

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
Sentinels 1A extension

1. Applicant

**Name:** Universal Space Network, Inc.      **Phone Number:** 215-328-9130  
**DBA Name:**      **Fax Number:** 215-328-9132  
**Street:** 417 Caredean Drive      **E-Mail:** jgreet@uspacenet.com  
Suite A  
**City:** Horsham      **State:** PA  
**Country:** USA      **Zipcode:** 19044  
**Attention:** Joanne Greet


File: SES-STA-20140425-00316  
Call Sign: SP2-14      Grant Date: SP2-14  
(or other identifier)  
Term Dates: SP2-14 To: SP2-14  
From: SP2-14      Approver: [Signature]



Applicant: Universal Space Network, Inc.  
File No.: SES-STA-20140425-00316  
No Call Sign  
Special Temporary Authority (STA)

Universal Space Network Inc. (USN) is granted extension of its STA FCC File number SES-STA-20140210-00064 to operate the earth station identified in this application to transmit on frequency 2078.650 MHz and receive on frequency 2254.099 MHz to conduct Launch and Early Orbit (LEOP) support satellite Sentinels-1A from North Pole Alaska using USN's ground station to assist the European Space Agency (EAS) and Swedish Space Corporation (SSC) for the S-band 2 GHz operation on the following conditions:

1. All operations shall be on an unprotected, non-interference basis to both government and non-government operations.
2. In the event of any harmful interference as a result of operations under this grant of STA, USN shall cease operations immediately upon notification of such interference and shall immediately inform the Commission, in writing, of such an event.
3. Operations will be limited to the transmit maximum eirp level 68 dBW and maximum eirp density level 48 dBW/4kHz with emission designator 400KG1D and receive with emission designator 400KG1D.
4. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at USN's own risk.
5. USN will inform the FCC (Paul.Blais@ 202-418-7274) at least 24 hours prior to the planned operations if delayed beyond the requested beginning date of March 28, 2014.
6. USN Point of Contact for Operation is Joanne Greet 215-328-9130 or 907-490-3064 and must be available while the frequencies are in use.
7. Operations from expiration of previous grant to the date of grant of this application was authorized pursuant to Section 1.62 of the Commission's rules, 47 C.F.R § 1.62.

 <b>GRANTED</b> International Bureau	<b>File:</b> <u>SES-STA-20140425-00316</u>
	<b>Call Sign</b> _____ <b>Grant Date</b> <u>5-2-14</u> (or other identifier)
	<b>From</b> <u>5-2-14</u> <b>Term Dates</b> <b>To:</b> <u>6-1-14</u>
	<b>Approved:</b> <u>Paul E. Blais</u>

<b>2. Contact</b>	
<b>Name:</b>	Universal Space Network, Inc. <b>Phone Number:</b> 215-328-9130
<b>Company:</b>	<b>Fax Number:</b> 215-328-9132
<b>Street:</b>	<b>E-Mail:</b> jgreet@uspacenet.com
417 Caredean Drive Suite A	
<b>City:</b> Horsham	<b>State:</b> PA
<b>Country:</b> USA	<b>Zipcode:</b> 19044 -
<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 SESSTA2014021000064 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 checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other	
6. Requested Use Prior Date	
04/26/2014	
7. City North Pole	
8. Latitude (dd mm ss.s h)    64 48 15.3 N	

9. State AK	10. Longitude (dd mm ss.s h) 147 30 0.8 W
11. Please supply any need attachments. Attachment 1: FCC 312 Form 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.) 10 Day extension of SES-STA-20140210-00064. Currently expires on 4/26/14. USN is requesting an extension to facilitate ranging test on the Sentinels IA spacecraft due to Quantum issues. All attachments from the currently approved STA are valid	
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 &quot;party to the application&quot;; for these purposes. Yes <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing Joanne Greet	15. Title of Person Signing Manager, Compliance
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.**

**FCC 312  
Main Form**

**FEDERAL COMMUNICATIONS COMMISSION**

**APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS**

Approved by OMB  
3000-0678  
Est. Avg. Burden Hours  
Per Response: 11 Hrs.

FCC Use Only  
File Number:

Call Sign:

Fee Number:

**APPLICANT INFORMATION**

1. Legal Name of Applicant <b>Universal Space Network, Inc.</b>		2. Voice Telephone Number <b>215-328-9130</b>
3. Other Name Used for Doing Business (if any)		
5. Mailing Street Address or P.O. Box <b>417 Caredean Drive, Suite A</b>		4. Fax Telephone Number <b>215-328-9132</b>
6. City <b>Horsham</b>		8. Zip Code <b>19044</b>
7. State / Country (if not U.S.A.) <b>PA</b>		10. Voice Telephone Number
9. Name of Contact Representative (If other than applicant)		
11. Firm or Company Name		12. Fax Telephone Number
13. Mailing Street Address or P.O. Box		14. City
ATTENTION:		15. State / Country (if not U.S.A.)
		16. Zip Code

**CLASSIFICATION OF FILING**

17. Place an "X" in the box next to the classification that applies to this filing for both questions a. and b. Mark only one box for 17a and only one box for 17b.

<input checked="" type="checkbox"/> a1. Earth Station	<input type="checkbox"/> b1. Application for License of New Station	<input type="checkbox"/> b6. Transfer of Control of License or Registration
<input type="checkbox"/> a2. Space Station	<input type="checkbox"/> b2. Application for Registration of New Domestic Receive-Only Station	<input type="checkbox"/> b7. Notification of Minor Modification
	<input type="checkbox"/> b3. Amendment to a Pending Application	<input type="checkbox"/> b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
	<input type="checkbox"/> b4. Modification of License or Registration	<input type="checkbox"/> b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
	<input type="checkbox"/> b5. Assignment of License or Registration	<input checked="" type="checkbox"/> b10. Other (Please Specify): <b>Application to request Special Temporary Authority</b>

18. If this filing is in reference to an existing station, enter:  
Call sign of station: **N/A**

19. If this filing is an amendment to a pending application enter:  
(a) Date pending application was filed:  
(b) File number of pending application:



**TYPE OF SERVICE**

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Place an "X" in the box(es) next to all that apply.

<input type="checkbox"/>	a. Fixed Satellite	<input type="checkbox"/>	c. Radiodetermination Satellite	<input type="checkbox"/>	e. Direct to Home Fixed Satellite
<input type="checkbox"/>	b. Mobile Satellite	<input type="checkbox"/>	d. Earth Exploration Satellite	<input checked="" type="checkbox"/>	f. Digital Audio Radio Service
<b>LEOP</b>					
g. Other (please specify)					

21. STATUS: Place an "X" in the box next to the applicable status. Mark only one box.

a. Common Carrier     b. Non-Common Carrier

22. If earth station applicant, place an "X" in the box(es) next to all that apply.

a. Using U.S. licensed satellites     b. Using Non-U.S. licensed satellites

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Mark only one box. Are these facilities:

a. Connected to the Public Switched Network     b. Not connected to the Public Switched Network

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).

a. C-Band (4/6 GHz)     b. Ku-Band (12/14 GHz)     c. Other (Please specify) **S-band**

**TYPE OF STATION**

25. CLASS OF STATION: Place an "X" in the box next to the class of station that applies. Mark only one box.

a. Fixed Earth Station     b. Temporary-Fixed Earth Station     c. 12/14 GHz VSAT Network     d. Mobile Earth Station     e. Space Station     f. Other (Specify)

If space station applicant, go to Question 27.

26. TYPE OF EARTH STATION FACILITY: Mark only one box.

a. Transmit/Receive     b. Transmit-Only     c. Receive-Only

**PURPOSE OF MODIFICATION OR AMENDMENT**

27. The purpose of this proposed modification or amendment is to: Place an "X" in the box(es) next to all that apply.

<input type="checkbox"/>	a -- authorization to add new emission designator and related service
<input type="checkbox"/>	b -- authorization to change emission designator and related service
<input type="checkbox"/>	c -- authorization to increase EIRP and EIRP density
<input type="checkbox"/>	d -- authorization to replace antenna
<input type="checkbox"/>	e -- authorization to add antenna
<input type="checkbox"/>	f -- authorization to relocate fixed station
<input type="checkbox"/>	g -- authorization to change assigned frequency(ies)
<input type="checkbox"/>	h -- authorization to add Points of Communication (satellites & countries)
<input type="checkbox"/>	i -- authorization to change Points of Communication (satellites & countries)
<input type="checkbox"/>	j -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
<input checked="" type="checkbox"/>	k -- Other (Please Specify) <b>N/A</b>

**ENVIRONMENTAL POLICY**

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application.

A Radiation Hazard Study must accompany all applications as an exhibit for new transmitting facilities, major modifications, or major amendments. Refer to OET Bulletin 65.

YES     NO

**ALIEN OWNERSHIP**

29. Is the applicant a foreign government or the representative of any foreign government?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
30. Is the applicant an alien or the representative of an alien?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit, the identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.		

**BASIC QUALIFICATIONS**

35. Does the applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
36. Has the applicant or any party to this application had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of the circumstances.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
37. Has the applicant, or any party to this application, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of the circumstances.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of the circumstances.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If Yes, attach as an exhibit, an explanation of the circumstances.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, addresses, and citizenship of those stockholders owning of record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		
41. By checking Yes, the undersigned certifies, that neither the 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.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. § 25.137, as appropriate. If no, proceed to question 43.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? <u>International Telecommunication Union</u>		





**FEDERAL COMMUNICATIONS COMMISSION**

**FCC 312 - Schedule A**

(Place an "X" in one of the blocks below)

- CONSENT TO TRANSFER OF CONTROL**       **CONSENT TO ASSIGNMENT OF LICENSE**
- NOTIFICATION OF TRANSFER OF CONTROL**       **NOTIFICATION OF ASSIGNMENT**
- OF RECEIVE ONLY REGISTRATION**               **OF RECEIVE ONLY REGISTRATION**

FCC Use Only

A1. Name of Licensee or Registrant		A2. Voice Telephone Number	
A3. Mailing Street Address or P.O. Box		A4. Fax Telephone Number	
ATTENTION:		A6. State / Country (if not U.S.A.)	
A5. City		A7. Zip Code	
A8. List Call Sign(s) of station(s) being assigned or transferred		A9. No. of station(s) listed	
A10. Name of Transferor/Assignor (if different than licensee or registrant)			
A11. Mailing Street Address or P.O. Box			
A12. City	A13. State/Country	A14. Zip Code	A15. Name of Transferee/Assignee
A16. Mailing Street Address or P.O. Box		A17. City	A18. State/Country
		A19. Zip Code	
A20. If these facilities are licensed, is the transferee/assignee directly or indirectly controlled by any other entity? If Yes, attach as an exhibit, a statement (including organizational diagrams where appropriate) which fully and completely identifies the nature and extent of control including: (1) the name, address, citizenship, and primary business of the controlling entity and any intermediate subsidiaries or parties; and (2) the names, addresses, citizenship, and the percentages of voting and equity stock of those stockholders holding 10 percent or more of the controlling corporation's voting stock.			
		<input type="checkbox"/> <b>YES</b>	<input type="checkbox"/> <b>NO</b>
A21. If these facilities are licensed, attach as an exhibit, a complete statement setting forth the facts which show how the assignment or transfer will serve the public interest.			

**CERTIFICATION**

1. The undersigned, individually and for licensee, certifies that all attached exhibits pertinent to Schedule A and all statements made in Schedule A of this application are true, complete and correct to the best of his/her knowledge and belief. The undersigned also certifies that any contracts or other instruments submitted herewith are complete and constitute the full agreement.		A23. Signature	A24. Title (Office Held by Person Signing)	A25. Date
2. The undersigned represents that stock will not be delivered and that control will not be transferred until the Commission's consent has been received, but that transfer of control or assignment of license will be completed within 60 days of Commission consent. The undersigned also acknowledges that the Commission must be notified by letter within 30 days of consummation.		A27. Signature	A28. Title (Office Held by Person Signing)	A29. Date
A22. Printed Name of Licensee (Must agree with A1)	A26. Printed Name of Licensee Transferor/Assignor (If different than licensee. Must agree with A10)	A31. Signature	A32. Title (Office Held by Person Signing)	A33. Date













**FEDERAL COMMUNICATIONS COMMISSION**  
**SATELLITE EARTH STATION AUTHORIZATIONS**  
**FCC Form 312 - Schedule B: (Technical and Operational Description)**

If VSAT Network, provide the SITE-ID (Item B1b) of the station that B8-B13 are in response to (HUB, REMOTE1, etc.): N/A -not VSAT network

<p>B8. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with <b>geostationary</b> satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurements? If NO, provide as an exhibit, a technical analysis showing compliance with two-degree spacing policy.</p> <p style="text-align: right;"><input type="checkbox"/> YES      <input type="checkbox"/> NO</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO									
<p>B9. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with <b>non-geostationary</b> satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?</p> <p style="text-align: right;"><input checked="" type="checkbox"/> YES      <input type="checkbox"/> NO</p>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO									
<p>B10. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.</p> <p><b>Remote Control Point Location:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">B10a. Street Address <b>417 Caredean Drive, Suite A</b></td> <td style="width: 30%;">B10c. State / Country <b>PA</b></td> <td style="width: 40%;">B10e. Zip Code <b>19044</b></td> </tr> <tr> <td>B10b. City <b>Horsham</b></td> <td colspan="2">B10g. Call Sign of Control Station (if appropriate)</td> </tr> <tr> <td>B10f. Telephone Number <b>215-328-9130</b></td> <td colspan="2"></td> </tr> </table>	B10a. Street Address <b>417 Caredean Drive, Suite A</b>	B10c. State / Country <b>PA</b>	B10e. Zip Code <b>19044</b>	B10b. City <b>Horsham</b>	B10g. Call Sign of Control Station (if appropriate)		B10f. Telephone Number <b>215-328-9130</b>			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B10a. Street Address <b>417 Caredean Drive, Suite A</b>	B10c. State / Country <b>PA</b>	B10e. Zip Code <b>19044</b>								
B10b. City <b>Horsham</b>	B10g. Call Sign of Control Station (if appropriate)									
B10f. Telephone Number <b>215-328-9130</b>										
<p>B11. Is frequency coordination required? If YES, attach a frequency coordination report as an exhibit.</p> <p style="text-align: right;"><input type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									
<p>B12. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as an exhibit.</p> <p style="text-align: right;"><input type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									
<p><b>B13. FAA Notification - (See 47 CFR Part 17 and 47 CFR Part 25.113(c))</b>  <b>Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation?</b></p> <p style="text-align: right;"><input type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p> <p><b>FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.</b></p>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									