

Date & Time Filed: Mar 14 2007 11:13:22:260AM
File Number: SAT-LOA-20070314-00051
Callsign/Satellite ID: S2737

77.3° W.L.

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	FCC Use Only
---	--------------

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
ViaSat, Inc. Ka-band Application - 77 WL Nominal

1-8. Legal Name of Applicant	
Name: ViaSat, Inc.	Phone Number: 760-476-2214
DBA Name:	Fax Number: 760-929-3941
Street: 6155 El Camino Real	E-Mail: keven.lippert@viasat.com
City: Carlsbad	State: CA
Country: USA	Zipcode: 92009
Attention: Mr. Keven Lippert	



File # SAT-LOA-20070314-00051
 Call Sign S2737 Grant Date July 18, 2007
 (or other identifier)
 Term Dates
 From July 18, 2007 To: see conditions
 Approved: [Signature]
 Policy Branch Chief

ViaSat, Inc.
File No. SAT-LOA-20070314-00051
Attachment – Conditions of Authorization
Call Sign S2737

July 18, 2007

ViaSat, Inc.'s ("ViaSat's") application, File No. SAT-LOA-20070314-00051, IS GRANTED. Accordingly, ViaSat is authorized to launch and operate its VIASAT-KA1 satellite, Call Sign S2737, at 77.3° W.L., in the 18.3-18.8 GHz, 19.7-20.2 GHz, 28.35-28.6 GHz, and 29.25-30.0 GHz frequency bands, in accordance with the terms, conditions, and technical specifications set forth in its application, this Attachment, and the Federal Communications Commission's Rules.

1. VIASAT-KA1 must be constructed, launched, and placed into operation in accordance with the technical parameters and terms and conditions of this authorization by these specified time periods following date of grant of this authorization:
 - a. Enter into a binding non-contingent contract to construct by 07/18/2008
 - b. Complete the critical design review by 07/18/2009
 - c. Begin construction by 07/18/2010
 - d. Launch and operate by 07/18/2012
 - e. ViaSat must file a bond with the Commission in the amount of \$3 million, pursuant to the procedures set forth in Public Notice, DA 03-2602, 18 FCC Rcd 16283 (2003), as revised by Amendment of the Commission's Space Station Licensing Rules and Policies, *First Order on Reconsideration and Fifth Report and Order*, FCC 04-147 (July 7, 2004), within 30 days of the date of this grant. *See also* 47 C.F.R. § 25.165.


Failure to meet any of these dates shall render this authorization null and void.

2. ViaSat's request for waiver of 47 C.F.R. § 25.114(c)(4)(v), as it applies to Section S7(p)¹ of the FCC Schedule S Form, IS GRANTED. Section 25.114(c)(4)(v) requires applicants to provide the relationship between satellite receive antenna gain pattern, gain-to-temperature ratio ("G/T"), and saturation flux density ("SFD") for each antenna beam. Because ViaSat's satellite is designed to use an on-board signal processor, it does not have conventional transponders to saturate. The receivers on the spacecraft dynamically either amplify or attenuate the input signal from the earth station in order to ensure that the signal level is appropriate for down conversion and decoding. Accordingly, ViaSat has established that it is not possible to provide the relationship between the satellite's receive antenna gain pattern, G/T, and SFD for each antenna beam. Considering the complexity of the VIASAT-KA1 satellite design, and the information provided by ViaSat in its explanation of its waiver request, we find that waiver is appropriate in this instance.

¹ This section of schedule S contains information regarding space station antenna beam characteristics for each beam of a satellite system. Subsection (p) contains information on the minimum saturation flux density.

3. ViaSat's request for partial waiver of 47 C.F.R. § 25.114(c)(4)(vi) of the Commission's Rules IS GRANTED. Section 25.114(c)(4)(vi) requires applicants to provide the gain of each transponder channel (between output of receiving antenna and input of transmitting antenna), including any adjustable gain-step capabilities. The VIASAT-KA1 satellite has an on-board processor which decouples the output power of the receiving antenna from input power of the transmitting antenna, precluding the calculation of a gain value. Considering the complexity of the VIASAT-KA1 satellite design, and the information provided by ViaSat in its explanation of its waiver request, we find that waiver is appropriate in this instance.
4. ViaSat's request for waiver of 47 C.F.R. § 25.114(d)(3) of the Commission's rules IS GRANTED. This rule section requires applicants to provide predicted space station antenna gain contours for each transmit and each receive antenna beam. Considering the complexity of the VIASAT-KA1 satellite design, the amount of information that would need to be provided for all beams (128 according to ViaSat) would be extensive and, in many ways, redundant. The information provided by ViaSat in its Schedule S Form is sufficient for us to determine whether the system meets the Commission's technical requirements.
5. ViaSat shall prepare the necessary information, as may be required, for submission to the International Telecommunications Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. ViaSat shall be held responsible for all cost recovery fees associated with these ITU filings. We also note that no protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other administrations. *See* 47 C.F.R. § 25.111(b).
6. The license term for the VIASAT-KA1 satellite, Call Sign S2737, is 15 years and will begin to run on the date that ViaSat certifies to the Commission that the satellite has been successfully placed into orbit and its operation fully conforms to the terms and conditions of this authorization. ViaSat is directed to file its certification within 5 business days of the satellite commencing operations at the regularly assigned orbital location.
7. ViaSat must coordinate its downlink operations in the 18.3-18.8 GHz and 19.7-20.2 GHz frequency bands with U.S. Government systems, including Government operations to earth stations in foreign countries, in accordance with footnote US334 to the Table of Frequency Allocations, 47 C.F.R. § 2.106.
8. ViaSat must conduct its operations pursuant to this authorization in manner consistent with the power flux-density requirements of footnote US255 to the Table of Frequency Applications, 47 C.F.R. § 2.106, 47 C.F.R. § 25.138(a)(6), and 47 C.F.R. § 25.208, of the Commission's Rules.
9. ViaSat shall maintain the VIASAT-KA1 spacecraft with an east/west longitudinal station-keeping tolerance of 0.05 degrees.

10. ViaSat has 30 days from the date of this grant and authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
11. This grant is issued pursuant to 47 C.F.R. § 0.261 of the Commission's Rules on delegated authority and is effective upon date of grant. 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 that this action was taken.

 GRANTED L. [unclear] w/conditions	File # <u>EAT-LOA-20070314-00051</u>
	Call Sign <u>S2737</u> Grant Date <u>July 18, 2007</u> (or other identifier)
	Term Dates From _____ To: <u>see cond. 6</u>
	Approved: <u>[Signature]</u> Policy Branch Chief

9-16. Name of Contact Representative

Name:	Elizabeth R. Park	Phone Number:	202-637-2200
Company:	Latham & Watkins LLP	Fax Number:	202-637-2201
Street:	555 Eleventh Street, NW Suite 1000	E-Mail:	elizabeth.park@lw.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20004 - 1304
Attention:		Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the buttonnext to the classification that applies to thisfiling for both questions a. and b. Choose only one for 17a and only one for 17b.

- a.
- (N/A) a1. Earth Station
 - a2. Space Station

b.

- b1. Application for License of New Station (N/A)
- b2. Application for Registration of New Domestic Receive-Only Station (N/A)
- b3. Amendment to a Pending Application (N/A)
- b4. Modification of License or Registration (N/A)
- b5. Assignment of License or Registration (N/A)
- b6. Transfer of Control of License or Registration (N/A)
- b7. Notification of Minor Modification (N/A)
- b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- b10. Replacement Satellite Application - no new frequency bands
- b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)
- b12. Petition for Declaratory Ruling to be Added to the Permitted List (N/A)
- b13. Other (Please specify)

<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>17c. Fee Classification BNY – Space Station (Geostationary)</p>
<p>18. If this filing is in reference to an existing station, enter: (a) Call sign of station: Not Applicable</p>	<p>19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: Not Applicable (b) File number of pending application: Not Applicable</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.
Not Applicable

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: 18000

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.

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

26. TYPE OF EARTH STATION FACILITY: Not Applicable

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.) Not Applicable

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.

<p>29. Is the applicant a foreign government or the representative of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>30. Is the applicant an alien or the representative of an alien?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>31. Is the applicant a corporation organized under the laws of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned 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?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<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 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 style="text-align: right;"> <input checked="" type="radio"/> Yes <input type="radio"/> No Waivers </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 style="text-align: right;"> <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: right;"> <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: right;"> <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: right;"> <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>Ownership, etc.</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 "party to the application"; for these purposes.</p>	<p>Yes <input checked="" type="radio"/> No <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>Yes <input type="radio"/> No <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>	

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.)

ViaSat, Inc. submits this application to launch and operate a spacecraft at the nominal 77 degree W.L. location operating in Ka-band frequencies.

Narr. & Tech. Annex

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

47. Please supply any need attachments.

1: Frequencies

2:

3:

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).

Completed Schedule S

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 jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

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.