Maritime Security Center (MSC)

A DHS **Center of Excellence**

MSC enhances Maritime Domain Awareness and develops strategies to support Marine Transportation System resilience and educational programs for current and aspiring homeland security practitioners.

LAUNCH ▶	2014
PARTNERS ▶	More than 18 university, private industry, and government partners
EXPERTISE ▶	Maritime domain technology development, engineering and science, resilience strategy, cybersecurity
DHS ALIGNMENT ▶	U.S. Coast Guard, U.S. Customs and Border Protection, U.S. Immigration and Customs Enforcement

Research and Education Capabilities

- Underwater and surface threat detection and tracking
- Sensor integration and optimization
- Port resilience planning and assessment
- Education and training for the current and future homeland security workforce

A nationwide consortium led by:

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Feedback from Our Partners

*"The U.S. Customs and Border Protection's (CBP) opportunities to engage with MSC, **regularly lead to innovative perspectives and outcomes in support of the Homeland Security mission.** Interactions with the MSC in field-based activities and technology demonstrations have facilitated a dynamic exchange of information and ideas between CBP Officers and researchers on present and future operational needs and considerations."*

Bradford N. Slutsky, Chief Watch Commander
National Targeting Center - Cargo Division, CBP, 2018

*"The National Urban Security Technology Laboratory (NUSTL) has greatly benefited from our ongoing partnership with MSC. **We are continually impressed by the quality and dedication of the MSC staff and students in the development and execution of projects** that are targeted to address real world homeland security concerns."*

Dr. Adam Hutter, Director
National Urban Security Technology Laboratory, 2018

Impacts

Engineering sensor systems for multi-use homeland security applications

MSC is developing and applying sensor technologies for the U.S. Navy and U.S. Coast Guard to detect underwater threats to new land-based applications in remote border areas. MSC has also developed a patented aircraft detection system to fill gaps in surveillance capabilities in rugged border environments, which helps U.S. Customs and Border Protection to detect, track and classify ultralight aircraft smuggling contraband into the United States.

Aiding decision-makers in making U.S. ports more resilient to disruptions

Extreme weather events, labor strikes, and man-made disasters threaten to disrupt the crucial flow of cargo at U.S. ports. MSC is developing a Port Resiliency Assessment and Planning tool to simulate the potential impacts on intermodal networks, supply chains and port communities and to develop mitigation strategies to increase their resilience against disruptions.

Building cybersecurity capacity and bolstering maritime asset protection

Cyber threats to vessel navigation, cargo inventory and port facility systems are major concerns to the U.S. Coast Guard in their mission to enforce the physical and operational safety and security of the Marine Transportation System. MSC is supporting the U.S. Coast Guard by providing maritime cyber-awareness training and developing a simplified set of cybersecurity standards for conducting security reviews of vessels and port facilities.