Intelsat License LLC

Approved by OMB 3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

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

1. Applicant

Intelsat License LLC

Phone Number:

202-944-7848

DBA Name:

Fax Number:

202-944-7870

Street:

Name:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

3400 International Drive, N.W.

Washington

State:

DC

Country:

City:

USA

Zipcode:

20008

-3006

Attention:

Susan H. Crandall

GRANTED

International Bureau

Call Sign

Grant Date |- 24-1

(or other identifier)

Term Dates

Approved:

Applicant: Intelsat License LLC

Call Sign: E000296

File No.: SES-STA-20130117-00063

Special Temporary Authority (STA)

space station to its authorized location of 55.5° W.L. Intelsat is also authorized to conduct in-orbit testing Communications Commission's rules not waived herein, and are subject to the following conditions: application, authorization of Intelsat's application SAT-STA-20121126-00204, the Federal Operations under this authorization must be in accordance with the terms and conditions contained this to-Earth), 12.50-12.75 GHz (space-to-Earth), and 14.0 - 14.5 GHz (Earth-to-space) frequency bands. Earth), 5925 – 6425 MHz (Earth-to-space), 11.45 – 11.70 GHz (space-to-Earth), 11.7 – 12.2 GHz (space-(IOT) of the Intelsat 27 satellite at the 51.5° W.L. orbital location using the 3700 – 4200 MHz (space-to-6424.5 MHz (Earth-to-space) necessary to maintain Intelsat 27 at 51.5° W.L. and to drift the Intelsat 27 authority to conduct telemetry, tracking, and command (TT&C) operations using center frequencies of 3701.25 MHz, 3701.75 MHz, 3702.25 MHz, and 3702.75 MHz (space-to-Earth), and 5925.5 MHz and and early orbit phase (LEOP) services for the Intelsat 27 satellite, Call Sign S2827. Intelsat is granted Intelsat License LLC is granted special temporary authority, with conditions, for 30 days, from January 2013, to use its Hagerstown, Maryland C-band earth station, Call Sign E000296, to provide launch

- 7701 East Coast Operations Center (primary); (310) 525-5900 West Coast Operations Center (back-up). Harry Burnham and Kevin Bell are the LEOP and IOT points of contact. Currently the 24x7 contact information for the Intelsat 27 LEOP mission is as follows: Ph.: (202) 944emergency phone number where the licensee can be reached in the event that harmful interference occurs. bands and are in the LEOP path. All operators of satellites in that path must be provided with an The LEOP operations must be coordinated with all operators of satellites that use the same frequency
- protection from interference caused to it by, any other lawfully operating station. harmful interference basis, i.e., Intelsat must not cause harmful interference to, and shall not claim All operations under this grant of special temporary authority must be on an unprotected and non-
- cease operations immediately upon notification of such interference, and must inform the Commission, in writing, immediately of such an event. In the event of any harmful interference under this grant of special temporary authority, Intelsat must
- authority is solely at Intelsat License LLC risk. Any action taken or expense incurred as a result of operations pursuant to this special temporary
- authorization as conditioned. conditioned. Failure to respond within this period will constitute formal acceptance of the 5. Intelsat is afforded 30 days from the date of release of this action to decline this authorization as
- C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the public notice indicating that this action the Commission's rules or applications for review under Section 1.115 of the Commission's rules, 47 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 of This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority,



2. Contact										
N	Name:	Susan H. Crandall	Phone Number	••	202-944-	-7848				
(Company:	Intelsat Corporation	Fax Number:		202-944-7870					
S	Street:	3400 International Drive, N.W.	E-Mail:		susan.cra	ndall@intelsat.com				
C	City:	Washington	State:		DC					
(Country:	USA	Zipcode:		20008	-3006				
A	Attention:	Susan H. Crandall	Relationship:		Legal Co	ounsel				
application.	Please enter	ated to an application filed with the only one.) er or Submission ID	e Commission, ento	er either the file nur	nber or the	e IB Submission ID of the related				
1		with this application?								
-		attach FCC Form 159. If No, inc		e exemption (see 47	C.F.R.Sec	ction 1.1114).				
- Tar-		Noncommercial educationa	Il licensee							
	lease explain									
4b. Fee Class	sification (CGX – Fixed Satellite Transmit/Re	ceive Earth Station							
5. Type Requ	uest									
O Use Pric	or to Grant	• Chang	ge Station Location		Other					
6. Requested	d Use Prior D	Pate								
7. CityHagei	rstown	*	8. Lat	itude m ss.s h) 39 35	54.0 N	1				

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:
12. Description. (If the complete description does not appear in this be	ox, please go to the end of the form to view it in its entirety.)
Intelsat License LLC herein requests a grant commencing January 28, 2013 to use its Hagers sign E000296, to provide launch and early orb satellite that is expected to be launched on	stown, Maryland C-band earth station, call oit phase services for the Intelsat 27
13. By checking Yes, the undersigned certifies that neither applicant not subject to a denial of Federal benefits that includes FCC benefits pursua of 1988, 21 U.S.C. Section 862, because of a conviction for possession See 47 CFR 1.2002(b) for the meaning of "party to the application	ant to Section 5301 of the Anti-Drug Act or distribution of a controlled substance.
14. Name of Person Signing Susan H. Crandall	15. Title of Person Signing Asst. General Counsel, Intelsat Corporation
(U.S. Code, Title 18, Section 1001), AND/OR REV	ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT OCATION OF ANY STATION AUTHORIZATION & 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. 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.

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: 01/26/2013 - 03/15/2013

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 January 9, 2013.

Company

CHESTER, COUNTY OF CLEARFIELD, COUNTY OF CAMDEN COUNTY Blue Ridge Carriers Believe Wireless, LLC Bedford, County of Atlantic Broadband (Delmar), LLC Atlantic Broadband (Penn), LLC Atlantic City Electric Company Auburn Data Systems, LLC Berks, County of Baltimore Gas and Electric Company Baltimore County of Maryland BLAIR COUNTY 911 BAY BROADBAND COMMUNICATIONS LLC B20 LLC Appalachian Broadcasting Appalachia Engineering Services Alltel Communications LLC-Southern VA Alltel Communications LLC - Western PA Alltel Communications LLC-E OH WV AT&T Corp. ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY AT&T COMMUNICATIONS OF MARYLAND INC AT&T Communications of Virginia, LLC American Electric Power Service Corp. Alltel Communications of Petersburg Inc Allentown SMSA Limited Partnership Aerbender, LLC AB Services LLC

Company (Continued)

CNG Transmission Corporation COLLEGE OF SOUTHERN MARYLAND 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

Charles, County of China Cat Productions LLC 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 Frederick

DAUPHIN COUNTY EMERGENCY MANAGEMENT

Delaware Division of Communications

Delmarva Power & Light Company ECW Wireless, LLC EG Broadcast Newco Corp Eastern MLG LLC Enoch Pratt Free Library Exelon Generation Company, L.L.C FELHC, Inc.

Fayette, County of

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
Huntingdon, County of
INDIANA, COUNTY OF

JEFFERSON COUNTY OF PENNSYLVANIA

Jefferson Microwave, LLC

Juniata County Emergency Services

King and Queen County

Kreider Networks

Kreider Networks

≺ryptic Technologies

Company (Continued)

Loudoun County, Virginia

MVC Research. LLC Mahwah Communications

Maryland Public Broadcasting Commission

Maryland, State of - Dept.of Info & Tech Maryland State Highway Administration

National Radio Astronomy Observatory
New Cingular Wireless PCS LLC -NJ
New Cingular Wireless PCS - Maryland
New Cingular Wireless PCS LLC - DC
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 Cingular Wireless PCS, LLC - PA
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 POWER COMPANY

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

SCS Networks

SCTF NET

SOMERSET COUNTY SHENANDOAH VALLEY ELECTRIC COOPERATIVE

SW Networks

Southern Maryland Electric Cooperative I

Sprint Spectrum, LP

St. Mary's County of (MD)
Stafford, County of
State of Maryland, MIEMSS
State of WV DHHR/BPH STECS

TRF SERVICES LLC

Texas Eastern Communications, Inc.

Thought Transmissions, LLC

Turtle Networks 6386 Turtle Networks 6467

US Cellular Operating Company, LLC (WI)

USCOC of Cumberland, Inc.
USCOC of Virginia RSA #2, Inc.
USCOC of Virginia RSA #3, Inc.

Velox Networks LLC

Company (Continued)

Virginia Electric & Power Company Virginia PCS Alliance, L.C. WHEELING POWER COMPANY WITF Inc. York County Dept of Emergency Services World Class Wireless LLC Wireless Backhaul Infrastructure, LLC Wireless Infrastructure Partners, LLC Washington Suburban Sanitary Commission Webline Holdings LLC Washington Gas Light Company Virginia Broadband, LLC Virginia RSA 5 Limited Partnership Verizon Maryland, Inc.
Verizon Wireless (VAW) LLC - Delaware
Verizon Wireless (VAW) LLC - Maryland
Verizon Wireless (VAW) LLC - W/B/V Mkts
Verizon Wireless (VAW) LLC-Pennsylvania Zen Networks, Inc Wireless Internetwork LLC Wireless Internet Work II. Wico, LLC Washington D.C. SMSA L.P. Virginia Department of State Police Virginia Cellular LLC Verizon Wireless VAW LLC-Southern VA Verizon Wireless LLC - West Virginia

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: Job Number:

01/16/2013 130109COMSJC11

HAGERSTOWN, MARYLAND	Site Information
Intelsat License LLC	Licensee Name
INTELS	Licensee Code
TEMP03	Call Sign
TEMPORARY (Operation from 01/26/2013 to 03/15/2013)	Status
חכ	Administrative Information

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
	The state of the s

The state of the s	
5.79 m / 19.0 ft	Antenna Centerline (AGL)
5.3° / 5.7°	Corresponding Elevation Angles
101.9° to 257.8°	Azimuth Range
6° W to 149° West Longitude	Satellite Arc
Digital	Modulation
TO - Transmit-Only	Mode
Geostationary	Satellite Type
	Link Information

Antenna Information	-	Transmit
Manufacturer		TIW
Model		9 Meter
Gain / Diameter		53.5 dBi / 9.0 m
3-dB / 15-dB Beamwidth	ה	0.36° / 0.67°
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)	7.2 31.2
Maximum EIRP	(dBW/4 kHz) (dBW/MHz) (dBW)	60.7 84.7 84.0
Interference Objectives:	Long Term Short Term	-154.0 dBW/4 kHz 20% -131.0 dBW/4 kHz 0.0025%

₽≤	<u>m</u> =n	=
Max Great Circle Coordination Distance Precipitation Scatter Contour Radius	Frequency Information Emission / Frequency Range (MHz	Interference Objectives:
tion Distance ur Radius	t ion ge (MHz)	Long Term Short Term
507.1 km / 315.0 mi 431.6 km / 268.1 mi	Transmit 6.1 GHz 850KFXD / 5925.5 850KFXD / 6424.5	-154.0 dBW/4 kHz 20% -131.0 dBW/4 kHz 0.0025%

COMSEARCH
Earth Station Data Sheet
19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

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

Transmit 6.1 GHz

185	175 180	170	165	160	155	150	145	140	135	130	125	120	115	110	105	100	95	90	85	80	75	70	65	60	55	50	45	40	<u>ვ</u>	30	25	20	15	10	Ċ1	0	Azimuth (°)
0.00	0.00 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Horizon Elevation (°)
43.92	43.92 44.18	43.16	41.93	40.26	38.20	35.82	33.14	30.23	27.11	23.83	20.41	16.89	13.27	9.60	6.15	5.61	8.66	12.98	17.65	22.47	27.34	32.26	37.19	42.14	47.09	52.06	57.03	62.00	66.97	71.95	76.92	81.90	86.88	91.86	96.84	101.81	Antenna Discrimination (°)
-9.07	-9.07 -9.13	-8.88	-8.56	-8.12	-7.55	-6.85	-6.01	-ნ.01	-3.83	-2.43	-0.75	1.31	3.93	7.45	12.28	13.27	8.56	4.17	0.83	-1.79	-3.92	-5.72	-7.26	-8.62	-9.82	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	Horizon Gain (dBi)
210.78	210.78 210.53	211.54	212.81	214.61	216.96	219.92	223.55	227.97	233.34	239.94	248.15	258.14	272.70	294.11	371.03	507.05	301.31	274.11	255.60	243.02	232.91	224.84	218.19	212.59	207.79	207.10	207.10	207.10	207.10	207.10	207.10	207.10	207.10	207.10	207.10	207.10	Coordination Distance (km)

COMSEARCH
Earth Station Data Sheet
19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

Short Term Max Available RF Power	Interference Objectives: Long Term	Antenna Mode	Antenna Model	Antenna Centerline (AGL)	Ground Elevation (AMSL)	Longitude (NAD 83)	Latitude (NAD 83)	Licensee Name	Coordination Values
131.0 dBW/4 kHz 7.2 (dBW/4 kHz)	-154.0 dBW/4 kHz	Transmit 6.1 GHz	TIW 9 Meter	5.79 m / 19.0 ft	173.74 m / 570.0 ft	77° 45' 35.0" W	39° 35' 54.0" N	Intelsat License LLC	HAGERSTOWN, MD
0.0025%	20%								

335 340 345 350 355	315 320 325	270 275 280 285 290 295 300	225 230 235 240 245 250 256 266	Azimuth (°) 190 195 200 210 215 220
0.00 0.00 0.00 0.00	0.000	000000000000000000000000000000000000000	0.000000000000000000000000000000000000	Horizon Elevation (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
72.31 77.28 82.26 87.23 92.21 97.18	47.46 52.44 57.40 62.37 67.34	13.46 18.11 22.90 27.76 32.66 37.59 42.53	27.11 23.83 20.42 16.89 13.28 9.59 6.33 6.11	Antenna Discrimination (°) 43.16 41.93 40.26 38.20 35.81 33.14 30.22
-10.00 -10.00 -10.00 -10.00 -10.00	-10.00 -10.00 -10.00	3.77 0.55 -2.00 -4.09 -5.85 -7.38	-3.83 -2.43 -0.75 1.31 3.92 7.46 11.96 12.35 7.93	Transm Horizon Gain (dBi) -8.88 -8.56 -8.12 -7.55 -6.85 -6.01
207.10 207.10 207.10 207.10 207.10 207.10 207.10	207.44 207.10 207.10 207.10 207.10	271.82 254.16 242.02 232.16 224.24 217.70 212.18	233.34 239.93 248.14 258.16 272.68 294.19 378.50 489.18 297.19	Transmit 6.1 GHz Coordination Bi) Distance (km) 3 211.54 5 212.81 6 214.61 2 214.61 5 216.96 5 219.92 1 223.55 1 227.97

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. Contes

Jeffrey E. Cowles
Engineer III, Telecommunications
COMSEARCH
19700 Janelia Farm Blvd.
Ashburn, Va. 20147

DATED: <u>January 16, 2013</u>



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 E000296

Dear Ms. Dortch:

launch and early orbit phase ("LEOP") services for the Intelsat 27 satellite that is expected to be launched on January 28, 2013. The LEOP period is expected to last approximately 17 days. Hagerstown, Maryland C-band earth station -- call sign E000296 -- to provide Authority ("STA") for 30 days commencing January 28, 2013 to use its Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary The LEOP period is expected

The Intelsat 27 LEOP operations will be performed in the following frequency

and LHCP). Uplink: 6424.5 MHz (LHCP) and 5925.5 MHz (H); and Downlink: 3701.25 MHz, 3701.75 MHz, 3702.25 MHz, and 3702.75 MHz (V

The LEOP operations will be coordinated with all operators of satellites that use the same frequency bands and are in the LEOP path.⁴ All operators of satellites

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

tested at 55.5° W.L., subject to receipt of FCC approval. 20121130-00204 (filed Nov. 30, 2012). The satellite's UHF payload will be ² The satellite's permanent orbital location will be 55.5° W.L. See Policy License LLC Request for Special Temporary Authority, File No. SAT-STA-27's C- and Ku-band payloads will be in-orbit tested at 51.5° E.L. See Intelsat payload without further order from the FCC. See id., Condition #4. granting the Intelsat 27 license prohibits Intelsat from operating the UHF LOA-20110610-00105 (Oct. 12, 2012) (Public Notice). The FCC's order Branch Information; Actions Taken, Report No. SAT-00904, File No. SAT-

³ Intelsat is seeking authority for 30 days to accommodate a possible launch

⁴Boeing Satellite Systems, Inc., which is the LEOP mission manager for Intelsat 27, will handle the coordination.

Ms. Marlene H. Dortch January 17, 2013 Page 2

licensee can be reached in the event that harmful interference occurs. in that path will be provided with an emergency phone number where the

The 24x7 contact information for the Intelsat 27 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.

transmissions to or from its earth station, Intelsat will take all reasonable steps to extremely unlikely event that harmful interference should occur due to harmful interference into any lawfully operating terrestrial facility. In the will be compatible with its electromagnetic environment and will not cause technical information that demonstrates that the operation of the earth station eliminate the interference. In further support of this request, Intelsat is attaching Exhibit A, which contains

power level in order to command the satellite. reflects a higher power level of 32.6 dBW because that is the level at which exceed 26.5 dBW. The technical information submitted with the STA request seeking to operate in the frequencies listed in the request at power levels not to Intelsat might operate in the event an emergency necessitates the use of a higher Intelsat also notes that for purposes of the Intelsat 27 LEOP mission, it is

satellite. This, in turn, will serve the public interest by providing replacement and new capacity at the satellite's permanent location of 55.5° W.L. Grant of this STA request will allow Intelsat to help launch the Intelsat 27

Ms. Marlene H. Dortch January 17, 2013 Page 3

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

Respectfully submitted,

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Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

cc: Paul Blais