## Exail's DriX USV surveys US wind farm areas for NOAA Fisheries





Exail's DriX uncrewed surface vessel (USV) recently completed a first-of-its-kind fisheries research survey to assess the impact on biomass and fish stock before, during and after wind farm construction.

Equipped with a <u>SeapiX-R 3D</u> highresolution multibeam echosounder from Exail, two <u>Kongsberg EK80</u> singlebeam echosounders and a Nortek ADCP, the <u>DriX USV</u> performed this survey off the

coast of Massachusetts, Rhode Island, and New York for NOAA Fisheries Northeast Fisheries Research Science Center (NEFSC), in close collaboration with NOAA USxOC, Kongsberg and Nortek.

Operating 24/7 in supervised autonomous mode, the DriX USV covered over 5,000km of navigation lines, safely operating within 20 metres of the wind farm monopiles and detecting and avoiding ships, fishing nets and buoys. During the mission, the USV transmitted its data in real time to a remote operations centre (ROC) set up at the University of Rhode Island's Inner Space Center in Narragansett, RI, as well as to Exail's Maritime Autonomy hub in La Ciotat, France.

"We would like to thank NOAA Fisheries Northeast Fisheries Research Science Center for the trust they have placed in Exail's USV and sensors. We are proud to have contributed to providing our customers with highly accurate scientific data, ranging from biomass detection in the water column to the finesse of sand displacement bathymetry," said Shayan Haque, business development manager at <a href="Exail">Exail</a>.

Exail closely coordinated its efforts with the US Coast Guard Sector Southeast New England, the wind farm developers and local mariners to ensure safe autonomous operation in busy navigation channels and challenging wind farm construction areas.

Thanks to its very efficient design, the DriX performed its mission flawlessly with a very small environmental footprint. With a 90% reduction in CO<sub>2</sub> emissions compared to a conventional survey vessel, DriX helped contribute towards an environmentally friendly operation.



Exail SeapiX-R mounted on a DriX USV. (Image courtesy: Exail)

https://www.hydro-international.com/content/news/exail-s-drix-usv-surveys-u-s-windfarm-areas-for-noaa-fisheries