

ATTACHMENT

Why is a STA necessary?

ViaSat requests Special Temporary Authority (STA) to perform acceptance testing on a mobile satellite communications system developed by ViaSat. As part of the test, the system will be transmit signals in the 29.5-30.0 GHz range in order to demonstrate that the system is capable of transmitting in accordance with specifications. The transmissions are expected to last for several hours at a time during the period between September 1, 2010 and December 31, 2010. ViaSat requests an STA due to the temporary nature of the operations and the short duration of the testing.

Purpose of the Operation:

Approval of this STA will allow ViaSat to perform timely acceptance testing of an RF Terminal (RFT), which will be a component in a mobile satellite communications system. The RFT is designed to enable communications via satellite to the designated satellite gateway earth station. The RFT is a 0.3 meter aeronautical mobile antenna, but which will only be operated as a temporary fixed transmit/receive antenna during testing and demos.

Testing will be located at either 1725 Breckinridge Plaza, Duluth, Georgia, or 6155 El Camino Real, Carlsbad, CA. The antenna will be operated at ground level. The RFT consists of a tracking antenna, antenna feed assembly, 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 1-888-272-7232.

During demonstrations, the RFT may be located up to 80 km from the Duluth, GA or Carlsbad, CA base locations. All operations will be temporary fixed and the unit will not be operated while in motion.

During testing and demonstration the RFT will use one of three satellite systems for communications: AMC-16, AMC-15, or WB-1. 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.