

U.N. and Marine Companies Get Help from Side Scan Sonar

The almost twenty year old Somali civil war devastated the capitol Mogadishu and left the city devoid of basic urban services and infrastructure. In an effort to rebuild and modernize the port, the Somalia's Transitional Federal Government (TFG) launched the Mogadishu Port Rehabilitation Project. Assisting in this work is Washington based Bancroft Global Development, an organization that receives some funding from the United Nations and the US State Department. Bancroft is helping African Union peacekeepers protect the Somalia government and eliminate obstacles to redevelopment. One of the jobs they have been tasked with is demining the harbor before reconstruction can get underway. To assist in this project Bancroft is using JW Fishers side scan sonars. Sonar is the ideal tool for this operation because it can search large areas quickly and produces detailed images of any objects on the bottom, regardless of water clarity. Side scan allows the operator to see everything on the harbor floor: abandoned fishing nets, scattered debris, sunken vessels, and mines. A member of Bancroft's team, Emmanuel Hlongwane, came to Fishers factory to gain a better understanding of how to utilize the side scan and learn the various ways to optimize its performance for their application. After completing the training, Hlongwane said, "I'm confident I can locate anything on the harbor bottom and know that Fishers staff is there to help and provide any needed technical support."

Another organization that employed the sonar in a similar operation is the Regional Centre for Underwater Demining (RCUD) in Montenegro, which was part of the former Yugoslavia. A bloody civil war in the 1990's left the country littered with unexploded ordnance and waterways unsafe to travel because of many scattered mines. After numerous fishermen and boaters were killed from these deadly devices, RCUD acquired a Fisher side scan to help locate the mines. The operation was a success. With the help of the sonar and trained divers, many explosives were found and removed from the country's lakes and rivers. Today the sonar is being used for more peaceful purposes. RCUD is working in cooperation with RPM Nautical Foundation and the Center for Conservation and Archaeology to locate historic shipwrecks and map other underwater sites of significance.

Marine service companies are also using side scan sonars in their operations. One of these firms is WJ Castle PE & Associates. Founder William Castle has been providing marine and structural engineering services for over 30 years, and has served on a number of industry boards including the International Association of Diving Contractors (IADC). The sonar proved especially useful in a recent bridge repair project. Castle and their affiliate Hydro Marine Construction were contracted to rehabilitate the Cheesequake Creek Bridge on Route 35 in Middlesex County, New Jersey. The work involved installation of new jackets and armor units using ACBMs (Advanced Cement-Based Materials). Before beginning the job, a survey of the creek bottom was required to know the extent and condition of the underwater structures and any objects around the bridge that could impede the operation. A side scan survey of the main channel revealed a previously unknown utility pipe adjacent to the bridge that was partially uncovered and slightly undermined. Although the pipe was small, its image was clearly visible on the sonar screen. In addition to side scan, the Castle / Hydro Marine team also did fathometric and scanning sonar surveys. Performing these surveys helped increase their knowledge of the site and allowed Castle to provide the client with a detailed record of the operation including images of the underwater structures before and after the work was completed.

Diver Dan Diving Services began as a small business in 1998 providing commercial divers to the marine and shipping industries around Port Arthur and Freeport, Texas. In 25 years the company has grown significantly and now offer underwater jetting, pipeline & riser repairs, platform inspections & refabrication of rigs, pier & dock repairs, underwater cutting & welding, hull scrubbing & polishing, bottom surveys and salvage work. They currently have two locations and service clients from Galveston to Lake Charles, Louisiana. To assist in

their salvage and survey operations the company acquired Fishers SSS-100K/600K dual frequency side scan. The sonar was instrumental in a recent operation involving the search and recovery of a sunken shrimp boat.

A few of the many other organizations using Fishers side scan sonars are West Coast Diving in Ireland, Al Bwardy Marine Engineering in Dubai, Cliffords Diving in Alabama, Cooper Marine in Florida, Digital Horizon Company in Nigeria, Realfs Diving & Salvage in Australia, Naval EOD Technology Division in Maryland, Nanhai Marine Archaeology in Malaysia, Dubina Inzenjering in Croatia, and North Carolina Dept of Transportation.

For more information on JW Fishers complete line of underwater search equipment go to www.jwfishers.com.



Photo attached Emmanuel Hlongwane with Fisher sonar tech (l) and side scan, Inset top left: Sonar image of utility pipe, Inset top right: Cheesequake Creek Bridge