

Ocean Group: Explosive Ordnance Disposal/ Landmine Clearance Division

Since 2000, the Ocean Group Explosive Ordnance Disposal/Landmine Clearance Division (EOD Division) has been forming an extensive underwater clearance program by combining vast experience from different fields of mine action and by developing advanced underwater demining technologies.

■ Ocean Group EOD Division team about to deploy.



by Susanna Sprinkel, MAIC

History

When first established in 1972 the Ocean Group conducted underwater inspection, naval recovery and marine works, but they have grown into "one of Canada's largest suppliers of integrated maritime services," according to the International Projects Manager of the EOD Division, John Kirby.¹ They provide numerous towing services throughout the ports of Quebec and Montreal. Special projects they have participated in are refloating the Irving Whale and transporting supplies for building the longest bridge in Canada.

In 2000, the company recognized a need for and set up a division to handle UXO/landmine clearance. Although the company derives from a commercially oriented background, they feel that this division represents a more humanitarian standpoint, which is necessary in order to fulfill the needs of the client. The EOD Division combines experience from many different aspects of landmine/UXO clearance in order to provide an extensive demining program.

Team

The EOD Division is comprised of a core team containing about 20 people with a wide range of experience in demining and UXO clearance. The com-

pany maintains a database that indicates the credentials of each staff member in order to form the most qualified team for each specific project. John Kirby, the International Projects Manager, has 19 years of civilian and military experience, and he has been actively involved in demining for the past 16 years. He was brought into the company for his international experience in order to help the Division establish itself in the marketplace. Additionally, the Operations Manager has 13 years of field experience. Overall, the senior management team has conducted survey and clearance operations in Angola, Bosnia, Cambodia, Canada, Cyprus, Egypt, Europe, Kurdistan, Kuwait, Iraq, Mozambique, Namibia, Thailand and Zimbabwe.

Strategy

The main strategy of the EOD Division is to combine enough experience from different fields of mine action so the workers can complete all necessary tasks themselves rather than contracting other organizations to help them. If a project requires airborne UXO surveys, the Ocean Group has the ability to complete it themselves. Because Canadian companies have not been very highly regarded in the humanitarian demining field, the Ocean Group hopes to prove they are capable of contributing to landmine clearance and improving technology.

Over the past few years, the EOD Division has been in a consolidation phase. They have built a foundation that integrates a variety of technologies supported by standard operating procedures (SOPs) and quality assurance (QA). They are prepared to locate landmines/UXO and either neutralize them or transport them further underwater where they no longer pose a threat. In many cases, the

latter solution is the better one because it puts the deminers in less danger. Safety is the primary concern of the EOD Division, who will reject a job offer before endangering their team. The entire Ocean Group is adapting to this safety standard, along with the QA standards of the EOD Division.

The initial focus of the EOD Division was conducting underwater mine clearance for big salvage companies, which included the use of underwater fencing and clearance divers. This led to the development of clearance methods in shallow water. Finally, their technology has developed to the point of working in flooded minefields. The division has partnered with an electronics specialist company conducting operations for the company using their machinery. Several other countries have shown an interest in the Ocean Group concerning problems in canals and areas close to shore where landmines have washed up.

Services

Since its development in 2000, the Ocean Group EOD Division has provided a number of services to the mine action community in underwater and terrestrial decontamination and demining, as well as consulting and research. The underwater and terrestrial decontamination and demining services provided by the EOD Division include detection, characterization, retrieval and disposal of energetic material and explosives; clearance of debris on battlefields and military training areas; and detection of the level and concentration of energetic material through geophysical studies. Additionally, the team includes experienced divers that specialize in handling explosives; these divers are vital to the company's underwater decontamination and demining services.

The EOD Division also offers the following consulting services: conducting QA operations, planning and managing various projects, and preparing evaluations and estimates. In addition, they provide valuable research services by conducting historical research of and assessing the risk of UXO contaminated sites.

Projects

So far, the Ocean Group EOD Division has conducted multiple operations on the Valcartier River in Quebec as well as in Sorel, Quebec; Halifax, Nova Scotia; and throughout Russia. They have also collaborated on bringing a UXO-detecting sonar system, APL Drums, into the field of underwater demining. These APL Drums provide a safe, quick, and affordable method for identifying submerged objects and objects lying as far as 30 cm below the ground in both shallow and deep waters.

This newly developed sonar system has been designed to operate under various circumstances. In 2000, the Ocean Group began developing a method that involves suspending the APL Drums from a hydraulic crane and is geared towards shallower waters that are at least 0.5 m deep. Another method was also being developed for deeper waters (over 2 m deep) with strong currents. This method includes a remotely operated vehicle (ROV) designed by Bofors Underwater Systems called a "Double Eagle," which is used by marines to counter landmines.

Over the past year, the EOD Division has focused much of its efforts on research and development (R&D). As a result they "have come out with the best shallow- and deep-water remote survey barge, remote harvester, remote transporter and demolition barge,"² preparing them to conduct any necessary underwater operations. These new developments include a number of technologies such as sonar systems, a sub-bottom profiler, stereoscopic cameras, and a seven-function manipulating arm with multiple exchangeable tools. All of the equipment is controlled by satellites and is capable of being transported by airplane, train, truck or ship.

Conclusion

Although there are a number of organizations that include underwater landmine and UXO clear-

ance in their work, Ocean Group is the first to focus specifically on this aspect of demining. Since 2000, they have formed a skilled team and developed advanced technologies that function extensively in the clearance of flooded minefields, canals and other waterways. As a result, they are prepared to form the most qualified team with the most beneficial equipment for each underwater demining project that comes their way. ■

References

1. Telephone interview with John Kirby, International Projects Manager for Ocean Group EOD Division, October 2001.
2. E-mail from Clerc Levasseur, Jr., Director of Operations for Ocean Group EOD Division, February 10, 2003.

* All photos courtesy of Ocean Group EOD Division.

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■ Electromagnetic System raising UXO from underwater dumping ground.

