

## MSC NEWSLETTER – MAY & JUNE 2016

**Maritime Security Doctoral Fellow Showcases Passive Acoustic Recording System at DHS OUP Technology Showcase.** Alex Pollara, DHS Career Development Grant Doctoral Fellow at Stevens Institute of Technology, discussed his research and the development of a low-cost, portable passive acoustic recording system at the DHS Office of University Programs Technology Showcase held May 19, 2016, in Washington, DC.

Currently under development, the Passive Acoustic Recording System operates on a small lightweight microcomputer that enables the system to process passive acoustic data in near real-time. The system is being designed to be deployable in a variety of remote and/or hidden locations and can be used to provide the forensic information needed to determine if intrusions have occurred and the likely source of the intrusion (e.g., small boat, swimmer, or unmanned undersea vehicle). The collected data can help the U.S. Coast Guard and other law enforcement entities detect illegal vessel traffic and intruders in maritime and port security zones.

The heavily attended Showcase was co-hosted by Stevens Institute of Technology and held at the Stevens office location in the Ronald Reagan Building.



Alex Pollara, Maritime Security Doctoral Fellow, demos the Passive Acoustic Recording System at the DHS OUP Technology Showcase.  
Image credits: DHS OUP



MSC and LSU co-host Active Shooter Discussion-based Tabletop Exercise at the Port of New Orleans.  
Image credits: [NOLA.com/The Times-Picayune](http://NOLA.com/The Times-Picayune)

**MSC holds Active Shooter Discussion-based TTX at the Port of New Orleans.** MSC in conjunction with research PI Brant Mitchell and his colleagues from the Stephenson Disaster Management Institute (SDMI) at Louisiana State University held an active shooter tabletop exercise (TTX) at the Port of New Orleans on June 8, 2016. The objective of the exercise was to review and enhance emergency response and preparedness to an active shooter event at a cruise ship terminal.

The scenario for the exercise involved passengers preparing to embark and/or disembark from a cruise ship with an active shooter incident taking place. The exercise included nationally renowned facilitators and subject matter experts in active shooter operations, economic impact and port emergency operations.

Exercise participants included representatives from the USCG Sector New Orleans, Port of New Orleans, CBP, ICE, FBI New Orleans Division-Joint Terrorism Task Force, Louisiana Governor's Office of Homeland Security and Emergency Preparedness, Carnival and Norwegian Cruise Lines, and other local first responders.

The Active Shooter TTX is part of a series of maritime threat exercises the Center is preparing in conjunction with its partners at LSU.

## Sector New York AMSC Cyber Subcommittee meets with U.S. Coast

**Guard Commandant.** On May 19, 2016, AMSC Cyber Subcommittee co-chairs Beth Austin-DeFares, Maritime Security Center (MSC), Morgan Smith, New York Police Department (NYPD), and Dennis Egan, Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA), joined Captain Michael H. Day, Commander U.S. Coast Guard Sector New York and other AMSC members for a luncheon and Q&A session with Admiral Paul F. Zukunft, Commandant U.S. Coast Guard.



**Admiral Zukunft, Commandant U.S. Coast Guard meets with members of the Sector New York AMSC for a Cybersecurity Q&A Session.**  
Image credits: USCG Sector NY

The luncheon was organized to recognize the Subcommittee's efforts to address cybersecurity concerns and vulnerabilities in the Port of NY/NJ, and for the Commandant to meet with local AMSC members to discuss the Coast Guard's Cyber Strategy and stance on emerging cybersecurity concerns.

The Sector New York AMSC Cyber Subcommittee was formed in 2015 to support the Coast Guard's Cyber Strategy and to enhance the cybersecurity awareness and posture of the Port of New York/New Jersey.



**Students on the Environmental Acoustics summer research team prepare microphones for an experiment held at the USMMA in Kings Point, NY.**

## Summer Research Students Engage in Field-Visits, Guest Lectures and Field-based Experiments.

This summer 13 aspiring engineers and cybersecurity students representing seven U.S. universities are conducting research as part of the MSC's 7th annual Summer Research Institute. Throughout the eight-week program, the students will work on Homeland Security related projects to include Maritime Cybersecurity Threats and Vulnerabilities, Environmental Acoustics and Underwater Buoy Noise.

The summer research program runs from June 6 - July 29, 2016 and is held at the Stevens Institute of Technology campus in Hoboken, NJ. Since starting the program in early June, the students have engaged in the following field-visits, guest lectures and field-based experiments:

### Field-visits and Trainings

CBP Operational Facilities - Port of New York / Newark

Port Awareness and Response Training - NYPD Counterterrorism

Transportation and Maritime Commerce Security Tabletop Exercise- Maher Terminal

COMSOL Multiphysics® Acoustics & Vibrations Workshop

### Experiments and Technology Deployments

Environmental Acoustics and Buoy Noise - U.S. Merchant Marine Academy (USMMA)

Environmental Acoustics - Madison Square Garden/Penn Station

### Guest Speakers and Visitors

Moran Shipping - Maritime and Port Stakeholders Overview

Texas Military Department - Border Security Applications

USMMA - Cyber Defense and Shipboard Systems

Goldman Sachs - Cybersecurity Core Process and Procedures

At the culmination of the summer research program, the students will be responsible for a final presentation and written report.