

Kongsberg to Market Two New Underwater Glider Systems



Kongsberg Underwater Technology, Inc. has completed negotiations with CoMotion, the University of Washington's collaborative innovation hub, to obtain the sole rights to produce, market and continue development of two new underwater glider systems. Both new glider systems are based in part on the original, proven Seaglider design. The first vehicle, Deepglider, is designed for operation to a maximum depth of 6,000 metres. This capability will allow the system to completely profile over 97% of the world's oceans.

The second vehicle, Oculus, is specifically designed for high performance, shallow water operation. Oculus has 3,500cm³ of variable buoyancy — which will allow it to operate from fresh water to sea water without the need to alter its static ballast. It is also capable of

achieving horizontal speeds up to 2 knots. These capabilities will enable operations in areas of extreme density variation and high currents.

Ocean Glider Principle

Ocean gliders are a specialised type of autonomous underwater vehicle (AUV). Rather than using a propeller to move through the water, they use fixed wings and changes in buoyancy to achieve both vertical and forward motion. The vehicles move through the water in a saw-tooth trajectory and surface periodically to communicate data on water properties, such as temperature, salinity and oxygen concentration, back to users via satellite telemetry. This form of propulsion is very energy efficient and allows mission periods of several months and distances of thousands of kilometres, rather than just a few days and tens of kilometres typical of propeller-driven AUVs.

Development of these glider systems was supported by federal grants from the National Science Foundation, National Oceanic and Atmospheric Administration, and the Department of Navy, Office of Naval Research.

The range of Kongsberg Seaglider models are displayed alongside the Eelume underwater robot for the first time at AUVSI Xponential, which takes place from 8-11 May 2017 at the Kay Bailer Hutchison Convention Center in Dallas (booth #1846).

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