



Unexploded bombs in Lake Constance

At the request of the munitions clearance service of the State of Baden-Württemberg, S+T carried out a test search in Lake Constance on October 12–16. The aim of the exercise was to locate unexploded bombs from World War II – an excellent example of cross-border cooperation between Germany and Switzerland for the protection of water resources.

Searching for unexploded munitions is a tricky business. One key problem is that their ignition devices are often still in working order and yet no longer safe to handle. Moreover, even if they are in shallow water, the suspected unexploded bombs are usually not visible as they are covered with layers of silt or sand. A swimmer first discovered an unexploded bomb here by chance in 2003. On October 12–16, S+T and the KAMIR (Explosive Ordnance Disposal and Mine-Clearing Competence Centre) team of the Swiss Armed Forces carried out a test search for unexploded World War II bombs in Lake Constance on behalf of the clearance service (Länderräumdienst) of the State of Baden-Württemberg and the Überlingen water protection authority. The search zone was an area of shallow water where unexploded munitions had been suspected based on aerial photograph assessments by the clearance service. To carry out the search, armasuisse used an underwater metal detector and an underwater navigation system mounted on a powerful underwater robot of the water protection authority, which served as a surveying platform. Tests established the best possible option for the surface search and localized several possible target objects below the lake bed.

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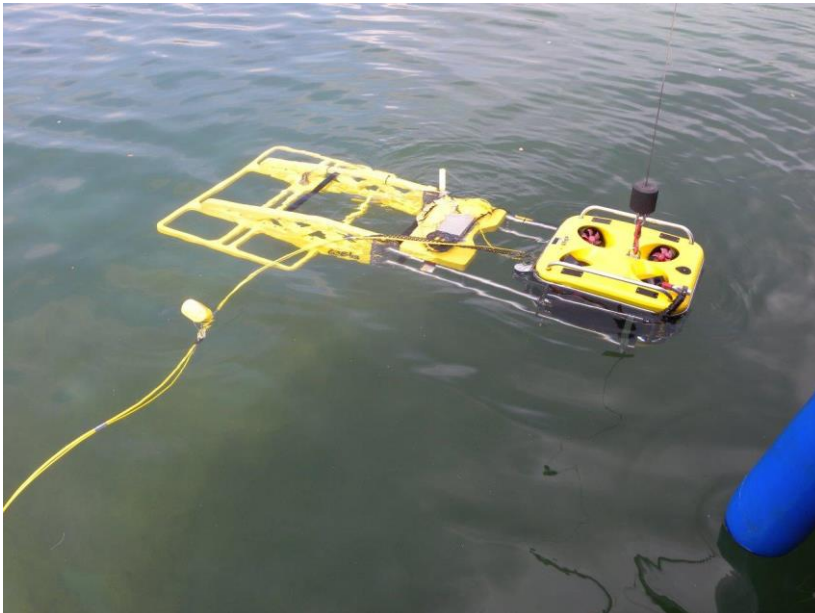


Fig. 1: Underwater metal detector in operation



Fig. 2: Total concentration was needed for the search