



Racine Fire Department
810 Eighth St, Racine WI 53403

April 17, 2014

Honorable Mayor and
Common Council

Dear Honorable Mayor and Common Council,

The Fire Department is requesting permission to apply for the 2014 DHS Port Security Grant for the purpose of securing a Sector Scan Sonar for water related emergencies.

Over the years your fire department has responded to numerous water related emergencies in the Greater Racine Area. North Beach has seen more than its share of drowning along with Root River and Quarry Lake Park. Technology today is significantly advanced over just a few years ago in that we are seeking to add what is known as a Sector Scan Sonar to our Water Rescue team.

Law enforcement and search and rescue personnel are frequently required to search for drowning victims as well as missing objects underwater. Typically these searches have been conducted using divers, and underwater cameras. Underwater searching by divers is time consuming and can be very dangerous depending upon water depth, visibility, current, and underwater obstructions.

The lack of good "point last seen" information can extend the search area to tens or hundreds of acres. Often the search area is large because there are no eyewitnesses or the eyewitnesses cannot accurately identify the place where the drowning victim or object was last seen. Large areas are often impossible to effectively search with traditional techniques and consequently searches are terminated after several days and recovery is left to chance.

Details regarding the Sector Scan Sonar from Product Literature: The KONGSBERG Underwater Search and Recovery (SAR) System is widely used by the first responders and law enforcement agencies searching for victims of drowning, submerged evidence, downed aircraft and submerged vehicles. It saves time, increases dive safety and provides records of the search and findings. The KONGSBERG SAR system scans a radius of approximately 120 feet (roughly 45,000 square feet) in minutes after it is deployed to the marine bottom. The KONGSBERG SAR System may be the primary means of searching in confined areas or under ice. The system is widely used as a secondary search means to investigate targets of interest identified by other types of sonar. The divers using Global Positioning System (GPS) instrumentation coordinates, can flag suspected targets for further investigation. It is also used to direct divers in recovery operations. Recovery operations are concluded more quickly and safely as divers can be directed to the target using underwater communications, and moved directly to the target while avoiding underwater hazards.

The KONGSBERG SAR System consists of these basic components, a high resolution MS 1171 single beam scanning sonar, a sonar processing computer with the MS 1000 software, a power/telemetry interface, light weight cable reel with cable and a tripod mount. The KONGSBERG 1171-Series Scanning Sonar is designed to produce the highest resolution sonar images possible. It is intended for applications where data clarity and diver safety supersedes other requirements.



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This asset when acquired is a Regional Asset under the Milwaukee Port Security Collaborative which means the asset will be made available to any requesting agency in Southeast Wisconsin that has a water related emergency. The fire department will provide trained personnel to operate the equipment and may participate in dive rescue operations if warranted.

Fiscal Note: The grant request is for \$70,000 of which the City's hard match is 25% or \$17,500. The City's Match will be budgeted under the 2015 Capital Improvement Project.

Respectfully submitted,

Steve Hansen, Fire Chief