

**NOTICE OF COMPLETION OF C-BAND ESV COORDINATION –**

**LONG BEACH, CALIFORNIA PORT AREA**

MTN License Corp. (“MTN”), pursuant to Section 25.221(a)(12) of the Commission’s rules, 47 C.F.R. 25.221(a)(12), hereby submits notification of the successful completion of frequency coordination of Earth Station on Vessels (“ESV”) operations conducted in the port area of Long Beach, California under its C-band ESV network license (Call Sign E050281). In support of this notification, MTN provides the following information as set forth in the Commission’s Public Notice DA 05-1671 (released June 15, 2005):

1. Name and contact information of the frequency coordinator

Ken Ryan, P.E.  
Skjei Telecom, Inc.  
777 Leesburg Pike, Suite 315N  
Falls Church, VA 22043  
Telephone: 703-917-4077  
Email: [www.skjeitelecom.com](http://www.skjeitelecom.com)

2. Reference identification, date, and duration (if relevant) of the coordination report

Coordination Report Number: 151125SKJTEL05  
Date: February 3, 2016

3. Frequency coordination method used

Critical contour point method

4. Interference criteria used

Long term: -154.0 dBW/4 kHz 20%  
Short term: -131.0 dBW/4 kHz 0.0025%

5. Speed of coordinated vessel, if relevant

8.6 knots

6. Center frequencies, bandwidths, and total spectrum coordinated per satellite

Frequency Range: 6312.0-6315.4 MHz<sup>1</sup>

Bandwidths: 1.05 MHz and 3.75 MHz

Total spectrum coordinated: 3.4 MHz

7. Name of satellite(s) and transponder(s) being used

Satellite: IS18G @ 180°W.L.

Transponder: G19C

Transponder Frequency Range: 6302.0-6338.0 MHz

8. Textual description and scaled map of the geographic area(s) coordinated

The geographic area coordinated is the route depicted in the maps contained in the attached Frequency Coordination and Interference Analysis Report, as well as all of the area seaward of this route within 200 kilometers of the baseline of the United States or 200 kilometers from any fixed service offshore installation.

9. 24/7 contact information for the ESV operator

Telephone: 1-954-538-4074

Email: noc.maritime@emconnected.com

10. Call sign of the hub station if independently licensed

N/A

11. Statement indicating that as of the date of this notification there are no unresolved coordination requests which would result in an exceedance of the maximum 180 megahertz of coordinated spectrum for all ESV operations in the coordination area in Section 25.202(a)(8)

The frequency coordination advises that there are no unresolved coordination requests which would result in an exceedance of the maximum 180 megahertz of coordinated spectrum for all ESV operations in the 5925-6425 MHz band.

---

<sup>1</sup> MTN notes that the attached Frequency Coordination and Interference Analysis Report also includes the coordination of the 6410.4-6420.5 MHz frequency band. Although these frequencies were coordinated, MTN has no immediate plans to operate within this band and thus does not include it as part of this Notice.

**MTN License Corp.**

Call Sign E050281

January 27, 2017

---

MTN respectfully requests that this notification be placed on Public Notice. Questions concerning this matter should be directed to MTN's counsel: David Keir (email address: [dkeir@lermansenter.com](mailto:dkeir@lermansenter.com); telephone: 202-416-6742) and Philip Bonomo (email address: [pbonomo@lermansenter.com](mailto:pbonomo@lermansenter.com); telephone: 202-416-6773).

# FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for  
**MTN license Corp**  
**Long Beach, CA**  
**Satellite Earth Station on Vessel (ESV)**

Prepared By:  
Skjei Telecom, Inc.  
7777 Leesburg Pike, Suite 315N  
Falls Church, VA 22043  
February 3, 2016

# Skjei Telecom, Inc.

## TABLE OF CONTENTS

1. CONCLUSIONS .....	3
2. SUMMARY OF RESULTS .....	4
3. SUPPLEMENTAL SHOWING .....	19
4. EARTH STATION COORDINATION DATA.....	22
5. CERTIFICATION.....	29

## **Skjei Telecom, Inc.**

### **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. There will be spectrum restrictions due to interference considerations.

# Skjei Telecom, Inc.

## 2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. The Critical Contour Point method of determining worst case interference from the route and port sites was the interference method used. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case. In those cases where OH losses did not resolve the interference the ESV will mute transmission within an exclusion zone sufficient in size to preclude interference. Also note, that there are no unresolved coordination requests which would result in an exceedance of the maximum 180 megahertz of coordinated spectrum for all ESV operations in the coordination area in the 5925-6425 MHz band.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-only earth station. The ESV will employ a GPS sensitive ability to cease transmission when traveling in certain exclusion zones. The interference cases and the location of the critical contour point (CCP), around which the exclusion zones exist are detailed in the tables below.

### Company

AirSites2000, LLC  
American Tower, LLC  
California RSA NO. 4 Limited Partnership  
California, State of  
Cellco Partnership - Southern California  
City of Los Angeles Dept Water & Power  
Coast Community College District  
Communication Services, Inc.  
Conterra Ultra Broadband, LLC  
Exxon Communications Company  
Frazier Mountain Internet Service, Inc.  
Fresno MSA Limited Partnership  
GTE Mobilnet of California LTD Partnersh  
GTE Mobilnet of Santa Barbara LTD Ptnsh  
KTLA, LLC  
Los Angeles City Info Technology Agency  
Los Angeles County FCC Licensing Section  
Los Angeles County Metro Transit Auth  
Los Angeles SMSA Ltd. Partnership  
M.U.T. Licensing, LLC  
Metropolitan Water Dist of So California  
New Cingular Wireless PCS - Los Angeles  
New Cingular Wireless PCS LLC -San Diego  
Nextweb Inc

## **Skjei Telecom, Inc.**

Olympic Wireless, LLC  
Orange, County of, CA  
Pacific Bell Tel Com dba AT&T California  
Pacific Gas and Electric Company  
Regents of the University of California  
San Bernardino County of California  
San Diego, City of  
San Diego, County of  
Santa Barbara Cellular Systems, Ltd.  
Santa Barbara, County of  
Skyriver Communications  
Southern California Edison Company  
Southern California Gas Company  
Southern California Regional Rail Auth.  
Turn Wireless, LLC  
TV MICROWAVES CO  
Ventura, County of  
Verizon California Inc.  
Verizon Wireless (VAW) LLC (Southern CA)



## Skjei Telecom, Inc.

Site	Long Beach														
Desired Frequencies (MHz)		6314 - 6319.4	6401.47 - 6405.01	5950.1992 - 5953.9708	6312 - 6315.36	5987 - 6020.96	6401.51 - 6408.415								
Into lCase #	Margi n(dB)							Frequencies Affected							
367	61.3					Y		5974.85	0	0	0	0	0	0	0
373	61.0	Y			Y			6226.89	6286.19	6315.84	6345.49	0	0	0	0
1272	47.2					Y		5974.85	6004.5	6063.8	0	0	0	0	0
475	45.1			Y				5945.2	0	0	0	0	0	0	0
1323	45.1			Y				5945.2	0	0	0	0	0	0	0
1325	45.1					Y		6034.15	0	0	0	0	0	0	0
1344	44.8			Y		Y		5945.2	5974.85	6123.1	6152.75	0	0	0	0
1345	44.8					Y		6004.5	6034.15	6063.8	0	0	0	0	0
652	44.6	Y	Y		Y		Y	6197.24	6226.89	6256.54	6286.19	6315.84	6345.49	6375.14	6404.79
218	44.6			Y		Y		5945.2	5974.85	6004.5	6034.15	6063.8	6093.45	6123.1	6152.75
846	44.3			Y				5945.2	0	0	0	0	0	0	0
447	44.2					Y		5974.85	6063.8	0	0	0	0	0	0
1306	44.2					Y		5974.85	6063.8	0	0	0	0	0	0
1168	44.2			Y				5945.2	6004.5	0	0	0	0	0	0
10	43.7	Y			Y			6197.24	6256.54	6315.84	6375.14	0	0	0	0
703	43.0		Y				Y	6404.79	0	0	0	0	0	0	0
1314	40.5					Y		5974.85	6093.45	6123.1	0	0	0	0	0
405	40.0					Y		6034.15	0	0	0	0	0	0	0
25	40.0			Y				5945.2	6004.5	0	0	0	0	0	0
8	39.2			Y				5945.2	6004.5	6063.8	6123.1	0	0	0	0
587	36.8					Y		5974.85	6063.8	0	0	0	0	0	0
276	34.6			Y		Y		5945.2	5974.85	0	0	0	0	0	0
1263	34.5					Y		5974.85	0	0	0	0	0	0	0
221	34.4					Y		5974.85	0	0	0	0	0	0	0
1257	33.8	Y	Y		Y		Y	6330.665	6389.965	0	0	0	0	0	0

## Skjei Telecom, Inc.

878	33.6					Y		5974.85	6004.5	6063.8	6123.1	0	0	0	0
1253	33.0					Y		6034.15	0	0	0	0	0	0	0
1258	32.5	Y			Y			6315.84	0	0	0	0	0	0	0
2	32.5	Y			Y			6212.065	6330.665	0	0	0	0	0	0
177	31.9			Y				5945.2	0	0	0	0	0	0	0
374	31.1			Y		Y		5945.2	5974.85	6004.5	6063.8	6093.45	0	0	0
236	30.7			Y				5945.2	0	0	0	0	0	0	0
78	30.0			Y				5945.2	0	0	0	0	0	0	0
599	29.6					Y		5974.85	6063.8	6123.1	6152.75	0	0	0	0
1076	29.1					Y		5974.85	6063.8	6123.1	6152.75	0	0	0	0
787	29.0	Y			Y			6226.89	6256.54	6286.19	6315.84	0	0	0	0
244	28.9					Y		5974.85	6004.5	6034.15	6093.45	0	0	0	0
410	28.9					Y		6034.15	0	0	0	0	0	0	0
570	28.8			Y		Y		5945.2	5974.85	6004.5	6034.15	0	0	0	0
228	28.2	Y			Y			6315.84	0	0	0	0	0	0	0
1117	27.9			Y				5945.2	0	0	0	0	0	0	0
242	27.7					Y		6034.15	6123.1	0	0	0	0	0	0
809	26.7	Y			Y			6315.84	0	0	0	0	0	0	0
810	26.7		Y				Y	6404.79	0	0	0	0	0	0	0
910	26.7		Y				Y	6404.79	0	0	0	0	0	0	0
7	26.7					Y		5974.85	6093.45	0	0	0	0	0	0
1103	26.4	Y			Y			6330.665	0	0	0	0	0	0	0
876	24.7		Y				Y	6345.49	6404.79	0	0	0	0	0	0
594	24.0	Y			Y			6315.84	0	0	0	0	0	0	0
616	24.0	Y			Y			6315.84	0	0	0	0	0	0	0
129	23.7			Y				5945.2	6004.5	6063.8	0	0	0	0	0
289	23.2	Y			Y			6315.84	0	0	0	0	0	0	0
256	23.1		Y				Y	6404.79	0	0	0	0	0	0	0
1393	23.0	Y			Y			6315.84	0	0	0	0	0	0	0
1246	23.0	Y			Y			6315.84	0	0	0	0	0	0	0
521	23.0		Y				Y	6404.79	0	0	0	0	0	0	0
753	22.9					Y		6004.5	6034.15	0	0	0	0	0	0

## Skjei Telecom, Inc.

858	22.9					Y		6004.5	6034.15	0	0	0	0	0	0		
1247	22.9		Y				Y	6404.79	0	0	0	0	0	0	0		
1231	15.9			Y				5945.2	0	0	0	0	0	0	0		
171	15.2		Y				Y	6404.79	0	0	0	0	0	0	0		
1105	15.2		Y				Y	6389.965	0	0	0	0	0	0	0		
710	15.1					Y		6034.15	0	0	0	0	0	0	0		
1146	15.1		Y				Y	6404.79	0	0	0	0	0	0	0		
1	12.1	Y			Y			6212.065	6330.665	0	0	0	0	0	0		
65	11.9					Y		6034.15	0	0	0	0	0	0	0		
408	11.7	Y			Y			6315.84	0	0	0	0	0	0	0		
284	10.9	Y			Y			6315.84	0	0	0	0	0	0	0		
1104	10.8	Y			Y			6330.665	0	0	0	0	0	0	0		
964	9.6			Y				5945.2	0	0	0	0	0	0	0		
547	8.4		Y				Y	6404.79	0	0	0	0	0	0	0		
931	7.5			Y				5945.2	0	0	0	0	0	0	0		
711	4.8	Y			Y			6226.89	6286.19	6315.84	0	0	0	0	0		
800	4.7	Y			Y			6197.24	6226.89	6315.84	0	0	0	0	0		
304	4.0					Y		6034.15	0	0	0	0	0	0	0		
564	2.5		Y				Y	6286.19	6375.14	6404.79	0	0	0	0	0		
270	2.5			Y				5945.2	0	0	0	0	0	0	0		
722	2.4			Y				5945.2	0	0	0	0	0	0	0		
780	1.4	Y			Y			6286.19	6315.84	6345.49	0	0	0	0	0		
1391	1.0		Y				Y	6286.19	6375.14	6404.79	0	0	0	0	0		
1408	0.9					Y		5974.85	0	0	0	0	0	0	0		
1397	0.9	Y			Y			6286.19	6315.84	6345.49	0	0	0	0	0		
555	0.8					Y		5974.85	6034.15	0	0	0	0	0	0		
142	0.6	Y	Y		Y		Y	6315.84	6345.49	6375.14	6404.79	0	0	0	0		
1174	0.3					Y		5974.85	6034.15	0	0	0	0	0	0		
Into 2 Case #	Margi n(dB)							Frequencies Affected									
589	61.3					Y		6034.15	0	0	0	0	0	0	0		
848	52.4		Y				Y	6404.79	0	0	0	0	0	0	0		

## Skjei Telecom, Inc.

1272	48.9	Y			Y			6226.89	6256.54	6315.84	0	0	0	0	0
24	47.4		Y				Y	6226.89	6286.19	6345.49	6404.79	0	0	0	0
850	47.4			Y				5945.2	0	0	0	0	0	0	0
482	46.6					Y		6034.15	0	0	0	0	0	0	0
218	45.2	Y	Y		Y		Y	6197.24	6226.89	6286.19	6315.84	6345.49	6375.14	6404.79	0
1344	45.2		Y				Y	6197.24	6226.89	6375.14	6404.79	0	0	0	0
1345	45.2	Y			Y			6256.54	6286.19	6315.84	0	0	0	0	0
46	45.1		Y				Y	6404.79	0	0	0	0	0	0	0
536	44.3			Y		Y		5945.2	6034.15	0	0	0	0	0	0
1308	44.3			Y		Y		5945.2	6034.15	0	0	0	0	0	0
652	44.2			Y		Y		5945.2	5974.85	6004.5	6034.15	6063.8	6093.45	6123.1	6152.75
1402	43.8			Y		Y		5960.025	0	0	0	0	0	0	0
26	43.2			Y				5945.2	6004.5	0	0	0	0	0	0
1291	41.8			Y				5945.2	0	0	0	0	0	0	0
839	41.5					Y		6034.15	0	0	0	0	0	0	0
445	40.8					Y		5974.85	0	0	0	0	0	0	0
1084	40.6					Y		6019.325	0	0	0	0	0	0	0
629	40.5	Y			Y			6315.84	0	0	0	0	0	0	0
147	40.3					Y		6034.15	0	0	0	0	0	0	0
932	39.8		Y				Y	6404.79	0	0	0	0	0	0	0
835	39.7	Y			Y			6315.84	0	0	0	0	0	0	0
494	38.0					Y		5974.85	6034.15	6063.8	6093.45	0	0	0	0
791	38.0			Y		Y		5945.2	5974.85	6004.5	6063.8	6093.45	0	0	0
1290	38.0			Y		Y		5945.2	5974.85	6004.5	6063.8	6093.45	0	0	0
1327	37.8					Y		6004.5	6034.15	6063.8	0	0	0	0	0
23	37.7		Y				Y	6078.6	6390	0	0	0	0	0	0
845	37.3					Y		6034.15	0	0	0	0	0	0	0
296	37.1					Y		5974.85	0	0	0	0	0	0	0
30	36.4					Y		5974.85	0	0	0	0	0	0	0
834	35.3					Y		5974.85	0	0	0	0	0	0	0
373	35.2					Y		5974.85	6034.15	6063.8	6093.45	0	0	0	0
588	33.6					Y		6034.15	6093.45	0	0	0	0	0	0

## Skjei Telecom, Inc.

1060	32.6					Y		6034.15	6093.45	0	0	0	0	0	0
1273	32.4					Y		6034.15	0	0	0	0	0	0	0
908	31.7					Y		6034.15	0	0	0	0	0	0	0
909	31.4					Y		6034.15	0	0	0	0	0	0	0
683	31.2				Y	Y		5945.2	6004.5	6034.15	6093.45	0	0	0	0
1204	31.2				Y	Y		5945.2	6004.5	6034.15	6093.45	0	0	0	0
384	31.0					Y		6034.15	6063.8	6093.45	0	0	0	0	0
39	30.2	Y					Y	6315.84	0	0	0	0	0	0	0
267	29.3				Y	Y		5945.2	6004.5	6034.15	6063.8	6093.45	0	0	0
436	29.3				Y			5945.2	0	0	0	0	0	0	0
877	28.8					Y		6034.15	0	0	0	0	0	0	0
1224	28.8					Y		6034.15	0	0	0	0	0	0	0
168	28.3					Y		6034.15	0	0	0	0	0	0	0
19	28.0				Y			5945.2	6004.5	6063.8	6093.45	0	0	0	0
214	27.6					Y		6004.5	0	0	0	0	0	0	0
957	27.5					Y		5974.85	0	0	0	0	0	0	0
1383	27.5					Y		5974.85	0	0	0	0	0	0	0
1350	27.5		Y				Y	6404.79	0	0	0	0	0	0	0
417	27.2				Y			5945.2	0	0	0	0	0	0	0
345	27.0					Y		5974.85	0	0	0	0	0	0	0
444	26.9				Y			5945.2	0	0	0	0	0	0	0
1313	26.6				Y	Y		5945.2	5974.85	6004.5	6034.15	6093.45	0	0	0
595	26.4				Y	Y		5945.2	5974.85	6004.5	6034.15	6093.45	0	0	0
268	25.9				Y			5945.2	0	0	0	0	0	0	0
531	25.5					Y		5974.85	0	0	0	0	0	0	0
138	24.9				Y			5945.2	0	0	0	0	0	0	0
934	24.5	Y					Y	6315.84	0	0	0	0	0	0	0
1130	24.4					Y		5974.85	6123.1	0	0	0	0	0	0
543	24.4				Y			5945.2	0	0	0	0	0	0	0
1208	24.3					Y		6034.15	6123.1	0	0	0	0	0	0
822	24.2					Y		6034.15	0	0	0	0	0	0	0
1116	24.1	Y					Y	6315.84	0	0	0	0	0	0	0

## Skjei Telecom, Inc.

1108	23.9					Y		6034.15	0	0	0	0	0	0	0
1178	23.7			Y		Y		5960.025	0	0	0	0	0	0	0
69	23.3					Y		6034.15	0	0	0	0	0	0	0
400	23.1					Y		5974.85	0	0	0	0	0	0	0
1320	22.1					Y		6019.325	0	0	0	0	0	0	0
759	21.6			Y				5945.2	0	0	0	0	0	0	0
1099	21.0	Y			Y			6315.84	0	0	0	0	0	0	0
945	20.5		Y				Y	6404.79	0	0	0	0	0	0	0
1030	20.1		Y				Y	6404.79	0	0	0	0	0	0	0
1031	20.1		Y				Y	6404.79	0	0	0	0	0	0	0
1387	15.6	Y			Y			6315.84	0	0	0	0	0	0	0
1102	9.7			Y				5945.2	6004.5	0	0	0	0	0	0
838	7.0			Y				5945.2	0	0	0	0	0	0	0
1376	6.8					Y		6034.15	6063.8	0	0	0	0	0	0
1	6.7					Y		5989.675	6108.275	0	0	0	0	0	0
528	5.6	Y			Y			6286.19	6315.84	0	0	0	0	0	0
587	4.3	Y			Y			6226.89	6315.84	0	0	0	0	0	0
493	4.2		Y				Y	6404.79	0	0	0	0	0	0	0
156	3.6					Y		6034.15	0	0	0	0	0	0	0
689	3.3			Y				5945.2	0	0	0	0	0	0	0
1141	2.3					Y		6004.5	6034.15	0	0	0	0	0	0
792	2.2					Y		6034.15	6093.45	0	0	0	0	0	0
1312	2.2					Y		6034.15	6093.45	0	0	0	0	0	0
31	1.4			Y				5945.2	0	0	0	0	0	0	0
404	1.0					Y		5974.85	0	0	0	0	0	0	0
370	0.9	Y			Y			6226.89	6256.54	6286.19	6315.84	6345.49	0	0	0
10	0.8					Y		5974.85	6093.45	0	0	0	0	0	0

Table 1 – ESV Interference Cases

## Skjei Telecom, Inc.

Interference Zones					
Into 1 Case #	CCP Latitude (dec.deg)	CCP Longitude (dec.deg.)	Margin (dB)	Victim Rx Site	Licensee
367	34.3502562	119.2288998	61.3	SBOV03	New Cingular Wireless PCS - Los Angeles
373	34.38413163	119.4882934	61.0	SBOV01	New Cingular Wireless PCS - Los Angeles
1272	33.46899953	118.3499033	47.2	BLACK JACK	Verizon Wireless (VAW) LLC (Southern CA)
475	33.73270259	118.3047189	45.1	SAN PEDRO	Los Angeles SMSA Ltd. Partnership
1323	33.73270259	118.3047189	45.1	SAN PEDRO	Los Angeles SMSA Ltd. Partnership
1325	33.73270259	118.3047189	45.1	SAN PEDRO	Los Angeles SMSA Ltd. Partnership
1344	33.637101	118.3038445	44.8	SAN PEDRO	Pacific Bell Tel Com dba AT&T California
1345	33.637101	118.3038445	44.8	SAN PEDRO	Pacific Bell Tel Com dba AT&T California
652	33.46097436	118.3337701	44.6	DAKIN 2	Pacific Bell Tel Com dba AT&T California
218	34.26488819	119.0997305	44.6	OXNARD MAIN	Verizon California Inc.
846	34.28494298	119.1300336	44.3	SOUTH MTN	Southern California Regional Rail Auth.
447	34.24667084	119.0722259	44.2	SOUTH MTN	Los Angeles SMSA Ltd. Partnership
1306	34.24667084	119.0722259	44.2	SOUTH MTN	Los Angeles SMSA Ltd. Partnership
1168	34.40282154	119.5014446	44.2	GIL	Nextweb Inc
10	33.75450305	118.3369465	43.7	CALL MTN	American Tower, LLC
703	33.74968859	118.1845882	43.0	LOMA RIDGE	Orange, County of, CA
1314	33.41393698	118.239353	40.5	MT ADA	Verizon Wireless (VAW) LLC (Southern CA)
405	33.83896996	118.4620837	40.0	DOWNEY DATA	Los Angeles County FCC Licensing Section
25	34.2142969	119.0233993	40.0	MT CHUAL	M.U.T. Licensing, LLC
8	33.74972816	118.3298854	39.2	SAN BENITO	American Tower, LLC
587	34.0447038	118.7686898	36.8	BIG MTN	Los Angeles SMSA Ltd. Partnership
276	33.94402571	118.6183255	34.6	KJLA XMTR	TV MICROWAVES CO
1263	33.93872344	118.6104237	34.5	SAN DIMAS	Southern California Gas Company
221	33.93831014	118.6098078	34.4	SAN DIMAS	Southern California Gas Company
1257	34.06587624	118.8003907	33.8	OAT	Skyriver Communications

## Skjei Telecom, Inc.

878	34.06970459	118.8061257	33.6	MT LUKENS	Los Angeles SMSA Ltd. Partnership
1253	33.75445388	118.3368738	33.0	BALDWINHILLS	Los Angeles County Metro Transit Auth
1258	34.00085459	118.7031237	32.5	76 NORTHDRGE	Southern California Gas Company
2	34.00071232	118.7029112	32.5	PR KERNVILLE	Verizon California Inc.
177	33.89181214	118.5405881	31.9	JOHNSTONE PK	Metropolitan Water Dist of So California
374	34.43296434	119.522669	31.1	OXNRII	New Cingular Wireless PCS - Los Angeles
236	32.34554751	117.9908373	30.7	OTAY MTN	San Diego, County of
78	33.77809288	118.3718515	30.0	LOS BANOS	California RSA NO. 4 Limited Partnership
599	33.74897845	118.1840322	29.6	MT LUKENS	Los Angeles SMSA Ltd. Partnership
1076	33.74897845	118.1840322	29.1	MT LUKENS	Los Angeles SMSA Ltd. Partnership
787	33.59207903	118.222038	29.0	DIAMOND BAR	Los Angeles SMSA Ltd. Partnership
244	34.04413925	118.7678449	28.9	PALMDALE	Los Angeles SMSA Ltd. Partnership
410	34.46979903	119.5486298	28.9	OXNRII	New Cingular Wireless PCS - Los Angeles
570	33.38329271	118.0632516	28.8	SUN CITY	Los Angeles SMSA Ltd. Partnership
228	34.1202114	118.8818722	28.2	MT MCDILL	City of Los Angeles Dept Water & Power
1117	32.34554751	117.9908373	27.9	OTAY MTN	San Diego, County of
242	33.89820577	118.5500983	27.7	SUNSET RDGE	Southern California Gas Company
809	33.54967091	118.1403303	26.7	COLTON	Los Angeles SMSA Ltd. Partnership
810	33.54967091	118.1403303	26.7	COLTON	Los Angeles SMSA Ltd. Partnership
910	33.54967091	118.1403303	26.7	COLTON	Los Angeles SMSA Ltd. Partnership
7	33.41260899	118.0768102	26.7	CEDAR CYN	American Tower, LLC
1103	33.40500061	118.0732904	26.4	LA HABRA	Coast Community College District
876	32.83935328	117.8939049	24.7	MT PALOMAR	Verizon Wireless (VAW) LLC (Southern CA)
594	33.76619661	118.3542449	24.0	VIOLIN SUMM	Los Angeles SMSA Ltd. Partnership
616	33.76619661	118.3542449	24.0	VIOLIN SUMM	Los Angeles SMSA Ltd. Partnership
129	34.05969507	118.7911329	23.7	KETTLEMAN H	Pacific Gas and Electric Company
289	33.592082	118.1788614	23.2	STRAWBERRY	Southern California Edison Company
256	33.39858031	118.0703208	23.1	BAILEY PK	Southern California Edison Company
1393	33.76619661	118.3542449	23.0	VIOLIN SUMM	Los Angeles SMSA Ltd. Partnership
1246	33.592082	118.1788614	23.0	STRAWBERRY	Southern California Edison Company



## Skjei Telecom, Inc.

521	34.05969507	118.7911329	23.0	LANCASTER	Los Angeles County FCC Licensing Section
753	33.09749677	117.9715312	22.9	94 ENG SPGS	Verizon Wireless (VAW) LLC (Southern CA)
858	33.09749677	117.9715312	22.9	94 ENG SPGS	Verizon Wireless (VAW) LLC (Southern CA)
1247	33.39858031	118.0703208	22.9	BAILEY PK	Southern California Edison Company
1231	33.42310767	118.0816682	15.9	CEDAR SPRIN	California, State of
171	33.74208251	118.3185818	15.2	HEAPS PEAK	San Bernardino County of California
1105	33.71716725	118.1838573	15.2	OCC	Coast Community College District
710	33.80077454	118.4054442	15.1	COMERICA TWR	KTLA, LLC
1146	33.74211406	118.3186284	15.1	HEAPS PEAK	San Bernardino County of California
1	33.93710473	118.6080117	12.1	COOK PK	Verizon California Inc.
65	34.11891795	118.8799304	11.9	OAT MTN	Los Angeles County FCC Licensing Section
408	33.77346348	118.3649989	11.7	HEAPS PK	Southern California Edison Company
284	33.67895119	118.1828252	10.9	MARION RIDGE	Southern California Edison Company
1104	33.71491281	118.1837964	10.8	OCC	Coast Community College District
964	33.70950245	118.4964829	9.6	BOUCHERHLS	California, State of
547	34.19904837	119.0004242	8.4	EAV	Los Angeles County FCC Licensing Section
931	34.11172819	118.8691386	7.5	41 SADDLE P	Southern California Gas Company
711	33.38865777	118.0657322	4.8	SAN MIGUEL	Verizon Wireless (VAW) LLC (Southern CA)
800	34.37467473	119.2659325	4.7	ARLETA	Los Angeles SMSA Ltd. Partnership
304	32.57864807	117.8159759	4.0	SANTIAGO PK	Orange, County of, CA
564	34.01815027	118.7289712	2.5	BANNING	Los Angeles SMSA Ltd. Partnership
270	32.95029566	117.9272095	2.5	COWLES MTN	San Diego, City of
722	33.35599713	118.0506363	2.4	MONUMENT PK	California, State of
780	32.98308338	117.9370686	1.4	HEMET	Los Angeles SMSA Ltd. Partnership
1391	34.01815027	118.7289712	1.0	BANNING	Los Angeles SMSA Ltd. Partnership
1408	33.75281076	118.1870328	0.9	MALIBU	Olympic Wireless, LLC
1397	32.98308338	117.9370686	0.9	HEMET	Los Angeles SMSA Ltd. Partnership
555	32.73219301	117.8618165	0.8	JACUMBA PEAK	Cellco Partnership - Southern California
142	33.21019077	118.0055658	0.6	SUPERSTITION	Pacific Bell Tel Com dba AT&T California

## Skjei Telecom, Inc.

1174	32.73219301	117.8618165	0.3	JACUMBA PEAK	Cellco Partnership - Southern California
Into 2 Case #	CCP Latitude (dec.deg)	CCP Longitude (dec.deg.)	Margin (dB)	Victim Rx Site	Licensee
589	34.33948835	119.2125815	61.3	SOUTH MTN	Los Angeles SMSA Ltd. Partnership
848	34.368705	119.2568754	52.4	ERRINGER GC	Southern California Regional Rail Auth.
1272	33.73997434	118.1800315	48.9	SIGNAL HILL	Los Angeles SMSA Ltd. Partnership
24	34.28998444	119.1376553	47.4	FREMONT PK	M.U.T. Licensing, LLC
850	34.29097736	119.1391566	47.4	NORTHRIDGE	Southern California Regional Rail Auth.
482	33.71132409	118.1836994	46.6	EL TORO	Los Angeles SMSA Ltd. Partnership
218	34.26488819	119.0997305	45.2	SOUTH MTN	Verizon California Inc.
1344	33.46100036	118.3338224	45.2	DAKIN 2	Pacific Bell Tel Com dba AT&T California
1345	33.46100036	118.3338224	45.2	DAKIN 2	Pacific Bell Tel Com dba AT&T California
46	33.73270259	118.3047189	45.1	COWLES MTN	San Diego, County of
536	33.33916834	118.0446286	44.3	SAN MARCOS	Verizon Wireless (VAW) LLC (Southern CA)
1308	33.33916834	118.0446286	44.3	SAN MARCOS	Verizon Wireless (VAW) LLC (Southern CA)
652	33.63710098	118.3036974	44.2	SAN PEDRO	Pacific Bell Tel Com dba AT&T California
1402	34.10327052	118.8564478	43.8	SHORES	Skyriver Communications
26	33.79830137	118.4017798	43.2	PALO ESCRIT	M.U.T. Licensing, LLC
1291	33.89407356	118.5439516	41.8	SIERRA PEAK	Los Angeles SMSA Ltd. Partnership
839	34.19944263	119.0010181	41.5	W TRANSITION	Southern California Edison Company
445	33.19391461	118.0006447	40.8	SAN MARCOS	Verizon Wireless (VAW) LLC (Southern CA)
1084	34.32710543	119.1938249	40.6	OAT	Skyriver Communications
629	34.41289073	119.3239669	40.5	MAGIC MTN	Los Angeles SMSA Ltd. Partnership
147	34.01569523	118.7253011	40.3	SANTIAGO PK	Orange, County of, CA
932	34.4182713	119.512321	39.8	LA CUMBRE	Southern California Gas Company
835	34.30870573	119.1659725	39.7	EOC	Los Angeles City Info Technology Agency
494	33.84640518	118.4731195	38.0	SANTA FE SP	Los Angeles SMSA Ltd. Partnership
791	33.84640518	118.4731195	38.0	SANTA FE SP	Los Angeles SMSA Ltd. Partnership

## Skjei Telecom, Inc.

1290	33.84625531	118.472897	38.0	SANTA FE SP	Los Angeles SMSA Ltd. Partnership
1327	33.49806005	118.1163866	37.8	SQUIRES DAM	Verizon Wireless (VAW) LLC (Southern CA)
23	33.00188921	117.9427269	37.7	FORT IRWIN	Verizon California Inc.
845	34.16564151	118.9501408	37.3	VERDUGO PEAK	Southern California Regional Rail Auth.
296	34.38936124	119.2882242	37.1	SISAR	Ventura, County of
30	33.72003837	118.2860104	36.4	DOWNEY DATA	Los Angeles County FCC Licensing Section
834	34.04112814	118.7633388	35.3	MT LEE	Los Angeles City Info Technology Agency
373	34.38413163	119.4882934	35.2	GOLETA MTSO	Santa Barbara Cellular Systems, Ltd.
588	34.06828836	118.804004	33.6	CHATSWORTH	Los Angeles SMSA Ltd. Partnership
1060	34.06828836	118.804004	32.6	CHATSWORTH	Los Angeles SMSA Ltd. Partnership
1273	34.53600011	119.5953554	32.4	MANDALAY SUB	Southern California Edison Company
908	33.91455017	118.5744209	31.7	MT HARVARD	TV MICROWAVES CO
909	33.9077631	118.5643188	31.4	WILSON	TV MICROWAVES CO
683	33.97606686	118.6661119	31.2	SOUTH MTN	Los Angeles SMSA Ltd. Partnership
1204	33.97606686	118.6661119	31.2	SOUTH MTN	Los Angeles SMSA Ltd. Partnership
384	33.79503569	118.3969418	31.0	LAC497	New Cingular Wireless PCS - Los Angeles
39	32.68454062	117.8475727	30.2	FREMONT PK	GTE Mobilnet of California LTD Partnersh
267	33.74330643	118.183032	29.3	RUNNING SPGS	Verizon California Inc.
436	34.42623275	119.34425	29.3	LAGUNA PK	Ventura, County of
877	33.72572678	118.2944125	28.8	OAT MTN	Los Angeles SMSA Ltd. Partnership
1224	32.84016496	117.8941482	28.8	SN MARCOS MT	San Diego, County of
168	32.84477584	117.8955307	28.3	SN MARCOS MT	San Diego, County of
19	34.08965737	118.8360305	28.0	MT SANTOS	Verizon California Inc.
214	34.0023442	118.7053491	27.6	BAILEY SUB	Southern California Edison Company
957	33.71727311	118.1838602	27.5	RIALTO	San Bernardino County of California
1383	33.71727311	118.1838602	27.5	RIALTO	San Bernardino County of California
1350	34.33535888	119.4540069	27.5	SANTA YNEZ	Santa Barbara, County of
417	33.37570887	118.0597457	27.2	SANTIAGO PK	Orange, County of, CA
345	33.42421866	118.0821823	27.0	SANTIAGO	Pacific Bell Tel Com dba AT&T California
444	34.04413925	118.7678449	26.9	PALMDALE	Los Angeles SMSA Ltd. Partnership

## Skjei Telecom, Inc.

1313	34.04413925	118.7678449	26.6	PALMDALE	Los Angeles SMSA Ltd. Partnership
595	34.04413925	118.7678449	26.4	PALMDALE	Los Angeles SMSA Ltd. Partnership
268	33.65644794	118.1922147	25.9	MT LUKENS	California, State of
531	33.73163099	118.3031355	25.5	BLUE RIDGE	AirSites2000, LLC
138	33.01012502	117.9452056	24.9	MARBLE	Pacific Bell Tel Com dba AT&T California
934	34.25314865	119.3963199	24.5	TIP TOP RNC	Southern California Gas Company
1130	33.71491281	118.1837964	24.4	RIALTO	San Bernardino County of California Los Angeles County FCC Licensing Section
543	34.1352784	118.9044994	24.4	HPK	
1208	34.26084639	119.4017158	24.3	LOMPOC	GTE Mobilnet of Santa Barbara LTD Ptnsh
822	34.26084639	119.4017158	24.2	LOMPOC	GTE Mobilnet of Santa Barbara LTD Ptnsh
1116	33.01012502	117.9452056	24.1	NORTH PEAK	San Diego, County of
1108	34.43991915	119.3650685	23.9	SF72XC146	Conterra Ultra Broadband, LLC
1178	34.3635182	119.249008	23.7	1430 TRUXTON	Frazier Mountain Internet Service, Inc.
69	34.47880014	119.4242768	23.3	MT WOODSON	Southern California Gas Company
400	34.52291811	119.586115	23.1	HERITAGE PL	Exxon Communications Company
1320	33.83586765	118.7622969	22.1	TW TELECOM	Communication Services, Inc.
759	34.08484836	118.8288206	21.6	FONTANA	Southern California Regional Rail Auth.
1099	34.41851943	119.3325225	21.0	GOSFORD	Fresno MSA Limited Partnership
945	33.65837754	118.18227	20.5	PALA PR	Verizon Wireless (VAW) LLC (Southern CA)
1030	33.75005431	118.5815716	20.1	RINCON	Turn Wireless, LLC
1031	33.75005431	118.5815716	20.1	RINCON	Turn Wireless, LLC
1387	32.74790787	117.8665172	15.6	RUTHERFORD	New Cingular Wireless PCS LLC -San Diego
1102	33.75281076	118.1870328	9.7	CCC	Coast Community College District Los Angeles City Info Technology Agency
838	33.74547224	118.3235928	7.0	SAN PEDRO CH	
1376	34.6377419	119.6673362	6.8	WHIRLWIND	Southern California Edison Company
1	34.43355761	119.3553904	6.7	PR KERNVILLE	Verizon California Inc.
528	33.75281076	118.1870328	5.6	ELSINORE PK2	Los Angeles SMSA Ltd. Partnership
587	34.09340161	118.8416451	4.3	CASTRO PEAK	Los Angeles SMSA Ltd. Partnership
493	34.09481156	118.8437595	4.2	CASTRO	Skyriver Communications

## Skjei Telecom, Inc.

156	33.94515777	118.6200128	3.6	PLEASANTS PK	Metropolitan Water Dist of So California
689	34.11240839	119.6673244	3.3	VALLEY PEAK	Regents of the University of California
1141	34.4376342	119.361592	2.3	RIALTO	San Bernardino County of California
792	32.94552309	117.925775	2.2	JOHNSTONE PK	Los Angeles SMSA Ltd. Partnership
1312	32.94552309	117.925775	2.2	JOHNSTONE PK	Los Angeles SMSA Ltd. Partnership
31	34.14695458	118.922044	1.4	JOHNSTONE PK	Los Angeles SMSA Ltd. Partnership
404	33.96211981	118.6453034	1.0	CCB	Los Angeles County FCC Licensing Section
370	34.0360808	119.32722	0.9	SBSB05	Santa Barbara Cellular Systems, Ltd.
10	33.75281076	118.1870328	0.8	SAN BENITO	American Tower, LLC

Table 2 - ESV CCP Locations  
See Interference Analysis for Exclusion Zone Details

### **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 Skjei Telecom, Inc. using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with PCN letter dated 11/25/2015.

AT&T COMMON SYSTEMS  
BNS Electronics, Inc.  
Coachella Valley Water District  
Coast Community College District  
Communication Services, Inc.  
DRS Technical Services  
Entravision Holdings, LLC  
Frazier Mountain Internet Service, Inc.  
Glendale, City of  
KERN COUNTY CALIFORNIA  
KTLA, LLC  
Kern, County of  
LDM Engineering  
LOS ANGELES UNIFIED SCHOOL DISTRICT  
Lightwave Broadband LLC  
MHO Networks  
MOBILE RELAY ASSOCIATES INC  
Metropolitan Water Dist of So California  
NRJ TV LA License Co, LLC  
Norris, Samuel O  
Pacific Television Center  
Paxson Communications Corporation  
QUALCOMM INC.  
Regents of the University of California  
Regional 3Cs  
San Diego Broadband  
San Diego County Water Authority  
Santa Barbara, County of  
Station Venture Operations, LP  
TV MICROWAVES CO  
University of California, HPWREN  
Ventura, County of  
Western Technical Services

Wireless Applications Corporation  
ABC Holding Company Inc.  
BNSF Railway Company  
CCO SoCal I, LLC  
CNG Communications, Inc.  
California, State of  
Calvary Chapel of Costa Mesa  
Cellco Partnership - Southern California  
Fresno MSA Limited Partnership  
Kern Ed Telecom Consortium  
Los Angeles City Info Technology Agency  
Los Angeles County Dept of Public Works  
Los Angeles County FCC Licensing Section  
Los Angeles County Metro Transit Auth  
Los Angeles SMSA Ltd. Partnership  
New Cingular Wireless PCS - Los Angeles  
New Cingular Wireless PCS LLC - N CAL  
New Cingular Wireless PCS LLC -San Diego  
Nextel of California Inc.  
Pacific Bell Tel Com dba AT&T California  
San Bernardino County of California  
San Diego Gas & Electric Company  
San Diego, City of  
San Diego, County of  
Santa Barbara Cellular Systems, Ltd.  
Southern California Edison Company  
Southern California Gas Company  
Southern California Regional Rail Auth.  
T-Mobile License LLC  
Time Warner Cable Pacific West LLC  
Union Pacific Railroad Company  
Verizon California Inc.  
Verizon Wireless (VAW) LLC (Southern CA)  
Verizon Wireless (VAW) LLC-N CA/NV  
AirSites2000, LLC  
Anaheim City, of  
City of Los Angeles Dept Water & Power  
City of Montebello  
Nextweb Inc  
Northrop Grumman Systems Corp.  
Orange, County of, CA  
Riverside, County of  
Skyriver Communications  
T-Mobile License LLC  
Turn Wireless, LLC  
Ultimate Internet Access, Inc

Vintage Production California LLC  
ION Media Los Angeles License, Inc.  
Gila Electronics of Yuma, Inc  
White, Fred K  
DM Ventures, Inc. dba Warp2Biz  
Encina Communications Company  
Olympic Wireless, LLC



## **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. The coordination contours include all the area within this route as well as all of the area seaward of this route within 200 km of the baseline of the United States or 200 km from any fixed service offshore installations.”

Date: 11/25/2015  
Job Number: 151125SKJTEL04

---

**Administrative Information**

Status ENGINEER PROPOSAL  
Call Sign  
Licensee Code MRNESV  
Licensee Name MTN License Corp. - ESV In-Motion Route

---

**Site Information** **LONG BEACH, CA**

Venue Name LONG BEACH ESV  
Latitude (NAD 83) 33° 45' 0.0" N  
Longitude (NAD 83) 118° 13' 12.4" W  
Climate Zone B  
Rain Zone 4  
Ground Elevation (AMSL) 0.0 m / 0.0 ft

---

**Link Information**

Satellite Type Geostationary  
Mode TO - Transmit-Only  
Modulation Digital  
Satellite Arc 47° W to 180° West Longitude  
Azimuth Range 100.7° to 253.4°  
Corresponding Elevation Angles 6.9° / 14.7°  
Antenna Centerline (AGL) 15.54 m / 51.0 ft

---

**Antenna Information**

**Transmit - FCC32**

Manufacturer FCC REFERENCE  
Model 32-25LOG(THETA)  
Gain / Diameter 41.7 dBi / 2.4 m  
3-dB / 15-dB Beamwidth 0.66° / 1.55°

Max Available RF Power (dBW/4 kHz) -10.0  
(dBW/MHz) 14.0

Maximum EIRP (dBW/4 kHz) 31.7  
(dBW/MHz) 55.7  
(dBW) 61.4

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) 1M05G7W - 3M75G7W / 6312.0 - 6315.4  
1M05G7W - 3M75G7W / 6410.4 - 6420.5

Max Great Circle Coordination Distance 290.7 km / 180.6 mi  
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

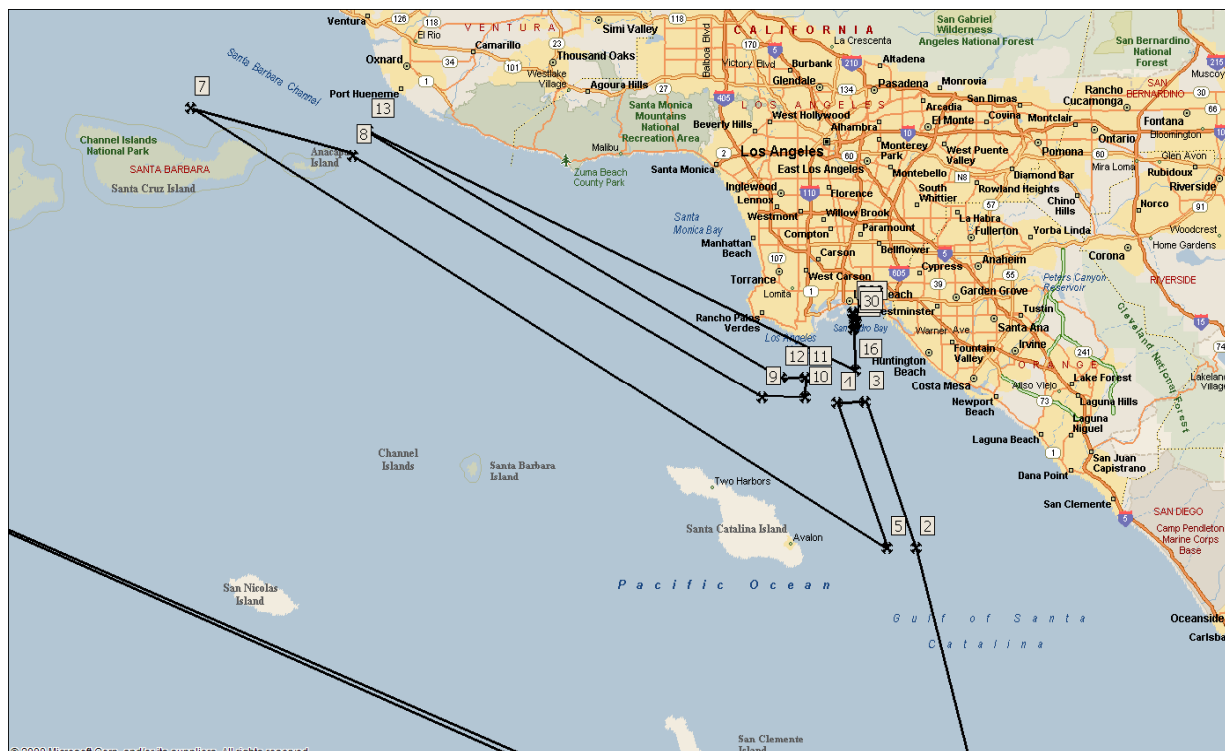
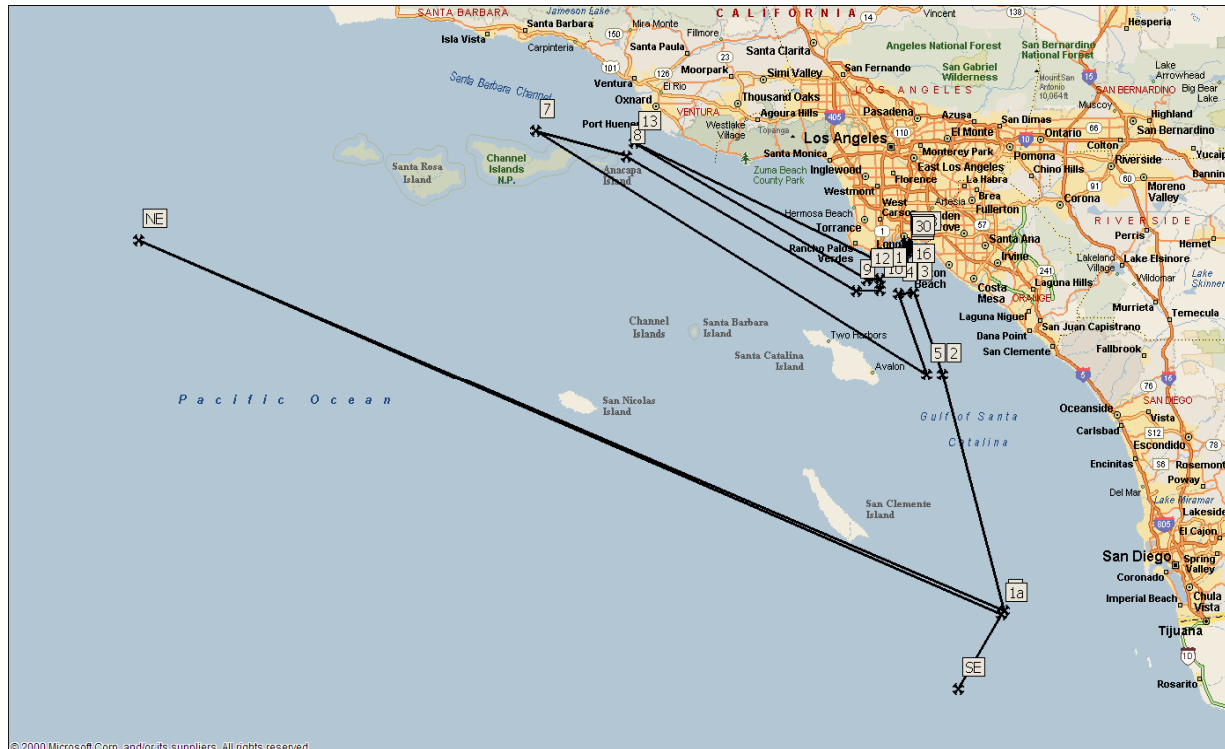
<b>Coordination Values</b>	<b>LONG BEACH, CA</b>
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	33° 45' 0.0" N
Longitude (NAD 83)	118° 13' 12.4" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna 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	-10.0 (dBW/4 kHz)

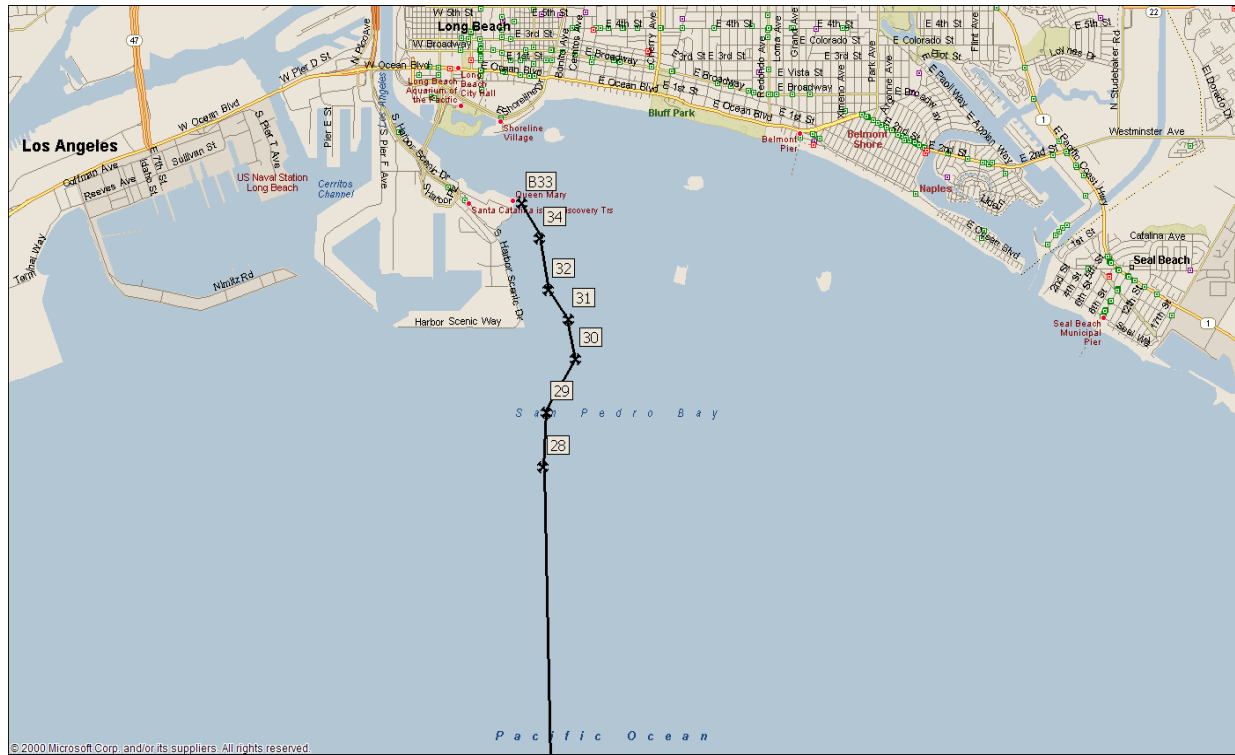
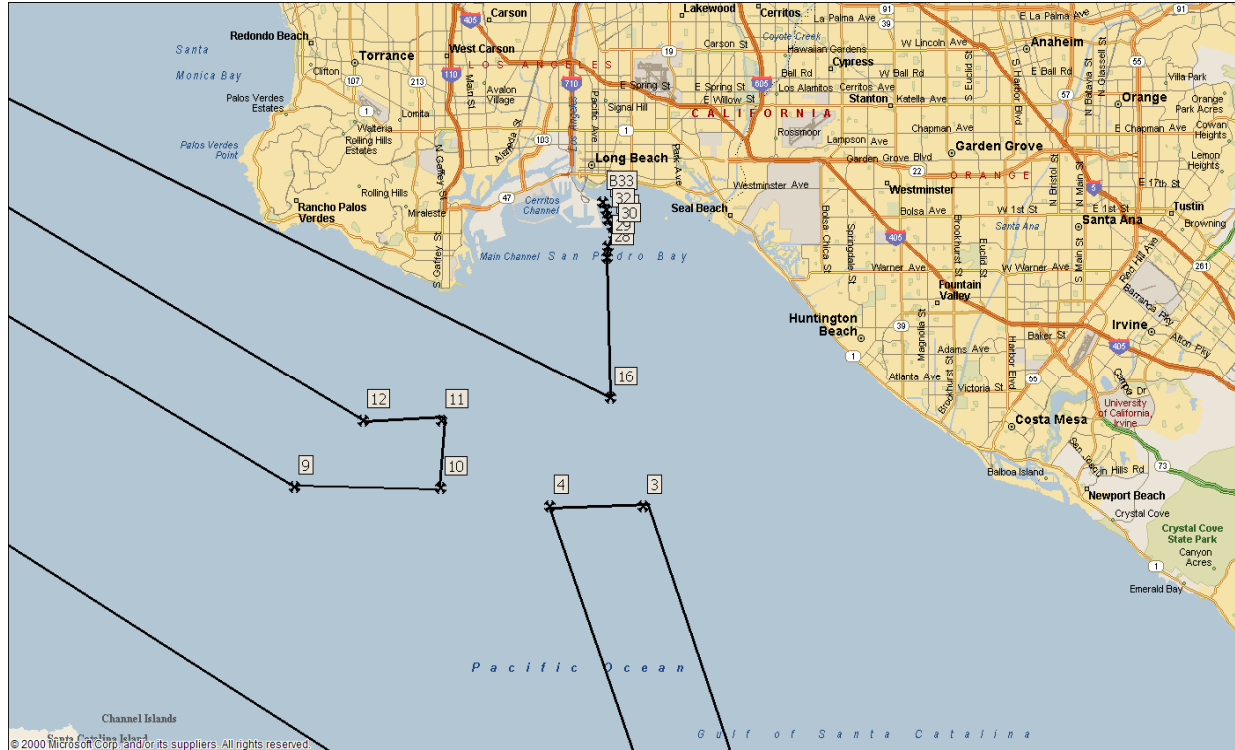
Transmit 6.1 GHz				
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	100.62	-10.00	162.88
5	0.00	95.66	-10.00	162.88
10	0.00	90.70	-10.00	162.88
15	0.00	85.73	-10.00	162.88
20	0.00	80.77	-10.00	162.88
25	0.00	75.81	-10.00	162.88
30	0.00	70.85	-10.00	162.88
35	0.21	65.88	-10.00	161.22
40	0.28	60.91	-10.00	151.19
45	0.57	55.94	-10.00	122.59
50	0.00	51.04	-10.00	162.88
55	0.21	46.08	-9.59	163.34
60	0.00	41.18	-8.37	170.54
65	0.00	36.27	-6.99	177.32
70	0.00	31.39	-5.42	185.43
75	0.00	26.55	-3.60	195.32
80	0.00	21.77	-1.45	208.02
85	0.00	17.11	1.17	223.80
90	0.00	12.71	4.40	244.53
95	0.00	8.93	8.22	269.37
100	0.00	6.93	10.99	290.66
105	0.00	8.12	9.27	277.16
110	0.00	11.56	5.43	251.41
115	0.00	15.57	2.19	230.21
120	0.00	19.53	-0.27	215.02
125	0.00	23.42	-2.24	203.42
130	0.00	27.20	-3.86	193.85
135	0.00	30.86	-5.24	186.41
140	0.00	34.37	-6.40	180.30
145	0.00	37.69	-7.41	175.24
150	0.00	40.78	-8.26	171.05
155	0.00	43.57	-8.98	167.62
160	0.00	46.00	-9.57	164.86
165	0.00	48.01	-10.00	162.88
170	0.00	49.51	-10.00	162.88
175	0.00	50.45	-10.00	162.88
180	0.00	50.76	-10.00	162.88
185	0.00	50.44	-10.00	162.88

<b>Coordination Values</b>	<b>LONG BEACH, CA</b>
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	33° 45' 0.0" N
Longitude (NAD 83)	118° 13' 12.4" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
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	-10.0 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	49.51	-10.00	162.88
195	0.00	48.01	-10.00	162.88
200	0.00	46.00	-9.57	164.86
205	0.00	43.57	-8.98	167.62
210	0.00	40.78	-8.26	171.05
215	0.00	37.69	-7.41	175.24
220	0.00	34.37	-6.41	180.29
225	0.00	30.86	-5.24	186.40
230	0.00	27.20	-3.86	193.85
235	0.00	23.41	-2.24	203.43
240	0.46	19.49	-0.24	171.07
245	0.43	16.54	1.53	183.93
250	0.41	14.72	2.80	194.95
255	0.33	14.50	2.96	211.12
260	0.43	15.74	2.08	188.29
265	0.53	18.27	0.46	165.61
270	0.48	21.76	-1.44	162.07
275	0.31	25.79	-3.28	178.08
280	0.00	30.15	-4.98	187.75
285	0.00	34.55	-6.46	180.01
290	0.00	39.07	-7.80	173.31
295	0.00	43.69	-9.01	167.48
300	0.00	48.36	-10.00	162.88
305	0.00	53.08	-10.00	162.88
310	0.00	57.84	-10.00	162.88
315	0.00	62.62	-10.00	162.88
320	0.00	67.42	-10.00	162.88
325	0.00	72.23	-10.00	162.88
330	0.00	77.05	-10.00	162.88
335	0.00	81.88	-10.00	162.88
340	0.00	86.72	-10.00	162.88
345	0.00	91.55	-10.00	162.88
350	0.00	96.39	-10.00	162.88
355	0.00	101.22	-10.00	162.88

Name	Latitude	Longitude
SE	32.33324	-118
1a	32.56627	-117.826
NE	33.75	-121.25
1	32.57859	-117.816
2	33.33333	-118.048
3	33.59167	-118.16
4	33.59167	-118.222
5	33.33333	-118.112
7	34.11167	-119.667
8	34.03	-119.303
9	33.60167	-118.39
10	33.60167	-118.293
11	33.63667	-118.293
12	33.63667	-118.345
13	34.075	-119.272
14	34.63667	-119.667
16	33.6491	-118.182
28	33.72317	-118.184
29	33.72917	-118.183
30	33.73517	-118.179
31	33.7395	-118.18
32	33.74283	-118.183
34	33.7485	-118.184
B33	33.75233	-118.187





## 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.

BY:



Ken Ryan, P.E.  
Principal Engineer  
Skjei Telecom, Inc.  
7777 Leesburg Pike, Suite 315N  
Falls Church, VA 22043

DATED: February 3, 2016