

Center for Secure and Resilient Maritime Commerce (CSR)



NATIONAL CENTER FOR MARITIME RESEARCH

CSR NEWSLETTER – JANUARY 2015



The 6th Annual Maritime Risk Symposium will be held at the Stevens Institute of Technology campus (pictured above) in Hoboken, NJ.

CSR to co-host 6th Annual Maritime Risk Symposium. The Center for Secure and Resilient Maritime Commerce (CSR) in conjunction with the U.S. Coast Guard will coordinate the 6th Annual Maritime Risk Symposium (MRS) to be held November 14 - 16, 2015, at the Stevens Institute of Technology campus in Hoboken, NJ. The theme of the Symposium will be Risk in the Western Hemisphere and Southern Border Approaches. The event will include discussions on transnational threats and maritime challenges to the Marine Transportation System and U.S. national security over the next ten years. Specifically focusing on: (1). Combating Networks, (2). Securing Borders, and (3). Safeguarding Commerce.

The 2015 National MRS Chairs are Dr. Julie Pullen, Director CSR, and Dr. Joseph DiRenzo III, Senior Advisor to the Area Commander for Science, Technology and Innovation, Coast Guard Atlantic Area. The Program Co-Chairs are Captain Bruce Clark, Director, Maritime Safety and Security Center, CSU Maritime Academy and Dr. David Boyd, Operations Analysis, Coast Guard Pacific Area. A call for

conference papers and details regarding the Symposium will be shared in a formal announcement being sent out in mid-February.

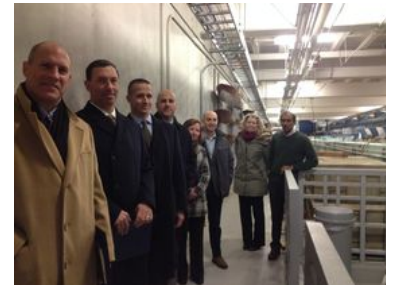
The Annual Maritime Risk Symposium has previously been co-hosted by the National Center for Risk and Economic Analysis of Terrorism Events (CREATE), and held at the University of Southern California.

Military and Intelligence Fellows from the Council on Foreign Relations visit the CSR for a briefing on the Center's research.

Captain Pat DeQuattro, U.S. Coast Guard, Colonel Samuel C. Hinote, U.S. Air Force, Colonel Stephen E. Liszewski, U.S. Marine Corps, Deborah A. McDonald, National Geospatial Intelligence Agency, Captain Robert A. Newson, U.S. Navy and Colonel Michael W. Rauhut, U.S. Army, recently visited the CSR at Stevens Institute of Technology in Hoboken, NJ, for a meeting with Dr. Julie Pullen and Dr. Michael Bruno to discuss the Center's research and MDA tool capabilities.

The Fellows received technology demonstrations by the Center's DHS Career Development Grant students and toured Stevens Davidson Laboratory, where hydrodynamic models of ships are tested and evaluated for military and private commercial groups.

The prestigious Council on Foreign Relations Military and Intelligence Fellowship Programs recognize high-achieving candidates from each of the U.S. military branches and the intelligence community. The programs enable the Fellows to broaden their understanding of international relations by spending a year in residence at the Council on Foreign Relations headquarters in New York.



Military and Intelligence Fellows from the Council on Foreign Relations join Dr. Julie Pullen for a tour of Stevens Davidson Laboratory led by Dr. Raju Datla, Research Associate Professor.



Bert Macesker, USCG R&D Center, Julie Pullen, CSR, and Jack McCreedy, USCG R&D, tour CSTARS satellite installation during their meetings with Coast Guard District 7 and Coast Guard Sector Miami.

CSR Director joins Coast Guard R&D Center leadership for meetings with USCG District 7 and Sector Miami.

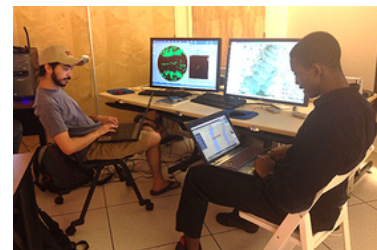
Dr. Julie Pullen, Director CSR, accompanied Bert Macesker, Executive Director, Coast Guard Research and Development Center and Jack McCreedy, Chief, Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance Branch, for meetings with Coast Guard District 7, whose area of responsibility includes the Caribbean region, and Coast Guard Sector Miami to discuss operational efforts and areas where R&D Center and CSR research can contribute and provide assistance.

Follow-on conversations with Coast Guard District 7 have included discussions on building out the Center's Magello emergency response tool to include data sets for the Caribbean region to enhance situational awareness and response to pollution and oil spill events.

The CSR and R&D Center meetings, also included visits to the [Center for Southeastern Tropical Advanced Remote Sensing \(CSTARS\)](#), at the University of Miami, to meet with Dr. Hans Graber, Executive Director and CSR research PI, and a trip to Florida Atlantic University, a new CSR academic partner university, where they met with Dr. Manhar Dhankar, Director of the [Institute of Ocean and Systems Engineering \(SeaTech\)](#).

DHS CDG student selected to present research at SPIE Radar Sensor Technology Conference.

Hasan Shahid, DHS Career Development Grant student and Maritime Systems Master's Degree Fellow at Stevens Institute of Technology, has been selected to present research he completed during the CSR's Summer Research Institute (SRI), at the [SPIE Radar Sensor Technology XIX Conference](#), to be held April 20 - 22, 2015, in Baltimore, MD.



Hasan Shahid, DHS CDG Fellow (I) and Joe Nathan Abellard, City Tech (r), explore new techniques for visualizing broadband radar detections in the CSR's Maritime Security Laboratory.

During the 2014 SRI program, Hasan served as the team leader for the Technology Integration and Synergies: Radar, Optics and AIS student research team. Working in collaboration with teammates Joe Nathan Abellard, New York City College of Technology (City Tech), David Gonzalez Chevere, University of Puerto Rico-Mayaguez, and Yong Qi "Felix" Chen, Stevens Institute of Technology, the team was challenged to assess the capabilities and limitations of various sensors and then to integrate them to effectively maximize the situational awareness and surveillance capabilities of end-users.

Faculty mentors for the team included Dr. Barry Bunin, Chief Architect Maritime Security Laboratory, Mikhail Tsionskiy, Research Engineer and Dr. Alex Yakubovskiy, Senior Research Engineer, Stevens Institute of Technology.

Click here to review a copy of the team's research abstract: [Technology Integration and Synergies: Radar, Optics and AIS](#).



DHS Science and Technology Directorate launches National Conversation on Homeland Security Technology.

Dr. Reginald Brothers, Under Secretary for Science and Technology has recently announced a new DHS S&T initiative to engage diverse groups from industry, government, academia and the general public, among others, in online and in-person discussions on how to innovate solutions in homeland security.

The National Conversation addresses any issue related to homeland security technology capabilities. Topics include sensors, wearable technologies for responders, multi-directional situational awareness and decision making, cybersecurity, screening, and community resilience. Upcoming conversations include:

Visit the following DHS S&T website for a list of upcoming conversations and dates: <http://www.dhs.gov/science-and-technology/join-conversation>

- Dialogue #1: Responder of the Future: wearables, communications, and information sharing
- Dialogue #2: Enabling the Decision Maker: data, interoperability, and actionable information
- Dialogue #3: Screening at Speed: accuracy, speed, and convenience
- Dialogue #4: A Trusted Cyber Future: mitigation, detection, and automation
- Dialogue #5: Resilient Communities: preparedness, mitigation, and recovery

To learn more on how you can participate and be part of the conversation, please visit <http://scietech.dhs.gov>.

www.stevens.edu/CSR

CSR is a DHS S&T national Center of Excellence in Port and Maritime Security.