

NOTICE OF COMPLETION OF C-BAND ESV COORDINATION –

PORT CANAVERAL, 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 Canaveral, 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: 151124SKJTEL07
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 MHz¹

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 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; 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 Canaveral, 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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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

City of Melbourne
T-Mobile License LLC

Skjei Telecom, Inc.

Site	Cape Canaveral												
Desired Frequencies (MHz)		5950.1992 -	6094.001 -	5987 - 6020.96	6314.798 -	6401.51 -							
Into 1													
Case #	Margin(dB)												
							Frequencies Affected						
309	22.98224		Y				6078.625	0	0	0	0	0	0
Desired Frequencies (MHz)		5950.1992 -	6094.001 -	5987 - 6020.96	6314.798 -								
Into 2													
Case #	Margin(dB)						Frequencies Affected						
283	3.637757			Y			6019.325	0	0	0	0	0	0
197	0.513243				Y		6315.84	6345.49	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
309	28.28107637	80.40261817	22.9	ST CLOUD	City of Melbourne
Into 2 Case #	CCP Latitude (dec.deg)	CCP Longitude (dec.deg.)	Margin (dB)	Victim Rx Site	Licensee
283	28.41167007	80.62780741	3.6	CHRISMAS	City of Melbourne
197	28.3985052	80.5598623	0.55	A2B0435A	T-Mobile License 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 11/24/2015.

Alltel Communications LLC - S Florida
New Cingular Wireless PCS LLC - S FL
Florida High Speed Internet
Charlotte County Board of County Comm
Central Florida Educational Foundation
FL Courts 18th Judicial Circuit
Florida Mobile Telecom, Inc.
Florida RSA No. 2B (Indian River) LP
Florida Rural Broadband Alliance, LLC
Harris Corporation - Orlando, FL
Lake, County of
Mosaic Fertilizer LLC
North Florida Broadband Authority
New Cingular Wireless PCS LLC - N FL
T-Mobile License LLC
Embarq Florida, Inc.
Pasco, County of
Peace River Electric Cooperative Inc.
Polk, County of
Rapid Systems, Inc
Duke Energy Business Services, LLC.
Jacksonville, City of
PALM BEACH, COUNTY OF
Tampa Electric Company
Florida Power and Light Company
Hernando County Board of Co Commissioner
Hillsborough County Sheriffs Office
Pinellas, County of
Seminole County Government, BOCC
South Florida Water Management District
Sumter Electric Cooperative, Inc.
Osceola County Intergovernmental Comm
Palm Beach, County Facilities Dev & Ops

St. Johns County of
Saint Lucie, County of
City of Melbourne
Verizon Wireless (VAW) LLC - S Florida
Sumter County Board of County Commission
Sun Broadcasting, Inc.
Daystar Communications
Verizon Wireless (VAW) LLC - S Florida
Villages Public Safety

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: 151124SKJTEL07

Administrative Information

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

Site Information

PORT CANAVER, FL
Venue Name PORT CANAVERAL ESV
Latitude (NAD 83) 28° 24' 41.8" N
Longitude (NAD 83) 80° 37' 39.7" 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 105.0° to 125.6°
Corresponding Elevation Angles 17.3° / 40.5°
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 223.0 km / 138.6 mi
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi



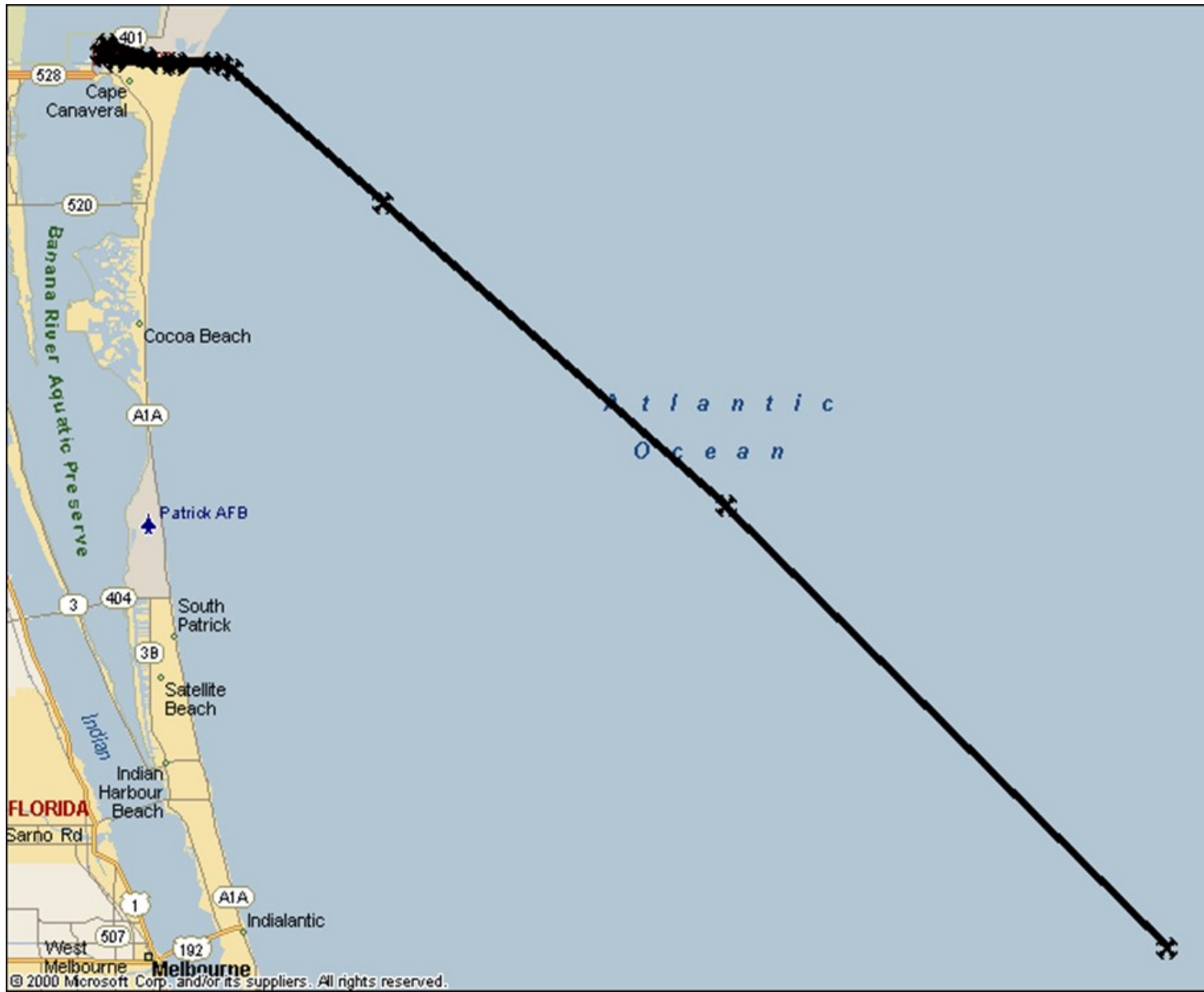
Coordination Values	PORT CANAVER, FL
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	28° 24' 41.8" N
Longitude (NAD 83)	80° 37' 39.7" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna Mode	Transmit 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	101.99	-10.00	162.88
5	0.00	97.22	-10.00	162.88
10	0.00	92.45	-10.00	162.88
15	0.00	87.67	-10.00	162.88
20	0.00	82.89	-10.00	162.88
25	0.00	78.12	-10.00	162.88
30	0.00	73.36	-10.00	162.88
35	0.00	68.61	-10.00	162.88
40	0.00	63.87	-10.00	162.88
45	0.00	59.16	-10.00	162.88
50	0.00	54.48	-10.00	162.88
55	0.00	49.84	-10.00	162.88
60	0.00	45.26	-9.39	165.68
65	0.00	40.75	-8.25	171.08
70	0.00	36.35	-7.01	177.21
75	0.00	32.09	-5.66	184.16
80	0.00	28.06	-4.20	191.99
85	0.00	24.35	-2.66	201.00
90	0.00	21.14	-1.13	209.91
95	0.00	18.69	0.21	217.93
100	0.00	17.32	1.03	222.97
105	0.00	17.31	1.05	223.04
110	0.00	18.64	0.24	218.09
115	0.00	21.07	-1.09	210.12
120	0.00	24.26	-2.62	201.21
125	0.00	27.97	-4.17	192.19
130	0.00	32.00	-5.63	184.33
135	0.00	36.20	-6.97	177.44
140	0.00	40.31	-8.13	171.66
145	0.00	44.27	-9.15	166.80
150	0.00	48.03	-10.00	162.88
155	0.00	51.54	-10.00	162.88
160	0.00	54.70	-10.00	162.88
165	0.00	57.68	-10.00	162.88
170	0.00	60.83	-10.00	162.88
175	0.00	64.12	-10.00	162.88
180	0.00	67.53	-10.00	162.88
185	0.00	71.03	-10.00	162.88

Coordination Values	PORT CANAVER, FL
Licensee Name	MTN License Corp. - ESV In-Motion Route
Latitude (NAD 83)	28° 24' 41.8" N
Longitude (NAD 83)	80° 37' 39.7" 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	74.61	-10.00	162.88
195	0.00	78.25	-10.00	162.88
200	0.00	81.92	-10.00	162.88
205	0.00	85.63	-10.00	162.88
210	0.00	89.35	-10.00	162.88
215	0.00	93.08	-10.00	162.88
220	0.00	96.79	-10.00	162.88
225	0.00	100.48	-10.00	162.88
230	0.00	104.13	-10.00	162.88
235	0.00	107.73	-10.00	162.88
240	0.00	111.26	-10.00	162.88
245	0.00	114.71	-10.00	162.88
250	0.00	118.04	-10.00	162.88
255	0.00	121.24	-10.00	162.88
260	0.00	124.29	-10.00	162.88
265	0.00	127.13	-10.00	162.88
270	0.00	129.75	-10.00	162.88
275	0.00	132.09	-10.00	162.88
280	0.00	134.11	-10.00	162.88
285	0.00	135.77	-10.00	162.88
290	0.00	137.02	-10.00	162.88
295	0.00	137.82	-10.00	162.88
300	0.00	138.15	-10.00	162.88
305	0.00	137.99	-10.00	162.88
310	0.00	137.35	-10.00	162.88
315	0.00	136.25	-10.00	162.88
320	0.00	134.73	-10.00	162.88
325	0.00	132.83	-10.00	162.88
330	0.00	130.26	-10.00	162.88
335	0.00	125.63	-10.00	162.88
340	0.00	120.95	-10.00	162.88
345	0.00	116.24	-10.00	162.88
350	0.00	111.51	-10.00	162.88
355	0.00	106.76	-10.00	162.88

Name	Latitude	Longitude
11	28.412	-80.6267
12	28.4135	-80.6287
13	28.41633	-80.6255
B10	28.41467	-80.6245
9	28.4125	-80.6245
8	28.41033	-80.6222
7	28.4095	-80.6027
14	28.41167	-80.6085
15	28.40883	-80.5958
16	28.4095	-80.5945
6	28.40967	-80.5793
5	28.40883	-80.5753
4	28.407	-80.5713
3	28.35833	-80.5058
2	28.24667	-80.3567
1	28.08333	-80.1667



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