

The Regional Center for Divers Training and Underwater Demining

The Regional Center for Divers Training and Underwater Demining (RCUD) in Bijela, Montenegro, trains divers from around the world to properly handle and dismantle weapons located underwater. Since the organization's creation in 2002, it has removed more than 120 tons of explosive material.

by Veselin Mijalović [Regional Center for Divers Training and Underwater Demining]

Beginning during World War I (WWI) and continuing after WWII, several world powers dumped excess chemical and conventional weapons in oceans around the world.¹ Remaining from WWI and II and other conflicts, weapons and munitions, either dumped or abandoned, contaminate major oceans and waterways worldwide.² In 1975 the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (also known as the London Convention) officially banned the practice of dumping chemical weapons, and the London Protocol, a modification of the London Convention, updated the original convention and further prohibited maritime dumping in 1996.^{1,3}

Unlike action taken to end weapons dumping, no current international legislation prohibits using underwater mines. These mines are purposefully placed in oceans and rivers. They have been used as far back as during the American Revolutionary War to more recently, such as during the 1980–1988 Iraq-Iran conflict. Some underwater mines are designed to sink to the ocean floor and cause deep explosions, while others float at the water's surface and are meant to explode close to ships.⁴ Mines, including underwater mines, are still used by nonstate actors, terrorist groups, and nations as they are easy to build, cost-effective to develop, hard to detect and extremely effective. Even threats of underwater mines can lead to the closure of key waterways necessary for international trade—such as the Strait of Hormuz or the Suez Canal among others.⁵

Collectively, dumped weapons and munitions and underwater mines pose dangers to maritime industries—

including fishing, ocean trade and transportation, tourism and water sports such as diving, oil drilling, and wind energy—as well as to ocean and underwater ecosystems around the globe.

RCUD

Due to the high number of underwater mines and dumped unexploded ordnance (UXO) from previous conflicts in and around Montenegro, the government of Montenegro established the Regional Center for Divers Training and Underwater Demining (RCUD) in 2002. The South-Eastern Europe Mine Action Coordination Council (SEEMACC) and the Office of Humanitarian Demining Program in the U.S. Department of State's Bureau of Political-Military Affairs (PM/HDP) had essential roles in the establishment of RCUD. PM/HDP and its successor organization, the Office of Weapons Removal and Abatement in the U.S. Department of State's Bureau of Political-Military Affairs (PM/WRA), provided RCUD with millions of dollars of support in the form of equipment, underwater clearance tasks, and diver training projects, through PM/WRA's implementing partner, the Slovenian organization ITF Enhancing Human Security (ITF). ITF has been PM/WRA's main implementing partner for conventional weapons destruction, including humanitarian demining, in the Balkans.

RCUD is located in Montenegro in the town of Bijela on the coast of the Bay of Kotor. Montenegro's own revenues, its state budget, and donations from other countries and organizations fund the organization. RCUD employs nine professional anti-mine divers and 11 logistical staff.



A diver uses an underwater metal detector produced by Vallon to perform underwater mine reconnaissance of the seabed in the Bay of Kotor, Montenegro.

All photos courtesy of Regional Center for Divers Training and Underwater Demining.

Operations

To help to meet international needs related to underwater clearance, RCUD trains underwater deminers from around the world. Before RCUD's establishment, no civilian institution of its kind existed in Europe that conducted humanitarian underwater demining and UXO removal while also training underwater deminers from other countries. RCUD coordinates, manages and unites the organizational, technical and professional levels of training affiliated with the implementation of underwater demining. This includes the critical practice of monitoring, supervising and protecting people and property from UXO during underwater demining operations. RCUD cooperates with state institutions, nongovernmental organizations (NGO) and international institutions to ensure efficient and safe use of water resources.

In addition to conducting underwater demining and training underwater demining divers, RCUD

- Drafts plans for underwater research and for protection of the population from underwater UXO

- Participates in studies and mapping of underwater minefields
- Coordinates institutions and individuals in South-east Europe and in other countries in humanitarian underwater demining

Diver and Deminer Training

Members of government disaster-relief agencies, as well as members of military and police units in countries with UXO-contaminated waters, obtain training at RCUD. Training is performed according to the Standard Operating Procedures for Humanitarian Underwater Demining in South Eastern Europe adopted in 2004 by SEEMACC members. From 2002 to 2010, RCUD trained 48 professional divers and 12 supervisors from Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Russia, Serbia and Slovenia for underwater demining and other underwater work.

Divers who attend the training must have the recommendations of their national armies or police. To attend

the four-week training, divers must have completed separate training in dealing with explosives on land, obtain a certificate logging a minimum of 300 hours of diving issued by state institutions, have a healthy medical certificate and pass psychophysical testing.

RCUD underwater demining divers learn and gain experience in

- Understanding the effects of explosives and the chemical reactions of pyrotechnic mixtures in water
- Handling ordnance and explosives in water
- Assessing sabotage of underwater ordnance
- Working with various ERW and mines and with specific fuze and mechanism activation
- Detecting explosives through various methods and means
- Learning different methods for deactivating or destroying explosives in water
- Organizing and implementing intervention and rescue in the water
- Communicating in the water through various methods such as telephone communication between divers, between divers and the surface, or communication through a “lifeline rope” strung between the diver and the surface
- Practicing first aid
- Learning protective measures for handling UXO in water
- Transporting UXO underwater, over water and on land

RCUD's Demining Progress

As of 2013, RCUD has demined approximately 2 million sq m (494 ac) underwater and destroyed approximately 120 tons of anti-ship mines and other explosive items. RCUD uses the latest technology for its underwater demining including the latest underwater mine detectors, side-scan sonar, georeferenced underwater equipment and remote-controlled parachutes/lifting bags for removing ordnance from the ocean floor. RCUD also employs highly qualified international instructors and other experts in the field of demining. In July and August 2012, three diving teams affiliated with RCUD removed 2.5 tons of explosives from the Zeta River in Montenegro. Among the explosives were grenades, cluster bombs and cannon balls.⁶ RCUD also removed an aircraft bomb from the Moraca river in the center of Podgorica, Montenegro in August 2012.⁷

One of the most complex tasks in the field of demining is removing explosive devices under the sea's surface. This type of underwater demining requires specially trained divers and equipment.



Veselin Mijajlović is the director of the Regional Center for Divers Training and Underwater Demining and is responsible for training the professional scuba divers and underwater deminers. He received his master's degree in physical education and sport from the Faculty of Sport and Tourism in Novi Sad, Republic of Serbia. He has more than 25 years of experience as a commander and diving instructor of special units of the Montenegrin army and police, and in 2011, the Bulgarian Ministry of Defense presented him with a plaque and letter of gratitude for professional, successful and efficient underwater demining at the Chelopechene disaster site in Bulgaria, a massive terrestrial and underwater UXO clearance project funded by PM/WRA.

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Endnotes

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