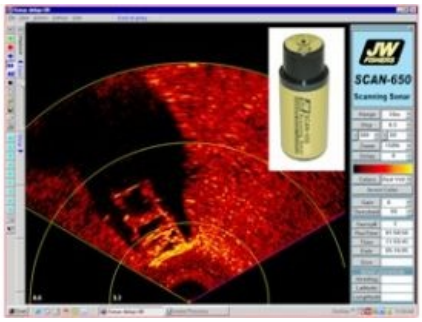
Law Enforcement Agencies Discover Scanning Sonar



Public security organisations are more interested in scanning sonar, that is able to produce a "picture" of the underwater environment regardless of water visibility. It can locate submerged objects from drowning victims to sunken vessels. Using this sonar dramatically reduces the time divers spend in the water, which is extremely important in difficult or dangerous situations. Another advantage of scanning sonar is its economical cost compared to side scan systems, which makes it an affordable alternative for many smaller departments.

The scanning sonar can be used as a stand-alone system or attached to an ROV. When the sonar is used as a stand-alone system, the transducer is lowered into the water from a stable platform such as pier or pontoon boat, or attached to a tripod and lowered to the bottom. The transducer transmits a fan-shaped beam that sweeps a circle up to 250 feet in diameter. The beam reflects off any object lying on the bottom and returns to the transducer where it is received and transmitted to the surface. Topside, the sonar signal is processed and displayed on a laptop computer.

The software has features that allow the scan to be tailored to fit the requirements of the search operation. The operator can select the size of the search area and also decide whether to scan a complete circle or just a portion of it. A variety of color schemes in 256 shades are available to display the sonar images. There is a choice of step sizes and sweep speeds, and a sizing tool shows the length and width of the target. Scanned data files are stored on the PC's hard drive along with the boat's GPS position, time, date, and other pertinent data. Recorded files can be played back at any time. Small file sections and screen shots can be copied for emailing.

JW Fishers is one of the primary suppliers of sonar to the agencies charged with public safety. Two groups that have recently added Fishers SCAN-650 to their arsenal of underwater search equipment are a rescue squad in Vermont and a sheriffs department in California. Members of the Vermont rescue squad visited Fishers factory for a demonstration of the system. Several targets were scanned including a mannequin and a handgun. The mannequin was weighted and dropped to the bottom of a river. The SCAN-650 clearly displayed each submerged target. Team members then discussed an occasional need to search for vehicles that sometimes mysteriously end up in local lakes and rivers. Seeing a scanned image of a sunken car convinced the group this would be a good tool for their underwater search operations.