

ViaSat, Inc.
File Nos. 0453-EX-PL-2010 and 0047-EX-ML-2012

ATTACHMENT

ViaSat is currently testing mobile applications under experimental license 0453-EX-PL-2010 (WF2XOQ) using bandwidth on the WB-1, ANIK-F2, AMC-15, and AMC-16 satellites. ViaSat now wishes to add its ViaSat-1 satellite as a point of communication along with the additional frequencies available on that spacecraft. Additionally, ViaSat wishes to add a new antenna type, the Mantarray to the list of antennas covered by the experiment.

Purpose of the Operation:

Approval of this license will allow ViaSat to perform testing of the VR-12-Ka (previously authorized) and the Mantarray RF Terminal (RFT), each of which will be components in a mobile satellite communications system. The RFTs are designed to enable communications via satellite to the designated satellite gateway earth station. The Mantarray RFT is a waveguide horn phased array aeronautical mobile antenna, designed to provide communications via Ka-band satellites while on the ground or in flight. Two models of the antenna will be tested a 40 horn wide version (M40) and a 32 horn wide version (M32). The M40 is 78.75 cm wide by 15.75 cm high and the M32 is 63 cm wide by 15.75 cm tall.

The Mantarray consists of a tracking antenna, power amplifier, and equipment for up/down conversion and modulation/demodulation. 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, and eventually on airborne platforms to test operation in flight.

During testing and demonstration the RFT will use one of several satellite systems for communications: ViaSat-1, WB-1, ANIK-F2, AMC-16, and AMC-15. All operations of the terminal over these satellites will be coordinated and monitored by their respective control centers.

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.