## Hydro

## Updated Control System for Underwater Workhorse Ventana





Greensea Systems, USA, has completed its control system upgrade for Ventana, Monterey Bay Aquarium Research Institute's (MBARI) work class ROV. The 1,850-metre-rated vehicle received a new software platform that supports advanced automation and control for the vehicle. Integrated station keeping is one of Greensea's technology features that excites MBARI's ROV crew.

According to Craig Dawe, Technical Support manager and chief *Ventana* pilot, they don't have to worry about drifting around and banging into things when the visibility is poor. It also allows the crew to do manipulation without actually sitting down on the sea floor.

Ventana successfully completed mid-water and benthic collections in the first operational days after the upgrade, and plans to follow up with a cable survey, a task that will be easier with Greensea's integrated waypoint following.

MBARI has 60 total dives scheduled for Ventana this year. Marybeth Gilliam, Greensea's chief marketing officer and VP of Sales, notes the new technology will help unify the scientific community.

## **Other Users**

In addition to <u>MBARI</u>, Greensea's technology platform is used by several other world renowned research organizations, including the National Oceanic Atmospheric Administration, Canadian Scientific Submersible Facility, Pelagic Research Services, Naval Post-Graduate School, and Georgia Tech Research Institute. Greensea continues to advance its universal technology platform by working for Schmidt Ocean Institute on a series of three vehicles designed to allow researchers to study the ocean's full depth.

Greensea optimises small inspection class vehicles as well as large work class systems of every solution offers stability using openSEA, the company's patent-pending software system anchored by a core library. The library provides native support for thousands of vehicle devices, which gives stability to even the industry's most disruptive technology.

MBARI was founded in 1987 by David Packard. The institute's mission is to achieve and maintain a position as a world center for advanced research and education in ocean science and technology, and to do so through the development of better instruments, systems, and methods for scientific research in the deep waters of the ocean. The institute's current research efforts span eight research themes, including: benthic processes, midwater research, upper ocean biogeochemistry, ocean observatories, remotely operated vehicle enhancements and upgrades, new in situ instruments, infrastructure support, and information dissemination and outreach.

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