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April 28, 2006

**BY HAND DELIVERY**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, N.W.  
Washington, D.C. 20554

RECEIVED - FCC

APR 28 2006

Federal Communication Commission  
Bureau / Office

Attn: Scott Kotler, International Bureau  
Trang Nguyen, International Bureau

Re: ViaSat, Inc. Supplemental Filing; Call Sign E050318;  
File Nos. SES-LIC-20051028-01494; SES-AMD-20060314-00440

Dear Ms. Dortch:

ViaSat, Inc. hereby submits a coordination letter from its satellite operator to supplement the above-referenced pending application.

If you have any questions regarding this submission, please contact the undersigned at (202) 637-1056.

Respectfully submitted,



Elizabeth R. Park

Enclosure

April 19, 2006

Federal Communications Commission – International Bureau  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Subject: Engineering Certification of SES Americom, Inc.

To Whom It May Concern:

This letter certifies that SES Americom, Inc. (“SES”) is aware that ViaSat, Inc. (“ViaSat”) has before the Federal Communications Commission (“FCC”), the FCC File No. SES-LIC-20051028-01494, as amended (FCC File No. SES-AMD-20060111-00035) (the “Application”), for authority to operate a transmit/receive steerable antenna for aeronautical mobile-satellite services (amss), using fixed-satellite service frequencies pursuant to ITU RR 5.504A, on a non-conforming, non-interference basis. ViaSat is seeking FCC authorization to utilize the SES Americom satellite AMC-6 at 72 degrees W.L. licensed by the FCC.

SES Americom understands that, as described in ViaSat’s application, the transmit/receive reflector antenna is an aeronautical mobile-satellite service steerable antenna manufactured by ViaSat. The aperture dimensions of the reflector antenna are 29.2 cm by 29.2 cm with a transmit gain of 31.27 dBi at 14.25 GHz and a receive gain of 29.62 dBi at 11.95 GHz. These antennas will operate with an rms pointing accuracy of +/- 0.1 degrees during active tracking of the intended satellite.

When communicating with the AMC-6 satellite, ViaSat will operate its reflector antenna within the 14-14.5 GHz FSS uplink band, 11.7-12.2 GHz FSS downlink band with a maximum e.i.r.p. of 37.35 dBW, and a corresponding maximum power spectral density at the antenna flange of -33.06 dBW/4 kHz. The sub-meter antenna is a non-conforming antenna because the off-axis gain exceeds the §25.209 antenna performance standard by 10.25 dB in the main-lobe region. ViaSat will reduce the effective power spectral density into each individual antenna flange such that the aggregate reduction in power density will equal 10.25 dB. Thus, the network aggregate antenna flange density will be -24.25 dBW/4 kHz, which is 10.25 dB below the limit of -14.0 dBW/4 kHz provided in the FCC’s rules. The nominal individual antenna flange density will be -38.77 dBW/4 kHz. ViaSat will operate direct sequence spread spectrum using offset QPSK so that the aggregate off-axis e.i.r.p. transmissions, from all co-frequency AES terminals within the footprint of the satellite, are always equal to or less than that of routinely authorized VSAT transmissions. Specifically, ViaSat will operate its system so that the co-frequency aggregate off axis e.i.r.p. from all AES antenna transmissions towards the intended geostationary satellite shall not exceed:

Angle off-axis	Maximum e.i.r.p. in any 4 kHz band
$1.25^\circ \leq \Theta \leq 7.0^\circ$	$15 - 25 \log \Theta$ dBW
$7.0^\circ < \Theta \leq 9.2^\circ$	-6 dBW
$9.2^\circ < \Theta \leq 48^\circ$	$18 - 25 \log \Theta$ dBW
$48^\circ < \Theta \leq 180^\circ$	-24 dBW

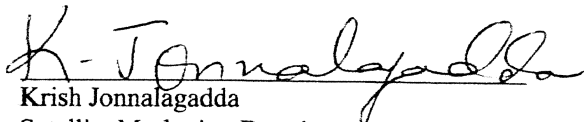
The forward downlink (hub to AES) maximum EIRP density is 9.8 dBW/4 kHz, which is below the limit of 10.0 dBW/4 kHz set forth in the FCC's rules. ViaSat will maintain the forward downlink EIRP density and the aggregate off-axis EIRP values, by maintaining tight control of the system operation, which includes:

- 1) maintaining rms pointing error to be  $\leq 0.1$  degree, relative to the intended satellite, from Inertial Navigational data every 20 milliseconds;
- 2) network management that inhibits transmission within 1 second of receive link loss from same transponder;
- 3) fault detection system that terminates transmissions when out of tolerance conditions (including the antenna pointing error) are detected;
- 4) continuous monitoring/oversight by ground network operations center; and
- 5) the continuous monitoring of the number of simultaneous co-frequency transmissions made by the remote terminals, and thereby the resulting aggregate return-uplink EIRP. The congestion control algorithm manages and controls both the aggregate EIRP and the CDMA multiple access to maintain the aggregate off-axis EIRP density to within prescribed limits.

SES Americom acknowledges that the use of the above referenced transmit/receive reflector antenna by ViaSat, installed and operated in accordance with the above conditions, is within the levels coordinated with the adjacent satellite operators and should not cause unacceptable interference into adjacent satellites operating in accordance with FCC's 2-degree spacing policy. If the FCC authorizes the operations proposed by ViaSat in the Application, SES Americom will include the antenna, as described above, in all future satellite network coordinations. ViaSat shall comply with all such coordination agreements reached by the satellite operators.

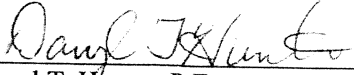
In order to prevent unacceptable interference into adjacent satellites, SES Americom has been informed and ViaSat acknowledges that the antennas will be installed and operated in accordance with the above conditions and/or any other operational requirements specified in the FCC authority granted to ViaSat. Furthermore, ViaSat agrees that it will accept interference from adjacent satellites to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the reference patterns defined in Section 25.209 of FCC rules. If the use of this antenna should cause unacceptable interference into other systems, ViaSat has agreed that it will terminate transmissions immediately upon notice from the affected parties.

Sincerely,

  
Krish Jonnalagadda  
Satellite Marketing Development, manager  
SES Americom, Inc.

Acceptance by ViaSat:

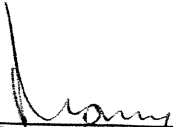
ViaSat testifies that the information provided to Intelsat and reflected in this affidavit letter is true and accurate to the best of ViaSat's knowledge.



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Daryl T. Hunter, P.E.  
Senior Systems Engineer  
ViaSat, Inc.

Acceptance by PanAmSat:

PanAmSat agrees to operation of the above reflector antenna, ViaSat, Inc. 29.2 cm by 29.2 cm reflector antenna, with the technical parameters described herein with respect to SBS 6 at 74 ° W.L. which has a geocentric separation of two degrees with respect to AMC-6 at 72° W.L.



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Mohammad Marashi  
Vice President  
Customer Support Engineering  
PanAmSat Corporation