

Futaris, Inc.

Approved by OMB
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
STA for use prior to grant of pending Earth Station License Anchorage, Alaska

1. Applicant

Name:	Futaris, Inc.	Phone Number:	907-273-0022
DBA Name:		Fax Number:	907-273-0071
Street:	5430 Fairbanks St Suite 5	E-Mail:	vpettit@futaris.com
City:	Anchorage	State:	AK
Country:	USA	Zipcode:	99518
Attention:	Valerie Pettit		



File # SES-STA-20151117-00848
5150139
 Call Sign (or other identifier) 1-4-16 Grant Date 1-4-16
 Term Dates From: 1-4-16 To: 2-3-16
 Approved: Valerie Pettit

Applicant: Futaris, Inc.
File No.: SES-STA-20151117-0848
Call-Sign: E150139
Special Temporary Authority (STA)



File # SES-STA-20151117-00848
Call Sign E150139 Grant Date 1-4-16
(or other identifier)
Term Dates
From: 1-4-16 To: 2-3-16
Approved: [Signature]

Futaris, Inc. is granted a Special Temporary Authority (STA), for 30 days, beginning January 4, 2016, to operate three different fixed antennas, 3.8 meter (General Dynamics-1383) C-band antenna and 3.5 meter and 6.1 meter (Vertex-KPK) Ku-band antennas in Anchorage, AK to communicate with Permitted List satellites to transmit/receive in the 5925-5948 MHz, 6045.80-6067.00 MHz, 6120-6126 MHz, 6169-6319 MHz, 6372-6425 MHz, and 14000-14500 MHz (Earth-to-space) and 3700-4200 MHz and 11700-12200 MHz (space-to-Earth) frequency bands, under the following conditions:

1. All operations must comply with the operational parameters listed in the pending application SES-LIC-20151117-00847.
2. Operation, shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.
3. Grant of this STA is without prejudice to any determination that the Commission may make regarding pending application SES-LIC-20151117-00847.
4. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at Futaris, Inc.'s risk.
5. This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

2. Contact	
Name: Valerie Pettit	Phone Number: 907-273-0022
Company: Futaris, Inc	Fax Number: 907-273-0071
Street: 5430 Fairbanks St Suite 5	E-Mail: vpettit@futaris.com
City: Anchorage	State: AK
Country: USA	Zipcode: 99518 -
Attention:	Relationship:
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)	
3. Reference File Number or Submission ID IB2015002231	
4a. Is a fee submitted with this application? <input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other(please explain):	
4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station	
5. Type Request <input checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other	
6. Requested Use Prior Date 12/01/2015	
7. City/Anchorage 8. Latitude (dd mm ss.s h) 61 8 28.4 N	

9. State AK	10. Longitude (dd mm ss.s h) 149 52 30.7 W
11. Please supply any need attachments. Attachment 1: Coordination report Attachment 2: Attachment 3:	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> STA for use pending grant of C-band and Ku-band transmit/receive earth stations in Anchorage, Alaska, FCC Submission ID IB2015002231 </div>	
13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes. <div style="text-align: right;"> Yes <input checked="" type="radio"/> No <input type="radio"/> </div>	
14. Name of Person Signing Valerie Pettit	15. Title of Person Signing Acting President
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).	

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FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Futaris, Inc.
ANCHORAGE, AK
(3.8 meter)
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
November 16, 2015

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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.

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-receive earth station.

Company

Chugach Electric Association, Inc.
GCI Communications Corporation

No other 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 to the below listed carriers with a letter dated 11/13/2015.

Company

ACS Long Distance License Sub, Inc.
ACS Wireless License Sub, Inc.
ACS of Anchorage License Sub, Inc.
Alascom Inc
Alaska Pipeline Company
Alaska Public Telecommunications, Inc.
Alaska Wireless Network, LLC
Chugach Electric Association, Inc.
ENSTAR NATURAL GAS COMPANY
GCI Communications Corporation
Homer Electric Association
MATANUSKA KENAI INC
MTA Communications, LLC
Matanuska Telephone Association, Inc.
Matanuska-Susitna, Borough of
New Cingular Wireless PCS LLC - Alaska
Norstar Pipeline Company
State of Alaska
Verizon Wireless (VAW) LLC - Alaska

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: 11/16/2015
Job Number: 151113COMSGE05

Administrative Information

Status ENGINEER PROPOSAL
Call Sign ANCHORAG
Licensee Code S30800
Licensee Name Futaris, Inc.

Site Information ANCHORAGE, AK

Venue Name
Latitude (NAD 83) 61° 8' 28.4" N
Longitude (NAD 83) 149° 52' 30.7" W
Climate Zone A
Rain Zone 2
Ground Elevation (AMSL) 32.0 m / 105.0 ft

Link Information

Satellite Type Geostationary
Mode TR - Transmit-Receive
Modulation Digital
Satellite Arc 90° W to 143° West Longitude
Azimuth Range 116.9° to 172.2°
Corresponding Elevation Angles 5.4° / 20.5°
Antenna Centerline (AGL) 2.74 m / 9.0 ft

Antenna Information

Manufacturer General Dynamics
Model 1383
Gain / Diameter 42.0 dBi / 3.8 m
3-dB / 15-dB Beamwidth 1.40° / 3.20°

Receive - FCC32

General Dynamics
1383
42.0 dBi / 3.8 m
1.40° / 3.20°

Transmit - FCC32

General Dynamics
1383
46.5 dBi / 3.8 m
0.90° / 2.00°

Max Available RF Power (dBW/4 kHz) -13.8
(dBW/MHz) 10.2

Maximum EIRP (dBW/4 kHz) 32.7
(dBW/MHz) 56.7
(dBW)

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

Emission / Frequency Range (MHz) 1M50G7W - 72M0G7W / 3700.0 - 4200.0

Receive 4.0 GHz

Transmit 6.1 GHz

1M50G7W - 72M0G7W / 5925.0 - 5948.0
1M50G7W - 72M0G7W / 6045.8 - 6067.0
1M50G7W - 72M0G7W / 6120.0 - 6126.0
1M50G7W - 72M0G7W / 6169.0 - 6319.0
1M50G7W - 72M0G7W / 6372.0 - 6425.0

Max Great Circle Coordination Distance 552.3 km / 343.1 mi 235.7 km / 146.5 mi
Precipitation Scatter Contour Radius 612.2 km / 380.3 mi 100.0 km / 62.1 mi

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
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Coordination Values

ANCHORAGE, AK

Licensee Name	Futaris, Inc.				
Latitude (NAD 83)	61° 8' 28.4" N				
Longitude (NAD 83)	149° 52' 30.7" W				
Ground Elevation (AMSL)	32.0 m / 105.0 ft				
Antenna Centerline (AGL)	2.74 m / 9.0 ft				
Antenna Model	General Dynamics 3.8 meter				
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			-13.8 (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	0.00	116.82	-10.00	285.28	-10.00	133.38
5	0.00	111.84	-10.00	285.28	-10.00	133.38
10	0.00	106.87	-10.00	285.28	-10.00	133.38
15	0.00	101.89	-10.00	285.28	-10.00	133.38
20	0.00	96.91	-10.00	285.28	-10.00	133.38
25	0.24	91.93	-10.00	279.77	-10.00	129.77
30	0.27	86.95	-10.00	276.71	-10.00	127.75
35	0.25	81.97	-10.00	278.43	-10.00	128.89
40	0.22	77.00	-10.00	282.76	-10.00	131.73
45	0.32	72.01	-10.00	270.32	-10.00	123.47
50	0.31	67.04	-10.00	271.57	-10.00	124.31
55	0.53	62.05	-10.00	247.78	-10.00	107.87
60	0.56	57.07	-10.00	245.83	-10.00	106.47
65	0.56	52.10	-10.00	245.78	-10.00	106.43
70	0.66	47.12	-9.83	240.72	-9.83	102.47
75	0.70	42.15	-8.62	245.25	-8.62	103.90
80	0.90	37.17	-7.26	241.00	-7.26	100.00
85	1.18	32.19	-5.69	237.68	-5.69	100.00
90	1.43	27.21	-3.87	240.14	-3.87	100.00
95	1.64	22.24	-1.68	246.63	-1.68	100.00
100	1.81	17.30	1.05	259.07	1.05	100.00
105	1.90	12.43	4.64	282.49	4.64	105.52
110	1.87	7.77	9.75	327.12	9.75	123.84
115	1.92	3.95	17.09	552.28	17.09	235.73
120	1.82	4.50	15.67	498.15	15.67	204.99
125	1.70	6.67	11.40	403.29	11.40	159.15
130	1.65	8.66	8.56	341.57	8.56	131.76
135	1.38	10.73	6.23	316.20	6.23	123.69
140	0.92	12.87	4.26	321.34	4.26	130.94
145	0.78	14.54	2.94	320.12	2.94	132.88
150	0.78	15.92	1.95	311.55	1.95	129.83
155	0.66	17.24	1.09	314.62	1.09	133.06
160	0.64	18.26	0.47	310.30	0.47	131.92
165	0.38	19.31	-0.14	331.54	-0.14	145.67
170	0.32	19.95	-0.50	337.04	-0.50	150.49
175	0.34	20.34	-0.71	332.70	-0.71	147.73
180	0.25	21.64	-1.38	339.68	-1.38	154.46
185	0.00	24.03	-2.52	337.66	-2.52	155.41

COMSEARCH

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Coordination Values

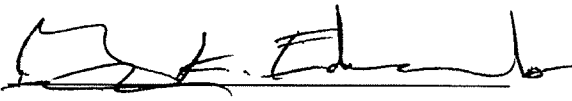
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Interference Objectives:	Long Term	-156.0 dBW/MHz 20%	-154.0 dBW/4 kHz 20%
	Short Term	-146.0 dBW/MHz 0.01%	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power			-13.8 (dBW/4 kHz)

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	0.22	26.74	-3.68	325.83	-3.68	148.85
195	0.49	30.00	-4.93	283.39	-4.93	124.07
200	0.00	34.07	-6.31	309.84	-6.31	142.78
205	0.23	37.98	-7.49	297.88	-7.49	136.57
210	0.62	42.03	-8.59	250.43	-8.59	107.50
215	0.64	46.39	-9.66	243.06	-9.66	103.93
220	0.47	50.90	-10.00	253.70	-10.00	112.00
225	0.00	55.54	-10.00	285.28	-10.00	133.38
230	0.00	60.09	-10.00	285.28	-10.00	133.38
235	0.00	64.68	-10.00	285.28	-10.00	133.38
240	0.00	69.30	-10.00	285.28	-10.00	133.38
245	0.00	73.95	-10.00	285.28	-10.00	133.38
250	0.00	78.62	-10.00	285.28	-10.00	133.38
255	0.00	83.29	-10.00	285.28	-10.00	133.38
260	0.00	87.97	-10.00	285.28	-10.00	133.38
265	0.00	92.66	-10.00	285.28	-10.00	133.38
270	0.21	97.35	-10.00	283.49	-10.00	132.22
275	0.34	102.04	-10.00	267.68	-10.00	121.69
280	0.28	106.70	-10.00	275.00	-10.00	126.61
285	0.00	111.32	-10.00	285.28	-10.00	133.38
290	0.00	115.94	-10.00	285.28	-10.00	133.38
295	0.00	120.53	-10.00	285.28	-10.00	133.38
300	0.00	125.07	-10.00	285.28	-10.00	133.38
305	0.00	129.56	-10.00	285.28	-10.00	133.38
310	0.00	133.97	-10.00	285.28	-10.00	133.38
315	0.00	138.29	-10.00	285.28	-10.00	133.38
320	0.00	142.46	-10.00	285.28	-10.00	133.38
325	0.00	146.45	-10.00	285.28	-10.00	133.38
330	0.00	146.56	-10.00	285.28	-10.00	133.38
335	0.00	141.62	-10.00	285.28	-10.00	133.38
340	0.00	136.68	-10.00	285.28	-10.00	133.38
345	0.00	131.72	-10.00	285.28	-10.00	133.38
350	0.00	126.75	-10.00	285.28	-10.00	133.38
355	0.00	121.79	-10.00	285.28	-10.00	133.38

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: November 16, 2015