

SeaRobotics Delivers Two USVs to the Canadian Hydrographic Service



SeaRobotics recently announced the delivery of two additional 2.5m autonomous unmanned surface vehicles (USVs) to the Canadian Hydrographic Service (CHS), a part of Fisheries and Oceans Canada, bringing the fleet to four systems. These USVs, built by SeaRobotics, are complete hydrographic systems including multibeam echosounders, support sensors, cast winches, deployment carts and road trailers.

The SeaRobotics USVs are being deployed across Canada supported by regional training performed by SeaRobotics. CHS has completed the first year of operation and the analysis of the efficiency and cost effectiveness of USV usage. A profile of high-productivity, cost-reducing activities is being developed for both traditional survey tasks and survey tasks in previously denied, and currently unsurveyed, areas.

Wide range of applications

These systems leverage SeaRobotics' extensive expertise and history delivering USVs for high-precision bathymetric surveys, water quality analysis, hydrographic surveys, shallow water, force multiplier and many other applications. The USVs were delivered with a fully integrated R2Sonic multi-beam echo sounder (MBES), associated motion reference unit and dual antenna RTK GPS system, as well as a surface sound velocity probe and a cast winch deploying a CTD—all tightly integrated with HYPACK software.

"We are pleased to be supporting CHS in their deployment of state-of-the-art USV technology. The 2.5 meter USV is one of the smallest systems capable of practical, general purpose MBES deployment," stated Don Darling, president of SeaRobotics Corporation.

Bathymetric, hydrographic and nautical data

"The USV will be used extensively to improve bathymetric, hydrographic and nautical data throughout Canada for waterways, estuaries and coastal bathymetric surveys," further explained Geoff Douglass, USV development manager at SeaRobotics.

SeaRobotics Corporation, headquartered in Stuart, Florida, USA, specialises in small, smart vessels that are remotely or autonomously operated. Its clients include major military and commercial organizations, both U.S. and foreign. SeaRobotics' seasoned marine survey software interfaces with most data acquisition hardware, software and sensing systems to produce multi-spectral, DGPS-stamped data for survey, research or surveillance efforts. Applications for SeaRobotics vessels range from bathymetric and hydrographic surveys to coastal, harbor, and riverine surveillance. Many SeaRobotics vessels are small, modular and man-portable, allowing rapid deployment in remote areas or deployment by larger vessels; their command and control systems are user-friendly and compact allowing backpack mobilization.