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WASHINGTON, DC

March 20, 2013

## VIA IBFS

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

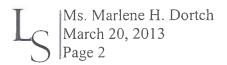
## Re: Request of Lockheed Martin for STA to Support Satmex 8 Post-Launch and Early Operations, File No. SES-STA-20130319-00280

Dear Ms. Dortch:

Lockheed Martin Corporation ("Lockheed Martin"), by its attorneys, hereby supplements its above-referenced request for a special temporary authority ("STA") to use the C-band antenna on its Carpentersville, New Jersey earth station (Call Sign E7541) to support post-launch and early operations ("LEOp") of the Satmex 8 satellite following its anticipated March 27, 2013 launch. In its STA request, Lockheed Martin included the Prior Coordination Notice from Comsearch for the temporary coordination of the Satmex 8 LEOp frequencies from Carpentersville, and stated that it would file the final report upon receipt.

Lockheed Martin has now received the final coordination report from Comsearch, and the report confirms that LEOp from Lockheed Martin's earth station (Call Sign E7541) in support of Satmex 8 raises "no unresolved interference objections" for the period covered by the STA request and beyond. Lockheed Martin includes a copy of the final Comsearch report as an attachment to this letter.

As a reminder, Lockheed Martin has requested Commission action on the Satmex 8 LEOp STA in time to enable calibration testing to commence on March 24. The attached Comsearch frequency coordination report is the final element to confirm that such important operations are able to be authorized as requested.



This letter is being submitted directly into the file for the Lockheed Martin Satmex 8 STA request. Please direct any questions regarding this submission to the undersigned.

Respectfully submitted,

Stephen D. Baruch for Lockheed Martin Corporation

Enclosure

cc (w/encl.): Mr. Paul Blais (by email)

#### 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: 03/24/2013 - 07/04/2013

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 March 13, 2013.

#### Company

256Q Networks **AB Services LLC** ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY ALGONQUIN GAS TRANSMISSION CO AT&T COMMUNICATIONS OF MARYLAND INC AT&T Communications of Virginia, LLC AT&T Corp. AWC Networks Aerbender, LLC Allentown SMSA Limited Partnership Appalachian Broadcasting Atlantic Broadband (Delmar), LLC Atlantic Broadband (Penn), LLC Atlantic City Electric Company Auburn Data Systems, LLC BAY BROADBAND COMMUNICATIONS LLC **BFI Licenses, LLC BLAIR COUNTY 911 Baltimore County of Maryland** Baltimore Gas and Electric Company Bedford, County of Believe Wireless, LLC Berks, County of Binghamton MSA Limited Partnership(NY) Binghamton MSA Limited Partnership(PA) Bucks, County of CAMDEN COUNTY CENTRE COUNTY CHESTER, COUNTY OF

#### Company (Continued)

CONSOLIDATED EDISON COMPANY OF NEW YORK **CTAB Holdings LLC Capital Communications of America** Carbon, County of 911 Center Cellco Partnership - (W-NY) Cellco Partnership - Bridgeville, PA/WV Cellco Partnership- PA Region Cellco Partnership-Newark-Dallas Verizon Cellco Partnership-WDC/Baltimore Cellco Prtnrshp - Phil. Tri-State Rgn **China Cat Productions LLC** City of New York Commonwealth of Pennsylvania-Radio Proj. **Comprehensive Wireless LLC** Connecticut State Police Department Conterra Ultra Broadband, LLC **Converge Towers LLC** Coral Reef Technologies Ltd Coralinks County of Frederick County of Warren, NJ Cumberland, County of DAUPHIN COUNTY EMERGENCY MANAGEMENT Delaware Division of Communications Delmarva Power & Light Company Direct Broadcast Services, Inc. ECW Wireless, LLC EG Broadcast Newco Corp EMS OF NORTHEAST PENNSYLVANIA Eastern MLG LLC Eastern Pennsylvania EMS Council Electric Railroad, LLC Enoch Pratt Free Library Essex County Sherrif Office (NJ) Exelon Generation Company, L.L.C FELHC, Inc. Federal Communications Commission Fibertrack, LLC Fundamental Broadcasting LLC Garden State Transmissions Geneva Communications, LLC Gloucester, County of Goosetown Network Services, LLC Hardy Cellular Telephone Company High Voltage Communications LLC Highway Networks, LLC Huntingdon, County of Jefferson Microwave, LLC Juniata County Emergency Services **K1 COMMUNICATIONS Kryptic Technologies** 

#### Company (Continued)

Last Mile Inc. Luzerne County Department of Public Sfty MONMOUTH, COUNTY OF MVC Research. LLC Mahwah Communications Maryland Public Broadcasting Commission Maryland State Highway Administration Maryland, State of - Dept.of Info & Tech Monroe County Control Center (PA) Morris, County of NYNEX Mobile of New York LP Nassau County Police Department 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-DE/NH/RI New Cingular Wireless PCS of PA LLC 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 Police New York, City of (Police Department) Newaja Networks, LLC Norfolk Southern Railway Northeast Pennsylvania SMSA LTD Prtnrsh Northeast Utilities Services Company OCEAN, COUNTY OF Ocean, County of-Div of Wireless Tech. Office of Emergency Telecom Services, NJ Orange Poughkeepsie SMSA LTD Partnership Orange and Rockland Utilities, Inc. PEG Bandwidth PENNSYLVANIA TURNPIKE COMMISSION **PSEG Services Corporation** Peco Energy Company Penn Service Microwave Co., Inc. Pike, County of PA Pitt Power Pitt Power Port Authority of New York & New Jersey Prince George's County Qoncept Holdings LLC SCS Networks SCTF NET SW Networks

#### Company (Continued)

State of Maryland, MIEMSS State of WV DHHR/BPH STECS Stevens Institute of Technology Suffolk, County of Sullivan, County of TRF SERVICES LLC Texas Eastern Communications, Inc. Thought Transmissions, LLC Turtle Networks 6386 **Turtle Networks 6423 Turtle Networks 6457 Turtle Networks 6465** Turtle Networks 6466 Turtle Networks 6467 US Cellular Operating Company, LLC (WI) USCOC of Cumberland, Inc. Velox Networks LLC Verizon Wireless (VAW) LLC (Georgia) Verizon Wireless (VAW) LLC (NY) Verizon Wireless (VAW) LLC - Delaware Verizon Wireless (VAW) LLC - Maryland Verizon Wireless (VAW) LLC - NJ Verizon Wireless (VAW) LLC-Pennsylvania WITF Inc. Washington D.C. SMSA L.P. Washington Gas Light Company Washington Suburban Sanitary Commission Webline Holdings LLC White Rabbit Networks Wico, LLC Wireless Backhaul Infrastructure, LLC Wireless Internet Work II. Wireless Internetwork LLC World Class Wireless LLC York County Dept of Emergency Services 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: Job Number:		03/19/2013 130313COMSJC01			
Administrative Info Status Call Sign Licensee Code Licensee Name	•	TEMPORARY (Operation from 03/24/2013 to 07/04/2013) TEMP07 RCASTR LOCKHEED MARTIN CORPORATION			
Site Information		CARPENTERSVILLE, NEW JERSEY			
Venue Name Latitude (NAD 83) Longitude (NAD 83) Climate Zone Rain Zone Ground Elevation (AM		40° 38' 39.4" N 75° 11' 27.6" W A 2 54.86 m / 180.0 ft			
Link Information					
Satellite Type Mode Modulation Satellite Arc	-	Geostationary FO - Transmit-Only Digital I8° W to 136° West Longitude			
Azimuth Range		112.8° to 250.0°			
Corresponding Elevation Antenna Centerline (A		I5.9° / 13.3° 9.14 m / 30.0 ft			
Antenna Informatio	n	Transmit			
Manufacturer		TIW			
Model		14.2 Meter			
Gain / Diameter	٤L.	57.5 dBi / 14.2 m			
3-dB / 15-dB Beamwid	th	0.20° / 0.50°			
Max Available RF Power	(dBW/4 kHz (dBW/MHz)				
Maximum EIRP	(dBW/4 kHz (dBW/MHz) (dBW)	,			
Interference Objectives:	Long Term Short Term	-154.0 dBW/4 kHz 20% -131.0 dBW/4 kHz 0.0025%			
Frequency Information Emission / Frequency Range (MHz)		<b>Transmit 6.1 GHz</b> 1K00G3D / 5926.5 1K00G3D / 6424.5			
Max Great Circle Coordination Distance Precipitation Scatter Contour Radius		332.5 km / 206.6 mi 0.0 km / 0.0 mi			

# COMSEARCH

Earth Station Data Sheet

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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 6.1 GHz			
Interference Objectives: Long Ter	m -154.0 dBW/4 kHz 20%			
Short Te	rm -131.0 dBW/4 kHz 0.0025%			
Max Available RF Power	29.8 (dBW/4 kHz)			

	Transmit 6.1 GHz					
	Horizon	Antenna	Horizon	Coordination		
Azimuth (°)	Elevation (°)	Discrimination (°)	Gain (dBi)	Distance (km)		
0	3.54	109.70	-10.00	195.91		
5	4.01	107.39	-10.00	186.00		
10	4.15	102.51	-10.00	183.56		
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	3.79	78.06	-10.00	190.53		
40	3.82	73.17	-10.00	189.87		
45	3.86	68.30	-10.00	189.14		
50	3.66	63.45	-10.00	193.34		
55	3.51	58.62	-10.00	196.40		
60	3.33	53.82	-10.00	200.35		
65	3.16	49.05	-10.00	203.75		
70	3.20	44.28	-9.15	205.60		
75	3.16	39.57	-7.93	212.92		
80	3.14	34.92	-6.58	220.90		
85	3.07	30.39	-5.07	231.50		
90	3.08	25.98	-3.37	242.10		
95	2.95	21.88	-1.50	257.31		
100	2.73	18.28	0.45	277.67		
105	2.74	15.26	2.41	292.71		
110	2.73	13.47	3.77	304.07		
115	2.77	13.33	3.88	303.80		
120	2.69	15.03	2.57	295.48		
125	2.45	18.11	0.55	286.45		
130	2.22	21.59	-1.36	278.19		
135	2.18	24.78	-2.85	268.15		
140	2.74	27.34	-3.92	246.85		
145	2.33	30.44	-5.09	248.88		
150	2.25	33.04	-5.98	245.92		
155	1.92	35.57	-6.78	249.16		
160	2.20	37.24	-7.28	239.18		
165	2.65	38.35	-7.59	226.37		
170	2.42	39.68	-7.96	229.52		
175	1. <b>94</b>	40.84	-8.28	240.16		
180	1.90	41.11	-8.35	240.76		
185	1.86	40.92	-8.30	242.51		

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Interference Objectives: Long Ter	rm -154.0 dBW/4 kHz 20%			
Short Te	rm -131.0 dBW/4 kHz 0.0025%			
Max Available RF Power	29.8 (dBW/4 kHz)			

	Transmit 6.1 GHz				
	Horizon	Antenna	Horizon	Coordination	
Azimuth (°)	Elevation (°)	Discrimination (°)	Gain (dBi)	Distance (km)	
190	1.24	40.83	-8.27	262.31	
195	1.36	39.56	-7.93	260.37	
200	2.35	37.10	-7.24	235.63	
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	3.42	26.81	-3.71	231.95	
225	4.04	23.36	-2.21	227.67	
230	4.93	19.56	-0.29	224.91	
235	4.35	16.73	1.41	246.63	
240	4.47	13.24	3.95	261.50	
245	3.78	10.70	6.27	294.75	
250	2.48	10.78	6.19	332.54	
255	2.26	12.06	4.97	328.43	
260	2.60	14.57	2.91	300.92	
265	3.11	18.04	0.59	268.55	
270	3.30	22.25	-1.68	248.05	
275	2.81	26.96	-3.77	245.92	
280	2.85	31.59	-5.49	234.12	
285	3.20	36.24	-6.98	217.28	
290	3.81	40.92	-8.30	199.19	
295	4.44	45.67	-9.49	181.52	
300	5.32	50.46	-10.00	163.45	
305	5.51	55.36	-10.00	161.12	
310	5.49	60.30	-10.00	161.42	
315	5.56	65.24	-10.00	160.57	
320	4.72	70.23	-10.00	173.94	
325	3.93	75.20	-10.00	187.73	
330	3.38	80.15	-10.00	199.12	
335	3.19	85.08	-10.00	203.25	
340	3.15	90.00	-10.00	203.97	
345	3.16	94.92	-10.00	203.80	
350	3.35	99.85	-10.00	199.81	
355	3.48	104.78	-10.00	197.17	

## 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. Courtes

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

DATED: March 19, 2013