

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Allen Holdings, Inc
MARCH AFB, CA
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
July 15, 2011

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	5
4. EARTH STATION COORDINATION DATA.....	6
5. CERTIFICATION.....	10

1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

2. SUMMARY OF RESULTS

There was no great circle interference cases were identified during the interference study of the proposed earth station.

No carriers reported potential interference cases.

3. SUPPLEMENTAL SHOWING

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. An information only coordination data for this earth station was sent to the below listed carriers with a letter dated 07/15/2011.

Company

ANAHEIM CITY, COMMUNICATIONS DIVISION
AT&T California
AirSites2000, LLC
BNSF Railway Company
CNG Communications, Inc.
COAST COMMUNITY COLLEGE DISTRICT
California, State of
Cellco Partnership - California
Coachella Valley Water District
Cox Communications - San Diego Mkt
FALCON CABLEVISION, A CALIFORNIA L.P.
KTLA INC
LOS ANGELES CITY WATER & POWER
LOS ANGELES UNIFIED SCHOOL DISTRICT
Los Angeles City Info Technology Agency
Los Angeles County Dept of Public Works
Los Angeles County FCC Licensing Section
Los Angeles SMSA Ltd. Partnership
METROPOLITAN AREA NETWORKS, INC.
MONTEBELLO CITY CALIFORNIA
Metropolitan Water Dist of So California
NEXTEL OF CALIFORNIA INC
New Cingular Wireless PCS - Los Angeles
New Cingular Wireless PCS LLC -San Diego
Nextweb Inc
ORANGE, COUNTY OF, CA
QUALCOMM INC.
Regional 3Cs
Riverside, County of
SAN DIEGO COUNTY
SAN DIEGO, CITY OF
SKYRIVER COMMUNICATIONS INC
SOUTHERN CALIFORNIA REGIONAL RAIL AUTH.
San Bernardino County of California
San Diego Gas & Electric Company
Southern California Edison Company
Southern California Gas Company
T-Mobile License LLC
TV MICROWAVES CO
Turn Wireless, LLC
University of California,HPWREN
Verizon California Inc.
Verizon Wireless (VAW) LLC (CA)
Western Pacific Mobile Microwave
Western Technical Services

4. EARTH STATION COORDINATION DATA

This 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: 07/15/2011
 Job Number: 110715COMSTC11

Administrative Information

Call Sign E000232
 Licensee Name Allen Holdings, Inc

Site Information MARCH AFB, CA

Venue Name
 Latitude (NAD 83) 33° 54' 21.7" N
 Longitude (NAD 83) 117° 14' 57.8" W
 Climate Zone A
 Rain Zone 4
 Ground Elevation (AMSL) 468.5 m / 1537.1 ft

Link Information

Satellite Type Geostationary
 Mode TO - Transmit-Only
 Modulation Digital
 Satellite Arc 177° W to 177° West Longitude
 Azimuth Range 252.0° to 252.0°
 Corresponding Elevation Angles 16.4° / 16.4°
 Antenna Centerline (AGL) 5.49 m / 18.0 ft

Antenna Information Transmit - V61103

Manufacturer VERTEX COMMUNICATIONS
 Model 11 KPC
 Gain / Diameter 55.4 dBi / 11.0 m
 3-dB / 15-dB Beamwidth 0.30° / 0.60°

		<u>1M23G7W - 9M00G7W</u>	
Max Available RF Power	(dBW/4 kHz)	-14.7	-14.7
	(dBW/MHz)	9.3	9.3
Maximum EIRP	(dBW/4 kHz)	40.7	40.7
	(dBW/MHz)	64.7	64.7
	(dBW)	65.6	74.22
Interference Objectives:	Long Term	-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%

Frequency Information Transmit 6.1 GHz

Emission / Frequency Range (MHz) 1M23G7W - 9M00G7W / 5850.0 - 5925.0

Max Great Circle Coordination Distance 137.8 km / 85.6 mi
 Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

MARCH AFB, CA

Licensee Name Allen Holdings, Inc
Latitude (NAD 83) 33° 54' 21.7" N
Longitude (NAD 83) 117° 14' 57.8" W
Ground Elevation (AMSL) 468.5 m / 1537.1 ft
Antenna Centerline (AGL) 5.49 m / 18.0 ft
Antenna Model VERTEX COMMUNICATIONS 11 KPC
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 -14.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.85	107.34	-9.60	100.00
5	1.82	112.24	-10.95	100.00
10	0.93	116.93	-12.60	100.00
15	1.14	121.72	-12.60	100.00
20	2.69	126.76	-12.60	100.00
25	3.05	131.60	-12.60	100.00
30	2.37	136.16	-12.60	100.00
35	1.92	140.68	-12.60	100.00
40	1.90	145.22	-12.60	100.00
45	1.48	149.46	-12.60	100.00
50	0.88	153.33	-12.60	100.00
55	0.62	157.00	-12.60	100.00
60	0.54	160.24	-12.60	100.00
65	0.80	162.97	-12.60	100.00
70	0.92	164.43	-12.60	100.00
75	0.54	163.89	-12.60	100.00
80	0.00	161.82	-12.60	124.08
85	0.00	159.19	-12.60	124.08
90	0.00	155.84	-12.60	124.08
95	0.50	152.28	-12.60	100.19
100	0.78	148.24	-12.60	100.00
105	0.62	143.80	-12.60	100.00
110	1.07	139.45	-12.60	100.00
115	1.87	135.06	-12.60	100.00
120	2.38	130.47	-12.60	100.00
125	2.52	125.73	-12.60	100.00
130	1.78	120.83	-12.60	100.00
135	0.78	115.91	-12.60	100.00
140	0.00	111.04	-10.23	130.36
145	0.00	106.27	-9.60	132.04
150	0.00	101.49	-9.60	132.04
155	0.00	96.69	-9.60	132.04
160	0.00	91.90	-10.22	130.38
165	0.00	87.10	-10.60	129.36
170	0.00	82.30	-11.14	127.93
175	0.00	77.51	-12.10	125.40
180	0.00	72.73	-12.60	124.08
185	0.00	67.96	-12.60	124.08

COMSEARCH

Earth Station Data Sheet

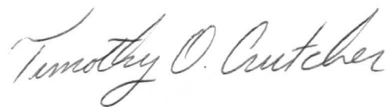
19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Coordination Values	MARCH AFB, CA
Licensee Name	Allen Holdings, Inc
Latitude (NAD 83)	33° 54' 21.7" N
Longitude (NAD 83)	117° 14' 57.8" W
Ground Elevation (AMSL)	468.5 m / 1537.1 ft
Antenna Centerline (AGL)	5.49 m / 18.0 ft
Antenna Model	VERTEX COMMUNICATIONS 11 KPC
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	-14.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	63.21	-12.60	124.08
195	0.27	58.43	-12.60	118.56
200	0.55	53.66	-12.06	100.00
205	0.48	48.99	-10.20	107.82
210	0.43	44.37	-8.47	116.33
215	0.55	39.77	-7.51	111.10
220	0.56	35.30	-5.72	115.65
225	0.54	30.98	-4.80	119.12
230	0.49	26.88	-3.35	125.32
235	0.51	23.08	-1.45	129.93
240	0.54	19.76	0.54	133.13
245	0.59	17.22	2.07	135.06
250	0.65	15.84	2.90	134.75
255	0.74	15.91	2.85	131.65
260	0.78	17.49	1.91	127.04
265	0.72	20.26	0.25	125.07
270	0.72	23.70	-1.82	118.99
275	0.53	27.70	-3.68	122.61
280	0.32	31.97	-4.99	133.63
285	0.23	36.35	-6.14	137.80
290	0.00	40.90	-7.78	135.75
295	0.00	45.46	-8.78	134.24
300	0.00	50.08	-10.63	129.28
305	0.20	54.71	-12.48	124.23
310	0.00	59.46	-12.60	124.08
315	0.00	64.20	-12.60	124.08
320	0.22	68.93	-12.60	122.28
325	0.61	73.68	-12.60	100.00
330	2.95	78.35	-11.93	100.00
335	3.92	83.19	-10.96	100.00
340	2.72	88.08	-10.60	100.00
345	1.57	92.92	-10.02	100.00
350	0.62	97.72	-9.60	102.57
355	0.57	102.52	-9.60	104.82

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Timothy O. Crutcher
Frequency Planner
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: July 15, 2011