

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:  
Pendergrass STA to Transmit to CARBONITE-1

1. Applicant

|            |                      |               |                          |
|------------|----------------------|---------------|--------------------------|
| Name:      | ViaSat, Inc.         | Phone Number: | 760-476-4812             |
| DBA Name:  |                      | Fax Number:   | 760-929-3941             |
| Street:    | 6155 El Camino Real  | E-Mail:       | steven.hemple@viasat.com |
| City:      | Carlsbad             | State:        | CA                       |
| Country:   | USA                  | Zipcode:      | 92009                    |
| Attention: | Mr. Steven C. Hemple |               |                          |

|                                                                                      |                       |                        |                                                                                     |
|--------------------------------------------------------------------------------------|-----------------------|------------------------|-------------------------------------------------------------------------------------|
|  | File #                | SES-STA-20190408-00499 |                                                                                     |
|                                                                                      | Call Sign             | Grant Date             | 5-10-19                                                                             |
|                                                                                      | (or other identifier) | Term Dates             | From: 5-10-19 To: 7-9-19                                                            |
|                                                                                      |                       | Approved:              |  |

**GRANTED**  
International Bureau

|                                                                                                                                                                                                                                                                                                            |                     |                                                    |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------------------------|--------------------------|
| <b>2. Contact</b>                                                                                                                                                                                                                                                                                          |                     |                                                    |                          |
| <b>Name:</b>                                                                                                                                                                                                                                                                                               | Steven Hemple       | <b>Phone Number:</b>                               | 7604764812               |
| <b>Company:</b>                                                                                                                                                                                                                                                                                            | Viasat              | <b>Fax Number:</b>                                 | 760-929-3941             |
| <b>Street:</b>                                                                                                                                                                                                                                                                                             | 6155 El Camino Real | <b>E-Mail:</b>                                     | steven.hemple@viasat.com |
| <b>City:</b>                                                                                                                                                                                                                                                                                               | Carlsbad            | <b>State:</b>                                      | CA                       |
| <b>Country:</b>                                                                                                                                                                                                                                                                                            | USA                 | <b>Zipcode:</b>                                    | 92009 -                  |
| <b>Attention:</b>                                                                                                                                                                                                                                                                                          |                     | <b>Relationship:</b>                               | Engineer                 |
| (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 SESMOD2018020600088 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).<br><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee<br><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 checked="" type="radio"/> Other                                                                                                                                                                   |                     |                                                    |                          |
| 6. Requested Use Prior Date                                                                                                                                                                                                                                                                                |                     |                                                    |                          |
| 7. City Pendergrass                                                                                                                                                                                                                                                                                        |                     | 8. Latitude<br>(dd mm ss.s h)   34   10   29.0   N |                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |                                      |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------|--------------------------|
| 9. State                                                                                                                                                                                                                                                                                                                                                                                                                                  | GA                           | 10. Longitude<br>(dd mm ss.s h)      | 83 40 19.0 W             |
| 11. Please supply any need attachments.                                                                                                                                                                                                                                                                                                                                                                                                   |                              | Attachment 2:                        | Attachment 3:            |
| Attachment 1: STA Description                                                                                                                                                                                                                                                                                                                                                                                                             |                              |                                      |                          |
| 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;"> <p>To perform initial verification of ground station equipment with the the Carbonite-1 (CBNT-1) test satellite in preparation for support of Launch and Early Operation (LEOP) activities for the General Atomics OTB satellite beginning in June 2019.</p> </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. |                              |                                      |                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              | Yes <input checked="" type="radio"/> | No <input type="radio"/> |
| 14. Name of Person Signing                                                                                                                                                                                                                                                                                                                                                                                                                | 15. Title of Person Signing  |                                      |                          |
| Steven Hemple                                                                                                                                                                                                                                                                                                                                                                                                                             | Engineer, Regulatory Affairs |                                      |                          |
| <p>WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT<br/> (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION<br/> (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).</p>                                                                                                                                              |                              |                                      |                          |

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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.**



File # SES-STA-20190408-00499  
E160161  
Call Sign E160161 Grant Date 5-10-19  
(or other identifier)  
Term Dates  
From: 5-10-19 To: 7-9-19  
Approved: Paul E. Hines

Applicant: ViaSat, Inc.  
File No.: SES-STA-20190408-00499  
Call Sign: E160161  
Special Temporary Authority

Viasat, Inc. ("Viasat") is granted a special temporary authority for 60 days, beginning May 10, 2019, to utilize its Pendergrass, GA, 5.4 meter earth station to perform initial verification of ground station equipment with the Carbonite-1 (CBNT-1) test satellite in preparation for support of Launch and Early Operation (LEOP) activities for the General Atomics OTB satellite using the frequency 2062 MHz (Earth-to-space) and 2059 MHz (space-to-Earth) under the following conditions:

1. Operations will not exceed the operational power levels and parameters coordinated.
2. All operations under this grant of special temporary authority shall be on an unprotected and non-harmful interference basis. ViaSat shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radio communication system.
3. In the event of any harmful interference under this grant of special temporary authority, ViaSat must cease operations immediately upon notification of such interference, and must inform the Commission, in writing, immediately of such an event.
4. All operators of satellites will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs, Currently the 24x7 contact information for ViaSat's is Ph.: (720) -493-7300.
5. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at ViaSat's risk.
6. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future ViaSat applications .

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.

## Request for Special Temporary Authority

Viasat, Inc. ("Viasat") herein requests 60 days, beginning April 29, 2019, of Special Temporary Authority ("STA") to use its Pendergrass, Georgia 5.4 meter earth station (call sign E160161) to perform initial verification of ground station equipment with the Carbonite-1 (CBNT-1) test satellite in preparation for support of Launch and Early Operation (LEOP) activities for the General Atomics OTB satellite beginning in June 2019.

The Carbonite-1 test satellite shares many common design features with the General Atomics OTB satellite such that advance testing with the Carbonite-1 satellite will be of high value toward assuring success of the General Atomics OTB satellite's LEOP. The Carbonite-1 satellite operates in non-geostationary orbit ("NGSO") and in the Earth Exploration Satellite Service ("EESS") S-band frequency band and X-band frequency band. Only the S-band will be used during this testing at Pendergrass. The Carbonite-1 satellite is already in orbit with NORAD ID 40718. The emission details are included below. Grant of this STA request will allow Viasat to support the US Government missions aboard the OTB satellite, including NASA, and hence serve the public interest.

Tests that involve uplink transmissions will be performed using the emissions shown in Table 1. The emission from the Earth station (E160161) is covered under the current license grant (SES-MOD-20180206-00088).

Table 1 Uplink Emission

| Frequency [MHz] | Polarization | Emission Designator | Max EIRP [dBW] | Max EIRP Density [dBW/4 kHz] | Service |
|-----------------|--------------|---------------------|----------------|------------------------------|---------|
| 2062.000        | R            | 30K0F1D             | 44             | 37.2                         | TT&C    |

The tests that involve downlink emission from the CARBONITE-1 space station will be performed using the emission shown in Table 2.

Table 2 Downlink Emissions

| Frequency [MHz] | Polarization | Emission Designator | Max EIRP [dBW] | Max EIRP Density [dBW/4 kHz] | Service |
|-----------------|--------------|---------------------|----------------|------------------------------|---------|
| 2059.000        | L            | 38K4M1D             | -14.8          | -24.6                        | TT&C    |

Viasat's 24x7 contact information for the Pendegrass earth station is 720-493-7300

Please direct any questions regarding this STA request to:

Steven Hemple  
steven.hemple@viasat.com  
760-476-4812