

The Underwater Centre Provides Ideal Kawasaki AUV Testing Site



The Underwater Centre, a world-leading provider of subsea testing and training based on the tidal waters of Loch Linnhe in Fort William, UK, has successfully supported the delivery of a complex autonomous underwater vehicle (AUV) operational testing project in collaboration with Kawasaki Heavy Industries (KHI). This significant 15-day operational trial was planned for almost two years and involved the use of workshops, vessels, deepwater test sites, ROVs and specialist support staff, amongst other assets.

With a focus on the growing demands for pipeline maintenance in the offshore oil and gas fields, Kawasaki has been developing cutting-edge component technologies of AUVs, utilising the sophisticated underwater vehicle technologies deployed by Kawasaki internally.

Prototype AUV

The operational subsea trial used a prototype AUV and charging station; tasks included automated docking of the AUV to the in-water charging station, contactless charging and large-capacity optical communication tests. A high level of experienced and specialist support was provided to Kawasaki to deliver deployment, operational and recovery assistance utilising the Centre's array of transport vehicles, crane, WROV and vessels.

The Underwater Centre provided the use of its mechanical workshop to allow Kawasaki to prepare the AUV to help ensure that the team and equipment were well prepared for the testing phase. The Centre's ROV team mobilised both WROV and OBSROV assets in support of the deployment of a test station and provision of footage of the AUV in the water.

During the trial, representatives from major oil and gas companies, underwater vehicle and equipment operating companies, UK subsea scientific and government organisations attended the Fort William test site to view demonstrations.

Subsea testing site

Steve Ham, The Underwater Centre's Commercial Director, commented on the successful trial saying, "This was a major subsea trial of AUV technology in UK waters. Kawasaki chose us for their testing due to the unique combination of equipment, facilities and subsea test site. Our personnel worked tirelessly to support Kawasaki and it's a further testament to our dedicated operational team, plus the range of vehicles, equipment and assets available, that mean we can support complex trials and testing such as this."

The Centre's unique location can accommodate various complexities of trials and testing projects owing to the mixture of facilities, equipment and staff; deep water subsea testing site down to 150m, 500m private pier, electrical and mechanical workshops, 1.5m litre onshore tank, training and testing areas, land and water-based vehicles including work boats, FRCs, ROV vessels, diving barges, crane, fork lift and transport vehicles.

About The Underwater Centre

The Underwater Centre is a purpose-built subsea training and testing facility which incorporates an extensive pier complex including four dive stations, classrooms, workshops and decompression chambers. With access to sea depths to 150m, the Centre's Fort William facilities also include a range of vessels providing air and saturation diver training and an ROV fleet including a work-class ROV.