

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
Request for Special Temporary Authority Using Hagerstown, Maryland Earth Station E000296

1. Applicant

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

File # SES-STA-20140512-00344

Call Sign E000296 Grant Date 5-28-14

(or other identifier)

Term Dates From 6-18-14 To 7-10-14


Approved: *Mul & Place*

GRANTED  
International Bureau

Applicant: Intelsat License LLC  
Call Sign: E000296  
File No.: SES-STA-20140512-00344  
Special Temporary Authority (STA)

Intelsat License LLC is granted, under the following conditions, STA, for 30 days, to use its Hagerstown, Maryland earth station, call sign E000296, to provide launch and early orbit phase (LEOP) services to the AsiaSat-8 satellite licensed by China. The satellite's permanent orbital location and in-orbit testing location will be at 105.3 degrees E.L.

1. Uplink to AsiaSat-8 satellite on the 6425.0 MHz and 6429.5 MHz (RHCP) coordinated emission and power limits.
2. Downlink from AsiaSat-8 satellite on the 4198.7 MHz and 4199.4 MHz (LHCP).
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 AsiaSat-8 satellite 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. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future Intelsat License LLC applications.
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 # <u>SES-STA-20140512-00344</u>
	Call Sign <u>E000296</u> Grant Date <u>5-22-14</u>
	(or other identifier)
	From <u>6-10-14</u> Term Dates To: <u>7-10-14</u>
	Approver: <u>Paul E. [Signature]</u>

<b>2. Contact</b>			
<b>Name:</b>	Susan H. Crandall	<b>Phone Number:</b>	202-944-7848
<b>Company:</b>	Intelsat Corporation	<b>Fax Number:</b>	202-944-7870
<b>Street:</b>	3400 International Drive, N.W.	<b>E-Mail:</b>	susan.crandall@intelsat.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20008 -3006
<b>Attention:</b>	Susan H. Crandall	<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.s 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.) Intelsat License LLC herein requests a grant of Special Temporary Authority for 30 days, commencing June 10, 2014, to use its Hagerstown, Maryland C-band earth station, call sign E000296, to provide launch and early orbit phase services for the AsiaSat-8 satellite that is expected to be launched on June 10, 2014.	
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 Assoc. 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.

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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 12, 2014

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, commencing June 10, 2014, to use its Hagerstown, Maryland C-band earth station -- call sign E000296 -- to provide launch and early orbit phase (“LEOP”) services for the AsiaSat-8 satellite that is expected to be launched on June 10, 2014.<sup>2</sup> The LEOP period is expected to last approximately ten days.<sup>3</sup>

The AsiaSat-8 LEOP operations will be performed in the following frequency bands: 6425.00 MHz and 6429.50 MHz in the uplink (RHCP), and 4198.7 MHz and 4199.4 MHz in the downlink (LHCP). 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 AsiaSat-8 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> The permanent orbital location for AsiaSat-8, which Intelsat understands is licensed by China, will be 105.3° E.L. The in-orbit testing location will be 105.3° E.L.

<sup>3</sup> Intelsat is seeking authority for 30 days to accommodate possible launch delays.

Ms. Marlene H. Dortch  
May 12, 2014  
Page 2

In further support of this request, Intelsat is attaching Exhibits A and B, which contain 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, as well as a waiver request. Intelsat also notes that for purposes of the AsiaSat-8 LEOP mission, it is seeking to operate in the frequencies listed in this request at power levels not to exceed 25.5 dBW. The technical information submitted with this STA request reflects a power level as high as 28.8 dBW because that is the level at which Intelsat might operate extremely unlikely event that harmful interference should occur due to transmission to or from its earth station, Intelsat will take all reasonable steps to eliminate the interference.

Finally, Intelsat clarifies that during the AsiaSat-8 launch, the spacecraft will be controlled by Space Systems/Loral, which is the manager of the LEOP mission. Space Systems/Loral 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 Space Systems/Loral. 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 AsiaSat-8 satellite. This, in turn, will help ensure continuity of service at the 105.3° E.L. orbital 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  
Associate General Counsel  
Intelsat Corporation

cc: Paul Blais

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-Only Earth Station  
Operation Dates: 04/14/2014 - 08/01/2014

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 February 14 and 26, 2014.

Company

256Q Networks  
AB Services LLC  
AT&T COMMUNICATIONS OF MARYLAND INC  
AT&T Communications of Virginia, LLC  
AT&T Corporation  
AWC Networks  
Adams County Department of Emergency Svc  
Alltel Communications LLC - Ohio Region  
Alltel Communications LLC - Western PA  
Alltel Communications LLC-E OH WV  
Alltel Communications LLC-Southern VA  
Alltel Communications LLC-TriState Rgn  
Alltel Communications of Petersburg Inc  
Appalachia Engineering Services  
Appalachian Broadcasting  
Appalachian Power Company  
Atlantic Broadband (Penn), LLC  
Atlantic City Electric Company  
Auburn Data Systems, LLC  
B20 LLC  
BAY BROADBAND COMMUNICATIONS LLC  
BEAVER SPRINGS FAITH BAPTIST CHURCH, INC  
BFI Licenses, LLC  
BLAIR COUNTY 911  
Baltimore County of Maryland  
Baltimore Gas and Electric Company  
Bedford, County of  
Believe Wireless, LLC  
Berks County Department of Emergency Ser  
Blue Ridge Carriers



Company (Continued)

CARROLL, COUNTY OF  
CLEARFIELD, COUNTY OF  
CNG Transmission Corporation  
CROWN COMMUNICATION, INC.  
Cable Of The Carolinas  
Cambria, County of  
Capital Communications of America  
Cellco Partnership - Bridgeville, PA/WV  
Cellco Partnership - Southern Virginia  
Cellco Partnership- PA Region  
Cellco Partnership-Newark-Dallas Verizon  
Cellco Partnership-WDC/Baltimore  
Cellco Prtnrshp - Phil. Tri-State Rgn  
Centre, County of  
Charles, County of  
Chester, County of  
China Cat Productions LLC  
Clinton, County of  
Columbia Gas Transmission Corporation  
Commonwealth of Pennsylvania  
Commonwealth of Pennsylvania-Radio Proj.  
Comprehensive Wireless LLC  
Conterra Ultra Broadband, LLC  
Converge Towers LLC  
Coral Reef Technologies Ltd  
Coralinks  
County of Camden  
County of Fayette  
County of Frederick  
CP Communications, LLC  
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  
Electric Railroad, LLC  
Enoch Pratt Free Library  
Exelon Generation Company, L.L.C  
FELHC, Inc.  
Federal Communications Commission  
Frederick County  
Fundamental Broadcasting LLC  
Garden State Transmissions  
Gloucester, County of  
Greene, County of (PA)  
Hanover, County of  
Hardy Cellular Telephone Company  
Harrisonburg-Rockingham ECC  
High Voltage Communications LLC

Company (Continued)

Huntingdon, County of  
INDIANA, COUNTY OF  
JEFFERSON COUNTY OF PENNSYLVANIA  
Jefferson Microwave, LLC  
Juniata County Emergency Services  
KENTUCKY POWER COMPANY  
King and Queen County  
Kryptic Technologies  
Lancaster County of  
Last Mile Inc.  
Loudoun, County of  
MGW Networks, LLC  
MVC Research. LLC  
Maryland Public Broadcasting Commission  
Maryland State Highway Administration  
Maryland, State of - Dept.of Info & Tech  
Metrosat Communications Inc.  
Mifflin Mobilecom  
National Tower Company  
New Cingular Wireless PCS LLC -NJ  
New Cingular Wireless PCS - Maryland  
New Cingular Wireless PCS LLC - DC  
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 Turnpike Authority-Pkwy Div  
New Jersey, State of -NJ Transit  
Newgig Networks, LLC  
Norfolk Southern Railway  
OHIO VALLEY ELECTRIC COMPANY  
Old Dominion LLC  
PA Communications  
PEG Bandwidth  
PENNSYLVANIA TURNPIKE COMMISSION  
PSEG Services Corporation  
Peco Energy Company  
Penn Service Microwave Co., Inc.  
Peoples Natural Gas Company LLC  
Pitt Power  
Pittsburgh SMSA Limited Partnership  
Prince George's County  
Prince William, County of  
RAPPAHANNOCK ELECTRIC COOPERATIVE  
Radio One Inc  
RF Technology, LLC  
Rural Broadband Network Services LLC  
SCS Networks  
SCTF NET  
SHENANDOAH VALLEY ELECTRIC COOPERATIVE  
SOMERSET COUNTY

Company (Continued)

SW Networks  
Southern Maryland Electric Cooperative I  
Spotsylvania, County of  
St. Mary's County of (MD)  
Stafford, County of  
Standard Backhaul Communications LLC  
State of Maryland, MIEMSS  
TRF SERVICES LLC  
Texas Eastern Communications, LLC  
Thought Transmissions, LLC  
Turtle Networks 6559  
US Cellular Operating Company, LLC (WI)  
USCOC of Cumberland, Inc.  
Velox Networks LLC  
Verizon Delaware Inc  
Verizon Maryland, Inc.  
Verizon Wireless (VAW) LLC - Delaware/NJ  
Verizon Wireless (VAW) LLC - Maryland  
Verizon Wireless (VAW) LLC-Pennsylvania  
Verizon Wireless VAW LLC - West Virginia  
Verizon Wireless VAW LLC-Southern VA  
Virginia RSA 5 Limited Partnership  
Virginia Broadband, LLC  
Virginia Cellular LLC  
Virginia Department of State Police  
Virginia Electric & Power Company  
Virginia PCS Alliance, L.C.  
WHEELING POWER COMPANY  
WITF Inc.  
WV DHHR BPH, Office of EMS, Com. Div.  
Washington D.C. SMSA L.P.  
Washington Gas Light Company  
Washington Suburban Sanitary Commission  
Weblin Holdings LLC  
Wireless Internetwork LLC  
World Class Wireless LLC  
York County Dept of Emergency Services  
Zen Networks, Inc  
iSignal  
ANNE ARUNDEL, COUNTY OF  
ATLANTIC, COUNTY OF  
AWC Networks  
Albermarle, County of, Virginia  
Allegheny Power Service Corporation  
Alltel Communications LLC-Southern VA  
CBS Communications Services Inc.  
COLUMBIA COUNTY  
CTAB Holdings LLC  
Calvert Cliffs Nuclear Power Plant  
Calvert, County of  
Cameron County Office of Emergency Servi  
Capital Communications of America

Company (Continued)

Cellco Partnership - Bridgeville, PA/WV  
Cellco Partnership - Southern Virginia  
Cellco Prtnrshp - Phil. Tri-State Rgn  
Chesterfield, County of  
Conectiv Communications, Inc.  
County of Culpeper  
County of Louisa, VA  
County of Lycoming  
County of Salem  
Cumberland, County of  
Eastern Pennsylvania EMS Council  
Egan LLC  
Equitable Gas Company  
Franklin County Dept. of Emergency Servi  
George Washington University  
Harrison County Emergency Services  
Howard, County of  
Kentucky Commonwealth of KY Emerg Warnin  
LEBANON COUNTY OF  
M&T Bank  
MARYLAND EMERG MANAGEMENT AGENCY COMM  
MARYLAND STATE DEPT OF GENERAL SERVICES  
Maryland, State Of - MDOT - MTA  
Maryland, State of - DNR  
Mifflin County  
Montgomery County Of  
Montgomery, County of  
Morgan, County of  
Nelson, County of  
New Jersey State Police  
Northumberland, County of  
Pennsylvania Commonwealth State Police  
Pennsylvania Sports Entertainment Netwo.  
Peoples TWP LLC  
Potomac Electric Power Company  
RCYM Holdings LLC  
Redi-Call Communications Company  
SCHUYLKILL, COUNTY OF  
SECOM NET  
SOUTHEAST OHIO EMERGENCY MEDICAL  
SOUTHEASTERN PENNSYLVANIA TRANSIT AUTH  
Snyder, County of  
Transcontinental Gas Pipeline Corp.  
Triangle Communications, Inc.  
USCOC of Virginia RSA #3, Inc.  
WASHINGTON COUNTY E-911  
Warrenton Fauquier Joint Communications  
Weblin Holdings LLC  
Westmoreland County Public Safety  
Wireless Internetwork LLC  
World Class Wireless LLC

Company (Continued)

Zango LLC  
3G Wireless, LLC  
ABC, Inc. - WPVI-TV  
AERIAL VIDEO SYSTEMS  
ANNE ARUNDEL, COUNTY OF  
AT&T California  
Alascom Inc  
Ascent Media Network Services, LLC  
Bellsouth Telecommunications, Inc.  
Borgeson, Tom R.  
Broadcast Sports Inc.  
C-SPAN  
CBS Broadcasting Inc  
CBS TELEVISION LICENSES LLC  
Carolina Telephone and Telegraph Co  
Casper, John  
CenturyTel of the Southwest, Inc.  
Chicago Comnet Corp  
Cincinnati Bell Wireless LLC  
Citywide News Network, Inc.  
Cohen, Elana  
County of Fairfax, Virginia  
Cowboys Stadium LP  
DCI II, INC.  
Direct Broadcast Services, Inc.  
Fox Television Stations, Inc.  
GOODYEAR TIRE AND RUBBER COMPANY  
GSN New, Inc  
Global Microwave Systems Inc  
HF Enterprises, Inc  
Hallco Unlimited, Inc.  
Hawaiian Telcom, Inc.  
Heiden, William  
Illinois Bell Telephone Company  
Indiana Bell Telephone Company  
Information & Display Systems, Inc.  
Information Super Station, LLC  
International Communications Group, Inc.  
Kentucky RSA #3 Cellular General Partner  
Kentucky RSA #4 Cellular General Partner  
MERCURY COMMUNICATIONS  
Metro Networks Communications, Inc.  
Michigan Bell Telephone Company  
Moreen, Steven K  
NBC Telemundo License Co.  
NBC Telemundo License LLC  
NEW ENGLAND DIGITAL DISTRIBUTION, INC.  
NEW ENGLAND SATELLITE SYSTEMS INC  
NSM Surveillance  
National Cable Satellite Corporation  
Navajo Communications Company  
NorthWest Suburbs Community Access Corp

Company (Continued)

Ohio Bell Telephone Company  
On Scene Video Production  
Onboard Images  
Pacific Television Center  
Philadelphia, City of  
Plateau Telecommunications, Inc.  
Plum TV, LLC  
Production & Satellite Services, Inc.  
Proxy Aviation  
Public Television Communications Center  
QUICK LINK CONNECTIONS INC  
Qwest Corporation  
RCC Minnesota Inc. - MN NE ND SD  
REMOTE FACILITIES CONSULTING SERVICES  
RF Central, LLC  
RF Film, Inc  
Radiofone, Inc.  
Randy Hermes Production  
Regulus Media Services, Inc.  
Remote Broadcasts, Inc.  
Southwestern Bell Telephone L.P.  
Speedshotz, Inc  
Texas A&M University, Athletic Department  
The City of Baltimore, Police Department  
Total RF Marketing Inc  
Unisat, Inc.  
United Telephone - Southeast  
VERIZON SOUTH INC.  
Verizon California Inc.  
Verizon New England Inc.  
Verizon New Jersey, Inc.  
Verizon New York, Inc.  
Verizon North Inc.  
Verizon Northwest Inc.  
Verizon Pennsylvania, Inc.  
Verizon Virginia, Inc.  
Verizon Washington DC, Inc.  
Village Video Productions Inc  
Vyvx, LLC  
Westar Satellite Services LP  
Western Technical Services  
Wexler Video, Inc.  
Winged Vision Inc  
Wisconsin Bell, Inc.  
Wolfe Air Aviation

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: 03/10/2014  
Job Number: 140214COMSJC04

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### Administrative Information

Status: TEMPORARY (Operation from 04/14/2014 to 08/01/2014)  
Call Sign: TEMP08  
Licensee Code: INTELS  
Licensee Name: Intelsat License LLC

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### Site Information

#### HAGERSTOWN, MARYLAND

Venue Name:  
Latitude (NAD 83): 39° 35' 54.7" N  
Longitude (NAD 83): 77° 45' 35.3" W  
Climate Zone: A  
Rain Zone: 2  
Ground Elevation (AMSL): 171.3 m / 562.0 ft

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### Link Information

Satellite Type: Geostationary  
Mode: TO - Transmit-Only  
Modulation: Analog and 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): 12.5 m / 41.0 ft

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### Antenna Information

#### Transmit

Manufacturer: TIW  
Model: 19.0 Meter  
Gain / Diameter: 59.1 dBi / 19.0 m  
3-dB / 15-dB Beamwidth: 0.20° / 0.40°

Max Available RF Power: (dBW/4 kHz) 5.6  
(dBW/MHz) 29.6

Maximum EIRP: (dBW/4 kHz) 64.7  
(dBW/MHz) 88.7  
(dBW) 88.0

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 6.1 GHz

Emission / Frequency Range (MHz): 850KFXD / 6425.0  
850KFXD / 6429.5

Max Great Circle Coordination Distance: 552.8 km / 343.4 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>

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<b>Coordination Values</b>	<b>HAGERSTOWN, MD</b>	
Licensee Name	Intelsat License LLC	
Latitude (NAD 83)	39° 35' 54.7" N	
Longitude (NAD 83)	77° 45' 35.3" W	
Ground Elevation (AMSL)	171.3 m / 562.0 ft	
Antenna Centerline (AGL)	12.5 m / 41.0 ft	
Antenna Model	TIW 19.0 Meter	
Antenna Mode	Transmit 6.1 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	5.6 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	101.81	-10.00	202.62
5	0.00	96.84	-10.00	202.62
10	0.00	91.86	-10.00	202.62
15	0.00	86.88	-10.00	202.62
20	0.00	81.90	-10.00	202.62
25	0.00	76.92	-10.00	202.62
30	0.00	71.95	-10.00	202.62
35	0.00	66.97	-10.00	202.62
40	0.00	62.00	-10.00	202.62
45	0.00	57.03	-10.00	202.62
50	0.00	52.06	-10.00	202.62
55	0.00	47.09	-9.82	203.29
60	0.00	42.14	-8.62	206.27
65	0.00	37.19	-7.26	211.60
70	0.00	32.26	-5.72	217.96
75	0.00	27.34	-3.92	225.69
80	0.00	22.47	-1.79	235.39
85	0.00	17.65	0.83	248.04
90	0.00	12.98	4.17	265.01
95	0.00	8.66	8.56	291.02
100	0.00	5.61	13.27	552.79
105	0.00	6.15	12.28	385.58
110	0.00	9.60	7.45	284.12
115	0.00	13.27	3.93	263.67
120	0.00	16.89	1.31	249.82
125	0.00	20.41	-0.75	240.32
130	0.00	23.83	-2.43	232.43
135	0.00	27.11	-3.83	226.10
140	0.00	30.23	-5.01	220.95
145	0.00	33.14	-6.01	216.73
150	0.00	35.82	-6.85	213.26
155	0.00	38.20	-7.55	210.44
160	0.00	40.26	-8.12	208.19
165	0.00	41.93	-8.56	206.48
170	0.00	43.16	-8.88	205.27
175	0.00	43.92	-9.07	204.55
180	0.00	44.18	-9.13	205.93
185	0.00	43.92	-9.07	204.54



# COMSEARCH

## Earth Station Data Sheet

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

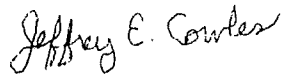
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<b>Coordination Values</b>	<b>HAGERSTOWN, MD</b>
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 35' 54.7" N
Longitude (NAD 83)	77° 45' 35.3" W
Ground Elevation (AMSL)	171.3 m / 562.0 ft
Antenna Centerline (AGL)	12.5 m / 41.0 ft
Antenna Model	TIW 19.0 Meter
Antenna Mode	Transmit 6.1 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	5.6 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	43.16	-8.88	205.27
195	0.00	41.93	-8.56	206.48
200	0.00	40.26	-8.12	208.19
205	0.00	38.20	-7.55	210.44
210	0.00	35.81	-6.85	213.26
215	0.00	33.14	-6.01	216.73
220	0.00	30.22	-5.01	220.96
225	0.00	27.11	-3.83	226.10
230	0.00	23.83	-2.43	232.42
235	0.00	20.42	-0.75	240.31
240	0.00	16.89	1.31	249.84
245	0.00	13.28	3.92	263.65
250	0.00	9.59	7.46	284.19
255	0.00	6.33	11.96	396.43
260	0.00	6.11	12.35	531.75
265	0.00	9.18	7.93	287.06
270	0.00	13.46	3.77	262.82
275	0.00	18.11	0.55	246.67
280	0.00	22.90	-2.00	234.42
285	0.00	27.76	-4.09	224.96
290	0.00	32.66	-5.85	217.39
295	0.00	37.59	-7.38	211.14
300	0.00	42.53	-8.72	205.88
305	0.00	47.48	-9.91	202.95
310	0.00	52.44	-10.00	202.62
315	0.00	57.40	-10.00	202.62
320	0.00	62.37	-10.00	202.62
325	0.00	67.34	-10.00	202.62
330	0.00	72.31	-10.00	202.62
335	0.00	77.28	-10.00	202.62
340	0.00	82.26	-10.00	202.62
345	0.00	87.23	-10.00	202.62
350	0.00	92.21	-10.00	202.62
355	0.00	97.18	-10.00	202.62

## 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.



Jeffrey E. Cowles  
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DATED: March 10, 2014