

SAT- MOD-20080718-00144  
SAT- AMD-20081203-00220

Approved by OMB  
3060-0678

File #

Call Sign S2737 Grant Date 03/25/09

(or other identifier)

Term Dates duration of

From 03/25/09 To: license

Approved:

*Stephen J. Duall*  
Stephen J. Duall  
Chief/Policy Branch



\*subject to conditions

S2737 IB2008001765

SAT-MOD-20080718-00144

ViaSat, Inc.  
VIASAT-KA1

Date & Time Filed: Jul 18 2008 6:47:18:270PM  
File Number: SAT-MOD-20080718-00144

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM  
FCC Use Only  
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
VIASAT-KA1 Minor Modification (77.3 W.L.)

1-8. Legal Name of Applicant

<b>Name:</b>	ViaSat, Inc.	<b>Phone Number:</b>	760-476-2583
<b>DBA Name:</b>		<b>Fax Number:</b>	760-929-3941
<b>Street:</b>	6155 El Camino Real	<b>E-Mail:</b>	daryl.hunter@viasat.com
<b>City:</b>	Carlsbad	<b>State:</b>	CA
<b>Country:</b>	USA	<b>Zipcode:</b>	92009
<b>Attention:</b>	Mr Daryl T Hunter		

ViaSat, Inc  
IBFS File Nos. SAT-MOD-20080718-00144 and  
SAT-AMD-20081203-00220  
Attachment – Conditions of Authorization  
Call Sign: S2737

March 25, 2009

ViaSat, Inc.'s (ViaSat) applications, File Nos. SAT-MOD-20080718-00144 and SAT-AMD-20081203-00220 are GRANTED.<sup>1</sup> ViaSat seeks authority to change the technical parameters of the design for its VIASAT-KA1 satellite, authorized to operate at the 77.3° W.L. orbital location.<sup>2</sup> There are no changes to ViaSat's licensed frequencies or orbital location. Accordingly, ViaSat is authorized to operate in accordance with the terms and conditions of its initial authorization, the technical specifications set forth in its applications, the Commission's rules, and the following conditions:

1. ViaSat is authorized to relocate its telecommand and telemetry functions within its authorized frequency bands. Specifically, ViaSat is authorized to relocate its telecommand functions from the 28.35- 28.6 GHz frequency band to one megahertz of bandwidth at each of the 29,500.5 MHz and 29,503.0 MHz center frequencies. ViaSat is also authorized to relocate its telemetry functions from the 18.3-18.8 GHz frequency band to one megahertz of bandwidth at each of the 19,701.0 MHz and 19,703.0 MHz center frequencies.
  
2. ViaSat's request for a waiver of Section 25.210(i) of the Commission's rules is GRANTED. Section 25.210(i) requires space station antennas in the Fixed Satellite Service to be designed to meet a cross-polarization isolation of 30 dB within the primary coverage area of the antenna. 47 C.F.R. § 25.210(i). It is a technical requirement necessary to facilitate two-degree orbital spacing between geostationary satellites. ViaSat states that the VIASAT-KA1 satellite uplink spot beam receive antennas provide a maximum cross-polarization of 26 dB. ViaSat notes that the shortfall is in the uplink direction only and will have no adverse affects of adjacent satellite networks. Accordingly, we grant this waiver with the condition that the operation of VIASAT-KA1 shall not cause more interference to U.S. services being provided by any authorized system that is two-degree spacing compliant than would be caused if VIASAT-KA1 complied with Section 25.210(i). Further, ViaSat shall not claim protection from interference to its operations caused by U.S. services being provided by the two-degree spacing compliant satellites if such interference results from failure of the VIASAT-KA1 satellite to comply with Section 25.210(i) of the Commission's rules. Grant of this waiver request is consistent with our precedent. *See* Star One S.A.- Petition for Declaratory

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<sup>1</sup> ViaSat's modification application was placed on Public Notice on January 23, 2009. *See* Policy Branch Information, *Public Notice*, Report No. SAT-00575 (January 23, 2009). No comments were filed in response to the Notice.

<sup>2</sup> *See* ViaSat, Inc., SAT-LOA-20070314-00051, Policy Branch Information, *Public Notice*, Report No. SAT-00458, DA No. 07-3322 (rel. July 20, 2007) and SAT-MOD-20071204-00168, Policy Branch Information, *Public Notice*, Report No. SAT-00524, DA 08-1204 (rel. May 23, 2008).

Ruling to Add the Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, Order, 19 FCC Rcd 16334 (Sat. Div. 2004) (finding that the impact on neighboring satellite systems of a 3-5 dB difference from the required cross polarization isolation ratio would be negligible).

3. ViaSat has 30 days from the date of this grant to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.


4. This grant is issued pursuant to 47 C.F.R. § 0.261 of the Commission's rules on delegated authority and is effective immediately. Petitions for Reconsideration and Applications for Review under the Commission's rules, 47 C.F.R. §§ 1.106 and 1.115 may be filed within 30 days of the date of the public notice indicating this action was taken.

SAT-MOD-20080718-00144  
File # SAT-AMD-20081203-00220

Call Sign	<u>S2737</u>	Grant Date	<u>03/25/09</u>
(or other identifier)		Exp. Date	duration of
From	<u>03/25/09</u>		license

*Stephen J. Duall*  
Stephen J. Duall  
Chief, Policy Branch

\*subject to conditions

A red circular seal of the Federal Communications Commission is stamped on the left side of the form. The seal features an eagle with wings spread, perched on a shield, with the words 'FEDERAL COMMUNICATIONS COMMISSION' around the perimeter. Below the seal, the word 'GRANTED' is stamped in a rectangular box, followed by an asterisk.

9-16. Name of Contact Representative

**Name:** John P. Janika **Phone Number:** 202-637-2200  
**Company:** Latham & Watkins LLP **Fax Number:** 202-637-2201  
**Street:** 555 Eleventh Street, NW **E-Mail:** john.janka@lw.com  
Suite 1000  
**City:** Washington **State:** DC  
**Country:** USA **Zipcode:** 20004-  
**Attention:** **Relationship:** Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- b3. Amendment to a Pending Application
- b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)
- (N/A) b11. Application for Earth Station to Access a Non-U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States
- (N/A) b12. Application for Database Entry
- b13. Amendment to a Pending Database Entry Application
- b14. Modification of Database Entry

<p>17c. 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):</p>	<p>17d.</p>
<p>Fee Classification    BFY – Space Station Modification(Geostationary)</p>	
<p>18. If this filing is in reference to an existing station, enter:  (a) Call sign of station:  S2737</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:  (a) Date pending application was filed:  (b) File number:  SATMOD2007120400168</p>

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:

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

21. STATUS: Choose the button next to the applicable status. Choose only one.

- Common Carrier
- Non-Common Carrier

22. If earth station applicant, check all that apply.

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

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

- Connected to a Public Switched Network
- Not connected to a Public Switched Network
- N/A

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 upper and lower frequencies in MHz.)

Frequency Lower: 18300      Frequency Upper: 30000      (Please specify additional frequencies in an attachment)

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- a. Fixed Earth Station
- b. Temporary-Fixed Earth Station
- c. 12/14 GHz VSAT Network
- d. Mobile Earth Station
- e. Geostationary Space Station
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

- Transmit/Receive
- Transmit-Only
- Receive-Only
- N/A

"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

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

- a --- authorization to add new emission designator and related service
- b --- authorization to change emission designator and related service
- c --- authorization to increase EIRP and EIRP density
- d --- authorization to replace antenna
- e --- authorization to add antenna
- f --- authorization to relocate fixed station
- g --- authorization to change frequency(ies)
- h --- authorization to add frequency
- i --- authorization to add Points of Communication (satellites & countries)
- j --- authorization to change Points of Communication (satellites & countries)
- k --- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l --- authorization to change orbit location
- m --- authorization to perform fleet management
- n --- authorization to extend milestones
- o --- Other (Please specify)



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 for new transmitting facilities, major modifications, or major amendments.

Yes  No

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government?

Yes  No

30. Is the applicant an alien or the representative of an alien?

Yes  No  N/A

31. Is the applicant a corporation organized under the laws of any foreign government?

Yes  No  N/A

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?

Yes  No  N/A

<p>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?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.</p>	

**BASIC QUALIFICATIONS**

<p>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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>Exhibit C</p>
<p>36. Has the applicant or any party to this application or amendment 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 circumstances.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

<p>37. Has the applicant, or any party to this application or amendment, 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 circumstances.</p>	<p style="text-align: center;"> <input type="radio"/> Yes      <input checked="" type="radio"/> No         </p>
<p>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 circumstances</p>	<p style="text-align: center;"> <input type="radio"/> Yes      <input checked="" type="radio"/> No         </p>
<p>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.</p>	<p style="text-align: center;"> <input type="radio"/> Yes      <input checked="" type="radio"/> No         </p>
<p>40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a 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.</p> <p style="text-align: right;">Exhibit B</p>	

<p>41. 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 &amp;quot;party to the application&amp;quot;; for these purposes.</p>	<p style="text-align: center;">Yes      No</p> <p style="text-align: center;"><input checked="" type="radio"/>      <input type="radio"/></p>
<p>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.</p>	<p style="text-align: center;">Yes      No</p> <p style="text-align: center;"><input type="radio"/>      <input checked="" type="radio"/></p>
<p>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?</p>	<p>43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)</p> <div style="border: 1px solid black; padding: 5px;"> <p>ViaSat, Inc. files this minor modification application to modify its existing license to operate a GSO satellite at the 77.3 degrees W.L. orbital location using portions of the Ka-band to (i) move certain TT&amp;C carriers to different frequencies, and (ii) reflect technical changes in the satellite's design.</p> </div> <p>Exhibit D</p>

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

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): (Choose the button next to applicable response.)

- Individual
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing  
Richard A. Baldrige

46. Title of Person Signing  
President & COO

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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