

Exhibit A
Lockheed Martin Corporation
Carpentersville, NJ Earth Station
Call Sign E7541
STA Request for
LEOp TT&C Operations
April 2012

Description

Lockheed Martin Corporation (“Lockheed Martin”) requests special temporary authority (“STA”) to operate its Carpentersville, New Jersey C-band and Ku-band fixed earth station antennas (see File No. SES-LIC-20081103-01443, as amended)¹ to provide telemetry, tracking and control (“TT&C”) functions during the post-launch and early operations (“LEOp”) phases of operation for the JCSAT-13 satellite that will be operated by SKY Perfect JSAT Corporation of Japan, and for the Vinasat-2 satellite that will be operated by the Vietnam Posts and Telecommunications Group. Both JCSAT-13 and Vinasat-2 are scheduled to be launched by the same Arianespace launch vehicle on May 15, 2012.² To the extent required to meet this timetable, Lockheed Martin requests expedited treatment of the instant STA request and action by May 13, 2014.

Lockheed Martin specifically seeks authority to transmit command/ranging signals to JCSAT-13 on the 13992.0 MHz and 14499 MHz frequencies. The Ku-band earth station antenna on Call Sign E7541 would receive telemetry signals from the JCSAT-13 satellite on the 12748.0 MHz and 12749.0 MHz telemetry frequencies. Lockheed Martin also specifically seeks authority to transmit command/ranging signals to Vinasat-2 on the 3694.5 MHz and 3695.5 MHz frequencies. The C-band earth station antenna on Call Sign E7541 would receive telemetry signals from the Vinasat-2 satellite on the 6430.5 MHz and 6427.5 MHz telemetry frequencies.³

The mission duration for the TT&C operations requested here – including the one day of calibration testing – is 10 to 12 days. To allow for some possible slippage in the launch schedule, Lockheed Martin requests a 30-day STA term that runs from May 13, 2012 to June 12, 2012, inclusive.

¹ The pending application in File No. SES-LIC-20081103-01443, as amended, under Call Sign E7541, was filed on a provisional basis to replace Lockheed Martin’s inadvertently non-renewed licenses for 14.2 meter C-band and Ku-band antennas at the Carpentersville, NJ site under Call Signs E7541 and E920702. Lockheed Martin’s petitions to reinstate the licenses for Call Signs E7541 and E920702, as well as the “replacement” application it filed in the alternative under File No. SES-LIC-20081103-01443, are pending.

² The test transmissions that would begin on May 13, 2012 would occur only May 13 and May 14. During these tests, the earth stations would not be communicating with any satellite; instead, the transmissions will be made with the antennas at zenith to verify RF functionality.

³ The coordinates in the main section of the FCC Form 312 to which this exhibit is attached are for Lockheed Martin’s South antenna at the Carpentersville facility. This is the antenna that will be used for Ku-band operations with JCSAT-13. The North antenna will be used for C-band operations with Vinasat-2, and is at the following coordinates: 40° 38’ 41.0” North, 75° 11’ 28.0” West.

Of the transmit frequencies Lockheed Martin seeks to use for the JCSAT-13 TT&C support operations, only the 14499 MHz frequency is included in Lockheed Martin's former license for Call Sign E920702 and current application for the Ku-band antenna in File No. SES-LIC-20081130-01443 (under Call Sign E7541). Lockheed Martin emphasizes, however, that its proposed transmissions on both the 14499 MHz and 13992 MHz frequencies will use the emission designators for telecommand that are proposed in the pending license application.⁴ The information in the Schedule B portion of Lockheed Martin's pending application in File No. SES-LIC-20081130-01443, as amended, is hereby incorporated by reference for the proposed Ku-band operation.

The transmit frequencies Lockheed Martin seeks to use for the Vinasat-2 TT&C support operations are also not included in Lockheed Martin's former license for Call Sign E7541 and current application for the C-band antenna in File No. SES-LIC-20081103-01443 (also under Call Sign E7541). Lockheed Martin emphasizes here as well that its proposed transmissions on the 6430.5 MHz and 6427.5 MHz transmit frequencies will use the emission designators for telecommand functions that are proposed in the pending license application, or will use carriers that do not exceed the highest e.i.r.p., e.i.r.p. density, and bandwidth prescribed in the application for the telecommand carriers. When no commands are being sent, a CW carrier that is within the emission envelope proposed in Lockheed Martin's application, as amended, would be present. *See* File No. SES-AMD-20081219-01664, at Schedule B. The information in the Schedule B portion of Lockheed Martin's pending application in File No. SES-LIC-20081130-01443, as amended, is hereby incorporated by reference for the proposed C-band operation.

Lockheed Martin has secured a temporary frequency coordination that covers the entire proposed STA window for operations on the JCSAT-13 and Vinasat-2 TT&C frequencies from its Carpentersville earth station facility. The report is attached to this Exhibit A.

Lockheed Martin notes that it is possible that during an unexpected emergency with either satellite, the power levels proposed for the earth station in the license application for Call Sign E7541, as amended, may need to be exceeded to help recover the satellite. Under these extremely unlikely circumstances, Lockheed Martin will make every effort to coordinate such operations with affected users, and will take all reasonable steps to swiftly eliminate any harmful interference caused. Lockheed Martin fully understands that all of its proposed LEOp TT&C support for the JCSAT-13 and Vinasat-2 launches will be on a strictly non-harmful interference, non-protected basis.

With respect to the proposed telemetry receive operations at 12.748 GHz and 12.749 GHz, Lockheed Martin notes that the 12.7-12.75 GHz band is allocated for FSS (space-to-Earth) operations in ITU Region 3 (where the JCSAT-13 is intended for permanent operation). Although the reception of telemetry signals at 12.74 GHz is inconsistent with the allocation table in both ITU Region 2 and the United States, Lockheed Martin believes that such limited duration operations – which it and the satellite operator will coordinate in advance with any and all potentially affected entities that operate communications systems in compliance with the Table

⁴ Specifically, transmissions would use the 3M00F3D and 3M00G7D emission designators. When no commands are being sent, the CW carrier (3M00N0N) would be present. *See* File No. SES-AMD-20081219-01664, at Schedule B.

of Frequency Allocations during the limited period of use – are required in the public interest, for reasons given below. The C-band telemetry receive frequencies are already proposed for inclusion in the license for Call Sign E7541 in the pending license application.

The Commission has previously granted Lockheed Martin STA requests for launch and early-operations TT&C support using its Carpentersville, New Jersey earth station facilities in both C-band and Ku-band. Most recently, the Commission authorized Lockheed Martin to perform launch support operations for SES-4 in February 2012. *See e.g.*, Request of Lockheed Martin Corp. for STA to support LEOp TT&C Functions of SES-4, File Nos. SES-STA-20111209-01447 and File No. SES-STA-20120216-00176. *See also* Request of Lockheed Martin Corp. for STA to support LEOp TT&C Functions of AsiaSat-7, File No. SES-STA-20111108-01341; Request of Lockheed Martin Corp. for STA to support LEOp TT&C Functions of QuetzSat-1, File No. SES-STA-20110919-01105; Request of Lockheed Martin Corp. for STA to support LEOp TT&C Functions of BSAT-3c, File No. SES-STA-20110504-00547; and Request of Lockheed Martin Corp. for STA to Support LEOp TT&C Functions for EchoStar-7, File No. SES-STA-20020208-00160.

Lockheed Martin's pending license application in File No. SES-LIC-20081103-01443 included radiation hazard studies for both the C-band and Ku-band antennas that Lockheed Martin hereby incorporates by reference. *See* Exhibit 28 to Application of Lockheed Martin Corporation, File No. SES-LIC-20081103-01443.

Lockheed Martin believes that the limited operations it proposes in support of the launch of JCSAT-13 and Vinasat-2 – operations Lockheed Martin and the satellite operators will coordinate in advance with any and all potentially affected entities that operate communications systems in compliance with the Table of Frequency Allocations during the limited period of use – are required in the public interest. Lockheed Martin's earth station will be part of a global network of control facilities for LEOp services that will be used to position the satellites as they progress from transfer orbit to their final locations. The safe and orderly use of the entire geostationary orbital resource and protection of the hundreds of satellites from the U.S. and other countries that operate there depends in no small part on ensuring that the JCSAT-13 and Vinasat-2 satellites are controlled while over North America, and Lockheed Martin's earth station thus will serve a limited-duration, but nonetheless vital function.

Lockheed Martin designates Michael Usarzewicz to be the contact person that will be available whenever transmission to, or reception from, JCSAT-13 or Vinasat-2 is to occur through the subject earth station. Mr. Usarzewicz can be reached at the following cell phone number: (609) 865-2658 and/or station number: (908) 859-4050.

The antennas to be used for operations under the proposed STA are already built. These are the same antennas that were previously authorized under Call Signs E920270 and E7541, and that are now the subject of the pending application and reinstatement request described in Note 1 above. As noted, both the C-band and Ku-band antennas have been authorized for use on an STA-basis to support other satellite launches.

In sum, Lockheed Martin requests authority to operate its Carpentersville, NJ C-band and Ku-band earth station antennas to provide critical LEOp operations in support of JCSAT-13 and Vinasat-2, for a term of 30 days – from May 13, 2012 through June 12, 2012.

EXHIBIT A

Prepared By

COMSEARCH

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

Prepared For

Lockheed Martin Corporation Carpentersville, New Jersey

Temporary Transmit-Only Earth Station
Operation Dates: 05/08/2012 - 07/01/2012

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 April 20, 2012.

Company

ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY
AERONAUTICAL RADIO INC - ARINC
ALGONQUIN GAS TRANSMISSION CO
ANNE ARUNDEL, COUNTY OF
ATLANTIC, COUNTY OF
Aerbender, LLC
Appalachian Broadcasting
Atlantic City Electric Company
Auburn Data Systems, LLC
BAY BROADBAND COMMUNICATIONS LLC
BRADFORD COUNTY
Baltimore County of Maryland
Baltimore Gas and Electric Company
Bedford, County of
Berks, County of
Binghamton MSA Limited Partnership
Bucks, County of
CAMDEN COUNTY
CARROLL COUNTY
CBS Communications Services
CENTRE COUNTY
CHESTER, COUNTY OF
CLINTON COUNTY
CMS HOLDINGS, LLC
COLUMBIA COUNTY
COMMUNITY PRODUCTS, LLC
CONNECTICUT STATE POLICE DEPARTMENT
CONSOLIDATED EDISON COMPANY OF NEW YORK
COUNTY OF MORRIS
Calvert Cliffs Nuclear Power Plant
Calvert County Government

Company (Continued)

Carbon, County of 911 Center
Cellco Partnership - (W-NY)
Cellco Prtnrshp - Phil. Tri-State Rgn
Chenango County
City of Bethlehem, Pennsylvania
Columbia Gas Transmission Corporation
Commonwealth of Pennsylvania
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Conectiv Communications, Inc.
County of Bergen, Bergen Cnty Police Dep
County of Burlington, Public Safety Cntr
County of Hunterdon
County of Salem
County of Warren
Cumberland, County of
DAUPHIN COUNTY EMERGENCY MANAGEMENT
DELAWARE STATE - DTI
Delaware County (PA) Emergency Services
Delmarva Power & Light Company
Dutchess County Emergency Response
EASTERN PENNSYLVANIA EMS COUNCIL
ECW Wireless, LLC
EG Broadcast Newco Corp
Eastern MLG LLC
Egan LLC
Enoch Pratt Free Library
Essex County Sherrif Office
Exelon Generation Company, L.L.C
FELHC, Inc.
Federal Communications Commission
Franklin County Dept. of Emergency Servi
Geneva Communications, LLC
Gloucester, County of
Hardy Cellular Telephone Company
High Voltage Communications LLC
Howard, County of
Jefferson Microwave, LLC
Keyspan Energy
Kreider Networks
Kryptic Technologies
LACKAWANNA COMMUNICATIONS
LACKAWANNA COUNTY
LANCASTER COUNTY OF
LEBANON COUNTY OF
LYCOMING COUNTY
Last Mile Inc.
Lehigh, County of
Luzerne County Department of Public Sfty
M&T Bank
MAHANTANGO MOUNTAIN MICROWAVE

Company (Continued)

MARYLAND EMERG MANAGEMENT AGENCY COMM
MARYLAND STATE DEPT OF GENERAL SERVICES
MARYLAND, STATE OF - MDOT - MTA
MONMOUTH, COUNTY OF
MONTGOMERY COUNTY OF
MTA - Long Island Railroad
MVC Research. LLC
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Maryland, State of - DNR
Maryland, State of - Dept.of Info & Tech
Meridian Microwave
Mifflin County
Monroe County Control Center (PA)
Montgomery, County of
Morgan, County of
NBC TELEMUNDO LICENSE LLC
NEW YORK CITY POLICE DEPARTMENT
NEW YORK CITY TRANSIT AUTHORITY
NYNEX Mobile Limited Partnership 2
NYNEX Mobile of New York LP
Nassau County Police Department
New Cingular Wireless PCS LLC-DE/NH/RI
New Cingular Wireless PCS, LLC (NY)
New Cingular Wireless PCS, LLC - PA
New Jersey State Police
New Jersey Transit Rail Operations, Inc.
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
New York Communcations CO., Inc
New York State Electric & Gas Corp
New York State Police
New York, City of
Norfolk Southern Railway
Northeast Utilities Services Company
Northumberland, County of
OCEAN, COUNTY OF
Ocean, County of-Div of Wireless Tech.
Orange Poughkeepsie SMSA LTD Partnership
Orange and Rockland Utilities, Inc.
PENNSYLVANIA MICROWAVE NETWORK INC.
PENNSYLVANIA TURNPIKE COMMISSION
PIKE COUNTY COMMISSIONERS
PSEG Services Corporation
Passaic Valley Microwave
Peco Energy Company
Pennsylvania Commonwealth State Police
Pitt Power
Port Authority of New York & New Jersey
Prince George's County
RCYM Holdings LLC

Company (Continued)

SCHUYLKILL, COUNTY OF
SCRANTON TIMES, LP
SCTF NET
SECOM NET
SOUTHAMPTON, TOWN OF, POLICE DEPT.
SOUTHEASTERN PENNSYLVANIA TRANSIT AUTH
STATE OF NEW JERSEY - OFFICE OF PUBLIC
SUFFOLK COUNTY WATER AUTHORITY
SW Networks
San Juan Wireless
Snyder, County of
State of Maryland, MIEMSS
State of WV DHHR/BPH STECS
Suffolk, County of
TRF SERVICES LLC
Texas Eastern Communications, Inc.
Thought Transmissions, LLC
Townsquare Media Monmouth-Ocean License
Transcontinental Gas Pipeline Corp.
Triangle Communications, Inc.
Turtle Networks 6384
Turtle Networks 6386
Turtle Networks 6444
USCOC of Cumberland, Inc.
Velox Networks LLC
WASHINGTON SUBURBAN SANITARY COMMISSION
WAYNE COUNTY PENNSYLVANIA
Washington Gas Light Company
Weblin Holdings LLC
Wico, LLC
Wireless Backhaul Infrastructure, LLC
Wireless Internetwork LLC
World Class Wireless LLC
York County Dept of Emergency Services
Zango LLC
Zen Networks, Inc
iSignal
3G Wireless, LLC
ABC, Inc. - WPVI-TV
AERIAL VIDEO SYSTEMS
ALASCOM, INC.
Alltel Communications, LLC
ANNE ARUNDEL, COUNTY OF
AT&T California
American Broadcasting Companies, Inc.
Ascent Media Network Services, LLC
BROADCAST COMMUNICATIONS INC
Bellsouth Telecommunications, Inc.
BFI Licenses, LLC
Borgeson, Tom R.
Broadcast Sports Inc.
C-SPAN

Company (Continued)

CBS Broadcasting Inc
CBS TELEVISION LICENSES LLC
CNG Communications, Inc.
COMMONWEALTH OF PENNSYLVANIA
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
Commonwealth of Pennsylvania-Radio Proj.
County of Fairfax, Virginia
Cowboys Stadium LP
CP Communications PA, LLC
DCI II, INC.
DELAWARE STATE - DTI
Direct Broadcast Services, Inc.
Global Microwave Systems Inc.
GOODYEAR TIRE AND RUBBER COMPANY
GSN New, Inc
HF Enterprises, Inc
Hallco Unlimited, Inc.
Hawaiian Telcom, Inc.
Heiden Mr., William
INDIANA BELL TELEPHONE COMPANY INC
Illinois 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.
Metrosat Communications Inc.
Michigan Bell Telephone Company
Moreen, Steven K
NBC TELEMUNDO LICENSE LLC
NBC Telemundo License Co.
NEW ENGLAND DIGITAL DISTRIBUTION, INC.
NEW ENGLAND SATELLITE SYSTEMS INC
NSM Surveillance
National Cable Satellite Corporation
Navajo Communications Company
New Jersey State Police
New York Racing Association, Inc
NorthWest Suburbs Community Access Corp
Ohio Bell Telephone Company
On Scene Video Production
Onboard Images
Orion Consultants, Incorporated

Company (Continued)

Penn Service Microwave Co., Inc.
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
RF Technology, LLC
Radiofone, Inc.
Rainbow News 12 Company
Randy Hermes Production
Randy Hermes Production dba Aerial Video Systems
Regulus Media Services, Inc.
Remote Broadcasts, Inc.
Southwestern Bell Telephone L.P.
Speedshotz, Inc
Time Warner Entertainment Company L.P.
Total RF Marketing Inc
Unisat, Inc.
United Telephone - Southeast
VERIZON SOUTH INC.
Verizon California Inc.
Verizon Delaware Inc.
Verizon Maryland, 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
Wisconsin Bell, Inc.
Wolfe Air Aviation

Society of Broadcast Engineers Coordinators

Connecticut – Hartford (Frank Clifford)
Maryland & DC – James Snyder
New York – Albany/Schenectady (Fred Lass)
New York – Binghamton/Central (William Sitzman)
New York – Long Island (Bob Wolf)
New York – NYC Leo Rosenberg
Pennsylvania – Central (Rick Markey)
Pennsylvania—Allentown (Barry Fisher)
Pennsylvania – SE, Delaware, and S. New Jersey (Jeff DePolo)
Pennsylvania – S. Central (Matt Lightner)
Pennsylvania – NE (Ron Schacht)

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: 04/27/2012
Job Number: 120420COMSJC02

Administrative Information

Status: TEMPORARY (Operation from 05/08/2012 to 07/01/2012)
Call Sign: TEMP07
Licensee Code: RCASTR
Licensee Name: LOCKHEED MARTIN CORPORATION

Site Information

CARPENTERSVILLE, NEW JERSEY

Venue Name
Latitude (NAD 83): 40° 38' 39.4" N
Longitude (NAD 83): 75° 11' 27.6" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 54.86 m / 180.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 18° W to 132° West Longitude
Azimuth Range: 112.8° to 246.9°
Corresponding Elevation Angles: 15.9° / 16.2°
Antenna Centerline (AGL): 9.14 m / 30.0 ft

Antenna Information

Transmit

Manufacturer: TIW
Model: 14.2 Meter
Gain / Diameter: 57.5 dBi / 14.2 m
3-dB / 15-dB Beamwidth: 0.20° / 0.50°

Max Available RF Power: (dBW/4 kHz) 29.8
(dBW/MHz) 29.8

Maximum EIRP: (dBW/4 kHz) 87.3
(dBW/MHz) 87.3
(dBW) 87.3

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

Frequency Information

Transmit 6.7 GHz

Emission / Frequency Range (MHz): 1K00G3D / 6427.5
1K00G3D / 6430.5

Max Great Circle Coordination Distance: 319.0 km / 198.2 mi
Precipitation Scatter Contour Radius: 523.0 km / 324.9 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

CARPENTERSVILLE, NJ

Licensee Name LOCKHEED MARTIN CORPORATION
Latitude (NAD 83) 40° 38' 39.4" N
Longitude (NAD 83) 75° 11' 27.6" W
Ground Elevation (AMSL) 54.86 m / 180.0 ft
Antenna Centerline (AGL) 9.14 m / 30.0 ft
Antenna Model TIW 14.2 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 29.8 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	3.54	112.22	-10.00	195.91
5	3.44	107.35	-10.00	197.88
10	4.05	102.50	-10.00	185.33
15	4.33	97.62	-10.00	180.56
20	3.97	92.72	-10.00	186.82
25	3.25	87.83	-10.00	201.82
30	3.56	82.95	-10.00	195.34
35	3.60	78.07	-10.00	194.70
40	3.62	73.19	-10.00	194.07
45	3.66	68.31	-10.00	193.35
50	3.42	63.48	-10.00	198.30
55	3.51	58.62	-10.00	196.40
60	3.29	53.83	-10.00	201.04
65	3.08	49.07	-10.00	205.48
70	3.20	44.28	-9.15	205.60
75	3.00	39.61	-7.95	216.36
80	2.76	35.05	-6.62	229.57
85	2.54	30.60	-5.14	243.88
90	2.27	26.37	-3.53	260.95
95	2.23	22.30	-1.71	275.13
100	2.55	18.41	0.38	281.95
105	2.55	15.42	2.29	297.30
110	2.11	14.08	3.29	318.98
115	2.43	13.66	3.61	311.76
120	2.11	15.55	2.21	310.09
125	2.45	18.11	0.55	286.45
130	2.22	21.59	-1.36	278.19
135	2.16	24.80	-2.86	268.78
140	2.65	27.42	-3.95	248.28
145	2.25	30.50	-5.11	250.75
150	2.21	33.07	-5.99	246.81
155	1.91	35.58	-6.78	249.50
160	2.13	37.30	-7.29	240.77
165	2.60	38.39	-7.61	227.32
170	2.41	39.69	-7.97	229.81
175	1.90	40.87	-8.29	241.12
180	1.90	41.11	-8.35	240.76

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

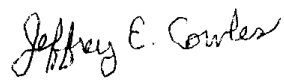
CARPENTERSVILLE, NJ

Licensee Name LOCKHEED MARTIN CORPORATION
Latitude (NAD 83) 40° 38' 39.4" N
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Antenna Model TIW 14.2 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 29.8 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.7 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
185	1.85	40.92	-8.30	242.52
190	1.24	40.83	-8.27	262.48
195	1.36	39.56	-7.93	260.37
200	2.31	37.14	-7.25	236.65
205	1.76	35.72	-6.82	254.19
210	1.78	33.43	-6.10	258.04
215	2.34	30.43	-5.08	248.60
220	2.98	27.15	-3.85	241.41
225	4.04	23.36	-2.21	227.67
230	4.93	19.56	-0.29	224.91
235	4.30	16.77	1.39	247.40
240	4.35	13.69	3.59	261.20
245	3.60	12.73	4.38	284.37
250	2.38	14.15	3.23	310.32
255	2.22	16.10	1.83	303.50
260	2.59	18.79	0.15	279.27
265	3.08	22.21	-1.66	252.92
270	2.75	26.53	-3.59	248.16
275	2.58	30.96	-5.27	242.18
280	2.85	35.38	-6.72	226.71
285	3.20	39.91	-8.03	211.46
290	3.81	44.49	-9.21	194.41
295	4.44	49.15	-10.00	178.74
300	5.32	53.85	-10.00	163.45
305	5.47	58.70	-10.00	161.69
310	5.49	63.59	-10.00	161.42
315	5.43	68.49	-10.00	162.17
320	4.59	73.44	-10.00	176.14
325	3.78	78.36	-10.00	190.72
330	3.36	83.25	-10.00	199.70
335	3.12	88.13	-10.00	204.59
340	2.98	93.00	-10.00	206.03
345	3.16	97.87	-10.00	203.80
350	3.35	102.75	-10.00	199.81
355	3.44	107.62	-10.00	197.94

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
Engineer III, Telecommunications
COMSEARCH
19700 Janelia Farm Blvd.
Ashburn, Virginia 20147

DATED: April 27, 2011