



June 06, 2019

Re: Atlas Space Operations, Inc.  
HARMON, GU  
S-Band Transmit Only Earth Station  
Job Number: 190606COMSGE05

Dear Frequency Coordinator:

This notice is being provided in accordance with Section 25.203(c) of the FCC Rules and Regulations. We are forwarding the attached coordination data on behalf of Atlas Space Operations, Inc., 10850 E. Traverse Hwy, Suite 3355 Traverse City, MI 49684 for a S-Band Transmit Only Earth Station to be located in HARMON, GU.

The coordination notice is being circulated to the owners (or their protection agents) of all existing or proposed terrestrial facilities operating in a shared frequency band within the coordination contours of the proposed station(s).

We respectfully request that you examine this data for its interference potential with your system(s). In the event that your analysis identifies potential interference cases that have not been resolved, please contact us by July 11, 2019.

If there are any questions concerning this coordination notice, please contact Comsearch.

Sincerely,

COMSEARCH

Gary K. Edwards  
Senior Manager  
gedwards@comsearch.com

Enclosure(s)

Date: 06/06/2019  
Job Number: 190606COMSGE05

---

**Administrative Information**

Status ENGINEER PROPOSAL  
Call Sign  
Licensee Code ATLSPC  
Licensee Name Atlas Space Operations, Inc.

---

**Site Information HARMON, GU**

Venue Name  
Latitude (NAD 83) 13° 30' 48.8" N  
Longitude (NAD 83) 144° 49' 31.1" E  
Climate Zone C  
Rain Zone 4  
Ground Elevation (AMSL) 72.02 m / 236.3 ft

---

**Link Information**

Satellite Type Low Earth Orbit  
Mode TO - Transmit-Only  
Modulation Digital  
Minimum Elevation Angle 5.0°  
Azimuth Range 0.0° to 360°  
Antenna Centerline (AGL) 2.74 m / 9.0 ft

---

**Antenna Information Transmit - FCC32**

Manufacturer Orbital  
Model 3.7 meter  
Gain / Diameter 34.0 dBi / 3.7 m  
3-dB / 15-dB Beamwidth 0.50° / 1.00°

Max Available RF Power (dBW/4 kHz) 0.0  
(dBW/MHz) 24.0

Maximum EIRP (dBW/4 kHz) 34.0  
(dBW/MHz) 58.0

Interference Objectives: Long Term -154.0 dBW/4 kHz 20%  
Short Term -131.0 dBW/4 kHz 0.0025%

---

**Frequency Information Transmit 2.0 GHz**

Emission / Frequency Range (MHz) 200KG7D / 2081.0

Max Great Circle Coordination Distance 220.0 km / 136.7 mi  
Precipitation Scatter Contour Radius 100.8 km / 62.6 mi

<b>Coordination Values</b>		<b>HARMON, GU</b>	
Licensee Name		Atlas Space Operations, Inc.	
Latitude (NAD 83)		13° 30' 48.8" N	
Longitude (NAD 83)		144° 49' 31.1" E	
Ground Elevation (AMSL)		72.02 m / 236.3 ft	
Antenna Centerline (AGL)		2.74 m / 9.0 ft	
Antenna Model		Orbital 3.7 meter	
Antenna Mode		Transmit 2.0 GHz	
Interference Objectives: Long Term		-154.0 dBW/4 kHz	20%
Short Term		-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	0.0 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 2.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.81	80.43	4.50	220.00
5	0.89	83.02	4.50	220.00
10	0.90	85.62	4.50	220.00
15	0.92	88.24	4.50	220.00
20	0.98	90.87	4.50	220.00
25	0.93	93.50	4.50	220.00
30	0.88	96.11	4.50	220.00
35	0.91	98.68	4.50	220.00
40	0.94	101.19	4.50	220.00
45	0.96	103.65	4.50	220.00
50	1.04	105.98	4.50	220.00
55	1.08	108.23	4.50	220.00
60	1.06	110.40	4.50	220.00
65	1.01	112.45	4.50	220.00
70	0.98	114.34	4.50	220.00
75	0.95	116.06	4.50	220.00
80	0.89	117.62	4.50	220.00
85	0.88	118.93	4.50	220.00
90	0.80	120.09	4.50	220.00
95	0.81	120.92	4.50	220.00
100	0.84	121.46	4.50	220.00
105	0.80	121.82	4.50	220.00
110	0.80	121.86	4.50	220.00
115	1.00	121.45	4.50	220.00
120	1.05	120.91	4.50	220.00
125	1.28	119.94	4.50	220.00
130	1.26	118.98	4.50	220.00
135	1.22	117.80	4.50	220.00
140	1.73	115.96	4.50	220.00
145	1.96	114.19	4.50	220.00
150	1.94	112.45	4.50	220.00
155	1.93	110.55	4.50	220.00
160	2.66	108.08	4.50	220.00
165	2.60	105.99	4.50	220.00
170	2.71	103.72	4.50	220.00
175	2.57	101.46	4.50	220.00
180	2.24	99.17	4.50	220.00
185	1.67	96.83	4.50	220.00

<b>Coordination Values</b>	<b>HARMON, GU</b>	
Licensee Name	Atlas Space Operations, Inc.	
Latitude (NAD 83)	13° 30' 48.8" N	
Longitude (NAD 83)	144° 49' 31.1" E	
Ground Elevation (AMSL)	72.02 m / 236.3 ft	
Antenna Centerline (AGL)	2.74 m / 9.0 ft	
Antenna Model	Orbital 3.7 meter	
Antenna Mode	Transmit 2.0 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	0.0 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 2.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.29	94.33	4.50	220.00
195	1.22	91.74	4.50	220.00
200	1.20	89.13	4.50	220.00
205	1.07	86.51	4.50	220.00
210	0.92	83.89	4.50	220.00
215	0.68	81.26	4.50	220.00
220	0.46	78.65	4.50	220.00
225	0.00	75.98	4.50	220.00
230	0.00	73.54	4.50	220.00
235	0.00	71.19	4.50	220.00
240	0.00	68.97	4.50	220.00
245	0.00	66.88	4.50	220.00
250	0.00	64.94	4.50	220.00
255	0.00	63.19	4.50	220.00
260	0.00	61.62	4.50	220.00
265	0.00	60.28	4.50	220.00
270	0.00	59.17	4.50	220.00
275	0.00	58.30	4.50	220.00
280	0.00	57.71	4.50	220.00
285	0.00	57.38	4.50	220.00
290	0.00	57.33	4.50	220.00
295	0.00	57.57	4.50	220.00
300	0.00	58.07	4.50	220.00
305	0.00	58.85	4.50	220.00
310	0.22	60.08	4.50	220.00
315	0.53	61.60	4.50	220.00
320	0.59	63.12	4.50	220.00
325	0.52	64.72	4.50	220.00
330	0.34	66.44	4.50	220.00
335	0.32	68.45	4.50	220.00
340	0.45	70.68	4.50	220.00
345	0.54	73.00	4.50	220.00
350	0.62	75.41	4.50	220.00
355	0.70	77.89	4.50	220.00