MTN License Corp.

Call Sign E050281

January 27, 2017

NOTICE OF COMPLETITION OF C-BAND ESV COORDINATION –

PORT EVERGLADES, FLORIDA 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 Port Everglades, Florida 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

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

   Coordination Report Number: 151125SKJTEL08
   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: 6314.7-6344.3 MHz[1]
   Bandwidths: 1.05 MHz and 3.75 MHz
   Total spectrum coordinated: 29.6 MHz

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

   Satellite: NSS7 @ 20° W.L.
   Transponders: GAL8/GAR8
   Transponder Frequency Range: 6309.0-6363.0 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.

[1] 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 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; telephone: 202-416-6742) and Philip Bonomo (email address: pbonomo@lermansenter.com; telephone: 202-416-6773).

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
MTN license Corp
Port Everglades, FL
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.

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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.

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 were 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

Miami-Dade County
Verizon Wireless Personal Comm, LP(S FL)
HiQ Data Corporation
Computer Office Solutions, Inc.

Skjei Telecom, Inc.

Site														
Desired Frequencies (MHz)		5950.1992 - 5953.9708	6094.001 - 6112.771	5987 - 6020.96	6314.798 - 6344.248	6401.51 - 6408.415								
Into 1														
Case #	Margin(dB)						Frequencies Affected							
91	32.31728		Y				6093.45	0	0	0	0	0	0	0
72	22.54452	Y	Y	Y			5945.2	5974.85	6004.5	6034.15	6063.8	6093.45	6123.1	6152.75
178	20.44452	Y	Y	Y			5945.2	5974.85	6004.5	6034.15	6063.8	6093.45	6123.1	6152.75
74	5.598475	Y	Y	Y			5945.2	6034.15	6063.8	6093.45	6123.1	6152.75	0	0
168	5.598475	Y	Y	Y			5945.2	6034.15	6063.8	6093.45	6123.1	6152.75	0	0
Notes														
Desired Frequencies (MHz)		5950.1992 - 5953.9708	6094.001 - 6112.771	5987 - 6020.96	6314.798 - 6344.248									
Into 2														
Case #	Margin(dB)						Frequencies Affected							
183	28.45345					Y	6389.965	0	0	0	0	0	0	0
201	19.4875		Y				6137.925	0	0	0	0	0	0	0
Notes														

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
91	26.09317552	80.10406649	32.3	CAB	Miami-Dade County
72	26.00325931	80.02549327	22.5	ANDY TOWN S	Verizon Wireless Personal Comm, LP(S FL)
178	26.00325931	80.02549327	20.4	ANDY TOWN S	Verizon Wireless Personal Comm, LP(S FL)
74	26.08727429	80.11548993	5.6	KROME TOWER	Verizon Wireless Personal Comm, LP(S FL)
168	26.08727429	80.11548993	5.6	KROME TOWER	Verizon Wireless Personal Comm, LP(S FL)
Case #	CCP Latitude (dec.deg)	CCP Longitude (dec.deg.)	Margin (dB)	Victim Rx Site	Licensee
183	26.08420337	80.07433998	28.5	MIDTOWN1	HiQ Data Corporation
201	26.19358091	79.59045556	19.5	MET2	Computer Office Solutions, Inc.

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.

Computer Office Solutions, Inc.
GM Consulting Group, Inc.
HiQ Data Corporation
Miami-Dade County
Saint Lucie, County of
Verizon Wireless (VAW) LLC-South Florida
Verizon Wireless VAW LLC - S Florida
Wireless Applications Corporation
Embarq Florida, Inc.
Florida Power and Light Company
Florida RSA No. 2B (Indian River) LP
Harris Corporation - Orlando, FL
New Cingular Wireless PCS LLC - N FL
New Cingular Wireless PCS LLC - S FL
PALM BEACH, COUNTY OF
Palm Beach, County Facilities Dev & Ops
South Florida Water Management District
T-Mobile License LLC
Verizon Wireless (VAW) LLC - S Florida
Verizon Wireless Personal Comm, LP(S FL)
T-Mobile License LLC
Florida Rural Broadband Alliance, LLC
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:	151125SKJTEL08

Administrative Information

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

Site Information — PORT EVERGLA, FL

Venue Name	PORT EVERGLADES ESV
Latitude (NAD 83)	26° 5' 48.1" N
Longitude (NAD 83)	80° 7' 12.0" W
Climate Zone	B
Rain Zone	1
Ground Elevation (AMSL)	0.0 m / 0.0 ft

Link Information

Satellite Type	Geostationary
Mode	TO - Transmit-Only
Modulation	Digital
Satellite Arc	20° W to 47° West Longitude
Azimuth Range	104.2° to 124.0°
Corresponding Elevation Angles	18.3° / 42.4°
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 / 6314.7 - 6344.3 1M05G7W - 3M75G7W / 6410.4 - 6420.5
Max Great Circle Coordination Distance	219.2 km / 136.2 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi

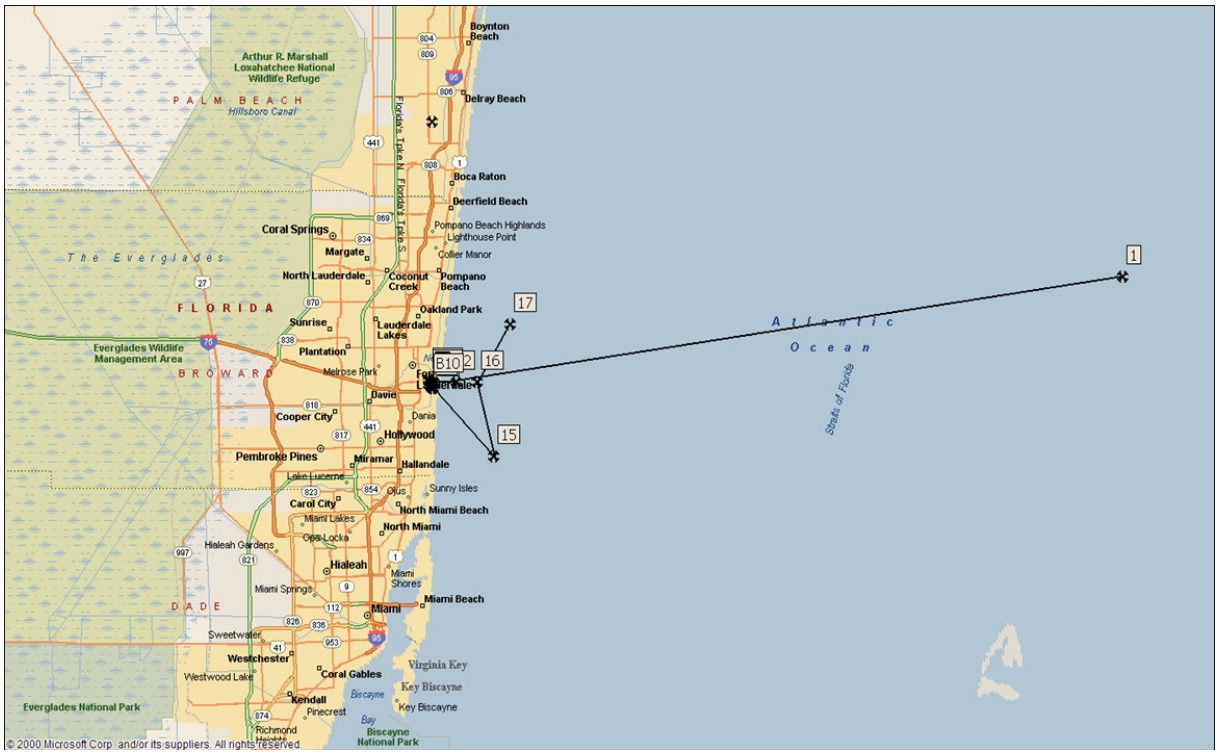
Coordination Values	**PORT EVERGLA, FL**
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	26° 5' 48.1" N
Longitude (NAD 83)	80° 7' 12.0" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna Mode	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	103.45	-10.00	162.88
5	0.00	98.72	-10.00	162.88
10	0.00	93.97	-10.00	162.88
15	0.00	89.23	-10.00	162.88
20	0.00	84.48	-10.00	162.88
25	0.00	79.74	-10.00	162.88
30	0.00	75.01	-10.00	162.88
35	0.00	70.29	-10.00	162.88
40	0.00	65.58	-10.00	162.88
45	0.00	60.90	-10.00	162.88
50	0.00	56.26	-10.00	162.88
55	0.00	51.65	-10.00	162.88
60	0.00	47.10	-9.83	163.68
65	0.00	42.63	-8.74	168.74
70	0.00	38.25	-7.57	174.44
75	0.00	34.03	-6.30	180.86
80	0.00	30.01	-4.93	188.04
85	0.00	26.29	-3.49	195.91
90	0.00	23.02	-2.05	204.48
95	0.00	20.43	-0.75	212.11
100	0.00	18.78	0.16	217.60
105	0.00	18.34	0.41	219.16
110	0.00	19.19	-0.08	216.16
115	0.00	21.18	-1.15	209.77
120	0.00	24.02	-2.52	201.82
125	0.00	27.46	-3.97	193.28
130	0.00	31.29	-5.38	185.62
135	0.00	35.36	-6.71	178.72
140	0.00	39.37	-7.88	172.90
145	0.00	43.23	-8.89	168.02
150	0.00	46.88	-9.77	163.91
155	0.00	50.26	-10.00	162.88
160	0.00	53.28	-10.00	162.88
165	0.00	56.11	-10.00	162.88
170	0.00	59.12	-10.00	162.88
175	0.00	62.29	-10.00	162.88
180	0.00	65.60	-10.00	162.88
185	0.00	69.01	-10.00	162.88

Coordination Values	**PORT EVERGLA, FL**
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	26° 5' 48.1" N
Longitude (NAD 83)	80° 7' 12.0" 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)
190	0.00	72.51	-10.00	162.88
195	0.00	76.09	-10.00	162.88
200	0.00	79.71	-10.00	162.88
205	0.00	83.37	-10.00	162.88
210	0.00	87.05	-10.00	162.88
215	0.00	90.74	-10.00	162.88
220	0.00	94.44	-10.00	162.88
225	0.00	98.11	-10.00	162.88
230	0.00	101.76	-10.00	162.88
235	0.00	105.36	-10.00	162.88
240	0.00	108.91	-10.00	162.88
245	0.00	112.37	-10.00	162.88
250	0.00	115.75	-10.00	162.88
255	0.00	119.00	-10.00	162.88
260	0.00	122.11	-10.00	162.88
265	0.00	125.05	-10.00	162.88
270	0.00	127.78	-10.00	162.88
275	0.00	130.26	-10.00	162.88
280	0.00	132.46	-10.00	162.88
285	0.00	134.32	-10.00	162.88
290	0.00	135.81	-10.00	162.88
295	0.00	136.87	-10.00	162.88
300	0.00	137.49	-10.00	162.88
305	0.00	137.63	-10.00	162.88
310	0.00	137.29	-10.00	162.88
315	0.00	136.50	-10.00	162.88
320	0.00	135.26	-10.00	162.88
325	0.00	133.61	-10.00	162.88
330	0.00	131.43	-10.00	162.88
335	0.00	126.86	-10.00	162.88
340	0.00	122.24	-10.00	162.88
345	0.00	117.58	-10.00	162.88
350	0.00	112.89	-10.00	162.88
355	0.00	108.18	-10.00	162.88

Name	Latitude	Longitude
1	26.225	-79.0883
2	26.09383	-80.0794
3	26.09367	-80.1122
4	26.09217	-80.1172
5	26.0905	-80.1152
B6	26.08933	-80.115
B7	26.08517	-80.1143
B8	26.0895	-80.1163
B9	26.08633	-80.1172
B10	26.0895	-80.1197
B11	26.09667	-80.12
B12	26.09467	-80.1208
13	26.09367	-80.1167
14	26.08667	-80.1138
15	26	-80.0233
16	26.09333	-80.0483
17	26.16667	-80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Pompano Beach Highlands
Lighthouse Point
Margate
Collier Manor
The Everglades
North Lauderdale
Coconut Creek
Pompano Beach
FLORIDA
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Sunrise
Lauderdale Lakes
Everglades Wildlife Management Area
Plantation
BROWARD
Melrose Park
Davie
Cooper City
Dania
Hollywood
Pembroke Pines
Miramar
Hallandale
Lake Lucerne
Sunny Isles
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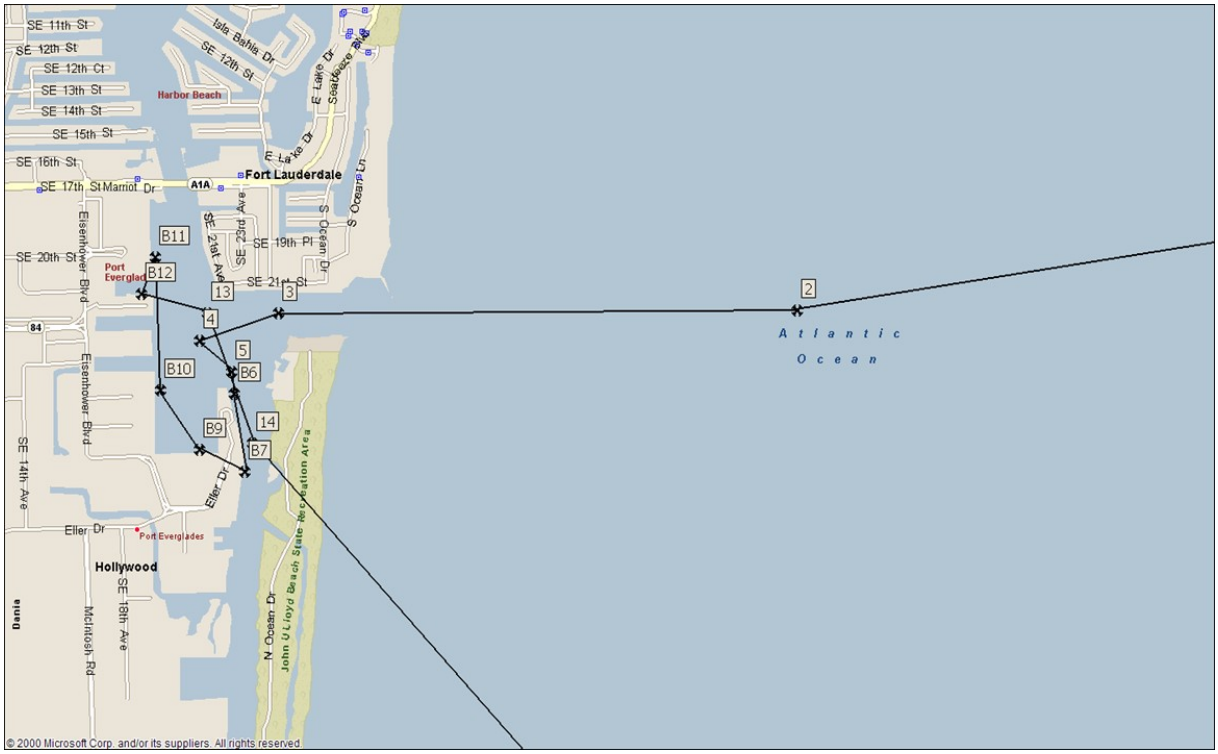
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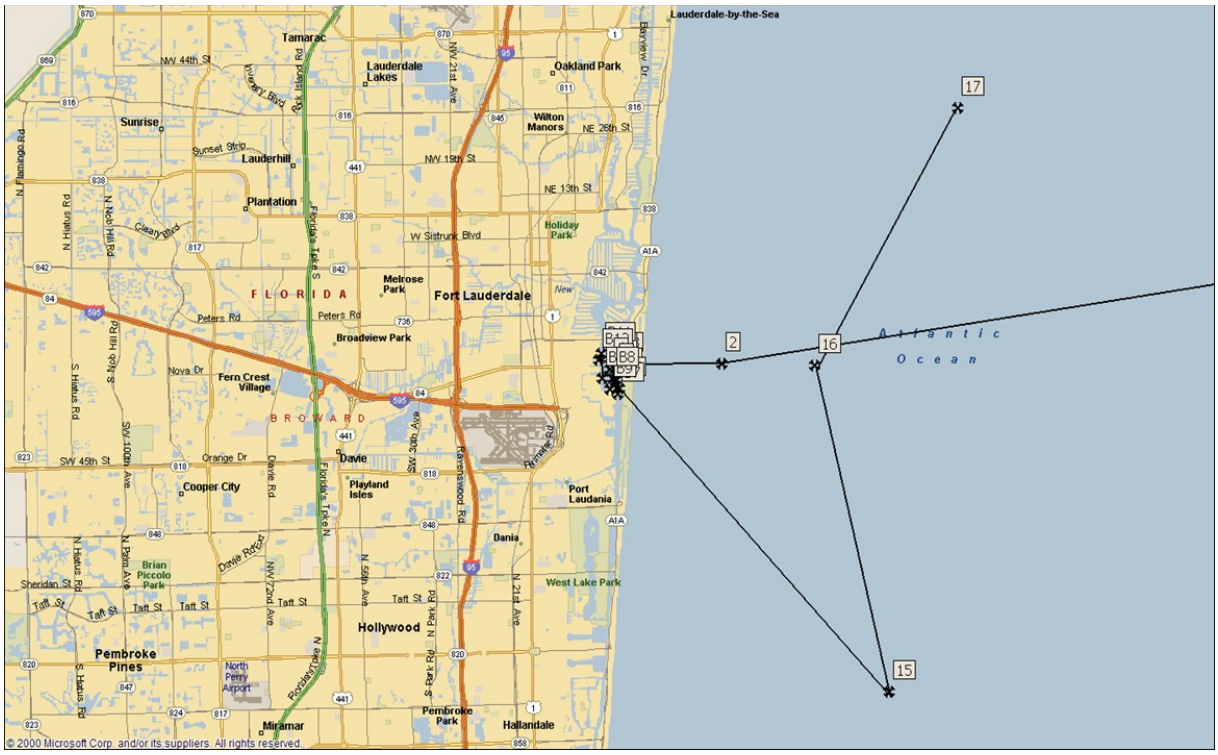
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5. CERTIFICATION

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