The Center for Secure and Resilient Maritime Commerce hosts Coast Guard Vice Adm. Charles D. Michel for a meeting with the Center's research principal investigators. VADM Michel, accompanied by Dr. Joseph DiRenzo, Senior Advisor to the Atlantic Area Commander for Science, Technology and Innovation, attended a meeting with CSR director, Dr. Julie Pullen and research principal investigators on April 28, 2014, at the Stevens Institute of Technology in Hoboken, N.J. The meeting included participation by Capt. Robert Thomas, Mr. Theo Gemelas, program manager, DHS S&T OUP, Capt. Alan Arsenault and representatives from the Coast Guard Investigative Service.

The meeting centered around research presentations by CSR principal investigators in the areas of passive acoustics, HF Radar multi-use capabilities, satellites, decision support tools and port resiliency. Michel's visit culminated in a tour of Stevens tow tank, a 300-foot long wave tank, where scale models of maritime vessels and ship hulls are tested for the military and private sponsors, hosted by Dr. Michael Bruno, Dean of the School of Engineering and Science.

CIMES Ice Radar assists in the rescue of Whaling Crew in North Slope Borough, Alaska. Emergency responders from the North Slope Borough Emergency Response Office were alerted to a stranded whaling crew in the Alaskan waters off of the North Slope. Utilizing its ice/water radar capabilities, CIMES was able to provide radar animations on the ice drift to the incident command team rescue base, allowing identification of the ice floe on which the crew was drifting. The Center's capabilities allowed researchers to pinpoint the location of the whaling crew, by plotting their position on the radar data in near-real time.

CIMES ice/water radar system was the only mechanism available to locate and track the stranded crew, allowing for their successful rescue once the weather conditions allowed.

CSR researchers are working to develop a decision framework toolkit to enhance Coast Guard and port partner processes during maritime and port disruptions. CSR researchers are working to prepare a decision framework and investigate candidate tools to enhance Coast Guard and port partner processes during maritime and port disruptions. The U.S. system of ports and their associated waterways are together a complex infrastructure critical to national commerce. As recent events, such as Hurricane Sandy have shown, resilience is important to the resumption of commerce. The Port Resilience Decision Framework Toolkit (PRDFT) is intended to provide decision support to the Coast Guard and port partners in preparing for and responding to disruptions. Proper identification of the decision process will allow for better situational awareness throughout the Coast Guard and port partners. PRDFT also considers the information systems that are currently employed by the USCG and others, and how those systems may be adapted for improved situational awareness in the future. The research team is conducting site visits over the next several months with Coast Guard Sectors New York, Houston and San Francisco in order to understand the decisions and tools used during recent port disruptions.
CSR is collaborating with the Center for Coastal Hazards (CHC), University of North Carolina, and the Center for Visual Analytics for Command, Control and Interoperability Environments (VACCINE), Purdue University, both DHS Center’s of Excellence, for their expertise regarding visualization and operational tools. The Coast Guard Research and Development Center is providing support and coordination for this project.

CSR hosts visitors from the Department of State International Visitor Leadership Program. Dr. Julie Pullen, Director, CSR, recently hosted a meeting with international leaders from Oman, Kuwait, Algeria, and Lebanon, to discuss border and maritime security issues in Near East and Northern African regions. The objective of the Dept. of State’s International Visitor Leadership program, is to facilitate a discussion and understanding on key cooperative efforts and challenges facing officials at international, intergovernmental and interagency organizations and to examine border and maritime security legislation and regulations at the state and international levels.

Organized by Mr. Christopher King, Program Officer, U.S. Department of State, Office of International Visitors, New York Program Branch, the visit included discussions on CSR’s research in the areas of Maritime Domain Awareness and tool and technology development for the U.S. Department of Homeland Security and affiliate public and private Homeland Security stakeholders. CSR will continue to pursue opportunities to collaborate with the Dept. of State and the international representatives engaged in the Leadership program.

USCG Auxiliary students patrol the Hudson River with Lt. Kenneth Sauerbrunn and his crew on the USCG Sturgeon Bay. On Saturday, April 5, 2014, the Stevens Institute of Technology USCG Auxiliary student group and a team of students from the naval engineering department participated in a patrol of the Hudson River with the Captain and crew of the USCG Sturgeon Bay.

Hosted by Lt. Kenneth Sauerbrunn, Captain of the Sturgeon Bay, the students engaged in a tour of the Ice Breaker and were given the opportunity to set sail and participate in a "man-overboard" exercise. The Auxiliary is invaluable to the Coast Guard. They serve as a force multiplier to almost every mission. The Auxiliary University program at Stevens is unique because the students can assist the Coast Guard with safety and security missions throughout New York Harbor. Their strong understanding of engineering and maritime systems has already contributed to research and development of new technologies to enhance maritime domain awareness, said Lt. Sauerbrunn of the students visit.

Established in the Fall of 2012, the Stevens USCG Auxiliary program is one of only seven university-based programs in the nation and is the only Auxiliary university program to be partnered with a Department of Homeland Security (DHS) Center of Excellence. The on-campus program is coordinated by Beth Austin-DeFares, Director of Education, CSR, in collaboration with local Flotilla 21 (Auxiliary unit) members.

Student News: DHS CDG Fellow, Alexander Pollara, defended his Master’s Thesis entitled Application of portable Passive Acoustic system for boat detection and classification. Alex's Thesis committee included Dr. Barry Bunin, Director Maritime Security Programs, Dr. Alexander Sutin, Research Professor, and Dr. Thomas Wakeman, Director, Maritime Systems Program. Following the completion of his Master's degree in May, Alex will continue his studies on the doctoral-level, working under the advisement of Dr. Michael Bruno, Dean, School of Engineering and Science and Dr. Alexander Sutin. Alex's doctoral program will be fully-funded through a DHS Career Development Grant (CDG). Pictured left, Dr. Barry Bunin, Academic Advisor for the DHS CDG Maritime Systems Master’s Degree program at Stevens, congratulates Alex Pollara on the successful defense of his Master’s Thesis.