

ThayerMahan Joins Forces with UNH/NOAA Partnership



ThayerMahan, a world leader in autonomous maritime solutions, has established a collaborative partnership with the Center for Coastal and Ocean Mapping/Joint Hydrographic Center (CCOM/JHC).

CCOM/JHC is a formal cooperative partnership between the University of New Hampshire (UNH) and the National Oceanic and Atmospheric Administration

(NOAA) and was founded in 1999 with two main objectives – to develop tools to advance ocean mapping and hydrography, and to train the next generation of hydrographers and ocean mappers. CCOM, a complementary university centre in the UNH School of Marine Science and Ocean Engineering, expands the scope of ocean mapping interaction and collaboration with the private sector, other government agencies and other universities.

Synthetic Aperture Sonar

The partnership developed after the two organizations worked together at sea. Representatives from ThayerMahan and CCOM/UNH deployed a SeaScout system on the NOAA ship *Okeanos Explorer* during the EX-19-04 2019 technology demonstration. During the expedition, synthetic aperture sonar (SAS) data was collected over a series of underwater cultural heritage locations off the U.S. Northeast and Mid-Atlantic coasts. ThayerMahan provided local command and control of the SeaScout system from the ship and demonstrated remote command and control from their operations centre in Groton, Connecticut.

Simultaneous SAS and Multibeam Data Collecting

A key component of the industrial partnership will be the advancement of the SAS-equipped SeaScout system. SeaScout is a high-speed, high-resolution survey system which offers significant advantages over other conventional technologies. Its innovative SAS and multibeam echosounder sensors simultaneously collect range-independent data from a large swath of seafloor. Near real-time visualization of ultra-fine resolution (3cm x 3cm) beamformed imagery and interferometric bathymetry allow immediate quality assurance/quality control. AI-driven data fusion and seafloor characterization make SeaScout a state-of-the-art tool for ocean mapping and hydrography.

Michael Connor, ThayerMahan's president and CEO, said: "ThayerMahan is excited to exchange ideas with CCOM and its partners and to work with them on research projects. This partnership is an important step towards high-resolution, high-speed ocean mapping and hydrography."

Larry Mayer, CCOM director/JHC co-director, stated: "CCOM is very excited about this new partnership. We have long focused on exploring new and innovative approaches to hydrography and ocean mapping. Bringing the extraordinary capabilities of SAS into this domain is an important step forward and we look forward to a productive collaboration with ThayerMahan."



A shipwreck offshore of Virginia/North Carolina captured at high speed by the SeaScout system.