

Exhibit 1

Transportable Demonstration System Description/Purpose

The system is a self-contained, moveable, tower/trailer package. The system contains operator consoles, radar, maritime VHF FM voice, maritime ITU 1371-1 AIS transponder base station, and standard (commercial) maritime 25KW X-band radar. It also contains other, non-emitting sensors. An ISM band data link radio is used, as necessary, for shore-to-shore data transmission; it is a commercial unit falling under FCC Part 15 rules.

The system purpose is to provide a quick reaction surveillance system for use in monitoring maritime regions, and to provide an aid in determining system performance for possible siting of permanent maritime surveillance infrastructure (towers and sensors). It is designed to help cognizant maritime authorities (e.g., US Coast Guard, port authorities) maintain security and orderly vessel traffic flow.

The individual emitters are commercial units, designed for the application (base station voice radios, maritime radar, AIS transponder base station).

System demonstration/test, at a given location, consists of moving the transportable system into place, using the radar to track various vessels of opportunity and test vessels, and performing voice and ITU-standard transponder communications with these vessels. Voice communications are to occur on standard maritime voice channels, coordinated with local CG and Navy units to insure non-interference. AIS transponder emissions are to occur on private (non-standard) frequencies in the maritime band; use of the international-standard Channels 87B and 88B will occur only if there is specific, written, authorization to do so.

To assist in system demonstration, two commercial 1W/5W VHF FM maritime handheld radios, and one portable AIS transponder package, are also used. The portable AIS package is designed to allow quick set-up onboard vessels, is a commercial unit designed for its intended use.

System use, and site selection, is coordinated with local authorities, USCG and Navy. They are the primary US potential users of the system, with USCG having overall maritime safety responsibility and the US Navy having specific security requirements at naval bases.

The system has two operational configurations. The tower may be fully extended, resulting in an antenna configuration as depicted. The system may also be operated with the tower in a nested configuration, in which case the lower VHF FM antenna is non operational, and the upper antennas are lowered by 57' (radar antenna at 31' above local ground level, combined AIS/voice antenna at 28' above local ground level).

The radio emitters are essential to project success, as they provide the core elements for maritime surveillance/safety/security. The radar is used to track vessels in the waterway, allowing operators to monitor potential safety/security violations. The voice radios are

necessary for querying vessels in transit. The AIS transponder is used to obtain enhanced data from mandatory-carriage vessels, as well as providing a data conduit permitting transmission of data to patrol vessels concerning vessels requiring closer inspection.

We are requesting to use only the following frequencies on this STA:

160.675 MHz	16K0G1E/16K0F1D/12K0G2B	10W
161.525 MHz	16K0G1E/16K0F1D/12K0G2B	10W
156.025 MHz	16K0G3E/16K0F1D/12K0G2B	10W
156.525 MHz	16K0G3E/16K0F1D/12K0G2B	10W
156.625 MHz	16K0G3E/16K0F1D/12K0G2B	10W
156.725 MHz	16K0G3E/16K0F1D/12K0G2B	10W