

ViaSat, Inc.

## **ATTACHMENT**

ViaSat desires to develop and test Ka band antennas and mobile applications using bandwidth on the ViaSat-1, WB-1, ANIK-F2, AMC-15, and AMC-16 satellites. ViaSat was previously testing under authority using license WF2XOQ (file number 0050-EX-ML-2014) that expired at the end of 2014.

### Purpose of the Operation:

Approval of this license will allow ViaSat to continue perform testing of the VR-12-Ka and the Mantarry RF Terminal (both previously authorized under the above call sign) each of which are components in a mobile satellite communications system.

This application also seeks the addition of an additional TBD antenna type to support development of new antennas. The beamwidth of the new antenna(s) to be developed will be not greater than 3.5 degrees in the azimuth plane, and not greater than 5.5 degrees in the elevation plane. The orientation of the antennas under test will be as required to communicate with the spacecraft identified above.

During testing, transmissions will be monitored by test engineers as well as the satellite operations center. If in the event interference is detected or for any other reason it is necessary to cease transmissions, ViaSat maintains a 7/24 Network Operations Center which can be reached at 1-720-493-7300.

During testing or demonstrations, the RFTs may be mounted on a vehicular platform to test basic operations while on the move, or on airborne platforms to test operation in flight, or on vessels.

The operation of the RFT will be in full compliance with the Commission's radio frequency (RF) exposure guidelines – see RF hazard analysis exhibit. The RFT will be secured from access by the general public and will be operated by experienced test personnel. When operating at full power and full duty cycle, the range to meet FCC occupational limit level in the on-axis beam of the antenna is approximately 41.5 ft. However typically the antennas will not operate at full power or 100% duty cycle. RF power will be removed when performing maintenance on the antennas.