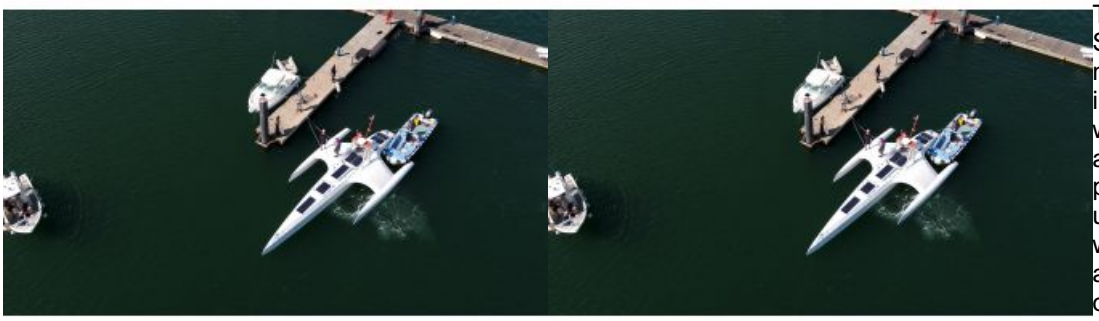
Valeport Gets On Board with the Mayflower Autonomous Ship Project



The Mayflower Autonomous Ship, which is set to self-navigate across the Atlantic in Spring 2021, will be fitted with the new Valeport uvSVX and a Valeport altimeter to provide vital precise underwater depth data which will help to protect the vessel and the onboard technology on its epic journey.

Sailing from Plymouth, UK, to Plymouth, USA, the Mayflower Autonomous Ship (MAS) will trace the route of the original 1620 *Mayflower* to commemorate the 400th anniversary of the famous voyage. With no human captain or crew, it will become one of the first full-sized, fully autonomous vessels to cross the Atlantic.

Deep Ocean Applications

Marine research organization ProMare is leading the development of the MAS. Throughout the 3,220-mile journey, the MAS will function as a science laboratory and Valeport's uvSVX and VA500 altimeter will be used to enhance the operational capability of the MAS. The MAS will also be one of the first applications for Valeport's new compact and lightweight SVP profiler, the uvSVX. Fitted through the hull of the MAS, the uvSVX features Valeport's sound velocity, temperature and depth technology and delivers salinity, conductivity and density data, along with SVP as standard. The new uvSVX has been designed specifically for vehicles where space is at a premium, and high accuracy is assured with the addition of Valeport's interchangeable pressure module that allows users to maximize operational specific depth requirements.

Powered by a hybrid wind, solar and diesel propulsion system, the MAS vessel will carry research pods for sensors and scientific instrumentation. Scientists coordinated by ProMare, with support from IBM, will use the data from the research pods to advance understanding in several areas, including maritime cybersecurity, marine mammal monitoring, sea-level mapping and ocean plastics.

Valeport's instruments are ideally suited for deep ocean applications. The Valeport uvSVX and VA500 altimeter have state-of-the-art signal processing technology, which provides stable, repeatable readings that deliver high accuracy data performance.

MAS project director, Brett Phaneuf, commented: "We've worked with Valeport for many years, integrating their equipment onto our marine vehicles, and when it comes to the Mayflower Autonomous Ship, we praise reliability, precision, low power and exemplary data above all else, and the uvSVX and VA500 altimeter provide exactly what we need to safely navigate and enable great science at sea."

Mayflower Autonomous Ship.

Then and Now

The original *Mayflower* travelled at a maximum speed of around 2.5knots and took more than two months to reach its destination, arriving in Plymouth Massachusetts on 21 December 1620. The modern, upgraded autonomous Mayflower travels at up to 15knots and should arrive in less than two weeks.

Valeport's head of sales, Kevin Edwards, added: "With sensor technology guiding the MAS decision making, this is an exciting demonstration of autonomous seafaring technology and we are immensely proud that our instruments are involved in the project."

Valeport has supplied the subsea sector for more than 50 years and continues to innovate and lead the way in the design and manufacture of precision instrumentation for the hydrographic and oceanographic communities.

---

https://www.hydro-international.com/content/news/valeport-gets-on-board-with-the-mayflower-autonomous-ship-project