

DOUBLING SURVEY CAPABILITIES ACCELERATES WIND PROJECT OPERATIONS



TerraSond entered a partnership with ASV Global (now L3 ASV) to provide a full geophysical survey kit on an autonomous surface vehicle (ASV) to support the primary survey vessel.

THE PROBLEM

TerraSond, a product and service line brand for the Geo-services segment within Acteon, was tasked by an offshore wind operator to multiply the offshore work and data collection force for renewables surveys for the local authority.

THE SOLUTION

As a proof of concept, TerraSond entered a partnership with ASV Global (now L3 ASV) to equip a remotely and autonomously operated 40' vessel with the necessary survey equipment. We put together a full geophysical survey kit on an autonomous surface vehicle (ASV) to support the primary survey vessel.

The survey equipment included an Applanix POSMV, CNAV 3050 GNSS, Veripos GNSS, EdgeTech 4200 SSS, Geometrics TVG, Two R2Sonic 2024 MBES', Sonardyne Mini Ranger USBL, Innomar Medium SBP, in-situ flow meter, surface sound velocity sensors, and an applied acoustics triple plate boomer. All this equipment was remotely operated, including during recovery and deployment which helped to minimise the project footprint.

The control van for both the primary 24-hour operating survey vessel and ASV, was installed on the deck of the primary vessel. Communications were carried out with redundant long-range radio connections and real-time data connection and transfer

while using collision avoidance sensors such as Wi-Fi Radar, 3D cameras, FLIR Cameras, night vision and thermal imaging cameras. This enabled the vessel to operate remotely and safely 24 hours per day to optimise operations.

THE SOLUTION

Survey data acquired by the ASV met specification while working in tandem as a force multiplier to the mother ship during acceptance testing, proving that autonomous surface vessels can produce COP level survey data. Acteon's offshore expertise and techniques allowed the highest possible quality data and specifications for the customer.

The vessel was able to operate remotely and safely 24 hours per day to optimise operations.

