

Virginia Beach Students Answer the Digital Ship Challenge

Suffolk, VA. (January 8, 2024) – Teams from the Advanced Technology Center (ATC) and Landstown High School, both in Virginia Beach, gathered at the Virginia Modeling, Analysis, and Simulation Center (VMASC) on Friday, December 15, 2023, for the Digital Ship Challenge Mid-Year Review. In partnership with the Virginia Ship Repair Foundation (VSRA) and the Virginia Maritime Association (VMA), the Digital Ship Challenge is a high school competition that challenges students to design and construct a cutting-edge container ship that can transit the Atlantic Ocean, facing various sea states along the way.

This is the first year that Digital Ship and the Virginia Digital Maritime Center (VDMC) are hosting this challenge. Jennifer Renne, Curriculum Coordinator for VDMC, volunteered for the VSRA Digital Innovation Challenge, which aims for middle school students to enhance awareness of careers available in the ship repair industry, which catapulted VDMC's challenge.

"After I volunteered last year at their event, I realized there was nothing like this, specifically in shipbuilding, design, and repair for high school students, so I wanted a way for the middle school students to continue their innovate ideas and designs in high school," said Renne.

During the mid-year review, teams experienced a demonstration of how testing of their container ship would go in VDMC's 8 ft. towing tank. Teams asked questions and



collaborated with their team members and technical advisors after watching the demonstration.

"The mid-year review was very enlightening as to how each team should go about with the design and fabrication of their seagoing vessel. The students asked many technical and intriguing questions that were answered after which each team should have a better understanding of each design parameter (research/engineering notebook/drawings/etc.). This has been a year-long competition culminating with a contest against other teams from various high schools in March," said Jim Reich, Naval Architecture teacher at ATC.



Students also met and heard from a panel of industry representatives that included Zachary Clark, Vice President of Operations and Maintenance at Virginia International Terminals; Kim Blossom, Environmental Services Manager at VHB; Michael Lewis, Senior Project Manager for Marine Affairs at Dominion Energy; Alex Murz, Director of Marine Operations at Intercoastal Marine; and Bob Bodvake, Founder of Disruptor Maritime.

During the panel, these industry representatives shared stories of the

pathways they took to their careers and about working in the maritime industry.

Bob Bodvake spent 26 years in the Navy as a Naval Officer, as well as working at Fairlead Integrated before opening his own company, Disruptor Maritime. "I knew that I wanted to be around the water when I was in high school. I wanted to drive fast boats, so I was ready to go into the Navy right after graduation, but my dad said, hold on, maybe you should go to the college first, and so I went in order to get a Naval scholarship to go to the Navy," said Bodvake.

VDMC is excited to see what the teams design and look forward to hosting the challenge in March, along with the Digital Innovation Challenge, which VDMC has been involved with for the past five years and how the idea for the Digital Ship Challenge started.

For more information on the Digital Ship Challenge or would like to volunteer or participate in the event, please contact Jennifer Renne at jrenne@odu.edu.