

Frequency Coordination has been issued for this proposed earth station and the Coordination Final Report will be uploaded as a supplement to this License Application request when completed.



December 03, 2019

Re: UNIVERSITY OF ALASKA DBA = KUAC  
FAIRBANKS, AK  
C-Band Transmit Only Earth Station  
Job Number: 191203COMSGE01

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 UNIVERSITY OF ALASKA DBA = KUAC, 802 EAST TANANA DRIVE FAIRBANKS, AK 99775 for a C-Band Transmit Only Earth Station to be located in FAIRBANKS, AK.

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 January 07, 2020.

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: 12/03/2019  
Job Number: 191203COMSGE01

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**Administrative Information**

Status	ENGINEER PROPOSAL
Call Sign	
Licensee Code	SUNALF
Licensee Name	UNIVERSITY OF ALASKA DBA = KUAC

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**Site Information****FAIRBANKS, AK**

Venue Name	
Latitude (NAD 83)	64° 51' 30.2" N
Longitude (NAD 83)	147° 49' 7.1" W
Climate Zone	A
Rain Zone	2
Ground Elevation (AMSL)	152.64 m / 500.8 ft

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**Link Information**

Satellite Type	Geostationary
Mode	TO - Transmit-Only
Modulation	Digital
Satellite Arc	139° W to 139° West Longitude
Azimuth Range	170.3° to 170.3°
Corresponding Elevation Angles	16.5° / 16.5°
Antenna Centerline (AGL)	3.66 m / 12.0 ft

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**Antenna Information****Transmit - FCC32**

Manufacturer	ASC Signal
Model	4.5 meter
Gain / Diameter	46.5 dBi / 4.5 m
3-dB / 15-dB Beamwidth	0.94° / 1.90°

Max Available RF Power	(dBW/4 kHz)	-13.1	
	(dBW/MHz)	10.9	
Maximum EIRP	(dBW/4 kHz)	33.4	
	(dBW/MHz)	57.4	
Interference Objectives:	Long Term	-154.0 dBW/4 kHz	20%
	Short Term	-131.0 dBW/4 kHz	0.0025%

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**Frequency Information****Transmit 6.1 GHz**

Emission / Frequency Range (MHz)	14M6G7W / 6060.0 - 6107.0
	14M6G7W / 6168.0 - 6210.0
	14M6G7W / 6241.0 - 6256.0
	14M6G7W / 6272.0 - 6359.0
	14M6G7W / 6391.0 - 6425.0

Max Great Circle Coordination Distance	175.2 km / 108.9 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi

<b>Coordination Values</b>	<b>FAIRBANKS, AK</b>
Licensee Name	UNIVERSITY OF ALASKA DBA = KUAC
Latitude (NAD 83)	64° 51' 30.2" N
Longitude (NAD 83)	147° 49' 7.1" W
Ground Elevation (AMSL)	152.64 m / 500.8 ft
Antenna Centerline (AGL)	3.66 m / 12.0 ft
Antenna Model	ASC Signal 4.5 meter
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	-13.1 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	1.22	161.96	-10.00	100.00
5	1.64	159.21	-10.00	100.00
10	2.24	155.84	-10.00	100.00
15	2.25	151.70	-10.00	100.00
20	2.20	147.31	-10.00	100.00
25	2.08	142.76	-10.00	100.00
30	1.87	138.10	-10.00	100.00
35	1.30	133.29	-10.00	100.00
40	0.59	128.45	-10.00	107.17
45	0.89	123.80	-10.00	100.00
50	0.52	119.00	-10.00	110.43
55	0.55	114.24	-10.00	108.91
60	0.00	109.41	-10.00	134.03
65	0.00	104.64	-10.00	134.03
70	0.00	99.85	-10.00	134.03
75	0.00	95.06	-10.00	134.03
80	0.52	90.27	-10.00	110.33
85	0.85	85.45	-10.00	100.00
90	0.23	80.67	-10.00	133.17
95	0.00	75.90	-10.00	134.03
100	0.00	71.12	-10.00	134.03
105	0.00	66.36	-10.00	134.03
110	0.00	61.61	-10.00	134.03
115	0.00	56.90	-10.00	134.03
120	0.00	52.21	-10.00	134.03
125	0.00	47.57	-9.93	134.22
130	0.00	42.98	-8.83	137.32
135	0.00	38.48	-7.63	140.87
140	0.00	34.10	-6.32	144.95
145	0.00	29.88	-4.88	149.64
150	0.00	25.91	-3.34	154.98
155	0.00	22.33	-1.72	160.86
160	0.00	19.35	-0.17	168.44
165	0.00	17.29	1.06	173.21
170	0.00	16.49	1.57	175.21
175	0.33	16.81	1.36	158.46
180	0.54	18.61	0.25	137.13
185	0.74	21.43	-1.28	124.40

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Longitude (NAD 83)	147° 49' 7.1" W
Ground Elevation (AMSL)	152.64 m / 500.8 ft
Antenna Centerline (AGL)	3.66 m / 12.0 ft
Antenna Model	ASC Signal 4.5 meter
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	-13.1 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.95	24.91	-2.91	109.98
195	1.12	28.85	-4.50	100.09
200	1.26	33.08	-5.99	100.00
205	1.40	37.48	-7.34	100.00
210	1.52	42.01	-8.58	100.00
215	1.64	46.62	-9.71	100.00
220	1.76	51.30	-10.00	100.00
225	1.88	56.02	-10.00	100.00
230	1.95	60.79	-10.00	100.00
235	2.04	65.57	-10.00	100.00
240	2.13	70.38	-10.00	100.00
245	2.22	75.20	-10.00	100.00
250	2.33	80.04	-10.00	100.00
255	2.59	84.88	-10.00	100.00
260	2.70	89.73	-10.00	100.00
265	2.92	94.59	-10.00	100.00
270	3.04	99.45	-10.00	100.00
275	3.20	104.32	-10.00	100.00
280	3.66	109.21	-10.00	100.00
285	3.89	114.09	-10.00	100.00
290	4.01	118.95	-10.00	100.00
295	4.09	123.80	-10.00	100.00
300	3.83	128.57	-10.00	100.00
305	3.42	133.27	-10.00	100.00
310	2.88	137.86	-10.00	100.00
315	2.28	142.32	-10.00	100.00
320	1.53	146.55	-10.00	100.00
325	1.16	150.70	-10.00	100.00
330	1.27	154.84	-10.00	100.00
335	1.45	158.69	-10.00	100.00
340	1.62	161.99	-10.00	100.00
345	1.35	163.99	-10.00	100.00
350	1.10	164.61	-10.00	100.00
355	1.14	163.96	-10.00	100.00