Exhibit A
Experiment Description

About ViaSat

ViaSat is in the business to connect the world. As a global broadband services and technology company, we are connecting international communities to the internet by offering residential internet service; enabling passengers and operations crews to stream high-bandwidth media, applications, and content when traveling globally on commercial, business or government aircraft and maritime vessels; and empowering international warfighters on the front lines of battle with real-time, secure internet-based intelligence, surveillance, and reconnaissance for high-requirement missions. We deliver and protect information –when and where it is needed most – with our trusted communications ground systems, infrastructure, and services.

Purpose

The purpose of this request for an experimental license is to test a new product on ViaSat's Ku mobile network satellite network. ViaSat is working with DoD personnel to develop a temporary fixed type portable antenna / terminal. The requested period of operation of operation is 2 years.

Description of Experiment

ViaSat is integrating its ArcLight® satellite system with 40 portable 60 cm temporary fixed type antenna manufactured by AVL Technologies which will allow the terminal to access the ViaSat global Ku network. The first phase of testing will require the antenna to be tested in several locations shown in the table below.

Location / City	State
Ft. Benning	GA
Ft. Bragg	NC
MacDill Air Force Base	FL
Aberdeen Proving Grounds	MD
Duluth	GA
Carlsbad	CA

During the test the terminal will be pointed to and communicate with SES-2 located at 87° W.L. in geostationary orbit. At all times the equipment will be monitored by ViaSat engineers as well as the ViaSat network operations center (NOC) which can be reached 24/7 at (1-760-476-2600).

RF Radiation Compliance

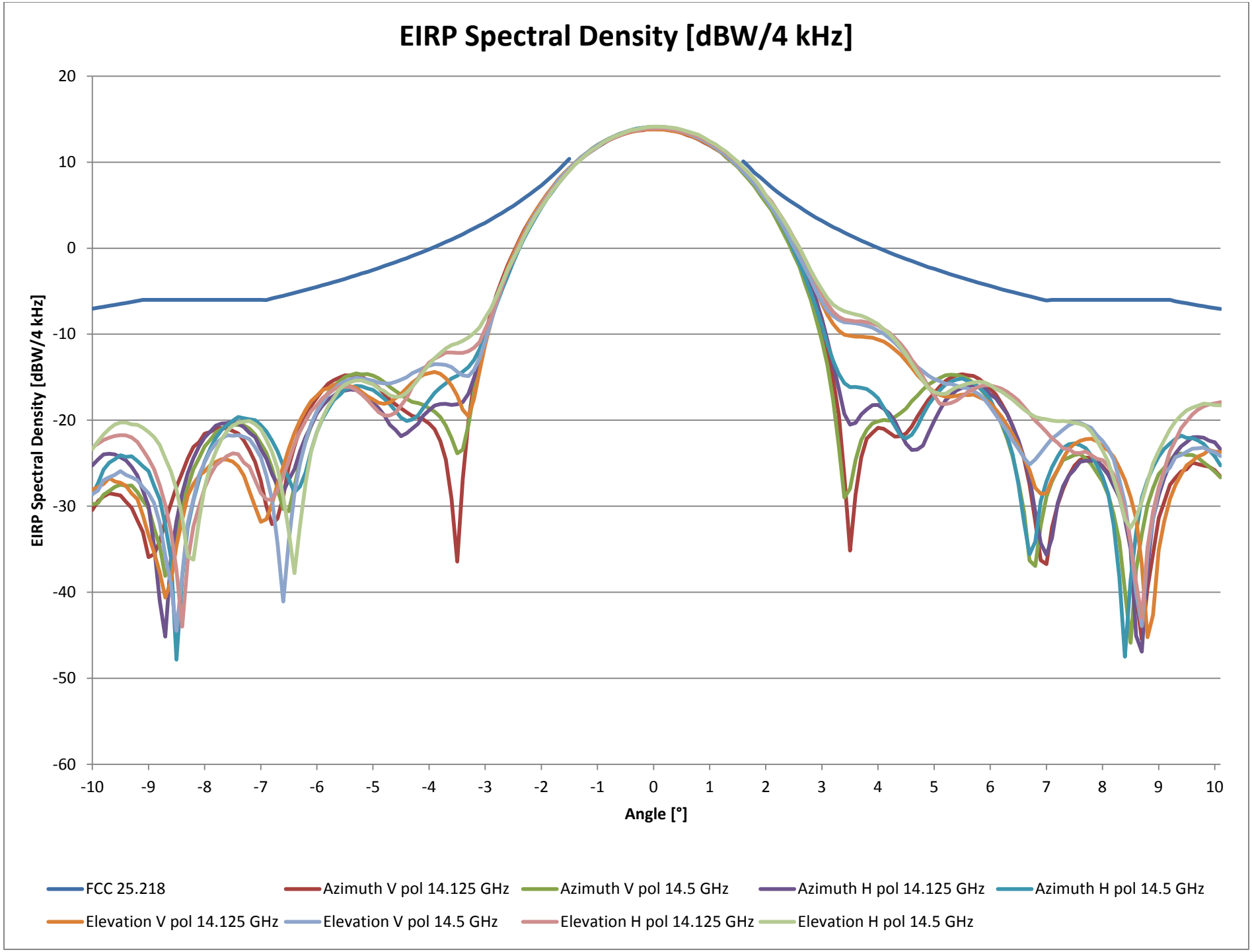
At all times during the experiment the antenna will be in a controlled environment and not accessible to the general population. A more detailed analysis of the radiation exposure is presented in Exhibit B of this submission.

Antenna Performance

The AVL model number 0614 60 cm manual flyaway antenna has a beam width of 3° and the orientation in the horizontal and vertical planes is shown by location in the table below.

Location	Horizontal Plane	Vertical Plane
Ft. Benning, GA	183.8	52.3
Ft. Bragg, NC	193.7	48.3
MacDill Air Force Base, FL	189.6	57.1
Aberdeen Proving Grounds, MD	196.8	42.9
Duluth, GA	185.2	50.4
Carlsbad, CA	133.1	39.6

The plot on the next page shows the maximum EIRP spectral density with a PSD of -23.33 dBW/4 kHz as compliant with the off-axis EIRP density limits in 25.218.


EIRP Spectral Density [dBW/4 kHz]
EIRP Spectral Density [dBW/4 kHz]
20
10
0
-10
-20
-30
-40
-50
-60
-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
Angle [°]
FCC 25.218
Azimuth V pol 14.125 GHz
Azimuth V pol 14.5 GHz
Azimuth H pol 14.125 GHz
Azimuth H pol 14.5 GHz
Elevation V pol 14.125 GHz
Elevation V pol 14.5 GHz
Elevation H pol 14.125 GHz
Elevation H pol 14.5 GHz