



Rovco Successfully Completes Wave Hub Survey Project

UK-based Rovco has successfully completed a subsea cable survey and inspection for the world's largest and most technologically advanced offshore renewables test site, Wave Hub.

The inspection programme included the first commercial trial of Rovco's 3D visualisation technology to create scaled, high resolution models of subsea infrastructure with millimetre accuracy.

Rovco also delivered a detailed bathymetric survey utilising a state-of-the-art multibeam echosounder (MBES), alongside an ROV video inspection with ultra-short baseline tracking for Wave Hub's entire offshore cable network, off the coast of Saint Ives Bay, Cornwall.

The 3D system, collects raw data which is then processed to obtain 3D volumetric information, ensuring a true representation of the underwater environment.

With short mobilisations and no need for large specialist vessels or technical support teams, the system generates cost savings of up to 80% compared with traditional survey methods.

The project, won through a competitive tender, was completed in ten days over short weather windows to avoid strong winds and rough sea conditions. The first phase utilised the MTS Xplorer vessel to carry out the MBES survey. The second stage saw the deployment of Rovco's Sub-Atlantic Mojave ROV

equipped with the latest Sonardyne Nano beacons, its own prototype hi-res camera system, and a fibre optic gyro to gather accurate heading and point references.

The final stage involved the Severn Sea vessel, which was used to complete the ROV visual and 3D survey. The project team lived on board the vessel and worked around three available tide windows to ensure the project was delivered on time and within budget.

Brian Allen, CEO of Rovco, commented: "With underwater 3D visualisation, we are improving the quality of subsea ROV inspections, identifying potential problem areas more effectively and providing a better means of communicating this information.

"We were honoured to support Wave Hub on this project, utilising our now proven 3D modelling technology to provide accurate survey data and provide a clear picture of the subsea environment. There are many applications for ROV 3D visualisation however we expect it to be used most frequently for condition monitoring of subsea assets, as well as for damage, corrosion or decommissioning surveys."

Located 16km from the north coast of Cornwall, at the eastern edge of the Atlantic Ocean, the Wave Hub site offers four cable connection points for testing offshore renewable energy

technology as well as purpose built and commissioned grid connected infrastructure. Julius Besterman, head of engineering and operations at Wave Hub, commented: "Periodic subsea inspection is essential to ensuring that the cable system is well maintained to afford projects with a reliable offshore connection, and we were extremely pleased to allow Rovco to trial their 3D system on our site. The results obtained were superb and enabled a very detailed asset and seabed condition assessment as well as providing valuable information for projects intending to connect at Wave Hub. Rovco has set the benchmark very high for future surveys."

With an expanding fleet of ROVs, sized from micro to large inspection vehicles, Rovco has the resources required to provide inshore/offshore services and inspections anywhere in the world. Offering a unique approach to technical subsea challenges, Rovco has the expertise to deliver a high quality, cost effective solution for underwater hydrographic survey and inspection services, using high resolution state-of-the-art cameras, scanning sonars and various leading edge survey technologies.

For more information about Rovco, visit www.rovco.com

Picture Caption: A 3D model of a Subsea Dry Mate Connector.