Exhibit A

Peiod of activity is not to exceed one month, commencing 3 July.

The location is the Tidewater Community College Campus, 7000 College Drive, Portsmouth, Loudon County, VA.
Longitude **76 26 06**
Latitude **36 54 18**

It is a **Terma Scanter 2001 Frequency Diversity Radar**

One unit, at the aforementioned location.

The radar consists of two separate transceivers, each 25KW, operating on two separate frequencies sharing a common antenna.

The radar is a maritime surface surveillance radar, that will be operated in a fixed shore location for the period of the STA.

The lower frequency is: 9225 MHz (it's above the band reserved for FAA operations). Per 47CFR2.106, 9200 - 9300 MHz is reserved for Maritime radionavigation, and there's a note about it being used by fixed shore stations (which we would be).

The upper frequency is 9438 MHz. This falls into the 9300 - 9500 MHz band stipulated for Maritime Radionavigation -- it's actually the "normal" marine radar band.

The particulars of operation would be:

9225 MHz	25 KW	100 MW	Peak	16M7P0N	60 nanosec, 3000 PRF	Inverse of pulsewidth
9438 MHz	25 KW	100 MW	Peak	16M7P0N	60 nanosec, 3000 PRF	Inverse of pulsewidth

(There's a bit of variability on pulsewidth/PRF values, so this is a nominal)

My basis for peak output is 25 KW - 2 dB waveguide/feed losses + 38dB antenna gain (it's a 21' circularly polarized slotted waveguide). This is a pulsed marine band radar system -- average power is vastly lower, since the duty cycle is 0.00000006 x 3000 = 0.0002.

Mounting is on a mast, on a temporary platform at the indicated location. Total height AGL is 40'.

The purpose of the STA is system integration testing and demonstration, a short term effort. The radar will be connected to the LM Lighthouse facility, a short distance away, by unlicensed S band ISM data link.

Joe Hersey at USCG has been contacted informally, pre-briefed. Attached is the correspondence.