



**SQUIRE, SANDERS & DEMPSEY L.L.P.**

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**cnalda@ssd.com**

September 25, 2009

Kathryn Medley  
Chief, Satellite Engineering Branch  
International Bureau  
Federal Communications Commission  
445 12th Street S.W.  
Washington, DC 20554

Re: KVH Industries, Inc.: Satellite Coordination Letters for AMC-15 Point of Communication for Call Sign E070085, File Nos. SES-LIC-20070504-00563 and SES-AMD-20090515-00596

Dear Ms. Medley:

KVH Industries, Inc. ("KVH"), pursuant to Section 1.65 of the Commission's Rules, 47 C.F.R. § 1.65, hereby submits the attached satellite coordination letters for the AMC-15 satellite point of communication at 105° W.L. for the above-referenced earth station onboard vessels ("ESVs") license application (Call Sign E070085). This notice and the coordination letters are being submitted to the record under both the pending ESV license application, File No. SES-LIC-20070504-00563, and subsequent amendment, File No. SES-AMD-20090515-00596.

Please feel free to contact me with any questions you may have or if KVH can provide any additional information regarding these letters or the underlying, amended license application.

Respectfully submitted,

SQUIRE, SANDERS & DEMPSEY L.L.P.

/s/ Carlos M. Nalda

Carlos M. Nalda  
Counsel to KVH Industries, Inc.

Attachments

# SES AMERICOM

23 September 2009

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

Subject: Engineering Certification of SES Americom, Inc.

To Whom It May Concern:

This letter certifies that SES Americom, Inc. is aware that KVH Industries, Inc. ("KVH") has filed a pending application for authority to operate a network of a fixed hub station and Ku-band earth stations onboard vessels ("ESVs") terminals using the AMC-15 satellite as an authorized satellite point of communication. The AMC-15 satellite at 105° W.L. is licensed by the FCC (Call sign S2180). Capacity on the AMC-15 satellite is marketed by EchoStar Satellite Services. KVH will be operating transmit/receive ESV antennas with AMC-15 (center downlink frequency 11.960 GHz, center uplink frequency 14.260 GHz, up to 36 MHz bandwidth, horizontal polarization in the uplink, and vertical polarization in the downlink).

KVH will operate ESV antennas with a diameter of 60 cm that in some respects do not comply with Section 25.222 of the FCC's rules governing Ku-band ESV operations. Specifically, the nominal pointing offset for the antennas will be less than or equal to +/- 0.6 degrees, all emissions from the ESV terminals shall automatically cease within 100 milliseconds if the angle between the orbital location of AMC-15 and the axis of the main lobe of the antenna exceeds 1 degree, and transmission will not resume until such angle is equal to or less than +/- 0.6 degrees. However, the KVH terminal operates at reduced input power and uses spectral spreading such that the off-axis EIRP spectral density produced by the terminal is 8.9 dB/4kHz less than a fully compliant terminal operating at maximum permissible levels (i.e., as permitted by the mask set forth in Section 25.222). Thus, even at the maximum 1.0 degree offset, the off-axis EIRP spectral density remains below the level permitted by the FCC's rules for terminals that automatically cease transmission at 0.5 degrees offset.

The ESV antennas will be operated, through the reduction of input power and frequency spreading, in a way that significantly reduces the maximum aggregate off-axis EIRP density produced by the antennas. Thus, even though the antennas operate with a CDMA transmission scheme in which aggregate uplink interference from multiple transmitting antennas must be considered, the aggregate emissions will comply with the off-axis EIRP density mask set forth in the FCC rules at 47 CFR §25.222(a)(1). Aggregate interference is calculated based on the nominal pointing offset of 0.6 degrees, rather than the maximum value, because at any point in time there will be multiple simultaneous transmitting antennas with different pointing errors.

SES Americom Inc., Four Research Way Princeton NJ 08540 USA tel (1) 609 987 4194  
krish.journalagadda@ses.com

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# SES AMERICOM

The satellite EIRP density of the carriers will not exceed 10 dBW/4KHz.

Except as described above, these antennas will be operated in compliance with the technical, operational and performance requirements of Part 25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for the above antennas.

SES Americom and KVH acknowledge that the use of the above non-conforming ESV antennas has the potential to cause unacceptable interference into adjacent satellites in accordance with the FCC's two-degree spacing policy and will not seek any additional protection compared to the case of an earth station employing an antenna that fully conforms to the FCC rules. However, under the conditions defined above, satellites at two-degree or greater spacing will not experience unacceptable interference.

Furthermore, KVH states that if the use of this antenna should cause unacceptable interference into other systems, KVH will terminate transmissions immediately upon notice from the affected parties.

Finally, SES Americom acknowledges that it will include the subject non-conforming ESV operations in all future satellite network coordinations.

Sincerely,

K. Jonnalagadda  
Krish Jonnalagadda  
Manager, Spectrum Development  
SES Americom

Date: 9/23/09

Acceptance by KVH Industries, Inc.

KVH certifies that the information provided to SES and reflected in this Affidavit letter is true and accurate to best of KVH's knowledge.

Felise Feingold  
Felise Feingold  
Vice President, General Counsel  
KVH Industries, Inc.

Date: 9/25/09

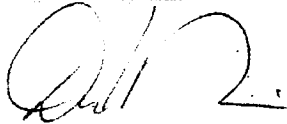
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# SES AMERICOM

## Acceptance by EchoStar Satellite Services

EchoStar Satellite Services agrees to operation of the above antenna with the technical parameters described herein.



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David Bair  
EchoStar Satellite Services

Date: 24 SEP 2009

## Acceptance by Telesat

Telesat Canada agrees to operation of the above antenna with the technical parameters described herein with respect to Anik F1R at 107.3°W, which has a nominal geocentric separation of 2.3° degrees from AMC-15. Telesat notes that such operation is consistent with the coordination agreement previously negotiated with SES Americom.



\_\_\_\_\_  
Robert J. Conurso  
Director, Government and Regulatory Affairs  
Telesat Canada

Date: 24 Sept 2009

# SES AMERICOM

29 August 2009

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

Subject: Engineering Certification of SES Americom, Inc.

To Whom It May Concern:

This letter certifies that SES Americom, Inc. is aware that KVH Industries, Inc. ("KVH") has a pending application for authority to operate a network of a fixed hub station and Ku-band earth stations onboard vessels ("ESVs") terminals using the AMC-15 satellite as an authorized satellite point of communication. The AMC-15 satellite at 105° W.L. is licensed by the FCC (Call sign S2180). Capacity on the AMC-15 satellite is marketed by EchoStar Satellite Services. KVH will be operating transmit/receive ESV antennas with AMC-15 (center downlink frequency 11.960 GHz, center uplink frequency 14.260 GHz, up to 36 MHz bandwidth, horizontal polarization in the uplink, and vertical polarization in the downlink).

KVH will operate ESV antennas with a diameter of 60 cm that in some respects do not comply with Section 25.222 of the FCC's rules governing Ku-band ESV operations. Specifically, the nominal pointing offset for the antennas will be less than or equal to +/- 0.6 degrees, all emissions from the ESV terminals shall automatically cease within 100 milliseconds if the angle between the orbital location of AMC-15 and the axis of the main lobe of the antenna exceeds 1 degree, and transmission will not resume until such angle is equal to or less than +/- 0.6 degrees.

The ESV antennas will be operated, through a reduction of input power and frequency spreading, in a way that significantly reduces the maximum aggregate off-axis EIRP density produced by the antennas. Thus, even though the antennas operate with a CDMA transmission scheme in which aggregate uplink interference from multiple transmitting antennas must be considered, the aggregate emissions will comply with the off-axis EIRP density mask set forth in the FCC rules at 47 CFR §25.222(a)(1). Aggregate interference is calculated based on the nominal pointing offset of 0.6 degrees, rather than the maximum value, because at any point in time there will be multiple simultaneous transmitting antennas with different pointing errors.

The satellite EIRP density of the carriers will not exceed 10 dBW/4KHz.

Except as described above, these antennas will be operated in compliance with the technical, operational and performance requirements of Part 25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for the above antennas.

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SES Americom Inc., Four Research Way Princeton NJ 08540 USA tel (1) 609 987 4194  
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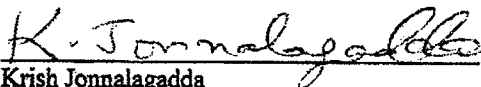
# SES AMERICOM

SES Americom and KVH acknowledge that the use of the above non-conforming ESV antennas has the potential to cause unacceptable interference into adjacent satellites in accordance with the FCC's two-degree spacing policy and will not seek any additional protection compared to the case of an earth station employing an antenna that fully conforms to the FCC rules. However, under the conditions defined above, satellites at two-degree or greater spacing will not experience unacceptable interference.

Furthermore, KVH states that if the use of this antenna should cause unacceptable interference into other systems, KVH will terminate transmissions immediately upon notice from the affected parties.

Finally, SES Americom acknowledges that it will include the subject non-conforming ESV operations in all future satellite network coordinations.

Sincerely,

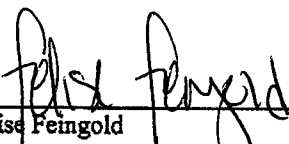


Krish Jonnalagadda  
Manager, Spectrum Development  
SES Americom  
4 Research Way  
Princeton NJ 08540  
Tel: (609) 987 4194

Date: 8/29/09

Acceptance by KVH Industries, Inc.

KVH certifies that the information provided to SES and reflected in this Affidavit letter is true and accurate to best of KVH's knowledge.



Felise Feingold  
Vice President, General Counsel  
KVH Industries, Inc.

Date: 9/25/09

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# SES AMERICOM

## Acceptance by EchoStar Satellite Services

EchoStar Satellite Services agrees to operation of the above antenna with the technical parameters described herein.

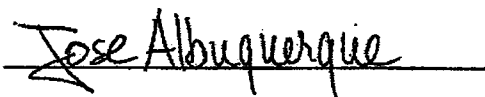


David Bair  
EchoStar Satellite Services

Date: 28 AUG 2009

## Acceptance by Intelsat:

Intelsat agrees to operation of the above antenna with the technical parameters described herein with respect to Galaxy-16 at 99°W, which has a nominal geocentric separation of six (6) degrees from AMC-15.



Jose Albuquerque  
Senior Director, Spectrum Engineering  
INTELSAT

Date: 28 August 2009