

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WE9XRN

(Call Sign)

XT MO

(Class of Station)

0027-EX-ST-2011

(File Number)

NAME KVH Industries, Inc.

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

To test and design of small aperture broadband Earth Stations onboard Vessel ("ESV") terminals.

Station Locations

(1) MOBILE: CONUS and associated ocean waters

Frequency Information

MOBILE: CONUS and associated ocean waters

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14500 MHz	MO	18M0G7D	3763 W (ERP)	
		36M0G7D		

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) POINT OF COMMUNICATION: AMC-15 satellite, AMC-21 satellite, GE-23 satellite
- (3) No transmissions are permitted between 14.0 GHz and 14.2 GHz within 125 km of Blossom Point, MD (latitude: 38° 25' 44" N, longitude 77° 05' 20" W).

This authorization effective January 28, 2011 and
will expire 3:00 A.M. EST July 29, 2011

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) Licensee shall comply with the Minimum Angle of Antenna Elevation criteria set forth in Part 25.205 of the FCC's rules.
- (5) No transmissions are permitted between 14.0 GHz and 14.2 GHz within 125 km of White Sands, NM (latitude: 32° 20' 59" N, longitude 106° 36' 31" W and latitude: 32° 32' 40" N, longitude 106° 36' 48" W).
- (6) Note that if, during the term of this authorization, NASA seeks to provide protection to a future TDRSS site that has been coordinated through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee process, NTIA will notify the Commission that the site is nearing operational status. Upon notice from the Commission, licensee must cease operations in the 14.0-14.2 GHz band within 125 km of the new TDRSS site until Lockheed Martin Corp. has coordinated with the new site. After coordination, operations will then again be permitted in the 14.0-14.2 GHz band within 125 km of the new TDRSS site, subject to any operational constraints developed in the coordination process.
- (7) In accordance with Article 4.4 of the ITU Radio Regulations, the operations authorized herein shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the ITU Constitution, the ITU Convention, and the ITU Radio Regulations.
- (8) Off-axis EIRP spectral density for cross-polarized signals emitted from the earth station shall not exceed the calculations given in 47CFR25.222(a)(4).
- (9) National Science Foundation (NSF) requests that licensee:
 - 1) Coordinate operation at the Taunton, MA site with the National Radio Astronomy Observatory's VLBA site at Hancock, NH. (POC Mr. Dan Mertely at Socorro, NM, Phone: 505- 835-7027 and e-mail: dmertely@nrao.edu).
 - 2) Coordinate operation at the Fredericksburg, VA site with Wes Sizemore at Green Bank. (Phone: 304-456-2107, e-mail:wsizemor@nrao.edu).
- (10) All emissions from the earth station shall automatically cease within 100 milliseconds if the angle between the orbital location of the target satellite and the axis of the main lobe of the earth station antenna exceeds 0.5°, and transmission will not resume until such angle is less than 0.2°.