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 Industries, Inc. LMSS STA Application

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



File # SES STA-2009, 019-01538

Call Sign & C3013 Grant Date & Nov. 2010

(or other identifier)

Term Dates

To: 39/A 201

Approved: Mul 201

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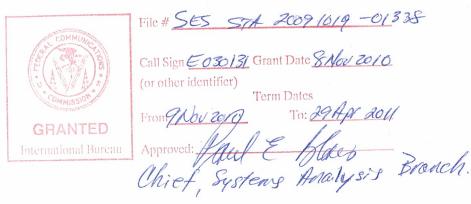
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Attachment to Grant KVH Industries, Inc. IBFS File No. SES-STA-20091019-01338 (Call Sign E030131)

The application of KVH Industries, Inc. (KVH) for special temporary authority, IBFS File No SES-STA-20091019-01338, IS GRANTED. Accordingly, KVH is authorized for a period of 180 days, to 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.



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- 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.

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- 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, 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. This authorization is not one relating to an "activity of a continuing nature" for purposes of Section 1.62 of the Commission's rules and Section 558(c) of the Administrative Procedures Act. Continuation of operations beyond the term of this authorization will require prior affirmative authorization by the FCC.
- 17. 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.
- 18. 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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<u></u>	15. Title of Person Signing Vice President and General Counsel	14. Name of Person Signing Felise Feingold	14.] Fe
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