Students Assess and Remediate Simulated Shipwrecks

Underwater robots will invade Orlando, USA, when the Marine Advanced Technology Education (MATE) Center hosts its 11th Annual International Student ROV Competition at Orlando's YMCA Aquatic and Family Center from 21 to 23 June 2012. Student teams from all over the world will gather to compete with remotely operated vehicles (ROVs) that they have designed and built themselves. The competition will be streamed live on the internet.

Each year, MATE's ROV competition encourages students to learn and apply science, technology, engineering, and math skills to complete tasks that simulate real-world problems from the ocean workplace. This year, the contest focuses on the role that ROVs play in assessing World War II shipwrecks and the potentially hazardous fuel oil that they may still contain.

The competition encourages students to think like entrepreneurs. Students are asked to transform their teams into "companies" that respond to a fictional RFP (request for proposal) for developing an ROV help with shipwreck documentation and remediation. During the process, the students develop the teamwork, creative thinking, and problem solving skills that make them competitive in today's global workplace.

Teams will participate in mission tasks, piloting their ROVs to assess the condition of a simulated shipwreck and determine a course of action if oil is still on board. In addition, they must prepare an engineering report, make a presentation to a panel of judges who represent various aspects of the marine industry, and create a poster display. Each team is evaluated on the design, construction, and performance of its ROV; the members' ability to communicate what they learned; and how they put their knowledge to use in designing and building their ROV.

Before the June event, teams from across the world participated in MATE's network of regional contests that feed into the international event. Currently, 21 regional competitions are part of the MATE Center's network.

Organised by MATE and the Marine Technology Society's (MTS) ROV Committee, the ROV competition is designed to present middle school, high school, community college, and university students with the same types of challenges faced by scientists and engineers when working underwater, and to encourage them to learn and apply science, technology, engineering, and math skills to the real-world ocean workplace. The competition is supported by the Marine Technology Society ROV Committee, the National Science Foundation, NASA, NOAA, Oceaneering, and other ocean- and science-related organisations.

https://www.hydro-international.com/content/news/students-assess-and-remediate-simulated-shipwrecks