



**COMSEARCH**<sup>®</sup>

A CommScope Company

May 11, 2016

Re: Lockheed Martin Corporation-Phillipsburg  
CARPENTERSVILLE, NJ - SATMEX 9  
Temporary Transmit-Only Earth Station  
Operation Dates: 06/10/2016 - 12/10/2016  
Job Number: 160511COMSGE02

Dear Frequency Coordinator:

On behalf of Lockheed Martin Corporation-Phillipsburg, we are forwarding the attached coordination data for a Temporary Transmit-Only Earth Station to be located at the site referenced above.

This earth station will transmit only on the satellite(s) and frequency or frequencies as described in the attached data. Please do not report cases involving 4 GHz facilities or problems involving non-active paths or frequencies outside the specified range.

If there are any questions concerning this coordination notice, please contact Comsearch.

Sincerely,

COMSEARCH

Gary K. Edwards  
Senior Manager  
gedwards@comsearch.com

Enclosure(s)

Date: 05/11/2016  
Job Number: 160511COMSGE02

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**Administrative Information**

Status TEMPORARY (Operation from 06/10/2016 to 12/10/2016)  
Call Sign TEMP05  
Licensee Code RCASTR  
Licensee Name Lockheed Martin Corporation-Phillipsburg

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**Site Information**

**CARPENTERSVILLE, NJ**  
Venue Name SATMEX 9  
Latitude (NAD 83) 40° 38' 39.1" N  
Longitude (NAD 83) 75° 11' 27.8" W  
Climate Zone A  
Rain Zone 2  
Ground Elevation (AMSL) 54.86 m / 180.0 ft

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**Link Information**

Satellite Type Geostationary  
Mode TO - Transmit-Only  
Modulation Analog and Digital  
Satellite Arc 4° W to 147° West Longitude  
Azimuth Range 102.5° to 257.9°  
Corresponding Elevation Angles 5.5° / 5.0°  
Antenna Centerline (AGL) 9.14 m / 30.0 ft

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**Antenna Information**

**Transmit - T61421**  
Manufacturer TIW SYSTEMS  
Model FCC STD 14.2-MET  
Gain / Diameter 57.5 dBi / 14.2 m  
3-dB / 15-dB Beamwidth 0.24° / 0.46°

Max Available RF Power (dBW/4 kHz) 6.5  
(dBW/MHz) 30.5

Maximum EIRP (dBW/4 kHz) 64.0  
(dBW/MHz) 88.0  
(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 6.1 GHz**  
Emission / Frequency Range (MHz) 400KFXD - 800KFXD / 6423.3

Max Great Circle Coordination Distance 557.6 km / 346.4 mi  
Precipitation Scatter Contour Radius 406.9 km / 252.8 mi

<b>Coordination Values</b>	<b>CARPENTERSVI, NJ</b>	
Licensee Name	Lockheed Martin Corporation-Phillipsburg	
Latitude (NAD 83)	40° 38' 39.1" N	
Longitude (NAD 83)	75° 11' 27.8" W	
Ground Elevation (AMSL)	54.86 m / 180.0 ft	
Antenna Centerline (AGL)	9.14 m / 30.0 ft	
Antenna Model	TIW SYSTEMS FCC STD 14.2-MET	
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	6.5 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	3.51	102.08	-10.50	100.00
5	3.90	97.51	-10.50	100.00
10	2.91	92.51	-10.50	103.26
15	2.84	87.51	-10.50	104.57
20	2.83	82.52	-10.50	104.78
25	3.07	77.52	-10.50	100.33
30	3.44	72.52	-10.50	100.00
35	3.78	67.52	-10.50	100.00
40	3.82	62.52	-10.50	100.00
45	3.80	57.53	-10.50	100.00
50	3.59	52.54	-10.50	100.00
55	3.40	47.55	-10.01	100.00
60	3.31	42.56	-9.01	101.43
65	3.12	37.58	-7.53	110.43
70	2.88	32.61	-5.54	122.58
75	3.07	27.61	-4.02	124.72
80	3.04	22.64	-2.08	132.36
85	3.06	17.68	0.89	142.62
90	3.07	12.74	4.76	160.56
95	2.74	8.00	7.50	183.89
100	2.73	3.74	14.55	217.90
105	2.58	3.84	14.16	353.21
110	2.72	7.37	7.50	184.29
115	2.80	10.92	5.58	172.73
120	2.62	14.56	2.94	161.86
125	2.05	18.40	0.46	163.33
130	1.63	22.02	-1.71	165.25
135	2.22	24.75	-3.35	142.17
140	2.76	27.32	-3.96	130.55
145	2.31	30.46	-4.68	135.26
150	2.22	33.06	-5.72	134.18
155	1.94	35.55	-6.72	134.93
160	2.22	37.22	-7.39	128.01
165	2.67	38.33	-7.83	117.70
170	2.46	39.65	-8.36	119.82
175	1.94	40.84	-8.67	128.96
180	1.90	41.11	-8.72	129.69
185	1.86	40.92	-8.68	130.89

<b>Coordination Values</b>	<b>CARPENTERSVI, NJ</b>	
Licensee Name	Lockheed Martin Corporation-Phillipsburg	
Latitude (NAD 83)	40° 38' 39.1" N	
Longitude (NAD 83)	75° 11' 27.8" W	
Ground Elevation (AMSL)	54.86 m / 180.0 ft	
Antenna Centerline (AGL)	9.14 m / 30.0 ft	
Antenna Model	TIW SYSTEMS FCC STD 14.2-MET	
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	6.5 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.23	40.84	-8.67	145.98
195	1.33	39.59	-8.34	144.55
200	2.37	37.09	-7.34	125.36
205	1.76	35.72	-6.79	139.23
210	1.77	33.44	-5.88	142.53
215	2.21	30.54	-4.72	137.12
220	3.42	26.81	-3.86	119.07
225	3.50	23.78	-2.77	121.68
230	4.90	19.59	-0.25	110.26
235	4.41	16.68	1.49	123.55
240	4.50	13.22	4.28	133.53
245	3.77	10.24	6.26	152.73
250	2.53	7.51	7.50	188.51
255	2.28	4.01	13.48	377.31
260	2.60	3.20	16.69	557.56
265	3.11	7.34	7.50	175.31
270	3.39	12.19	5.31	156.29
275	2.86	17.22	1.17	147.85
280	2.80	22.19	-1.81	136.52
285	3.05	27.15	-3.93	125.43
290	3.56	32.11	-5.35	111.09
295	4.21	37.09	-7.34	100.00
300	4.98	42.08	-8.92	100.00
305	5.49	47.09	-9.92	100.00
310	5.46	52.09	-10.50	100.00
315	5.57	57.09	-10.50	100.00
320	4.81	62.08	-10.50	100.00
325	3.99	67.09	-10.50	100.00
330	3.36	72.09	-10.50	100.00
335	3.16	77.09	-10.50	100.00
340	3.15	82.09	-10.50	100.00
345	3.00	87.09	-10.50	101.51
350	3.23	92.08	-10.50	100.00
355	3.48	97.08	-10.50	100.00