

Exhibit A

Frequency Coordination

Per 47 C.F.R. Ch. 1 §25.130(b), attached is a “Frequency Coordination and Interference Analysis Report” performed pursuant to 47 C.F.R. Ch. 1 §25.203.

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
GCI Communications Corp.
Chignik Bay, AK
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
October 17, 2018

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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

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

No carriers reported potential interference cases.

3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent on 10/02/2018.

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: 10/02/2018
 Job Number: 181002COMSTC12

Administrative Information

Call Sign E960430
 Licensee Code P3203
 Licensee Name GCI Communications Corp.

Site Information

CHIGNIK BAY, AK

Latitude (NAD 83) 56° 18' 5.4" N
 Longitude (NAD 83) 158° 24' 50.4" W
 Climate Zone B
 Rain Zone 2
 Ground Elevation (AMSL) 15.85 m / 52.0 ft

Link Information

Satellite Type Geostationary
 Mode TR - Transmit-Receive
 Modulation Digital
 Satellite Arc 94° W to 223° West Longitude
 Azimuth Range 111.7° to 248.4°
 Corresponding Elevation Angles 5.2° / 5.1°
 Antenna Centerline (AGL) 3.08 m / 10.1 ft

Antenna Information

Receive

Transmit

Manufacturer	Viasat / Scientific-Atlanta	Viasat / Scientific-Atlanta
Model	8136	8136
Gain / Diameter	41.8 dBi / 3.6 m	45.9 dBi / 3.6 m
3-dB / 15-dB Beamwidth	1.40° / 3.00°	0.90° / 1.70°

			45K0G7W - 108MG7W		
			<u>45K0D7W - 108MD7W</u>		
Max Available RF Power	(dBW/4 kHz)		-2.7	-18.29	
	(dBW/MHz)		21.3	5.71	
Maximum EIRP	(dBW/4 kHz)		43.2	27.61	
	(dBW/MHz)		67.2	51.61	
	(dBW)		53.71	71.92	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information

Receive 4.0 GHz

Transmit 6.1 GHz

Emission / Frequency Range (MHz)	45K0G7W - 108MG7W / 3700.0 - 4200.0	45K0G7W - 108MG7W / 5925.0 - 6425.0
	45K0D7W - 108MD7W / 3700.0 - 4200.0	45K0D7W - 108MD7W / 5925.0 - 6425.0

Max Great Circle Coordination Distance	559.0 km / 347.3 mi	325.2 km / 202.0 mi
Precipitation Scatter Contour Radius	617.6 km / 383.7 mi	101.6 km / 63.1 mi

COMSEARCH

Earth Station Data Sheet

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Coordination Values

CHIGNIK BAY, AK

Licensee Name GCI Communications Corp.
Latitude (NAD 83) 56° 18' 5.4" N
Longitude (NAD 83) 158° 24' 50.4" W
Ground Elevation (AMSL) 15.85 m / 52.0 ft
Antenna Centerline (AGL) 3.08 m / 10.1 ft
Antenna Mode Receive 4.0 GHz Transmit 6.1 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -154.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	12.72	111.37	-10.00	101.63	-10.00	100.00
5	12.72	106.58	-10.00	101.63	-10.00	100.00
10	11.25	101.66	-10.00	108.18	-10.00	100.00
15	10.99	96.69	-10.00	109.31	-10.00	100.00
20	10.53	91.72	-10.00	111.40	-10.00	100.00
25	10.53	86.74	-10.00	111.40	-10.00	100.00
30	6.53	81.73	-10.00	119.79	-10.00	100.00
35	6.53	76.73	-10.00	119.79	-10.00	100.00
40	0.51	71.79	-10.00	319.32	-10.00	152.68
45	0.00	66.82	-10.00	412.20	-10.00	200.77
50	0.00	61.85	-10.00	412.20	-10.00	200.77
55	0.00	56.88	-10.00	412.20	-10.00	200.77
60	0.00	51.91	-10.00	412.20	-10.00	200.77
65	1.53	46.83	-9.76	225.42	-9.76	111.00
70	2.70	41.78	-8.53	182.23	-8.53	100.00
75	4.04	36.74	-7.13	152.04	-7.13	100.00
80	3.35	31.77	-5.55	177.86	-5.55	100.00
85	3.72	26.76	-3.69	177.21	-3.69	100.00
90	4.06	21.75	-1.44	180.83	-1.44	100.00
95	4.47	16.74	1.41	191.48	1.41	100.00
100	4.21	11.76	5.24	218.97	5.24	106.36
105	4.65	6.75	11.28	253.97	11.28	118.86
110	5.30	1.73	26.08	556.04	26.08	322.34
115	5.01	1.85	25.29	469.98	25.29	253.29
120	6.34	3.14	19.57	342.59	19.57	171.99
125	6.77	5.07	14.38	243.81	14.38	117.01
130	9.99	4.38	15.97	237.43	15.97	114.60
135	12.64	3.97	17.03	217.22	17.03	106.36
140	12.87	5.61	13.27	191.99	13.27	100.00
145	14.16	6.06	12.44	176.49	12.44	100.00
150	13.82	7.83	9.66	165.00	9.66	100.00
155	13.43	9.48	7.58	157.89	7.58	100.00
160	10.41	13.50	3.74	161.41	3.74	100.00
165	8.89	15.86	1.99	160.10	1.99	100.00
170	6.41	18.95	0.06	159.98	0.06	100.00
175	8.06	17.69	0.81	157.49	0.81	100.00
180	12.04	13.85	3.46	149.08	3.46	100.00
185	11.78	13.97	3.37	150.08	3.37	100.00

COMSEARCH

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Coordination Values

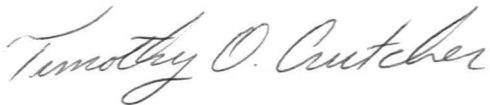
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Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	10.54	14.84	2.72	155.62	2.72	100.00
195	10.52	14.25	3.16	157.85	3.16	100.00
200	10.93	12.99	4.16	159.57	4.16	100.00
205	10.11	12.70	4.40	166.86	4.40	100.00
210	6.89	14.47	2.99	172.68	2.99	100.00
215	6.43	13.34	3.87	179.22	3.87	100.00
220	6.32	11.71	5.29	187.63	5.29	100.00
225	6.77	9.36	7.72	199.96	7.72	100.00
230	6.77	7.29	10.42	216.94	10.42	105.56
235	6.68	5.15	14.21	243.07	14.21	116.71
240	6.32	3.14	19.58	345.47	19.58	173.88
245	6.67	0.53	38.92	509.16	38.92	275.45
250	7.31	2.70	21.22	559.03	21.22	325.18
255	9.95	8.15	9.21	194.38	9.21	100.00
260	8.82	12.14	4.89	174.89	4.89	100.00
265	7.58	16.75	1.40	162.08	1.40	100.00
270	9.60	22.01	-1.57	142.26	-1.57	100.00
275	9.60	26.92	-3.75	133.46	-3.75	100.00
280	9.60	31.86	-5.58	126.77	-5.58	100.00
285	10.76	36.94	-7.19	118.72	-7.19	100.00
290	10.76	41.88	-8.55	114.67	-8.55	100.00
295	12.40	47.01	-9.80	103.64	-9.80	100.00
300	12.14	51.91	-10.00	104.21	-10.00	100.00
305	12.14	56.85	-10.00	104.22	-10.00	100.00
310	12.43	61.82	-10.00	102.89	-10.00	100.00
315	12.44	66.77	-10.00	102.88	-10.00	100.00
320	11.60	71.69	-10.00	106.61	-10.00	100.00
325	15.35	76.79	-10.00	100.00	-10.00	100.00
330	15.35	81.71	-10.00	100.00	-10.00	100.00
335	15.36	86.63	-10.00	100.00	-10.00	100.00
340	15.36	91.55	-10.00	100.00	-10.00	100.00
345	15.35	96.47	-10.00	100.00	-10.00	100.00
350	15.35	101.38	-10.00	100.00	-10.00	100.00
355	15.35	106.30	-10.00	100.00	-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.

A handwritten signature in cursive script that reads "Timothy O. Crutcher".

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

DATED: October 17, 2018