



COMSEARCH[®]

A CommScope Company

October 06, 2016

Re: Lockheed Martin Corporation-Phillipsburg
CARPENTERSVILLE, NJ
Temporary Transmit-Only Earth Station
Operation Dates: 10/25/2016 - 12/24/2016
Job Number: 161006COMSGE03

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 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: 10/06/2016
Job Number: 161006COMSGE03

Administrative Information

Status ENGINEER PROPOSAL
Call Sign TEMP12
Licensee Code RCASTR
Licensee Name Lockheed Martin Corporation-Phillipsburg

Site Information **CARPENTERSVILLE, NJ**

Venue Name
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

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

Antenna Information**Transmit - FCC32**

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) 2.2
(dBW/MHz) 26.2

Maximum EIRP (dBW/4 kHz) 59.7
(dBW/MHz) 83.7
(dBW) 83.0

Interference Objectives: Long Term -151.0 dBW/4 kHz 20%
Short Term -128.0 dBW/4 kHz 0.0025%

Frequency Information**Transmit 18.0 GHz**

Emission / Frequency Range (MHz) 1M00G8D / 17305.0 - 17791.0

Max Great Circle Coordination Distance 384.5 km / 238.9 mi
Precipitation Scatter Contour Radius 179.1 km / 111.3 mi

Coordination Values	CARPENTERSVI, NJ	
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 14.2 meter	
Antenna Mode	Transmit 18.0 GHz	
Interference Objectives: Long Term	-151.0 dBW/4 kHz	20%
Short Term	-128.0 dBW/4 kHz	0.0025%
Max Available RF Power	2.2 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	3.51	102.08	-10.00	100.00
5	3.90	97.51	-10.00	100.00
10	2.91	92.51	-10.00	100.00
15	2.84	87.51	-10.00	100.00
20	2.83	82.52	-10.00	100.00
25	3.07	77.52	-10.00	100.00
30	3.44	72.52	-10.00	100.00
35	3.78	67.52	-10.00	100.00
40	3.82	62.52	-10.00	100.00
45	3.80	57.53	-10.00	100.00
50	3.59	52.54	-10.00	100.00
55	3.40	47.55	-9.93	100.00
60	3.31	42.56	-8.72	100.00
65	3.12	37.58	-7.37	100.00
70	2.88	32.61	-5.83	100.00
75	3.07	27.61	-4.03	100.00
80	3.04	22.64	-1.87	100.00
85	3.06	17.68	0.82	100.00
90	3.07	12.74	4.37	108.30
95	2.74	8.00	9.42	130.79
100	2.73	3.74	17.68	164.93
105	2.58	3.84	17.40	243.12
110	2.72	7.37	10.31	134.27
115	2.80	10.92	6.05	118.85
120	2.62	14.56	2.92	111.14
125	2.05	18.40	0.38	112.88
130	1.63	22.02	-1.57	115.83
135	2.22	24.75	-2.84	100.00
140	2.76	27.32	-3.91	100.00
145	2.31	30.46	-5.09	100.00
150	2.22	33.06	-5.98	100.00
155	1.94	35.55	-6.77	100.00
160	2.22	37.22	-7.27	100.00
165	2.67	38.33	-7.59	100.00
170	2.46	39.65	-7.95	100.00
175	1.94	40.84	-8.28	100.00
180	1.90	41.11	-8.35	100.00
185	1.86	40.92	-8.30	100.00

Coordination Values	CARPENTERSVI, NJ	
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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 18.0 GHz	
Interference Objectives: Long Term	-151.0 dBW/4 kHz	20%
Short Term	-128.0 dBW/4 kHz	0.0025%
Max Available RF Power	2.2 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 18.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.23	40.84	-8.28	105.88
195	1.33	39.59	-7.94	104.48
200	2.37	37.09	-7.23	100.00
205	1.76	35.72	-6.82	100.00
210	1.77	33.44	-6.11	100.00
215	2.21	30.54	-5.12	100.00
220	3.42	26.81	-3.71	100.00
225	3.50	23.78	-2.41	100.00
230	4.90	19.59	-0.30	100.00
235	4.41	16.68	1.44	100.00
240	4.50	13.22	3.97	100.00
245	3.77	10.24	6.75	105.33
250	2.53	7.51	10.11	136.88
255	2.28	4.01	16.92	259.02
260	2.60	3.20	19.36	384.46
265	3.11	7.34	10.36	128.41
270	3.39	12.19	4.85	104.72
275	2.86	17.22	1.10	100.66
280	2.80	22.19	-1.65	100.00
285	3.05	27.15	-3.84	100.00
290	3.56	32.11	-5.67	100.00
295	4.21	37.09	-7.23	100.00
300	4.98	42.08	-8.60	100.00
305	5.49	47.09	-9.82	100.00
310	5.46	52.09	-10.00	100.00
315	5.57	57.09	-10.00	100.00
320	4.81	62.08	-10.00	100.00
325	3.99	67.09	-10.00	100.00
330	3.36	72.09	-10.00	100.00
335	3.16	77.09	-10.00	100.00
340	3.15	82.09	-10.00	100.00
345	3.00	87.09	-10.00	100.00
350	3.23	92.08	-10.00	100.00
355	3.48	97.08	-10.00	100.00