

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Sentinels 3A 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-20160315-00242
Call Sign 3-17-16 Grant Date 3-17-16
(or other identifier)
Term Dates
From: 3-17-16 To: 4-16-16
Approved: Joanne Greet

Universal Space Network, Inc.
File No.: SES-STA-20160315-00242
Call Sign: None
Special Temporary Authority (STA)



File # SES-STA-20160315-00242
Call Sign _____ Grant Date 3-17-16
(or other identifier)
Term Dates
From: 3-17-16 To: 4-16-16
Approved: Paul E. Blais

Universal Space Network, Inc. (USN) is granted a Special Temporary Authority extension from SES-STA-20150917-00592, for 30 days, beginning March 17, 2016, to operate its fixed earth station in North Pole, AK, to provide Launch and Early Orbit Support (LEOP) service to the Sentinels-3A spacecraft licensed by the European Space Agency. Communications shall consist of ranging (tone uplink), telecommand, and telemetry of the satellite. Authority is granted under the following conditions.

1. Operations are limited to the following frequencies, emissions and power limits:

| Frequency | Emissions | Max. EIRP (dBW) | Max. EIRP Den. (dBW/4KHz) |
|-------------------------------|-----------|-----------------|---------------------------|
| Transmitting: 2075.650 MHz | 400KG1D | 68 | 48 |
| Receiving: 2254.099 MHz | 400KG1D | | |

2. Operations must comply with the satellite operator's coordinated agreements for the Sentinels 3A spacecraft with U.S. satellite operators. If no agreements exist then operations are not permitted.

3. This is not a grant of market access for the Sentinels 3A spacecraft.

4. Operations, shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station(s). USN shall cease transmission(s) immediately upon notice of such interference and report the interference to the FCC point of contact Paul.Blaisfcc.gov, 202-418-7274 within 24 hours of occurrence.

5. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future USN applications.

6. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at USN's risk.

7. 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.

2. Contact

Name: Universal Space Network, Inc. **Phone Number:** 215-328-9130
Company: **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: **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 SESSTA2015091700592 or Submission ID

4a. Is a fee submitted with this application?

If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).

Governmental Entity Noncommercial educational licensee

Other (please explain):

4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station

5. Type Request

Use Prior to Grant

Change Station Location

Other

6. Requested Use Prior Date
03/17/2015

7. CityNorth 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: SES-STA Approval Attachment 2: FCC 312 Sentinels3A Attachment 3: Sentinel3A | |
| 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 extension of STA SES-STA 20150917-00592 to support testing on the Sentinels-3A spacecraft in support of the Sentinels-1B mission scheduled for launch on April 22, 2016 | |
| 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 Joanne Greet | 15. Title of Person Signing Manager of 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). | |

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

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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

Approved by OMB
3060-0678
Est. Avg. Burden Hours
Per Response: 11 Hrs.

FEDERAL COMMUNICATIONS COMMISSION

APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

FCC Use Only
File Number:
Call Sign:
Fee Number:

APPLICANT INFORMATION

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

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

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

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.

- a. Fixed Satellite c. Radiodetermination Satellite e. Direct to Home Fixed Satellite
 b. Mobile Satellite d. Earth Exploration Satellite f. Digital Audio Radio Service g. Other (please specify) **Ranging**

21. STATUS: Place an "X" in the box next to the applicable status. Mark only one box. 22. If earth station applicant, place an "X" in the box(es) next to all that apply.

a. Common Carrier b. Non-Common Carrier 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) c. Other (Please specify) **S-band**
 b. Ku-Band (12/14 GHz)

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) N/A |

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.

- YES NO

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.

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? | International Telecommunication Union | |

43. Description. (Summarize the nature of the application and the services to be provided).
 USN ground station shall be used to assist the European Space Agency (ESA) and Swedish Space Corporation (SSC) with the ranging of the Sentinels-3A spacecraft in preparation of the launch of the Sentinel-1B mission scheduled for 4/22/16
 Communications shall consist of ranging (tone uplink), telecommand, and telemetry of the satellite.

| Exhibit No. | Identify all exhibits that are attached to this application. |
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CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Place an "X" in the box next to applicable response.)

a. Individual
 b. Unincorporated Association
 c. Partnership
 d. Corporation
 e. Governmental Entity
 f. Other (Please specify) _____

45. Typed Name of Person Signing: **Joanne Greet**
 46. Title of Person Signing: **Manager, Compliance**

47. Signature: _____

48. Date: **15 March 2016**

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).

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:

A5: City

A6. State / Country (if not U.S.A.)

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)

A15. Name of Transferee/Assignee

A11. Mailing Street Address or P.O. Box

A16. Mailing Street Address or P.O. Box

A12. City

A13. State/Country

A14. Zip Code

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.

YES NO

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.

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.

A22. Printed Name of Licensee (Must agree with A1)

A23. Signature

A25. Date

A26. Printed Name of License Transferor/Assignor (if different than licensee. Must agree with A10)

A27. Signature

A29. Date

A30. Printed Name of License Transferee/Assignee (Must agree with A15)

A31. Signature

A33. Date

**FCC 312
Schedule B**

**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE EARTH STATION AUTHORIZATIONS
(Technical and Operational Description)**

Page 1: Location

License of New Station Registration of New Domestic Receive-Only Station Amendment to a Pending Application Modification of License/Registration Notification of Minor Modification

B1. Location of Earth Station Site. If temporary-fixed, mobile, or VSAT remote facility, specify area of operation and point of contact. If VSAT hub station, give its location. For VSAT networks attach individual Schedule B, Page 1 sheets for each hub station and each remote station. Individually provide the Location, Points of Communications, and Destination Points for each hub and remote station.

| | | | | | |
|---|---|---|---|---|--|
| B1a. Station Call Sign USAK01 | B1b. Site Identifier (HUB, REMOTE1, etc.) | B1c. Telephone Number 907-490-3064 | B1j. Geographic Coordinates Deg. - Min. - Sec. - E/W | | B1k. Lat/Lon. Coordinates are: |
| B1d. Street Address of Station or Area of Operation 1465 Broadway Road | | B1e. Name of Contact Person Joanne Greet | Lat. 64 48 15.3 | N | <input type="checkbox"/> NAD-27 |
| B1f. City North Pole | B1g. County North Star Borough-Fairbanks | B1h. State AK | Lon. 147 30 00.8 | W | <input checked="" type="checkbox"/> NAD-83 |
| | | B1i. Zip Code 99705 | B1l. Site Elevation (AMSL) 149.4 | | meters |

B2. Points of Communications: List the names and orbit locations of all satellites with which this earth station will communicate. The entry "ALSAT" is sufficient to identify the names and locations of all satellite facilities licensed by the U.S. All non-U.S. licensed satellites must be listed individually.

| Satellite Name and Orbit Location | Satellite Name and Orbit Location |
|-----------------------------------|-----------------------------------|
| SENTINELS-3A | |
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| | |

B3. Destination points for communications using non-U.S. licensed satellites. For each non-U.S. licensed satellite facility identified in section B2 above, specify the destination point(s) (countries) where the services will be provided by this earth station via each non-U.S. licensed satellite system. Use additional sheets as needed.

| Satellite Name | List of Destination Points |
|----------------|----------------------------|
| SENTINELS-3A | ESA (Non US spacecraft) |
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FEDERAL COMMUNICATIONS COMMISSION
 SATELLITE EARTH STATION AUTHORIZATIONS
 FCC Form 312 - Schedule B: (Technical and Operational Description)

B4. Earth Station Antenna Facilities: Use additional pages as needed.

| (a) Site ID* | (b) Antenna ID** | (c) Quantity | (d) Manufacturer | (e) Model | (f) Antenna Size (meters) | (g) Antenna Gain Transmit and/or Receive (____ dBi at ____ GHz) |
|--------------|------------------|--------------|------------------|-----------|---------------------------|---|
| USAK01 | AK-13M | 1 | Datron | 1453 | 13 | TX 46.3dBi @ 2090 MHz RX 47.2dBi @ 2270 MHz |
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B5. Antenna Heights and Maximum Power Limits: (The corresponding Antenna ID in tables B4 and B5 applies to the same antenna)

| (a) Antenna ID** | (b) Antenna Structure Registration No. | Maximum Antenna Height | | (c) Building Height Above Ground Level (meters)*** | (f) Maximum Antenna Height Above Rooftop (meters)*** | (g) Total Input Power at antenna flange (Watts) | (h) Total EIRP for all carriers (dBW) |
|------------------|--|---------------------------------|-----------------------------------|--|--|---|---------------------------------------|
| | | (c) Above Ground Level (meters) | (d) Above Mean Sea Level (meters) | | | | |
| AK-13M | N/A | 20 | 398 | N/A+ | N/A+ | 200W | 68dBW |
| | | | | | | | |
| | | | | | | | |
| | | | | + Antenna are not | on a building. | Max bldg ht. is 10' | |
| | | | | non-GEO | Non-GEO | 5 degrees | 5 degrees |
| 0-360 | 0-360 | | AK-13M | 2075.650 MHz | non-GEO | non-GEO | 5 degrees |
| 5 degrees | 0-360 | 0-360 | 8 dB/W | | | | |
| | | | | | | | |
| | | | | | | | |
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Notes: * If this is an application for a VSAT network, identify the site (Item B1b, Schedule B, Page 1) where each antenna is located. Also include this Site-ID on Schedule B, Page 5.
 ** Identify each antenna in VSAT network or multi-antenna station with a unique identifier, such as HUB, REMOTE1, A1, A2, 10M, 12M, 7M, etc. Use this same antenna ID throughout tables B4, B5, B6, and B7 when referring to the same antenna.
 *** Attach sketch of site or exemption, Sec 47 CFR Part 17.

**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

| | | | | | | | | | | |
|---|---|---|-----------------------------|-------------------------|-----------------------|----------------------------|---|--|--|--|
| B8. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary 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. | <input type="checkbox"/> YES <input type="checkbox"/> NO | | | | | | | | | |
| 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 non-geostationary 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? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | | | | | | | |
| B10. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point. | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | | | | | | | |
| <p align="center">Remote Control Point Location:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%; padding: 2px;"> B10a. Street Address 417 Caredean Drive, Suite A </td> <td style="width:30%; padding: 2px;"> B10d. State / Country PA </td> <td style="width:40%; padding: 2px;"> B10e. Zip Code 19044 </td> </tr> <tr> <td style="padding: 2px;"> B10b. City Horsham </td> <td style="padding: 2px;"> B10c. County Montgomery </td> <td style="padding: 2px;"> B10g. Call Sign of Control Station (if appropriate) </td> </tr> <tr> <td style="padding: 2px;"> B10f. Telephone Number 215-328-9130 </td> <td colspan="2"></td> </tr> </table> | | B10a. Street Address 417 Caredean Drive, Suite A | B10d. State / Country PA | B10e. Zip Code 19044 | B10b. City Horsham | B10c. County Montgomery | B10g. Call Sign of Control Station (if appropriate) | B10f. Telephone Number 215-328-9130 | | |
| B10a. Street Address 417 Caredean Drive, Suite A | B10d. State / Country PA | B10e. Zip Code 19044 | | | | | | | | |
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| B10f. Telephone Number 215-328-9130 | | | | | | | | | | |
| B11. Is frequency coordination required? If YES, attach a frequency coordination report as an exhibit. | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | | | | | | | | |
| B12. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as an exhibit. | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | | | | | | | | |
| B13. FAA Notification - (See 47 CFR Part 17 and 47 CFR Part 25.113(c)) 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? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | | | | | | | | |
| <p align="center">FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.</p> | | | | | | | | | | |