reflector	$S_{fa}$	1410.792	Potential Hazard
5. Main Reflector	$S_{surface}$	8.842	Potential Hazard
6. Between Reflector and Ground	$S_g$	2.210	Potential Hazard

Table 5. Summary of Expected Radiation levels for Controlled Environment

Region	Calculated Maximum Radiation Power Density Level (mW/cm <sup>2</sup> )		Hazard Assessment
1. Far Field ( $R_{ff} = 345.6$ m)	$S_{ff}$	1.922	Satisfies FCC MPE
2. Near Field ( $R_{nf} = 144.0$ m)	$S_{nf}$	4.486	Satisfies FCC MPE
3. Transition Region ( $R_{nf} < R_t < R_{ff}$ )	$S_t$	4.486	Satisfies FCC MPE
4. Between Feed Assembly and Antenna Reflector	$S_{fa}$	1410.792	Potential Hazard
5. Main Reflector	$S_{surface}$	8.842	Potential Hazard
6. Between Reflector and Ground	$S_g$	2.210	Satisfies FCC MPE

It is the applicant's responsibility to ensure that the public and operational personnel are not exposed to harmful levels of radiation.



## 8. Conclusions

Based upon the above analysis, it is concluded that harmful levels of radiation may exist in those regions noted for the Uncontrolled (Table 4) and Controlled (Table 5) Environments.

The antenna will be installed at Intelsat LLC's teleport facility in Clarksburg, Maryland. The teleport is a gated and fenced facility with secured access in and around the proposed antenna. The earth station will be marked with the standard radiation hazard warnings, as well as the area in the vicinity of the earth station to inform those in the general population, who might be working or otherwise present in or near the direct path of the main beam.

The applicant will ensure that the main beam of the antenna will be pointed at least one diameter away from any building, or other obstacles in those areas that exceed the MPE levels. Since one diameter removed from the center of the main beam the levels are down at least 20 dB, or by a factor of 100, these potential hazards do not exist for either the public, or for earth station personnel.

Finally, the earth station's operating personnel will not have access to areas that exceed the MPE levels, while the earth station is in operation. The transmitter will be turned off during periods of maintenance, so that the MPE standard of  $5.0 \text{ mW/cm}^2$  will be complied with for those regions in close proximity to the main reflector, which could be occupied by operating personnel.

EXHIBIT C

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

INTELSAT EARTH STATION E040286  
CLARKSBURG, MARYLAND

April 6, 2006



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  
Clarksburg, Maryland Ka-band Earth Station, E040286

Dear Ms. Dortch:

Intelsat LLC (“Intelsat”) herein requests Special Temporary Authority<sup>1</sup> for 11 days, from April 11, 2006 through April 21, 2006, to use its Clarksburg, Maryland Ka-band earth station, E040286, to conduct repeat in-orbit testing (“IOT”) of the Spainsat satellite for two days within that time period. As the Commission is aware, Intelsat recently conducted in-orbit testing of the Spainsat satellite’s Ka-band payload pursuant to STA.<sup>2</sup> However, as explained below, Intelsat now seeks to conduct further testing of that payload.

As explained in the initial STA request, Intelsat has a contract with Space Systems Loral (“Loral”), the manufacturer of the Spainsat satellite, to conduct IOT services for the satellite’s Ka-band payload. The satellite was launched successfully on March 11, 2006 and Intelsat performed IOT of the satellite’s Ka-band payload between March 30, 2006 and April 4, 2006 at the 30.3° W.L. orbital location.<sup>3</sup> Intelsat notified the FCC, the National Telecommunications and Information Administration (“NTIA”) and the Office of the Secretary of Defense (“DOD”) on April 4, 2006 that testing had concluded, and the STA became void, per its terms.<sup>4</sup>

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<sup>1</sup> Intelsat has filed its STA request, an FCC Form 159, a \$155.00 filing fee and this supporting letter electronically via the International Bureau’s Filing System (“IBFS”).

<sup>2</sup> See *Satellite Communications Services Information; Re: Actions Taken*, Rept. No. SES-00797, File No. SES-STA-20060131-00188 (Feb. 17, 2006) (Public Notice) (granting STA from March 6, 2006 through April 2, 2006 to conduct Ka-band IOT for the Spainsat satellite); *Satellite Communications Services Information; Re: Actions Taken*, Rept. No. SES-00809, File No. SES-STA-20060321-00474 (Apr. 5, 2006) (Public Notice) (granting extension of the STA through May 2, 2006).

<sup>3</sup> The satellite’s permanent orbital position will be 30.0° W.L., where the satellite will operate against the ITU filings of Spain. It is Intelsat’s understanding that the satellite is licensed by Spain.

<sup>4</sup> Condition No. 1 of both the original STA and extension stated that the STA would become void no later than five days after testing began.

Subsequent to completion of the testing, Loral checked the test results and raised concerns about the validity of some of the data. Specifically, there are errors in the data that create uncertainty concerning the performance of the satellite's Ka-band transponder. Accordingly, Loral has asked Intelsat to repeat some of the tests of that transponder. Loral has asked that those re-tests be conducted between April 11 and April 21, 2006. As noted above, the re-testing is expected to last two days.

In support of its STA request, Intelsat provides the same package of additional information as was included in its original STA request. This includes Schedule S technical information relating solely to the Ka-band IOT services that Intelsat will be performing, as well as the relevant coordination information. In addition, Intelsat again requests a waiver of the U.S. Table of Frequency Allocations.

The detailed technical information provided 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 terrestrial facility. In addition, as previously noted, there is no commercial satellite operating in Ka-band within +/- 10 degrees of the 30.3° W.L. orbital location. With respect to potential interference into the operations of non-commercial satellites, Intelsat and Loral are coordinating the Ka-band IOT re-tests with the NTIA and DOD. In the extremely unlikely event that harmful interference should occur, Intelsat will take all reasonable steps to eliminate the interference. Moreover, Intelsat would agree to have the Commission place conditions on the STA identical to those included in the grants of the initial STA and its extension.

Grant of this STA request will enable Intelsat to re-test the Ka-band payload on the Spainsat satellite, thereby serving the public interest in ensuring the successful operation of the new satellite, which is expected to be used to support the military operations of both Spain and the United States.

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

Respectfully submitted,



Susan H. Crandall  
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Intelsat Global Service Corporation