

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
Request for STA to support Launch operations on an existing earth station Call Sign E990067

1. Applicant

<b>Name:</b>	Denali 20020, LLC	<b>Phone Number:</b>	509-689-1000
<b>DBA Name:</b>		<b>Fax Number:</b>	509-689-3798
<b>Street:</b>	66 C Teleport Drive	<b>E-Mail:</b>	TOCC@usei-teleport.com
<b>City:</b>	Brewster	<b>State:</b>	WA
<b>Country:</b>	USA	<b>Zipcode:</b>	98812
<b>Attention:</b>	Mr Darryl White		




File # SES-STA-20171017-01181  
Call Sign E990067 Grant Date 12-15-18  
(or other identifier)  
Term Dates From: 2018-18 To: 2018-18  
Approved: Michael E. Hales

Applicant: Denali 20020, LLC  
Call Sign: E990067  
File No.: SES-STA-20171017-01181  
Special Temporary Authority (STA)

Denali 20020, LLC is granted STA for a 90-day period, beginning February 28, 2018 ending May 28, 2018 to operate its fixed earth station in Brewster, Washington to provide launch and early orbit phase (LEOP) services and telemetry, tracking and command services for the HYLAS 4 satellite (licensed by the United Kingdom (ITU Filing UKMMSAT-B2-TTC-C )) to the 33 W.L. orbital location on the following center frequencies: 6723.75 and 7026.25 MHz (Earth-to-space), and 4199.25 and 4500.75 MHz (space-to-Earth) with the following conditions:

1. Denali 20020, LLC 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.
2. In the event that there is a report of interference, Denali 20020, LLC must immediately terminate transmissions and notify the FCC in writing.
3. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Denali 20020, LLC risk.
4. Denali 20020, LLC shall take all reasonable and customary measures to ensure that the earth station does not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the earth station when it is in operation. The earth station operator shall be responsible for assuring that individuals do not stray into the regions around the earth station where there is a potential for exceeding the maximum permissible exposure limits.
5. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

 <b>GRANTED</b> International Bureau	File # <u>SES-STA-20171017-01181</u>
	Call Sign <u>E990067</u> (or other identifier)
	Grant Date <u>12-15-18</u>
	Term Dates From: <u>2-28-18</u> To: <u>5-28-18</u>
	Approved: <u>[Signature]</u>

<b>2. Contact</b>	
<b>Name:</b> Mr Darryl White	<b>Phone Number:</b> 509-689-1000
<b>Company:</b> Denali 20020, LLC	<b>Fax Number:</b> 509-689-3798
<b>Street:</b> 66 C Teleport Drive	<b>E-Mail:</b> TOCC@usei-teleport.com
<b>City:</b> Brewster	<b>State:</b> WA
<b>Country:</b> USA	<b>Zipcode:</b> 98812 -
<b>Attention:</b>	<b>Relationship:</b>
(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	
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 type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input checked="" type="radio"/> Other	
6. Requested Use Prior Date 12/01/2017	
7. City Brewster	
8. Latitude (dd mm ss.s h) 48 8 46.7 N	

9. State WA	10. Longitude (dd mm ss.s h) 119 42 12.1 W
11. Please supply any need attachments. Attachment 1: SuppSho 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.) Request for Special Temporary Authority to utilize new transmit frequencies for satellite launch support on Call sign E990067. The approximate dates of operation are from 12-01-17 thru 03-01-18 and the STA is requested to cover this time frame.	
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. Yes <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing Darryl White	15. Title of Person Signing Manager
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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**THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.**

Prepared By

## COMSEARCH

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

Prepared For

### Denali 20020 LLC Brewster, Washington

Temporary Transmit-Only Earth Station  
Operation Dates: 12/01/2017 - 03/01/2018

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. Verbal and written coordination was conducted with the below listed carriers on October 10, 2017.

#### Company

3G Wireless, LLC  
AERIAL VIDEO SYSTEMS  
Alascom Inc  
Ascent Media Network Services, LLC  
AT&T Mobility Wireless Ops Hldgs - WA  
AT&T Mobility Wireless Ops Hldgs Inc -OR  
Avista Corporation  
Bates Technical College  
Bearclaw, LLC  
Bellsouth Telecommunications, Inc.  
Benton County Emergency Services  
Benton, County of  
BNSF Railway Company  
Boeing Company  
Boingo Wireless, Inc.  
Bookbinder, LLC  
Borgeson, Tom R.  
Brigadier, LLC  
Broadcast Sports Inc.  
Carolina Telephone and Telegraph Co  
Casper, John  
Cellco Partnership - Washington  
CenturyTel of the Southwest, Inc.  
Chelan County PUD #1  
Chicago Comnet Corp  
Cincinnati Bell Wireless LLC  
Citicasters Licenses, Inc.  
City of Portland  
City of Tacoma / Tacoma Public Utilities  
Citywide News Network, Inc.  
Clackamas C800 Radio Group  
Clark Communications, Inc  
Clark, County of WA (Emergency Services)

Cohen, Elena  
Columbia 911 Communications Dist  
Community Transit Snohomish County PTBA  
Cowboys Stadium LP  
Cowlitz, County of  
Crista Ministries  
DCI II, INC.  
Direct Broadcast Services, Inc.  
Eastside Public Safety Com Agency  
Federal Communication Commission  
Franklin County Sheriff  
Friends of KSPS  
Frontier California Inc.  
Frontier Communications Northwest Inc.  
Global Telecom & Technology Americas, In  
Goodyear Tire & Rubber Company  
GW Networks  
Hallco Unlimited, Inc.  
Hawaiian Telcom, Inc.  
Heiden, William  
HF Enterprises, Inc  
Idaho Power Company  
Illinois Bell Telephone Company  
Indiana Bell Telephone Company  
Information & Display Systems, Inc.  
Information Super Station, LLC  
Inland Cellular LLC  
International Communications Group, Inc.  
Ion Media License Company, LLC  
Ion Media Spokane License, Inc.  
Island County Emergency Svcs Comm Cntr  
Jefferson, County Of  
Kentucky RSA #3 Cellular General Partner  
Kentucky RSA #4 Cellular General Partner  
KHQ, Incorporated  
KIMA-TV/Fisher Broadcasting  
King Broadcasting Company  
King Broadcasting Company - KREM TV  
King County DOT Metro Transit Division  
King, County of  
KIRO-TV, Inc  
Kittcom  
Klickitat, County of  
KPTV-KPDX Broadcasting Corporation  
Lewis County of  
Life of Victory TV, Inc (KVBI-CD)  
McDaniel Cellular Telephone Company  
MERCURY COMMUNICATIONS  
Michigan Bell Telephone Company  
Moreen, Steven K  
Mount Baker Ski Area, Inc  
Mountain Licenses, L.P.  
Multi Agency Communications Center  
Navajo Communications Company  
New Cingular Wireless PCS - ID, WY  
New Cingular Wireless PCS LLC -OR Region

New Cingular Wireless PCS LLC-Washington  
NEW ENGLAND DIGITAL DISTRIBUTION, INC.  
NEW ENGLAND SATELLITE SYSTEMS INC  
NEXSTAR BROADCASTING, INC.  
Nextel License Holdings 4 Inc.  
Nextel of California Inc.  
Nextel West Corporation  
Noel Communications, Inc  
Northwest Pipeline GP  
NorthWest Suburbs Community Access Corp  
NSM Surveillance  
NW Natural Gas Company  
Ohio Bell GTelephone Company  
Olympic Wireless, LLC  
Onboard Images  
Oregon Public Broadcasting (KOPB)  
Oregon Public Broadcasting (KRBM)  
Oregon RSA #2, Inc.  
Oregon State  
Oregon State (Osp)  
Oregon, State of (ODOT)  
Ota Broadcasting (Sea), LLC  
Pacific Bell Tel Com dba AT&T California  
Pacific Wireless Systems LLC  
PacifiCorp  
Penn Service Microwave Co., Inc.  
Pierce County  
Pierce Transit  
Plateau Telecommunications, Inc.  
Plum TV, LLC  
Port of Seattle  
Portland General Electric  
Production & Satellite Services, Inc.  
Public Util Dist. #1 of Snohomish County  
Public Utility Dist #1 of Douglas County  
Public Utility Dist #1 of Lewis County  
Public Utility Dist #2 of Grant County  
Puget Sound Energy, Inc  
Quick Link Connections Inc.  
Qwest Corporation  
Radiofone, Inc.  
Randy Hermes Production  
RCC Minnesota Inc. - MN NE ND SD  
RCC Minnesota, Inc - Washington/Oregon  
Remote Broadcasts, Inc.  
REMOTE FACILITIES CONSULTING SERVICES  
RF Central, LLC  
RF Film, Inc  
Rivercom 911  
Rsn Wireless, LLC  
Sander Operating Co. III LLC  
Seattle City Light  
Seattle Public Schools  
Seattle SMSA Limited Partnership  
Seattle, City of  
Selahv Farms, LLC



Silke Communications, Inc.  
Sinclair Lewiston Licensee, LLC - WA  
Sinclair Portland Licensee, LLC  
Sinclair Seattle Licensee, LLC  
Sinclair Yakima Licensee, LLC ( WA)  
Skagit 911  
Skyline Tower LLC  
Southwestern Bell Telephone L.P.  
Speedshotz, Inc  
Spokane Regional Emergency Communication  
Spokane Television Inc.  
St. John Cooperative Telephone & Tel Co  
Startouch, Inc.  
State Board of Education State of Idaho  
State of Idaho  
Thurston 9-1-1 Communications  
T-Mobile License LLC  
Trans Canada GTN System  
Tri County Metro Transit Dist of Oregon  
Tribune Broadcasting Seattle, LLC  
Trinity Broadcasting of Washington  
Trinity Christian Center of Santa Ana  
TTWN Networks, LLC  
Umatilla Morrow Radio & Data District  
Umatilla, County of  
Union Pacific Railroad Company  
Unisat, Inc.  
United Telephone - Southeast  
United Telephone Co. of the Northwest  
USCOC of Richland, Inc.  
Valley Communications Center  
Verizon Maryland, Inc.  
Verizon New England Inc.  
Verizon New Jersey, Inc.  
Verizon New York, Inc.  
Verizon North Inc.  
Verizon Northwest Inc.  
Verizon Pennsylvania, Inc.  
VERIZON SOUTH INC.  
Verizon Virginia, Inc.  
Verizon Washington DC, Inc.  
Verizon Wireless (VAW) LLC - (WA)  
Verizon Wireless (VAW) LLC - Idaho  
Verizon Wireless (VAW) LLC-Portland, OR  
Village Video Productions Inc  
Vyvx, LLC  
Walla Walla, City of  
Washington Oregon Wireless, LLC  
Washington State of Dept of Transportat  
Washington State Patrol  
Washington State University  
Westar Satellite Services LP  
Western Sub-RSA LTD Partnership  
Western Technical Services  
Wexler Video, Inc.  
Whitman County Emergency Management

Whitman County Fire Protection Dist #7  
Winged Vision Inc  
Wisconsin Bell Telephone Company  
Wolfe Air Aviation  
World Television of Washington LLC  
Yakima MSA Limited Partnership

There are no unresolved interference objections with the station contained in these applications.

The following section presents the data pertinent to frequency coordination of the 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: 10/10/2017  
Job Number: 171010COMSGE04

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### Administrative Information

Status: TEMPORARY (Operation from 12/01/2017 to 03/01/2018)  
Call Sign: TEMP03  
Licensee Code: DENALI  
Licensee Name: Denali 20020, LLC

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### Site Information

**BREWSTER, WA**  
Venue Name  
Latitude (NAD 83): 48° 8' 46.7" N  
Longitude (NAD 83): 119° 42' 12.1" W  
Climate Zone: A  
Rain Zone: 5  
Ground Elevation (AMSL): 382.83 m / 1256.0 ft

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### 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): 4.88 m / 16.0 ft

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### Antenna Information

**Transmit - FCC32**  
Manufacturer: NEC  
Model: 7.6 meter  
Gain / Diameter: 52.7 dBi / 7.6 m  
3-dB / 15-dB Beamwidth: 0.52° / 0.98°

Max Available RF Power (dBW/4 kHz): 7.3  
(dBW/MHz): 31.3

Maximum EIRP (dBW/4 kHz): 60.0  
(dBW/MHz): 84.0

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 7.0 GHz**  
Emission / Frequency Range (MHz): 400KG7W / 6723.75 and 7026.25

Max Great Circle Coordination Distance: 370.0 km / 229.9 mi  
Precipitation Scatter Contour Radius: 156.7 km / 97.3 mi

<b>Coordination Values</b>	<b>BREWSTER, WA</b>	
Licensee Name	Denali 20020, LLC	
Latitude (NAD 83)	48° 8' 46.7" N	
Longitude (NAD 83)	119° 42' 12.1" W	
Ground Elevation (AMSL)	382.83 m / 1256.0 ft	
Antenna Centerline (AGL)	4.88 m / 16.0 ft	
Antenna Model	NEC 7.6 meter	
Antenna Mode	Transmit 7.0 GHz	
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%
Short Term	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power	7.3 (dBW/4 kHz)	

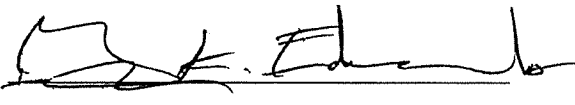
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 7.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	1.88	69.99	4.50	370.00
5	2.03	65.76	4.50	370.00
10	2.62	61.74	4.50	370.00
15	1.73	57.33	4.50	370.00
20	0.93	52.95	4.50	370.00
25	1.77	49.36	4.50	370.00
30	0.58	44.95	4.50	370.00
35	0.36	41.15	4.50	370.00
40	0.63	37.89	4.50	370.00
45	1.03	35.10	4.50	370.00
50	0.87	32.32	4.50	370.00
55	1.02	30.32	4.50	370.00
60	1.08	28.91	4.50	370.00
65	1.60	28.71	4.50	370.00
70	1.82	29.01	4.50	370.00
75	1.51	29.57	4.50	370.00
80	2.06	31.65	4.50	370.00
85	2.17	33.91	4.50	370.00
90	2.44	36.76	4.50	370.00
95	2.40	39.76	4.50	370.00
100	2.24	43.00	4.50	370.00
105	1.90	46.42	4.50	370.00
110	1.68	50.13	4.50	370.00
115	1.44	53.99	4.50	370.00
120	1.38	58.06	4.50	370.00
125	1.07	62.15	4.50	370.00
130	0.48	66.28	4.50	370.00
135	0.37	70.59	4.50	370.00
140	0.00	74.92	4.50	370.00
145	0.00	79.35	4.50	370.00
150	0.00	83.79	4.50	370.00
155	0.00	88.24	4.50	370.00
160	0.00	92.69	4.50	370.00
165	0.00	97.14	4.50	370.00
170	0.00	101.57	4.50	370.00
175	0.00	105.99	4.50	370.00
180	0.00	110.38	4.50	370.00
185	0.00	114.73	4.50	370.00

<b>Coordination Values</b>	<b>BREWSTER, WA</b>		
Licensee Name	Denali 20020, LLC		
Latitude (NAD 83)	48° 8' 46.7" N		
Longitude (NAD 83)	119° 42' 12.1" W		
Ground Elevation (AMSL)	382.83 m / 1256.0 ft		
Antenna Centerline (AGL)	4.88 m / 16.0 ft		
Antenna Model	NEC 7.6 meter		
Antenna Mode	Transmit 7.0 GHz		
Interference Objectives: Long Term	-154.0 dBW/4 kHz	20%	
Short Term	-131.0 dBW/4 kHz	0.0025%	
Max Available RF Power	7.3 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 7.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	119.03	4.50	370.00
195	0.00	123.27	4.50	370.00
200	0.00	127.42	4.50	370.00
205	0.00	131.46	4.50	370.00
210	0.00	135.35	4.50	370.00
215	0.00	139.06	4.50	370.00
220	0.00	142.53	4.50	370.00
225	0.00	145.68	4.50	370.00
230	0.00	148.41	4.50	370.00
235	0.00	150.60	4.50	370.00
240	0.40	151.75	4.50	370.00
245	2.21	150.68	4.50	370.00
250	3.21	149.61	4.50	370.00
255	3.42	148.59	4.50	370.00
260	3.29	147.23	4.50	370.00
265	3.75	144.77	4.50	370.00
270	4.21	141.88	4.50	370.00
275	4.64	138.69	4.50	370.00
280	5.01	135.29	4.50	370.00
285	4.80	132.01	4.50	370.00
290	4.72	128.43	4.50	370.00
295	4.23	124.87	4.50	370.00
300	3.66	121.15	4.50	370.00
305	2.08	117.56	4.50	370.00
310	2.48	113.25	4.50	370.00
315	2.12	109.08	4.50	370.00
320	2.06	104.78	4.50	370.00
325	1.65	100.49	4.50	370.00
330	1.88	96.11	4.50	370.00
335	2.23	91.73	4.50	370.00
340	0.61	87.33	4.50	370.00
345	0.00	82.86	4.50	370.00
350	0.00	78.43	4.50	370.00
355	0.67	74.11	4.50	370.00

## Certification

I hereby certify that I am the technically qualified person responsible for the preparation of the frequency coordination data contained in this report. I am familiar with Parts 101 and 25 of the FCC Rules and Regulations and I have either prepared or reviewed the frequency coordination data submitted with this report, 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 18, 2017