Approved by OMB 3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu: KVH Application for Brief Extension of LMSS STA

1. Applicant City: Street: **DBA** Name: Name: Attention: Country: Ms. Felise Feingold USA Middletown 50 Enterprise Center KVH Industries, Inc. State: Zipcode: E-Mail: Fax Number: Phone Number: 02842 401-845-8116 ffeingold@kvh.com 401-845-8148 \mathbb{R}

30 days Extension with conditions From 4/29/20 File # SES-STA-20/10429-00525 (or other identifier) Call Sign 6036 13 Brant Date 4/29/2011

International Bureau GRANTED

Attachment to Grant KVH Industries, Inc. IBFS File No. SES-STA-20110429-00525 (Call Sign E030131)

The application, IBFS File No SES-STA-20110429-00525, of KVH Industries, Inc. (KVH) for extension of special temporary authority that was granted under SES-STA-20091019-01338, IS GRANTED. Accordingly, KVH is authorized for a period of 30 days, to continue operate up to 15 technically identical Land Mobile-Satellite Service (LMSS) mobile earth terminals (METs) in the 14.0-14.5 GHz (Earth-to-space) and 11.7-12.2 GHz (space-to-Earth) frequency bands throughout the continental United States (CONUS) using a hub earth station in Carlsbad, CA, with the AMC-15 space station at 105° W.L. This authorization is subject to the technical parameters of the application, the Commission's rules not waived herein, and the following conditions:

- 1. All operations shall be on unprotected and non-harmful interference basis, *i.e.*, KVH shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station.
- 2. In the event of any harmful interference, KVH shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
- 3. KVH's METs are limited to communications with AMC-15 at 105° W.L. KVH must seek Commission authorization in the event the satellites change orbital locations, or if KVH desires to add satellites as points of communication.
- 4. KVH's METs must accept interference from lawful operation of any station in the 11.7-12.2 GHz band in accordance with the U.S. Table of Frequency Allocations (47 C.F.R. § 2.106) and shall immediately terminate space-to-Earth operations upon notification that such operations are causing harmful interference, not permitted under the terms of a pertinent coordination agreement, with lawful operation of any radio system in the 11.7-12.2 GHz band in conformance with the U.S. Table of Frequency Allocations.
- 5. The operation of an KVH MET shall immediately terminate upon notification that such operation is causing harmful interference, not permitted under the terms of pertinent coordination agreements, with (1) lawful operation of any radio system in the 14.0-14.5 GHz band authorized on a primary basis in conformance with the U.S. Table of Frequency Allocations or authorized on a secondary basis prior to the effective date of this order, or (2) operation of any TDRSS earth station in the band 14-14.2 GHz, or (3) radio astronomy observations in the 14.47-14.5 GHz band.

File # SES - STA - 2011 0429 - 0525

Call Sign <u>E030131</u> Grant Date <u>4/29/2011</u>

(or other identifier)

Term Dates

From <u>4/29/2011</u>

International Bureau

Approved: faul E Mach

Attachment to Grant KVH Industries, Inc. IBFS File No. SES-STA-20110429-00525 (Call Sign E030131)

- 6. If the Commission authorizes a Ku-band NGSO FSS system in the future, KVH must successfully coordinate its operations with that future licensee and obtain an affidavit from the licensee that KVH's system proposed operations are acceptable. In the absence of such an affidavit, KVH's system must cease service immediately upon launch and operation of the first satellite of the Ku-band NGSO FSS system, or demonstrate that it will not cause harmful interference to the new NGSO FSS system. Failure to make such a demonstration may subject KVH's METs to further conditions by the Commission designed to address potential harmful interference.
- 7. KVH shall maintain a point of contact for discussing interference concerns with other licensees and U.S. Government agencies and shall submit a letter to be included in its license file with the name and telephone number of the contact prior to commencing operation. KVH shall maintain records of the locations of METs in longitude and latitude, the center frequency and bandwidth of MET transmissions, and the ownership of vehicles on which the METs have been installed. The information shall be recorded at time intervals of no greater than every five minutes while the mobile earth station terminal is transmitting. KVH must maintain the information for a year and make it available to appropriate entities within twenty-four hours of request. KVH must maintain logs of all alleged incidences of interference, the stations involved, and the outcome of the incident.
- 8. KVH METs must employ a tracking algorithm that is resistant to capturing and tracking adjacent satellite signals, and each KVH MET must be capable of inhibiting its own transmission in the event it detects unintended satellite tracking.
- 9. KVH METs must be monitored and controlled by a ground-based network control and monitoring center. Each KVH MET must be able to receive "enable transmission" and disable transmission" commands from the network control center and must cease transmission immediately after receiving any "parameter change" command until it receives an "enable transmission" command from the network control center. The network control center will monitor operation of each KVH MET to determine if it is malfunctioning, and each KVH MET will self-monitor and automatically cease transmission upon detecting an operational fault that could cause harmful interference to the fixed satellite service network.
- 10. KVH's operation in the 11.7-12.2 and 14.0-14.5 GHz bands shall be in accordance with the space station authorization for the satellite with which KVH's METs communicate.
- 11. KVH is required to complete coordination of its operations in the 14.0-14.5 GHz frequency band with NASA and NSF prior to commencing operations. Operations pursuant to this authorization shall conform to the requirements of KVH's coordination agreements with NASA and NSF. KVH METs shall cease operations within 125 km of the new TDRSS site at Blossom Point, MD, when those facilities become operational, unless KVH reaches an agreement with NASA permitting such operations.

Attachment to Grant KVH Industries, Inc. IBFS File No. SES-STA-20110429-00525 (Call Sign E030131)

- 12. In the event that another co-frequency FSS satellite commences operation at a location within six degrees of the target satellite, KVH must reduce aggregate off-axis radiation from its METs to levels one dB below the routine-processing envelope, pending demonstration of coordination with the operator of the new satellite.
- 13. Section 2.102 of the Commission's rules is waived with respect to operation of the KVH METs in the 11.7-12.2 GHz downlink band consistent with the terms of this authorization.
- 14. KVH shall take all reasonable and customary measures to ensure that the MET does not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the MET when it is in operation. At a minimum, permanent warning label(s) shall be affixed to the MET warning of the radiation hazard and including a diagram showing the regions around the MET where the radiation levels could exceed 1.0 mW/cm2. The operator of the MET shall be responsible for assuring that individuals do not stray into the regions around the MET where there is a potential for exceeding the maximum permissible exposure limits required by Section 1.1310 of the Commission's rules, 47 C.F.R. § 1.1310. This shall be accomplished by means of signs, caution tape, verbal warnings, and placement of the MET so as to minimize access to the hazardous region and/or any other appropriate means.
- 15. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at KVH's own risk.
- 16. KVH is afforded thirty days from the date of release 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.
- 17. This action is issued pursuant to the Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

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April 29, 2011

BY ELECTRONIC FILING

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

Re: KVH Industries, Inc. Application to Extend Special Temporary Authority; SES-STA-20091019-01338 (Call Sign E030131)

Dear Ms. Medley:

KVH Industries, Inc. ("KVH"), pursuant to Section 25.120 of the Commission's Rules, 47 C.F.R. § 25.120, hereby requests a brief extension of its Special Temporary Authority ("STA") to operate up to 15 V7 Land Mobile-Satellite Service ("LMSS") earth stations in the 14.0-14.5 GHz and 11.7-12.2 GHz frequency bands using a single remote control point (a network operations center located in Carlsbad, California) with the AMC-15 satellite at 105°W. STA is sought for a period of up to 30 days or until KVH's vehicle-mounted earth station ("VMES") application is granted.

Section 25.120 of the Commission's rules permits grant of STA if the STA request has not been placed on public notice and the applicant plans to file a request for regular authority for the service.² Concurrently with the instant application, KVH has filed an application for a VMES network license to operate its V7 and V3 terminals in the 14.0-14.5 GHz (transmit) and 10.95–11.2 GHz, 11.45–11.7 GHz and 11.7-12.2 GHz (receive) frequency bands.³ Since KVH's LMSS STA expires today, however, KVH requests a brief extension of its STA to operate the V7 LMSS terminals until the Bureau acts on KVH's

¹ See SES-STA-20091019-01338 (Call Sign E030131) granted on Nov. 8, 2010.

² See 47 C.F.R. § 25.120.

³ See IBFS Submission ID IB2011001258 filed Apr. 29, 2011.

VMES application. KVH hereby incorporates by reference the application materials and technical demonstration included with its previous request for STA.⁴

During the pendency of KVH's VMES application, it will operate pursuant to its STA in conformance with the Commission's VMES rules, albeit on a secondary basis. KVH will also operate in conformance with the conditions imposed on its current LMSS STA. Grant of the instant STA extension will confer no competitive advantage. KVH expressly acknowledges that: (i) grant of such a temporary extension shall not be construed as a finding by the Commission that the operations will serve the public interest, convenience, or necessity beyond the express terms of such temporary extension of the license, and (ii) such temporary extension shall not in any way affect or limit the action of the Commission with respect to its VMES license application or proceeding.

Such a grant will, however, allow KVH to continue to deliver limited two-way broadband connectivity to vehicles equipped with its earth station terminals and operated by users in the public and private sectors while its application for regular VMES authority is pending. Therefore, grant of this brief STA extension will serve the public interest by addressing existing public and private sector demand for broadband land-mobile services.

For the reasons underlying grant of KVH's original land mobile STA request, the Commission should similarly grant this request for limited extension of such temporary authority. Moreover, the request for limited extension does not implicate the reasons that the Commission sought to limit multiple renewals of the original temporary authority (*i.e.*, ongoing commercial operations under rolling LMSS STAs rather than a long-term VMES license, for which KVH has filed an application).

Please feel free to contact me with any questions you may have or if KVH can provide any additional information to facilitate expeditious action on its STA extension request.

Respectfully submitted,

Squire, Sanders & Dempsey (US) LLP

/s/ Carlos M. Nalda

Carlos M. Nalda Counsel to KVH Industries, Inc.

⁴ See SES-STA-20091019-01338 (Call Sign E030131).

2. Contact			
Name:	Carlos Nalda	Phone Number:	202-626-6659
Company:	Squire, Sanders & Dempsey (US) LLP	Fax Number:	
Street:	1201 Pennsylvania Ave., NW	E-Mail:	carlos.nalda@ssd.com
	Suite 500		
City:	Washington	State:	DC
Country:	USA	Zipcode:	20004 –
Attention:	Mr. Carlos Nalda	Relationship:	Legal Counsel
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4a. Is a fee submitted • If Yes, complete and	4a. Is a fee submitted with this application? If Yes, complete and attach FCC Form 159. If No, indic	ate reason for fee exemption	If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
O Governmental Entity	O Governmental Entity O Noncommercial educational licensee	icensee	
Other(please explain):	1):		
4b. Fee Classification	CGB – Mobile Satellite Earth Stations	lS	
5. Type Request			
O Use Prior to Grant	O Change	Change Station Location	Other
6. Requested Use Prior Date	Date		

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<u>Q</u> .	See attached	a brief extension of its existing LMSS STA.		KVH Industries, Inc. requests
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