Wave Glider Swims 2,808 Nautical Miles in South Pacific

A Liquid Robotics Wave Glider swam 2,808 nautical miles (5,200km) to the Big Island of Hawaii after successfully completing a 4-month patrol mission of the Pitcairn Island Marine Sanctuary for the UK Foreign & Commonwealth Office (FCO). This achievement represents a fundamental enabling capability for unmanned systems as it proves the feasibility and flexibility of autonomous mission deployment. The Wave Glider began its mission on 27 November 2015 in the South Pacific, where it helped the UK FCO protect the Pitcairn Island Marine Sanctuary against illegal fishing activities.

After successfully completing its mission, the Wave Glider was remotely piloted more than 2,808 nautical miles (5,200 km) — through strong equatorial currents, doldrums and challenging sea states — back to port in Hawaii. Along the way, it collected 9,516 measurements of meteorological, oceanographic and marine biodiversity data over expanses rarely travelled. This data was recently used to support the worldwide Fishackathon, a programme sponsored by the US Department of State to promote innovative ways to stop illegal and unregulated fishing. Altogether, the Wave Glider was continuously at sea, untouched, for 213 days while traveling a total of 7,205 nautical miles (13,344km).

Accessing Remote Ocean Locations

Using the Wave Glider platform, Liquid Robotics' customers are able to deploy sensors in the most remote marine locations without sending a large ship for recovery. This opens up large expanses of the ocean that once were previously inaccessible due to the high cost and risk of deploying manned vessels for research, commerce, or defence.