

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 Hagerstown, Maryland Earth Station KA258

1. Applicant


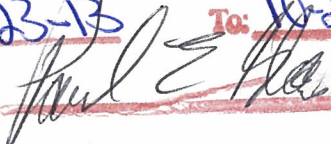
Name:	Intelsat License LLC	Phone Number:	202-944-7848
DBA Name:		Fax Number:	202-944-7870
Street:	c/o Intelsat Corporation 3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20008 -3006
Attention:	Susan H. Crandall		

File # SES-STA-20130610-00483
Call Sign KA258 Grant Date 9-17-13
(or other identifier) Term Dates 9-23-13 To: 9-23-13
Approved: [Signature]
International Bureau

Applicant: Intelsat License LLC
Call Sign: KA258
File No.: SES-STA-20130610-00483
Special Temporary Authority (STA)

Intelsat License LLC (Intelsat) is granted STA, under the following conditions, to use its Hagerstown, Maryland earth station, call sign KA258, for 30 days, to provide launch and early orbit phase (LEOP) services for the Luxembourg licensed Astra-2E satellite at its permanent orbital location at 28.2° E.L. The in-orbit testing location will be at 43.5° E.L. The following conditions are:

1. LEOP operations with Astra-2E will be performed on uplink frequencies (Earth-to-space) 17309.5 MHz and 18090.0 MHz (LHCP and RHCP) and downlink frequencies (space-to-Earth) 11707.5 MHz, 11453.5 MHz, and 12493.0 MHz (LHCP and RHCP).
2. The maximum input power level not to exceed 23.5 dBW and maximum coordinated EIRP level of 88.0 dBW.
3. The LEOP operations must be coordinated with all operators of satellites that use the same frequency bands and are in the LEOP path. All operators of satellites in that path 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 Astra-2E at LEOP operations is as follows: Ph.: (202) 944-7701 - East Coast Operations Center (primary); (310) 525-5900 - West Coast Operations Center (back-up). Request to speak with Harry Burnham or Kevin Bell.
4. All operations shall be on an unprotected and non-harmful interference basis, *i.e.*, Intelsat shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radiocommunication station and it shall cease transmission(s) immediately upon notice of such interference.
5. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at Intelsat's own risk.
6. This is granted without prejudice to any future FCC enforcement action in connection with any unauthorized operation of radio facilities.
7. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

 GRANTED International Bureau	File #	SES-STA-20130610-00483
	Call Sign	KA258
	(or other identifier)	
	Grant Date	9-17-13
From	9-23-13	
Term Dates	To: 10-23-13	
Approver		

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. City Hagerstown 8. Latitude (dd mm ss.s h) 39 35 54.0 N

9. State MD	10. Longitude (dd mm ss.s h) 77 45 33.0 W
11. Please supply any need attachments. Attachment 1: STA Request Attachment 2: Exhibits A-C 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.) <div style="border: 1px solid black; padding: 5px;"> Intelsat License LLC herein requests a grant of Special Temporary Authority for 30 days, from July 19, 2013 through August 17, 2013, to use its Hagerstown, Maryland Ku-band earth station, call sign KA258, to provide launch and early orbit phase services for the Astra-2E satellite that is expected to be launched on July 19, 2013. </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"; 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).	

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.

June 10, 2013

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



Re: Request for Special Temporary Authority
Hagerstown, Maryland Earth Station KA258

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA")¹ for 30 days, from July 19, 2013 through August 17, 2013, to use its Hagerstown, Maryland Ku-band earth station -- call sign KA258 -- to provide launch and early orbit phase ("LEOP") services for the Astra-2E satellite that is expected to be launched on July 19, 2013.² The LEOP period is expected to last approximately ten days.³

The Astra-2E LEOP operations will be performed in the following frequency bands: 17309.5 MHz and 18090.0 MHz in the uplink (RHCP or LHCP), and 11707.5 MHz, 11453.5 MHz, and 12493.0 MHz in the downlink (RHCP or LHCP). The LEOP operations will be coordinated with all operators of satellites that use the same frequency bands and are in the LEOP path. As such, there would be no risk of interference with respect to lawfully operating, co-frequency radiocommunication facilities. Nevertheless, all operators of satellites in that path 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 Astra-2E LEOP mission is as follows:

Ph.: (202) 944-7701 – East Coast Operations Center (primary)
(310) 525-5900 – West Coast Operations Center (back-up)

¹ Intelsat has filed its STA request, an FCC Form 159, a \$180.00 filing fee and this supporting letter electronically via the International Bureau's Filing System ("IBFS").

² The permanent orbital location for Astra-2E, which is licensed by Luxembourg, will be 28.2° E.L. The in-orbit testing location will be 43.5° E.L.

³ Intelsat is seeking authority through August 17, 2013 to accommodate a possible launch delay.

Ms. Marlene H. Dortch
June 10, 2013
Page 2

Request to speak with Harry Burnham or Kevin Bell.

In addition, Intelsat attaches Exhibits A-C, which contain two waiver requests as well as technical information indicating 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 or government 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. Intelsat also notes that for purposes of the Astra-2E LEOP mission, it is seeking to operate in the frequencies listed in the request at a maximum input power level not to exceed 23.5 dBW.

Intelsat notes that during the Astra-2E launch, the spacecraft will be controlled by EADS Astrium, which is the satellite's manufacturer and the manager of the launch mission. EADS Astrium will build and send the commands to the Intelsat antenna, which will process and execute the commands. Telemetry received by Intelsat will be forwarded to EADS Astrium. Intelsat will remain in control of the baseband unit, RF equipment and antenna.

Grant of this STA request will allow Intelsat to help launch the Astra-2E satellite to the 28.2° E.L. location. This, in turn, will help ensure continuity of service at that location and thereby promotes the public interest.

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

INTELSAT LICENSE LLC

30-DAY STA REQUEST

FOR

ASTRA-2E LEOP SERVICES

EARTH STATION KA258

HAGERSTOWN, MARYLAND

June 10, 2013

Exhibit A

PETITION FOR WAIVER OF SECTIONS 25.137 AND 25.114

Pursuant to Section 25.137 of the Federal Communications Commission's ("Commission" or "FCC") rules, earth station applicants "requesting authority to operate with a non-U.S. licensed space station *to serve the United States*" must demonstrate that effective competitive opportunities exist and must provide the same technical information required by Section 25.114 for U.S.-licensed space stations.¹ Intelsat License LLC ("Intelsat") herein seeks authority to provide launch and early orbit phase ("LEOP") services -- not commercial services -- to the United States, and thus believes that Section 25.137 does not apply.²

To the extent the Commission determines, however, that Intelsat's request for authority to provide LEOP services on a special temporary basis is a request to serve the United States with a non U.S.-licensed satellite, Intelsat respectfully requests a waiver of Sections 25.137 and 25.114 of the Commission's rules.³ The Commission may grant a waiver for good cause shown.⁴ The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.⁵ In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.⁶ Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause exists for a waiver of both Section 25.137 and Section 25.114. With respect to Section 25.114, Intelsat seeks authority only to provide LEOP services for the Astra-2E satellite. The information sought by Section 25.114 is not relevant to LEOP services. Moreover, Intelsat does not have -- and would not easily be able to obtain -- such information because Intelsat is not the operator of the Astra-2E satellite, nor is Intelsat in contractual privity with that operator. Rather, an affiliate of Intelsat has a contract with EADS Astrium, the manufacturer of the Astra-2E satellite, to conduct LEOP services for the satellite.

¹ 47 C.F.R. § 25.137 (emphasis added).

² See *EchoStar Satellite Operating Company Application for Special Temporary Authority Related to Moving the EchoStar 6 Satellite from the 77° W.L. Orbital Location to the 96.2° W.L. Orbital Location, and to Operate at the 96.2° W.L. Orbital Location*, DA 13-593, File No. SAT-STA-20130220-00023 (released Apr. 1, 2013) (noting that operating TT&C earth stations in the United States with a foreign-licensed satellite does not constitute "DBS service").

³ 47 C.F.R. §§ 25.137 and 25.114.

⁴ 47 C.F.R. §1.3.

⁵ *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("*Northeast Cellular*").

⁶ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

The information that Intelsat is not including is not required to determine potential harmful interference. The Schedule S information for this satellite would pertain to the operation of the Astra-2E satellite at its final orbital location. However, the present application for LEOP services involves communications *prior* to the satellite attaining its final location in the geostationary orbit. In other words, during the LEOP mission, the earth station will not be communicating with a satellite located in the geostationary orbit. Rather, it will be transmitting to a satellite traveling on its “transfer orbit” or “LEOP path”, which starts immediately following its separation from a launch vehicle, and ends when the satellite reaches its geostationary orbital location. Moreover, as with any STA, Intelsat will perform the LEOP services on a non-interference basis.

Because it is not relevant to the service for which Intelsat seeks authorization, and because obtaining the information would be a hardship, Intelsat seeks a waiver of all the information required by Section 25.114. Intelsat has provided in this STA request the required technical information that is relevant to the LEOP services for which Intelsat seeks authorization.

Good cause also exists to waive Section 25.137. Section 25.137 is designed to ensure that “U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services” in other countries. Here, there is no service being provided by the satellite; it is simply being placed in its orbital location after separating from the launch vehicle. Thus, the purpose of the information required by Section 25.137 is not implicated here. For example, Section 25.137(d) requires earth station applicants requesting authority to operate with a non-U.S.-licensed space station that is not in orbit and operating to post a bond.⁷ The underlying purpose in having to post a bond—*i.e.*, to prevent warehousing of orbital locations by operators seeking to serve the United States—would not be served by requiring Intelsat to post a bond in order to provide approximately ten days of LEOP services to the Astra-2E satellite.

It is Intelsat’s understanding that Astra-2E is licensed by Luxembourg, which is a WTO-member country. Thus, the purposes of Section 25.137—to ensure that U.S. satellite operators enjoy “effective competitive opportunities” to serve foreign markets and to prevent warehousing of orbital locations serving the United States—will not be undermined by grant of this waiver request.

Finally, Intelsat notes that it expects to operate with the Astra-2E satellite using its U.S. earth station for a period of approximately ten days. Requiring Intelsat to obtain copious technical and legal information from an unrelated party, where there is no risk of harmful interference and the operations will cease after approximately ten days, would pose undue hardship without serving underlying policy objectives. Given these particular facts, the waiver sought herein is plainly appropriate.

⁷ See 47 C.F.R. §25.137(d)(4).

EXHIBIT B

INTELSAT LICENSE LLC

30-DAY STA REQUEST

FOR

ASTRA-2E LEOP SERVICES

EARTH STATION KA258

HAGERSTOWN, MARYLAND

June 10, 2013

Exhibit B

Request for Waiver of Footnote 2 of Section 25.202(a)(1) and Footnote NG104 of the U.S. Table of Allocations

To the extent necessary, Intelsat also requests waiver of Section 25.202(a)(1) and Footnote NG104 of the U.S. Table of Allocations, which restrict the use of the 10700-11700 MHz band by the non-federal fixed satellite service in the geostationary orbit to international systems only.¹ Good cause exists to waive the international systems only requirement for the 10700-11700 MHz frequency band. The purpose of NG104 and footnote 2 of Section 25.202(a)(1) is to limit the number of fixed satellite service earth stations with which the co-primary fixed service would need to coordinate.² Intelsat will provide LEOP services in the 10700-11700 MHz frequency band only on a non-interference/non-protected basis and, therefore, will not need to coordinate with fixed service stations.

Moreover, grant of this waiver is consistent with the Commission's precedent. A waiver of the U.S. Table of Allocations is generally granted "when there is little potential interference into any service authorized under the Table of Frequency allocations and when the nonconforming operator accepts any interference from authorized services."³ The International

¹ See 47 C.F.R. §§ 25.202(a)(1), fn. 2 and 2.106, fn. NG104.

² See *Satellite Services*, 26 RR 2d at 1263-65 (1973). See also *EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83° W.L. Orbital Location*, Order and Authorization, DA 04-3162, 9 (Int'l Bur., Sept. 30, 2004) ("EchoStar 83° Waiver").

³ See *The Boeing Company*, Order and Authorization, 16 FCC Rcd 22645, 22651 (Int'l Bur. & OET 2001); *Application of Fugro-Chance, Inc. for Blanket Authority to Construct and Operate a Private Network of Receive-Only Mobile Earth Stations*, Order and Authorization, 10 FCC Rcd 2860 (Int'l Bur. 1995) (authorizing MSS in the C-band); see also *Application of Motorola Satellite Communications, Inc. for Modification of License*, Order and Authorization, 11 FCC Rcd 13952-13956 (Int'l Bur. 1996) (authorizing service to fixed terminals in bands allocated the mobile satellite service).

Bureau has found that waiving NG104 and footnote 2 of Section 25.202(a)(1) would not undermine the purpose of the rules if the party seeking a waiver: (1) will be utilizing earth stations that are receive-only in these bands and thus “not capable of causing interference into FS stations” operating in the bands and (2) agrees “to accept any level of interference from FS stations” into its receiving earth stations.⁴ Intelsat satisfies these criteria. The earth stations operating in the 10700-11700 MHz band for purposes of the Astra-2E LEOP mission will not transmit in these bands and Intelsat agrees to accept any level of interference into these earth stations from fixed service stations in the band. Accordingly, the earth stations operating in these bands pose no interference concerns with respect to co-frequency fixed service stations.

Finally, Intelsat notes that it expects to operate with the Astra-2E satellite using its U.S. earth stations only for a period of approximately ten days. Given these particular facts, the waiver sought herein is plainly appropriate.

⁴ EchoStar 83° Waiver, ¶ 13.

EXHIBIT C

INTELSAT LICENSE LLC

30-DAY STA REQUEST

FOR

ASTRA-2E LEOP SERVICES

EARTH STATION KA258

HAGERSTOWN, MARYLAND

June 10, 2013

Prepared By

COMSEARCH

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

Prepared For

**Intelsat License LLC
Hagerstown, Maryland**

Temporary Transmit/Receive Earth Station
Operation Dates: 06/20/2013 - 09/20/2013

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 May 14, 2012.

Company

ACC License, LLC
ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY
ALLEGANY COUNTY GOVERNMENT
APC Realty and Equipment CO LLC
ART Licensing Corp.
Airband Communications Inc
Arlington County Emergency Comm Ctr
B.F. SAUL COMPANY
BUSINESS INFORMATION GROUP, INC.
Believe Wireless, LLC
Blaze Broadband
Blue Ridge Carriers
Boeing Company
CAMP HILL SCHOOL DISTRICT
CBS Broadcasting Inc
CBS Communications Services Inc.
CECIL COUNTY PUBLIC SCHOOLS
CNG Transmission Corporation
CRISPUS ATTUCKS ASSOCIATION
Cable Of The Carolinas
Calvert County Government
Cambria, County of
Cape May County Municipal Utilities Auth
Cape May County, MIS Department
Carlisle Area School District
City of Altoona
Clearwire Spectrum Holdings III, LLC
Commissioners of Caroline County
Conterra Ultra Broadband, LLC
Cumberland County, New Jersey
Cumberland Valley School District

Company (Continued)

DELAWARE RIVER & BAY AUTHORITY
DOVER AREA SCHOOL DISTRICT
Delmarva Power & Light Company
ECW Wireless, LLC
East Pennsboro Area School
Eastern Lancaster County School District
Eduro Networks LLC
Enoch Pratt Free Library
Federal Communications Commission
Franklin County Dept. of Emergency Servi
GETWIRELESS.NET
George Washington University
Glenville State University
HALIFAX AREA SCHOOL DISTRICT
Harrison County Emergency Services
High Voltage Communications LLC
Hope Gas, Inc.
LANCASTER GENERAL HOSPITAL
Last Mile Inc.
Loudoun Wireless LLC
Loudoun, County of
MLS ENGINEERING
MVC Research. LLC
Maryland Port Administration
Maryland, State Of - MDOT - MTA
MetroPCS AWS, LLC
NBC TELEMUNDO LICENSE LLC
NEXSTAR BROADCASTING, INC.
National Radio Astronomy Observatory
National Tower Company
Netrepid, Inc.
New Cingular Wireless PCS LLC - AZ
New Cingular Wireless PCS LLC - DC
New Cingular Wireless PCS LLC- WV/NC/SC
New Cingular Wireless PCS, LLC - PA
Newgig Networks, LLC
Northern York County School District
PENNSYLVANIA TURNPIKE COMMISSION
Prince William, County of
Radio One, Inc
RapidDSL & Wireless, Inc.
Red Rose Transit Authority
Red Zebra Broadcasting Licensee, LLC
Roadstar Internet, Inc.
SHIPPENSBURG AREA SCHOOL DISTRICT
SOMERSET COUNTY
SUSQUEHANNA TOWNSHIP SCHOOL DISTRICT
Shenandoah Personal Communications, LLC
Sprint Spectrum, LP
State of WV DHHR/BPH STECS
Steeltown-Highspire School District

Company (Continued)

THE HERSHEY COMPANY
Telecom Transport Management, Inc
WASHINGTON CABLE SYSTEMS INC
WKYSFM, INC
Washington Metro Area Transit Police Dep
West Virginia PCS Alliance, L.C.
Western PA Internet Access, Inc.
Windstream D&E Systems, Inc.
Wireless Internetwork LLC
World Class Wireless LLC
York County Dept of Emergency Services
York Water Co

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

The following 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: 05/28/2013
Job Number: 130514COMSJC03

Administrative Information

Status: TEMPORARY (Operation from 06/20/2013 to 09/20/2013)
Call Sign: TEMP09
Licensee Code: INTELS
Licensee Name: Intelsat License LLC

Site Information

HAGERSTOWN, MARYLAND
Venue Name
Latitude (NAD 83): 39° 35' 54.0" N
Longitude (NAD 83): 77° 45' 33.0" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 174.65 m / 573.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 6° W to 149° West Longitude
Azimuth Range: 101.9° to 257.8°
Corresponding Elevation Angles: 5.3° / 5.7°
Antenna Centerline (AGL): 9.45 m / 31.0 ft

Antenna Information

Manufacturer: TIW
Model: 14.2 Meter
Gain / Diameter: 65.1 dBi / 14.2 m
3-dB / 15-dB Beamwidth: 0.10° / 0.20°

816KFXD & 850KFXD

Max Available RF Power	(dBW/4 kHz)	-0.2	-0.4
	(dBW/MHz)	23.8	23.6

Maximum EIRP	(dBW/4 kHz)	64.9	64.7
	(dBW/MHz)	88.9	77.7
	(dBW)	88.0	88.0

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

Frequency Information

Transmit 18.0 GHz
Emission / Frequency Range (MHz):
816KFXD / 17301.0
816KFXD / 17302.5
850KFXD / 17309.5
850KFXD / 18090.0

Max Great Circle Coordination Distance: 446.5 km / 277.4 mi
Precipitation Scatter Contour Radius: 0.0 km / 0.0 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values	HAGERSTOWN, MD
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 35' 54.0" N
Longitude (NAD 83)	77° 45' 33.0" W
Ground Elevation (AMSL)	174.65 m / 573.0 ft
Antenna Centerline (AGL)	9.45 m / 31.0 ft
Antenna Model	TIW 14.2 Meter
Antenna Mode	Transmit 18.0 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	-0.2 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	153.39
5	0.00	96.84	-10.00	153.39
10	0.00	91.86	-10.00	153.39
15	0.00	86.88	-10.00	153.39
20	0.00	81.90	-10.00	153.39
25	0.00	76.92	-10.00	153.39
30	0.00	71.95	-10.00	153.39
35	0.00	66.97	-10.00	153.39
40	0.00	62.00	-10.00	153.39
45	0.00	57.03	-10.00	153.39
50	0.00	52.06	-10.00	153.39
55	0.00	47.09	-9.82	153.96
60	0.00	42.14	-8.62	158.39
65	0.00	37.19	-7.26	162.91
70	0.00	32.26	-5.72	168.15
75	0.00	27.34	-3.92	174.35
80	0.00	22.47	-1.79	181.89
85	0.00	17.65	0.83	191.39
90	0.00	12.98	4.17	203.75
95	0.00	8.66	8.56	221.33
100	0.00	5.61	13.27	446.50
105	0.00	6.15	12.28	303.98
110	0.00	9.60	7.45	216.77
115	0.00	13.27	3.93	202.81
120	0.00	16.89	1.31	192.91
125	0.00	20.41	-0.75	185.64
130	0.00	23.83	-2.43	179.61
135	0.00	27.11	-3.83	174.68
140	0.00	30.23	-5.01	170.57
145	0.00	33.14	-6.01	167.15
150	0.00	35.82	-6.85	164.29
155	0.00	38.20	-7.55	161.93
160	0.00	40.26	-8.12	160.03
165	0.00	41.93	-8.56	158.57
170	0.00	43.16	-8.88	157.03
175	0.00	43.92	-9.07	156.41
180	0.00	44.18	-9.13	156.21
185	0.00	43.92	-9.07	156.41

COMSEARCH

Earth Station Data Sheet

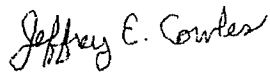
19700 Janelia Farm Boulevard, Ashburn, VA 20147
 (703)726-5500 <http://www.comsearch.com>

Coordination Values		HAGERSTOWN, MD	
Licensee Name		Intelsat License LLC	
Latitude (NAD 83)		39° 35' 54.0" N	
Longitude (NAD 83)		77° 45' 33.0" W	
Ground Elevation (AMSL)		174.65 m / 573.0 ft	
Antenna Centerline (AGL)		9.45 m / 31.0 ft	
Antenna Model		TIW 14.2 Meter	
Antenna Mode		Transmit 18.0 GHz	
Interference Objectives: Long Term		-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	-0.2 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	43.16	-8.88	157.03
195	0.00	41.93	-8.56	158.57
200	0.00	40.26	-8.12	160.04
205	0.00	38.20	-7.55	161.93
210	0.00	35.81	-6.85	164.29
215	0.00	33.14	-6.01	167.15
220	0.00	30.22	-5.01	170.58
225	0.00	27.11	-3.83	174.67
230	0.00	23.83	-2.43	179.61
235	0.00	20.42	-0.75	185.63
240	0.00	16.89	1.31	192.93
245	0.00	13.28	3.92	202.80
250	0.00	9.59	7.46	216.82
255	0.00	6.33	11.96	314.25
260	0.00	6.11	12.35	428.23
265	0.00	9.18	7.93	218.73
270	0.00	13.46	3.77	202.23
275	0.00	18.11	0.55	190.38
280	0.00	22.90	-2.00	181.15
285	0.00	27.76	-4.09	173.78
290	0.00	32.66	-5.85	167.68
295	0.00	37.59	-7.38	162.52
300	0.00	42.53	-8.72	158.06
305	0.00	47.48	-9.91	153.67
310	0.00	52.44	-10.00	153.39
315	0.00	57.40	-10.00	153.39
320	0.00	62.37	-10.00	153.39
325	0.00	67.34	-10.00	153.39
330	0.00	72.31	-10.00	153.39
335	0.00	77.28	-10.00	153.39
340	0.00	82.26	-10.00	153.39
345	0.00	87.23	-10.00	153.39
350	0.00	92.21	-10.00	153.39
355	0.00	97.18	-10.00	153.39

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.



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DATED: May 28, 2013