

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
STA Request for Earth Station E000296

I. Applicant

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



File # SYS-STA-20121121-01037  
5000916  
Call Sign 12-14-13 Grant Date 12-14-13  
(or other identifier)  
Term Dates  
From 12-14-13 To: 1-25-13  
Approved: [Signature]  
with conditions

Applicant: Intelsat License LLC  
File No.: SES-STA-20121121-01037  
Call Sign: E000296  
Special Temporary Authority (STA)

Intelsat License LLC (Intelsat) is granted STA, under the following conditions, for a period of 30 days to use its C-band earth station, Call Sign E000296, at Hagerstown, Maryland to provide launch and early orbit phase (LEOP) services for the MexSat-3 satellite at its permanent orbital location 114.0° W.L. The satellite is expected to be launched on December 19, 2012.

1. Uplink to MexSat-3 @ 114.0° W.L on 6703.0 MHz and 6706.0 MHz (CP) within coordinated emission and power limits.
2. Downlink from MexSat-3 @ 114.0° W.L on 3673.0 MHz and 3675.0 MHz (CP) .
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 Intelsat 22 LEOP mission 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, Intelsat License LLC, E000296, shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.
5. In the event that there is a report of interference, Intelsat Licensee LLC must immediately terminate transmissions and notify the FCC in writing.
6. 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.



File # SES-STA-20121121-01037  
Call Sign E000296 Grant Date 12-14-12  
(or other identifier)  
Term Dates  
From 12-14-12 To 1-13-13  
Approved: Karl E. Hayes

<b>2. Contact</b>	
<b>Name:</b>	Susan H. Crandall
<b>Company:</b>	Intelsat Corporation
<b>Street:</b>	3400 International Drive, N.W.
<b>City:</b>	Washington
<b>Country:</b>	USA
<b>Attention:</b>	Susan H. Crandall
<b>Phone Number:</b>	202-944-7848
<b>Fax Number:</b>	202-944-7870
<b>E-Mail:</b>	susan.crandall@intelsat.com
<b>State:</b>	DC
<b>Zipcode:</b>	20008 -3006
<b>Relationship:</b>	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. City Hagerstown	
8. Latitude (dd mm ss.s h) 39 35 54.0 N	

9. State MD	10. Longitude (dd mm ss.h) 77 45 35.0 W
11. Please supply any need attachments. Attachment 1: STA Request                      Attachment 2: Exhibit A                      Attachment 3: Exhibit B	
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 December 19, 2012 through January 17, 2013, to use its Hagerstown, Maryland C-band earth station, call sign E000296, to provide launch and early orbit phase services for the MexSat-3 satellite that is expected to be launched on December 19, 2012.</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.                      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**

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to [PRA@fcc.gov](mailto:PRA@fcc.gov). PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

**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.**

November 21, 2012

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  
Hagerstown, Maryland Earth Station E000296

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)<sup>1</sup> for 30 days, from December 19, 2012 through January 17, 2013, to use its Hagerstown, Maryland C-band earth station -- call sign E000296 -- to provide launch and early orbit phase (“LEOP”) services for the MexSat-3 satellite that is expected to be launched on December 19, 2012.<sup>2</sup> The LEOP period is expected to last approximately 10 days.<sup>3</sup>

The MexSat-3 LEOP operations will be performed in the following frequency bands:

Uplink: 6703.0 MHz and 6706.0 MHz (CP); and  
Downlink: 3673.0 MHz and 3675.0 MHz (CP)

The LEOP operations will 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.

The 24x7 contact information for the MexSat-3 LEOP mission 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.

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<sup>1</sup> 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”).

<sup>2</sup> It is Intelsat’s understanding that the satellite’s permanent orbital location will be 114.0° W.L. It will be in-orbit tested at 114.8° W.L.

<sup>3</sup> Intelsat is seeking authority through January 17, 2013 to accommodate a possible launch delay.

Ms. Marlene H. Dortch  
November 21, 2012  
Page 2

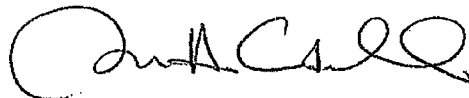
In further support of this request, Intelsat is attaching Exhibits A and B, which contain a waiver request, as well as technical information that demonstrates that the operation of the earth station will be compatible with its electromagnetic environment and will not cause harmful interference into any lawfully operating 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.

Intelsat also notes that for purposes of the MexSat-3 LEOP mission, it is seeking to operate in the frequencies listed in the request at power levels not to exceed 26.5 dBW. The technical information submitted with the STA request reflects a higher power level of 30.3 dBW because that is the level at which Intelsat might operate in the event an emergency necessitates the use of a higher power level in order to command the satellite.

Grant of this STA request will allow Intelsat to help launch the MexSat-3 satellite. This, in turn, will serve the public interest by ensuring that it can bring additional capacity to Mexico.

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

### 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.<sup>1</sup> 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.

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.<sup>2</sup> The Commission may grant a waiver for good cause shown.<sup>3</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>4</sup> 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.<sup>5</sup> 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 MexSat-3 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 MexSat-3 satellite, nor is Intelsat in contractual privity with that operator. Rather, an affiliate of Intelsat has a contract with Orbital Sciences, the manufacturer of the MexSat-3 satellite, to conduct LEOP services for the satellite.

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 MexSat-3 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.

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<sup>1</sup> 47 C.F.R. § 25.137 (emphasis added).

<sup>2</sup> 47 C.F.R. §§ 25.137 and 25.114.

<sup>3</sup> 47 C.F.R. §1.3.

<sup>4</sup> *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("*Northeast Cellular*").

<sup>5</sup> *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.



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.<sup>6</sup> 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 10 days of LEOP services to the MexSat-3 satellite.

It is Intelsat’s understanding that MexSat-3 is licensed by Mexico, which is a WTO-member country. It is also Intelsat’s understanding that MexSat-3 will not serve the United States. 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 MexSat-3 satellite using its U.S. earth station for a period of approximately 10 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 10 days, would pose undue hardship without serving underlying policy objectives. Given these particular facts, the waiver sought herein is plainly appropriate.

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<sup>6</sup> See 47 C.F.R. §25.137(d)(4).

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: 12/15/2012 - 02/20/2013

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 October 30, 2012.

Company

ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY  
ANNE ARUNDEL, COUNTY OF  
ATLANTIC, COUNTY OF  
Aerbender, LLC  
Albermarle, County of, Virginia  
Allegheny County  
Allegheny Power Service Corporation  
Alltel Communications LLC-Southern VA  
American Electric Power Service Corp.  
Appalachia Engineering Services  
Appalachian Broadcasting  
Atlantic City Electric Company  
Auburn Data Systems, LLC  
B20 LLC  
BAY BROADBAND COMMUNICATIONS LLC  
Baltimore County of Maryland  
Baltimore Gas and Electric Company  
Bedford, County of  
Berks, County of  
Blue Ridge Carriers  
CAMDEN COUNTY  
CARROLL COUNTY  
CBS Communications Services  
CENTRE COUNTY  
CHESTER, COUNTY OF  
CLEARFIELD, COUNTY OF  
CNG Transmission Corporation  
COLUMBIA COUNTY  
CTAB Holdings LLC  
Calvert Cliffs Nuclear Power Plant  
Calvert County Government

Company (Continued)

Cameron County Office of Emergency Servi  
Capital Communications of America  
Cellco Partnership - Bridgeville, PA/WV  
Cellco Partnership - Southern Virginia  
Cellco Prtnrshp - Phil. Tri-State Rgn  
Chesterfield, County of  
Clinton, County of  
Columbia Gas Transmission Corporation  
Commonwealth of Pennsylvania  
Commonwealth of Pennsylvania-Radio Proj.  
Comprehensive Wireless LLC  
Conectiv Communications, Inc.  
Converge Towers LLC  
Coralinks  
County of Burlington, Public Safety Cntr  
County of Culpeper  
County of Louisa, VA  
County of Lycoming  
County of Nelson  
County of Salem  
Cumberland, County of  
DAUPHIN COUNTY EMERGENCY MANAGEMENT  
Delaware County (PA) Emergency Services  
Delaware Division of Communications  
Delmarva Power & Light Company  
ECW Wireless, LLC  
EG Broadcast Newco Corp  
Eastern MLG LLC  
Eastern Pennsylvania EMS Council  
Egan LLC  
ELK COUNTY  
Enoch Pratt Free Library  
Equitable Gas Company  
Exelon Generation Company, L.L.C  
FELHC, Inc.  
Federal Communications Commission  
Franklin County Dept. of Emergency Servi  
Fundamental Broadcasting LLC  
George Washington University  
Gloucester, County of  
Hanover, County of  
Hardy Cellular Telephone Company  
Harrison County Emergency Services  
Harrisonburg-Rockingham ECC  
High Voltage Communications LLC  
Howard, County of  
INDIANA, COUNTY OF  
JEFFERSON COUNTY OF PENNSYLVANIA  
Jefferson Microwave, LLC  
Kreider Networks  
Kryptic Technologies

Company (Continued)

LACKAWANNA COMMUNICATIONS  
LEBANON COUNTY OF  
Lancaster County of  
Last Mile Inc.  
Loudoun County, Virginia  
M&T Bank  
MAHANTANGO MOUNTAIN MICROWAVE  
MARYLAND EMERG MANAGEMENT AGENCY COMM  
MARYLAND STATE DEPT OF GENERAL SERVICES  
MVC Research. LLC  
Maryland Public Broadcasting Commission  
Maryland State Highway Administration  
Maryland, State Of - MDOT - MTA  
Maryland, State of - DNR  
Maryland, State of - Dept.of Info & Tech  
Mifflin County  
Montgomery County Of  
Montgomery, County of  
Morgan, County of  
National Radio Astronomy Observatory  
New Cingular Wireless PCS - Maryland  
New Cingular Wireless PCS LLC - Ohio  
New Cingular Wireless PCS LLC - VA  
New Cingular Wireless PCS LLC- WV/NC/SC  
New Cingular Wireless PCS LLC-DE/NH/RI  
New Cingular Wireless PCS, LLC - PA  
New Jersey State Police  
New Jersey Turnpike Authority-Pkwy Div  
New Jersey, State of -NJ Transit  
Norfolk Southern Railway  
Northumberland, County of  
OHIO POWER COMPANY  
PA Communications  
PENNSYLVANIA MICROWAVE NETWORK INC.  
PENNSYLVANIA TURNPIKE COMMISSION  
PSEG Services Corporation  
Passaic Valley Microwave  
Peco Energy Company  
Pennsylvania Commonwealth State Police  
Peoples Natural Gas Company  
Pitt Power  
Pittsburgh SMSA Limited Partnership  
Potomac Electric Power Company  
Prince George's County  
Prince William, County of  
RAPPAHANNOCK ELECTRIC COOPERATIVE  
RCYM Holdings LLC  
REDI-CALL COMMUNICATIONS  
SCHUYLKILL, COUNTY OF  
SCS Networks  
SCTF NET

Company (Continued)

SECOM NET  
SOUTHEASTERN PENNSYLVANIA TRANSIT AUTH  
SPOTSYLVANIA COUNTY  
SW Networks  
San Juan Wireless  
Snyder, County of  
St. Mary's County of (MD)  
Stafford, County of  
State of Maryland, MIEMSS  
State of WV DHHR/BPH STECS  
Texas Eastern Communications, Inc.  
Thought Transmissions, LLC  
Transcontinental Gas Pipeline Corp.  
Triangle Communications, Inc.  
Turtle Networks 6384  
Turtle Networks 6386  
Turtle Networks 6444  
US Cellular Operating Company, LLC (WI)  
USCOC of Cumberland, Inc.  
USCOC of Virginia RSA #3, Inc.  
Verizon Wireless VAW LLC-Southern VA  
Virginia Cellular LLC  
Virginia Department of State Police  
Virginia Electric & Power Company  
Virginia PCS Alliance, L.C.  
WASHINGTON COUNTY E-911  
Warrenton Fauquier Joint Communications  
Washington Gas Light Company  
Washington Suburban Sanitary Commission  
Weblin Holdings LLC  
Wico, LLC  
Wireless Internet Work II.  
World Class Wireless LLC  
York County Dept of Emergency Services  
Zango LLC  
Zen Networks, Inc  
iSignal

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: 11/12/2012  
Job Number: 121030COMSJC01

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### Administrative Information

Status: TEMPORARY (Operation from 12/15/2012 to 02/20/2013)  
Call Sign: TEMP02  
Licensee Code: INTELS  
Licensee Name: Intelsat License LLC

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### Site Information

#### HAGERSTOWN, MARYLAND

Venue Name  
Latitude (NAD 83): 39° 35' 54.0" N  
Longitude (NAD 83): 77° 45' 35.0" W  
Climate Zone: A  
Rain Zone: 2  
Ground Elevation (AMSL): 173.74 m / 570.0 ft

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### 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): 5.79 m / 19.0 ft

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### Antenna Information

#### Transmit - FCC32

Manufacturer: TIW  
Model: 9 Meter  
Gain / Diameter: 53.5 dBi / 9.0 m  
3-dB / 15-dB Beamwidth: 0.36° / 0.67°

Max Available RF Power (dBW/4 kHz): 7.2  
(dBW/MHz): 31.2

Maximum EIRP (dBW/4 kHz): 60.7  
(dBW/MHz): 84.7  
(dBW): 84.0

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

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### Frequency Information

#### Transmit 6.7 GHz

Emission / Frequency Range (MHz): 850KFXD / 6703.0  
850KFXD / 6706.0

Max Great Circle Coordination Distance: 507.1 km / 315.0 mi  
Precipitation Scatter Contour Radius: 431.6 km / 268.1 mi

## COMSEARCH Earth Station Data Sheet

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

<b>Coordination Values</b>	<b>HAGERSTOWN, MD</b>		
Licensee Name	Intelsat License LLC		
Latitude (NAD 83)	39° 35' 54.0" N		
Longitude (NAD 83)	77° 45' 35.0" W		
Ground Elevation (AMSL)	173.74 m / 570.0 ft		
Antenna Centerline (AGL)	5.79 m / 19.0 ft		
Antenna Model	TIW 9 Meter		
Antenna Mode	Transmit 6.7 GHz		
Interference Objectives:	Long Term	-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	7.2 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	207.10
5	0.00	96.84	-10.00	207.10
10	0.00	91.86	-10.00	207.10
15	0.00	86.88	-10.00	207.10
20	0.00	81.90	-10.00	207.10
25	0.00	76.92	-10.00	207.10
30	0.00	71.95	-10.00	207.10
35	0.00	66.97	-10.00	207.10
40	0.00	62.00	-10.00	207.10
45	0.00	57.03	-10.00	207.10
50	0.00	52.06	-10.00	207.10
55	0.00	47.09	-9.82	207.79
60	0.00	42.14	-8.62	212.59
65	0.00	37.19	-7.26	218.19
70	0.00	32.26	-5.72	224.84
75	0.00	27.34	-3.92	232.91
80	0.00	22.47	-1.79	243.02
85	0.00	17.65	0.83	255.60
90	0.00	12.98	4.17	274.11
95	0.00	8.66	8.56	301.31
100	0.00	5.61	13.27	507.05
105	0.00	6.15	12.28	371.03
110	0.00	9.60	7.45	294.11
115	0.00	13.27	3.93	272.70
120	0.00	16.89	1.31	258.14
125	0.00	20.41	-0.75	248.15
130	0.00	23.83	-2.43	239.94
135	0.00	27.11	-3.83	233.34
140	0.00	30.23	-5.01	227.97
145	0.00	33.14	-6.01	223.55
150	0.00	35.82	-6.85	219.92
155	0.00	38.20	-7.55	216.96
160	0.00	40.26	-8.12	214.61
165	0.00	41.93	-8.56	212.81
170	0.00	43.16	-8.88	211.54
175	0.00	43.92	-9.07	210.78
180	0.00	44.18	-9.13	210.53

# COMSEARCH

## Earth Station Data Sheet

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

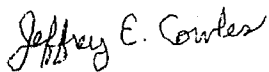
<b>Coordination Values</b>	<b>HAGERSTOWN, MD</b>		
Licensee Name	Intelsat License LLC		
Latitude (NAD 83)	39° 35' 54.0" N		
Longitude (NAD 83)	77° 45' 35.0" W		
Ground Elevation (AMSL)	173.74 m / 570.0 ft		
Antenna Centerline (AGL)	5.79 m / 19.0 ft		
Antenna Model	TIW 9 Meter		
Antenna Mode	Transmit 6.7 GHz		
Interference Objectives:	Long Term	-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	7.2 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
185	0.00	43.92	-9.07	210.78
190	0.00	43.16	-8.88	211.54
195	0.00	41.93	-8.56	212.81
200	0.00	40.26	-8.12	214.61
205	0.00	38.20	-7.55	216.96
210	0.00	35.81	-6.85	219.92
215	0.00	33.14	-6.01	223.55
220	0.00	30.22	-5.01	227.97
225	0.00	27.11	-3.83	233.34
230	0.00	23.83	-2.43	239.93
235	0.00	20.42	-0.75	248.14
240	0.00	16.89	1.31	258.16
245	0.00	13.28	3.92	272.68
250	0.00	9.59	7.46	294.19
255	0.00	6.33	11.96	378.50
260	0.00	6.11	12.35	489.18
265	0.00	9.18	7.93	297.19
270	0.00	13.46	3.77	271.82
275	0.00	18.11	0.55	254.16
280	0.00	22.90	-2.00	242.02
285	0.00	27.76	-4.09	232.16
290	0.00	32.66	-5.85	224.24
295	0.00	37.59	-7.38	217.70
300	0.00	42.53	-8.72	212.18
305	0.00	47.48	-9.91	207.44
310	0.00	52.44	-10.00	207.10
315	0.00	57.40	-10.00	207.10
320	0.00	62.37	-10.00	207.10
325	0.00	67.34	-10.00	207.10
330	0.00	72.31	-10.00	207.10
335	0.00	77.28	-10.00	207.10
340	0.00	82.26	-10.00	207.10
345	0.00	87.23	-10.00	207.10
350	0.00	92.21	-10.00	207.10
355	0.00	97.18	-10.00	207.10



## 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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