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October 17, 2016

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

**Re: Telenor Maritime, Inc. – Section 1.65 Submission, Call Sign E160157
File Nos. SES-LIC-20160927-00811 and SES-STA-20160927-00812**

Dear Ms. Dortch:

Telenor Maritime, Inc. (“Telenor Maritime”), pursuant to Section 1.65 of the Commission’s Rules, 47 C.F.R. § 1.65, and in connection with the above-referenced earth station onboard vessel (“ESV”) blanket license application and associated special temporary authorization (“STA”) request, is writing to update certain information regarding its C-band port area coordination notices.

In support of its proposed C-band ESV operations at certain inland port locations in the northeast United States, Telenor Maritime provided the Commission with the port area coordination notices that were sent to existing terrestrial licensees within relevant coordination distances and confirmed that no objections were received from incumbent licensees. Telenor Maritime now updates the record of these proceedings with the attached final coordination notices, which specifically identifies the FCC licensees at each port location that received notice of Telenor Maritime’s proposed C-band ESV operations.

Accordingly, Telenor Maritime requests that the Commission associate the final coordination notices with the above-referenced application file numbers.

Please do not hesitate to contact me with any questions regarding this matter.

Respectfully submitted,

Carlos M. Nalda
Principal
LMI Advisors

Attachments

cc (w/ att.): Paul Blais

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Telenor Maritime, Inc.
BAR HARBOR, ME
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
October 13, 2016

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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. Further, there will be no restrictions of its operation 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. 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.

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.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 09/23/2016.

Company

Bangor Cellular Telephone, L.P.
Federal Communication Commission
Island Telephone Company
Maine RSA #1 Inc.
Maine RSA #4 Limited Partnership
Maine, State of - MSCommNet Project
New Cingular Wireless PCS LLC-Maine
Northern New England Telephone Ops LLC
Union River Telephone Company

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: 10/13/2016
Job Number: 160923COMSGE01

Administrative Information

Status: TEMPORARY (Operation from 09/30/2016 to 03/30/2017)
Call Sign:
Licensee Code: TEMARI
Licensee Name: Telenor Maritime, Inc.

Site Information

BAR HARBOR, ME
Venue Name:
Latitude (NAD 83): 44° 23' 30.1" N
Longitude (NAD 83): 68° 12' 11.5" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 0.81 m / 2.7 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 22° W to 22° West Longitude
Azimuth Range: 123.9° to 123.9°
Corresponding Elevation Angles: 21.6° / 21.6°
Antenna Centerline (AGL): 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32
Manufacturer: SeaTel
Model: 9711
Gain / Diameter: 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.32° / 2.60°

Max Available RF Power: (dBW/4 kHz) -17.5
(dBW/MHz) 6.5
Maximum EIRP: (dBW/4 kHz) 24.2
(dBW/MHz) 48.2
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): 9M00G7W / 6332.6 - 6332.6

Max Great Circle Coordination Distance: 168.2 km / 104.5 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

BAR HARBOR, ME

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 44° 23' 30.1" N
Longitude (NAD 83) 68° 12' 11.5" W
Ground Elevation (AMSL) 0.81 m / 2.7 ft
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Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	1.27	121.50	-10.00	100.00
5	0.00	116.67	-10.00	133.25
10	0.00	112.10	-10.00	133.25
15	0.00	107.49	-10.00	133.25
20	0.00	102.87	-10.00	133.25
25	0.00	98.23	-10.00	133.25
30	0.00	93.59	-10.00	133.25
35	0.26	88.93	-10.00	127.06
40	0.78	84.26	-10.00	100.00
45	0.00	79.64	-10.00	133.25
50	0.00	75.01	-10.00	133.25
55	0.38	70.34	-10.00	116.22
60	0.00	65.81	-10.00	133.25
65	0.35	61.17	-10.00	118.50
70	0.51	56.60	-10.00	107.97
75	0.31	52.18	-10.00	122.16
80	0.00	47.88	-10.00	133.25
85	0.00	43.59	-8.99	136.78
90	0.26	39.31	-7.86	134.43
95	0.26	35.31	-6.70	138.55
100	0.00	31.72	-5.53	149.79
105	0.92	27.67	-4.05	103.56
110	0.85	24.75	-2.84	109.97
115	0.00	23.22	-2.15	164.50
120	0.00	21.88	-1.50	167.51
125	0.00	21.58	-1.35	168.21
130	0.00	22.37	-1.74	166.37
135	0.00	24.14	-2.57	162.56
140	0.00	26.70	-3.66	157.69
145	0.00	29.84	-4.87	152.54
150	0.27	33.23	-6.04	139.65
155	0.91	36.78	-7.14	100.00
160	1.21	40.79	-8.26	100.00
165	1.81	44.86	-9.30	100.00
170	3.52	48.79	-10.00	100.00
175	2.42	53.65	-10.00	100.00
180	1.45	58.46	-10.00	100.00
185	1.82	62.98	-10.00	100.00

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

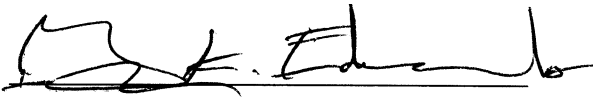
BAR HARBOR, ME

Licensee Name Telenor Maritime, Inc.
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Longitude (NAD 83) 68° 12' 11.5" W
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Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	4.08	67.31	-10.00	100.00
195	5.00	71.95	-10.00	100.00
200	5.34	76.71	-10.00	100.00
205	5.32	81.50	-10.00	100.00
210	4.74	86.31	-10.00	100.00
215	4.30	91.09	-10.00	100.00
220	3.77	95.85	-10.00	100.00
225	3.43	100.59	-10.00	100.00
230	3.35	105.32	-10.00	100.00
235	2.58	109.94	-10.00	100.00
240	1.93	114.52	-10.00	100.00
245	1.95	119.16	-10.00	100.00
250	2.76	123.94	-10.00	100.00
255	3.49	128.72	-10.00	100.00
260	3.24	133.20	-10.00	100.00
265	2.67	137.46	-10.00	100.00
270	2.10	141.54	-10.00	100.00
275	1.85	145.54	-10.00	100.00
280	1.31	149.10	-10.00	100.00
285	1.20	152.53	-10.00	100.00
290	0.93	155.32	-10.00	100.00
295	1.10	157.79	-10.00	100.00
300	0.81	158.92	-10.00	100.00
305	0.23	158.64	-10.00	130.32
310	0.38	157.99	-10.00	116.36
315	0.36	156.18	-10.00	117.37
320	0.21	153.47	-10.00	131.85
325	0.00	150.16	-10.00	133.25
330	0.38	146.83	-10.00	115.84
335	0.38	142.95	-10.00	116.22
340	0.35	138.84	-10.00	118.67
345	0.50	134.65	-10.00	108.33
350	1.19	130.51	-10.00	100.00
355	2.22	126.30	-10.00	100.00

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: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: October 13, 2016

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Telenor Maritime, Inc.
BOSTON, MA
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
October 14, 2016

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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. Further, there will be no restrictions of its operation 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. 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.

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.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 09/23/2016.

Company

ALGONQUIN GAS TRANSMISSION, LLC
BAE Systems Information & Electronic Sys
Catholic Media, Inc
Cellco Partnership - E-MA, NH, RI
Central Maine Power Company
Connecticut State Police Department
Eversource Energy Service Company
Federal Communication Commission
First Light Power Resources, LLC
Florida Power and Light Company
Greater Boston Police Council
ISO New England, Inc.
Industrial Tower and Wireless, LLC
Maine, State of - MSCommNet Project
Massachusetts Commonwealth of
Massachusetts, Commonwealth of
NH #1 Rural Cellular, Inc.
NSTAR Electric Company
National Grid USA Service Company, Inc
New Cingular Wireless PCS LLC - MA
New Hampshire Dept of Transportation
New Hampshire Dept. of Safety
New Hampshire Electric Cooperative
SAGA COMMUNICATIONS OF NEW ENGLAND, LLC
SCS Networks
State of Rhode Island
University System of New Hampshire
Verizon New England Inc.
Vermont RSA #2-B2, Inc.
WHDH-TV

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: 10/14/2016
Job Number: 160923COMSGE04

Administrative Information

Status: TEMPORARY (Operation from 09/30/2016 to 03/30/2017)
Call Sign:
Licensee Code: TEMARI
Licensee Name: Telenor Maritime, Inc.

Site Information

BOSTON, MA
Venue Name:
Latitude (NAD 83): 42° 20' 35.9" N
Longitude (NAD 83): 71° 2' 1.3" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 0.0 m / 0.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 22° W to 22° West Longitude
Azimuth Range: 120.3° to 120.3°
Corresponding Elevation Angles: 20.9° / 20.9°
Antenna Centerline (AGL): 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32
Manufacturer: SeaTel
Model: 9711
Gain / Diameter: 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.32° / 2.60°

Max Available RF Power: (dBW/4 kHz) -17.5
(dBW/MHz) 6.5
Maximum EIRP: (dBW/4 kHz) 24.2
(dBW/MHz) 48.2
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): 9M00G7W / 6332.6 - 6332.6

Max Great Circle Coordination Distance: 170.0 km / 105.6 mi
Precipitation Scatter Contour Radius: 100.0 km / 62.1 mi

COMSEARCH

Earth Station Data Sheet

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Coordination Values

BOSTON, MA

Licensee Name Telenor Maritime, Inc.
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Interference Objectives: Long Term -154.0 dBW/4 kHz 20%
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Max Available RF Power -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	118.15	-10.00	133.25
5	0.24	113.60	-10.00	129.17
10	0.00	108.94	-10.00	133.25
15	0.00	104.30	-10.00	133.25
20	0.23	99.65	-10.00	130.13
25	0.24	94.98	-10.00	128.71
30	0.00	90.30	-10.00	133.25
35	0.00	85.63	-10.00	133.25
40	0.00	80.96	-10.00	133.25
45	0.00	76.30	-10.00	133.25
50	0.00	71.66	-10.00	133.25
55	0.00	67.04	-10.00	133.25
60	0.00	62.44	-10.00	133.25
65	0.00	57.88	-10.00	133.25
70	0.00	53.37	-10.00	133.25
75	0.00	48.93	-10.00	133.25
80	0.00	44.57	-9.23	135.93
85	0.00	40.32	-8.14	139.83
90	0.00	36.23	-6.98	144.20
95	0.00	32.36	-5.75	148.91
100	0.00	28.80	-4.49	154.15
105	0.00	25.68	-3.24	159.55
110	0.00	23.17	-2.12	164.60
115	0.00	21.50	-1.31	168.41
120	0.00	20.86	-0.98	169.97
125	0.00	21.36	-1.24	168.76
130	0.00	22.91	-2.00	165.19
135	0.00	25.32	-3.09	160.24
140	0.00	28.37	-4.32	154.84
145	0.00	31.89	-5.59	149.57
150	0.00	35.72	-6.82	144.80
155	0.00	39.78	-7.99	140.37
160	0.00	44.01	-9.09	136.41
165	0.00	48.36	-10.00	133.25
170	0.00	52.79	-10.00	133.25
175	0.26	57.23	-10.00	127.34
180	0.23	61.80	-10.00	129.91
185	0.00	66.44	-10.00	133.25

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

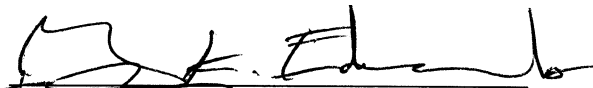
BOSTON, MA

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Interference Objectives: Long Term -154.0 dBW/4 kHz 20%
Short Term -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	71.06	-10.00	133.25
195	0.00	75.70	-10.00	133.25
200	0.23	80.35	-10.00	129.61
205	0.00	85.03	-10.00	133.25
210	0.27	89.70	-10.00	126.35
215	0.47	94.38	-10.00	111.06
220	0.97	99.09	-10.00	100.00
225	0.62	103.75	-10.00	102.38
230	0.35	108.38	-10.00	118.77
235	0.38	113.02	-10.00	116.41
240	0.27	117.61	-10.00	125.87
245	0.00	122.12	-10.00	133.25
250	0.20	126.68	-10.00	133.06
255	0.46	131.23	-10.00	111.26
260	0.00	135.43	-10.00	133.25
265	0.00	139.68	-10.00	133.25
270	0.00	143.77	-10.00	133.25
275	0.00	147.64	-10.00	133.25
280	0.00	151.20	-10.00	133.25
285	0.00	154.32	-10.00	133.25
290	0.00	156.83	-10.00	133.25
295	0.00	158.50	-10.00	133.25
300	0.00	159.14	-10.00	133.25
305	0.22	158.85	-10.00	131.51
310	0.00	157.09	-10.00	133.25
315	0.00	154.68	-10.00	133.25
320	0.00	151.63	-10.00	133.25
325	0.00	148.11	-10.00	133.25
330	0.00	144.28	-10.00	133.25
335	0.00	140.22	-10.00	133.25
340	0.00	135.99	-10.00	133.25
345	0.00	131.64	-10.00	133.25
350	0.00	127.21	-10.00	133.25
355	0.00	122.70	-10.00	133.25

5. CERTIFICATION

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Prepared for
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CAPE COD CANAL, MA
Satellite Earth Station

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Coordination data for this earth station was sent to the below listed carriers with a letter dated 09/23/2016.

Company

ALGONQUIN GAS TRANSMISSION, LLC
BAE Systems Information & Electronic Sys
Catholic Media, Inc
Cellco Partnership - E-MA, NH, RI
Connecticut State Police Department
Eversource Energy Service Company
Federal Communication Commission
Florida Power and Light Company
Greater Boston Police Council
Higher Ground LLC
Industrial Tower and Wireless, LLC
Massachusetts Commonwealth of
Massachusetts, Commonwealth of
NH #1 Rural Cellular, Inc.
NSTAR Electric Company
National Grid USA Service Company, Inc
New Cingular Wireless PCS LLC - CT
New Cingular Wireless PCS LLC - MA
New Cingular Wireless PCS, LLC (NY)
SCS Networks
State of Rhode Island
Verizon New England Inc.
WHDH-TV

4. EARTH STATION COORDINATION DATA

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Date: 10/13/2016
Job Number: 160923COMSGE03

Administrative Information

Status: TEMPORARY (Operation from 09/30/2016 to 03/30/2017)
Call Sign:
Licensee Code: TEMARI
Licensee Name: Telenor Maritime, Inc.

Site Information

CAPE COD CAN, MA

Venue Name:
Latitude (NAD 83): 41° 44' 16.5" N
Longitude (NAD 83): 70° 37' 32.8" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 0.0 m / 0.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 22° W to 22° West Longitude
Azimuth Range: 120.4° to 120.4°
Corresponding Elevation Angles: 21.5° / 21.5°
Antenna Centerline (AGL): 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32

Manufacturer: SeaTel
Model: 9711
Gain / Diameter: 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.32° / 2.60°

Max Available RF Power: (dBW/4 kHz) -17.5
(dBW/MHz) 6.5
Maximum EIRP: (dBW/4 kHz) 24.2
(dBW/MHz) 48.2
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): 9M00G7W / 6332.6 - 6332.6

Max Great Circle Coordination Distance: 146.8 km / 91.2 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

CAPE COD CAN, MA

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 41° 44' 16.5" N
Longitude (NAD 83) 70° 37' 32.8" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	118.09	-10.00	133.25
5	0.00	113.52	-10.00	133.25
10	0.00	108.92	-10.00	133.25
15	0.00	104.30	-10.00	133.25
20	0.00	99.66	-10.00	133.25
25	0.00	95.01	-10.00	133.25
30	0.00	90.36	-10.00	133.25
35	0.00	85.71	-10.00	133.25
40	0.00	81.06	-10.00	133.25
45	0.00	76.42	-10.00	133.25
50	0.41	71.75	-10.00	115.11
55	0.33	67.14	-10.00	120.66
60	0.31	62.56	-10.00	121.78
65	0.40	57.99	-10.00	116.70
70	0.45	53.47	-10.00	112.17
75	0.49	49.02	-10.00	108.77
80	0.46	44.68	-9.25	113.74
85	0.48	40.43	-8.17	114.65
90	0.58	36.30	-7.00	112.28
95	0.62	32.40	-5.76	113.27
100	0.55	28.88	-4.52	118.15
105	0.45	25.84	-3.31	129.59
110	0.58	23.22	-2.15	123.38
115	0.60	21.52	-1.32	124.76
120	0.61	20.85	-0.98	124.99
125	0.66	21.28	-1.20	121.60
130	0.56	22.91	-2.00	124.58
135	0.30	25.52	-3.17	146.79
140	0.35	28.51	-4.37	136.45
145	0.33	32.00	-5.63	134.01
150	0.32	35.82	-6.85	131.34
155	0.23	39.90	-8.02	136.91
160	0.23	44.10	-9.11	133.07
165	0.00	48.51	-10.00	133.25
170	0.00	52.91	-10.00	133.25
175	0.00	57.39	-10.00	133.25
180	0.00	61.91	-10.00	133.25
185	0.00	66.48	-10.00	133.25

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

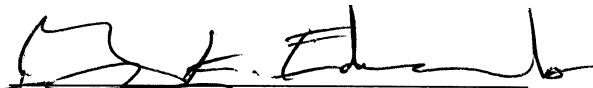
CAPE COD CAN, MA

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 41° 44' 16.5" N
Longitude (NAD 83) 70° 37' 32.8" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	71.08	-10.00	133.25
195	0.00	75.70	-10.00	133.25
200	0.00	80.34	-10.00	133.25
205	0.00	84.99	-10.00	133.25
210	0.00	89.64	-10.00	133.25
215	0.00	94.29	-10.00	133.25
220	0.00	98.94	-10.00	133.25
225	0.00	103.58	-10.00	133.25
230	0.00	108.20	-10.00	133.25
235	0.00	112.80	-10.00	133.25
240	0.00	117.38	-10.00	133.25
245	0.00	121.91	-10.00	133.25
250	0.00	126.40	-10.00	133.25
255	0.00	130.81	-10.00	133.25
260	0.00	135.14	-10.00	133.25
265	0.00	139.35	-10.00	133.25
270	0.00	143.40	-10.00	133.25
275	0.00	147.22	-10.00	133.25
280	0.00	150.73	-10.00	133.25
285	0.00	153.81	-10.00	133.25
290	0.00	156.26	-10.00	133.25
295	0.00	157.90	-10.00	133.25
300	0.00	158.54	-10.00	133.25
305	0.00	158.07	-10.00	133.25
310	0.00	156.58	-10.00	133.25
315	0.00	154.23	-10.00	133.25
320	0.22	151.40	-10.00	131.52
325	0.00	147.79	-10.00	133.25
330	0.00	144.01	-10.00	133.25
335	0.00	139.99	-10.00	133.25
340	0.00	135.81	-10.00	133.25
345	0.00	131.49	-10.00	133.25
350	0.00	127.09	-10.00	133.25
355	0.00	122.61	-10.00	133.25

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: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: October 13, 2016

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Telenor Maritime, Inc.
CAPE LIBERTY, NJ
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
October 14, 2016

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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. Further, there will be no restrictions of its operation 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. 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.

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.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 09/23/2016.

Company

AB Services LLC
ALGONQUIN GAS TRANSMISSION, LLC
AT&T Corp.
AWC Networks
Auburn Data Systems, LLC
BFI Licenses, LLC
Berks County Department of Emergency Ser
Blueline Communications
Bucks County Dept. of Emergency Comm
CONSOLIDATED EDISON COMPANY OF NEW YORK
CTAB Holdings LLC
Capital Communications of America
Cellco Partnership - (W-NY)
Cellco Prtnrshp - Phil. Tri-State Rgn
Central Hudson Gas & Electric Corp.
China Cat Productions LLC
City of New York
Commonwealth of Pennsylvania-Radio Proj.
Connecticut State Police Department
Coralinks
County of Burlington, Public Safety Cntr
County of Camden
County of Pike
County of Warren, NJ
Cox Radio Inc
Delaware County (PA) Emergency Services
Direct Broadcast Services, Inc.
ECW Wireless, LLC
Eastern MLG LLC
Eastern Pennsylvania EMS Council
Electric Railroad, LLC
Essex County Sheriff's Office (NJ)
Eversource Energy Service Company
Exelon Generation Company, LLC
FELHC, INC
Federal Communication Commission
Garden State Transmissions
Gloucester, County of
Goosetown Network Services, LLC
Hammarlund Research LLC

High Voltage Communications LLC (CFN)
Higher Ground LLC
Highway Networks, LLC
Jefferson Microwave, LLC
Kryptick Technologies
MONMOUTH, COUNTY OF
Mahwah Communications
Middlesex, County of
Mifflin Mobilecom
Monroe County Control Center (PA)
Montgomery County Of
Morris, County of
NEW YORK CITY POLICE DEPARTMENT
Nassau County Police Department
National Tower Company LLC
NeXXCom Wireless LLC
New Cingular Wireless PCS LLC - NJ
New Cingular Wireless PCS, LLC - PA
New Jersey State Police
New Jersey Transit Rail Operations, Inc.
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
New Line Networks, LLC
New York Communications Co., Inc
Office of Emergency Telecom Services, NJ
Orange County Dept of Emergency Services
Orange Poughkeepsie SMSA LTD Partnership
Orange and Rockland Utilities, Inc.
PEG Bandwidth, LLC
PSEG Services Corporation
Peco Energy Company
Pennsylvania Turnpike Commission
Perseus Technology Holdings USA Inc.
Pitt Power
Port Authority of New York & New Jersey
Qoncept Holdings LLC
Rendezvous Communications LLC
SCS Networks
SW Networks
Suffolk County Police Department
Sullivan County DPW
Texas Eastern Communications, LLC
Transcontinental Gas Pipeline Corp.
Turtle Networks 6559
ULSTER COUNTY OF
Verizon Wireless (VAW) LLC-Pennsylvania
WESTCHESTER, COUNTY OF
Weblin Holdings LLC
Wireless Internetwork LLC
World Class Wireless, LLC
iSignal
xWave Engineering 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.

COMSEARCH

Earth Station Data Sheet

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

Date: 10/14/2016
Job Number: 160923COMSGE05

Administrative Information

Status: TEMPORARY (Operation from 09/30/2016 to 03/30/2017)
Call Sign:
Licensee Code: TEMARI
Licensee Name: Telenor Maritime, Inc.

Site Information

CAPE LIBERTY, NJ
Venue Name:
Latitude (NAD 83): 40° 40' 1.0" N
Longitude (NAD 83): 74° 4' 30.5" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 0.0 m / 0.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 22° W to 22° West Longitude
Azimuth Range: 116.9° to 116.9°
Corresponding Elevation Angles: 19.6° / 19.6°
Antenna Centerline (AGL): 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32
Manufacturer: SeaTel
Model: 9711
Gain / Diameter: 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.32° / 2.60°

Max Available RF Power (dBW/4 kHz): -17.5
(dBW/MHz): 6.5
Maximum EIRP (dBW/4 kHz): 24.2
(dBW/MHz): 48.2
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): 9M00G7W / 6332.6 - 6332.6

Max Great Circle Coordination Distance: 172.6 km / 107.3 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

CAPE LIBERTY, NJ

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 40° 40' 1.0" N
Longitude (NAD 83) 74° 4' 30.5" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	115.25	-10.00	133.25
5	0.00	110.59	-10.00	133.25
10	0.00	105.91	-10.00	133.25
15	0.00	101.22	-10.00	133.25
20	0.00	96.52	-10.00	133.25
25	0.00	91.81	-10.00	133.25
30	0.00	87.10	-10.00	133.25
35	0.00	82.39	-10.00	133.25
40	0.00	77.69	-10.00	133.25
45	0.00	73.00	-10.00	133.25
50	0.00	68.33	-10.00	133.25
55	0.00	63.68	-10.00	133.25
60	0.00	59.06	-10.00	133.25
65	0.00	54.48	-10.00	133.25
70	0.00	49.95	-10.00	133.25
75	0.00	45.50	-9.45	135.14
80	0.00	41.14	-8.36	139.04
85	0.00	36.91	-7.18	143.43
90	0.00	32.86	-5.92	148.24
95	0.22	28.94	-4.54	150.93
100	0.28	25.46	-3.15	148.94
105	0.00	22.82	-1.96	165.38
110	0.31	20.45	-0.77	155.30
115	0.24	19.45	-0.22	167.94
120	0.00	19.83	-0.43	172.65
125	0.00	21.14	-1.13	169.29
130	0.00	23.42	-2.24	164.08
135	0.00	26.42	-3.55	158.19
140	0.00	29.92	-4.90	152.40
145	0.00	33.78	-6.22	147.18
150	0.00	37.87	-7.46	142.37
155	0.00	42.13	-8.62	138.10
160	0.00	46.52	-9.69	134.31
165	0.00	50.99	-10.00	133.25
170	0.00	55.53	-10.00	133.25
175	0.00	60.12	-10.00	133.25
180	0.21	64.72	-10.00	131.69
185	0.34	69.36	-10.00	119.54

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

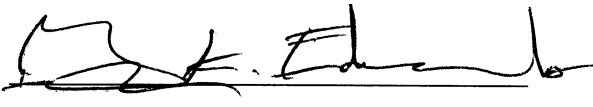
CAPE LIBERTY, NJ

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 40° 40' 1.0" N
Longitude (NAD 83) 74° 4' 30.5" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.73	74.01	-10.00	100.00
195	1.10	78.70	-10.00	100.00
200	0.95	83.44	-10.00	100.00
205	0.73	88.18	-10.00	100.00
210	0.52	92.91	-10.00	107.15
215	0.35	97.62	-10.00	118.55
220	0.00	102.31	-10.00	133.25
225	0.00	107.00	-10.00	133.25
230	0.00	111.67	-10.00	133.25
235	0.00	116.32	-10.00	133.25
240	0.00	120.94	-10.00	133.25
245	0.00	125.52	-10.00	133.25
250	0.00	130.05	-10.00	133.25
255	0.00	134.50	-10.00	133.25
260	0.00	138.86	-10.00	133.25
265	0.00	143.09	-10.00	133.25
270	0.00	147.14	-10.00	133.25
275	0.00	150.92	-10.00	133.25
280	0.00	154.33	-10.00	133.25
285	0.00	157.18	-10.00	133.25
290	0.00	159.26	-10.00	133.25
295	0.00	160.31	-10.00	133.25
300	0.00	160.17	-10.00	133.25
305	0.00	158.86	-10.00	133.25
310	0.00	156.58	-10.00	133.25
315	0.00	153.58	-10.00	133.25
320	0.00	150.08	-10.00	133.25
325	0.00	146.22	-10.00	133.25
330	0.00	142.13	-10.00	133.25
335	0.00	137.87	-10.00	133.25
340	0.00	133.48	-10.00	133.25
345	0.00	129.01	-10.00	133.25
350	0.00	124.47	-10.00	133.25
355	0.00	119.88	-10.00	133.25

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: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: October 14, 2016

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Telenor Maritime, Inc.
NEWPORT, RI
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
October 13, 2016

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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

A number of great circle interference cases were identified during the interference study of the proposed earth station. 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.

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.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 09/23/2016.

Company

ALGONQUIN GAS TRANSMISSION, LLC
AT&T Corp.
Catholic Media, Inc
Cellco Partnership - E-MA, NH, RI
Connecticut State Police Department
Eversource Energy Service Company
Federal Communication Commission
Greater Boston Police Council
Higher Ground LLC
ISO New England, Inc.
Industrial Tower and Wireless, LLC
Massachusetts Commonwealth of
Massachusetts, Commonwealth of
NSTAR Electric Company
National Grid USA Service Company, Inc
New Cingular Wireless PCS LLC - CT
New Cingular Wireless PCS LLC - MA
New Cingular Wireless PCS, LLC (NY)
SCS Networks
State of Rhode Island
Verizon New England Inc.
WHDH-TV

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: 10/13/2016
Job Number: 160923COMSGE02

Administrative Information

Status: TEMPORARY (Operation from 09/30/2016 to 03/30/2017)
Call Sign:
Licensee Code: TEMARI
Licensee Name: Telenor Maritime, Inc.

Site Information

NEWPORT, RI
Venue Name:
Latitude (NAD 83): 41° 29' 14.7" N
Longitude (NAD 83): 71° 19' 9.6" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 0.0 m / 0.0 ft

Link Information

Satellite Type: Geostationary
Mode: TO - Transmit-Only
Modulation: Digital
Satellite Arc: 22° W to 22° West Longitude
Azimuth Range: 119.7° to 119.7°
Corresponding Elevation Angles: 21.1° / 21.1°
Antenna Centerline (AGL): 15.54 m / 51.0 ft

Antenna Information

Transmit - FCC32
Manufacturer: SeaTel
Model: 9711
Gain / Diameter: 41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth: 1.32° / 2.60°

Max Available RF Power: (dBW/4 kHz) -17.5
(dBW/MHz) 6.5
Maximum EIRP: (dBW/4 kHz) 24.2
(dBW/MHz) 48.2
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): 9M00G7W / 6332.6 - 6332.6

Max Great Circle Coordination Distance: 154.0 km / 95.7 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

NEWPORT, RI

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 41° 29' 14.7" N
Longitude (NAD 83) 71° 19' 9.6" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	117.49	-10.00	133.25
5	0.00	112.91	-10.00	133.25
10	0.36	108.34	-10.00	117.33
15	0.55	103.71	-10.00	105.74
20	0.50	99.04	-10.00	108.08
25	0.51	94.36	-10.00	107.90
30	0.58	89.68	-10.00	104.19
35	0.65	85.00	-10.00	101.09
40	0.64	80.32	-10.00	101.35
45	0.57	75.66	-10.00	104.75
50	0.59	71.00	-10.00	103.71
55	0.61	66.37	-10.00	103.08
60	0.55	61.78	-10.00	105.89
65	0.46	57.23	-10.00	111.19
70	0.47	52.72	-10.00	110.75
75	0.60	48.23	-10.00	103.17
80	0.67	43.83	-9.05	102.38
85	0.79	39.53	-7.92	100.00
90	0.90	35.37	-6.72	100.00
95	0.83	31.53	-5.47	104.09
100	0.69	28.06	-4.20	114.02
105	0.62	25.02	-2.96	118.68
110	0.59	22.60	-1.85	123.33
115	0.59	21.03	-1.07	125.87
120	0.55	20.57	-0.83	128.84
125	0.37	21.40	-1.26	146.06
130	0.35	23.10	-2.09	145.22
135	0.24	25.70	-3.25	153.97
140	0.00	28.99	-4.56	153.84
145	0.00	32.53	-5.81	148.68
150	0.00	36.38	-7.02	144.03
155	0.00	40.45	-8.17	139.70
160	0.00	44.68	-9.25	135.83
165	0.00	49.03	-10.00	133.25
170	0.00	53.46	-10.00	133.25
175	0.00	57.96	-10.00	133.25
180	0.00	62.51	-10.00	133.25
185	0.24	67.05	-10.00	128.49

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

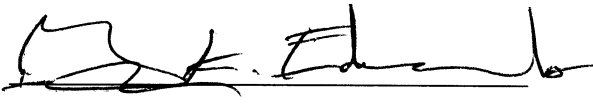
NEWPORT, RI

Licensee Name Telenor Maritime, Inc.
Latitude (NAD 83) 41° 29' 14.7" N
Longitude (NAD 83) 71° 19' 9.6" W
Ground Elevation (AMSL) 0.0 m / 0.0 ft
Antenna Centerline (AGL) 15.54 m / 51.0 ft
Antenna Model SeaTel 9711
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 -17.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	71.71	-10.00	133.25
195	0.00	76.34	-10.00	133.25
200	0.00	80.99	-10.00	133.25
205	0.37	85.64	-10.00	116.69
210	0.00	90.32	-10.00	133.25
215	0.00	94.98	-10.00	133.25
220	0.00	99.64	-10.00	133.25
225	0.00	104.29	-10.00	133.25
230	0.00	108.92	-10.00	133.25
235	0.00	113.53	-10.00	133.25
240	0.00	118.11	-10.00	133.25
245	0.00	122.65	-10.00	133.25
250	0.00	127.15	-10.00	133.25
255	0.00	131.57	-10.00	133.25
260	0.00	135.90	-10.00	133.25
265	0.00	140.11	-10.00	133.25
270	0.00	144.16	-10.00	133.25
275	0.00	147.97	-10.00	133.25
280	0.00	151.46	-10.00	133.25
285	0.00	154.48	-10.00	133.25
290	0.00	156.87	-10.00	133.25
295	0.00	158.40	-10.00	133.25
300	0.00	158.88	-10.00	133.25
305	0.22	158.46	-10.00	130.84
310	0.00	156.59	-10.00	133.25
315	0.21	154.28	-10.00	131.67
320	0.26	151.18	-10.00	127.43
325	0.00	147.47	-10.00	133.25
330	0.00	143.62	-10.00	133.25
335	0.00	139.55	-10.00	133.25
340	0.00	135.32	-10.00	133.25
345	0.00	130.97	-10.00	133.25
350	0.00	126.54	-10.00	133.25
355	0.00	122.04	-10.00	133.25

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: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: October 13, 2016