Port & Coastal Surveillance Project

Science and Technology

CHALLENGE: PROTECTING THE NATION'S WATERWAYS, COASTS, AND PORTS

The United States has more than 95,471 miles of coastline. The U.S. Coast Guard (USCG) is responsible for the safety, security, and stewardship of the coastline's exclusive economic zone (EEZ). The USCG also is responsible for Maritime Domain Awareness (MDA), which is the effective understanding of the global maritime domain for security and safety. U.S. Customs and Border Protection (CBP) Air and Marine Operations (AMO) and the U.S. Border Patrol (USBP) require MDA to achieve maritime border security within U.S. territorial waters.

Numerous threats exist that potentially endanger American citizens and the country's coastlines, from drug and human traffic smuggling to piracy and illegal fishing. Equipping the agents and authorities responsible for ensuring security of these areas with new tools and capabilities will be essential in enhancing protection of vital maritime interests.

SOLUTIONS FOR MDA

To address these challenges, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) has established the Port & Coastal Surveillance Project (P&CS) within its Maritime Safety and Security Program (MSSP).

P&CS is a joint effort to identify, develop, and transition technologies to improve MDA, such as integrating sensors and platforms (including autonomous ones), information sharing technologies, mission support tools, and decision support capabilities. Its efforts will benefit DHS and our federal, state, local, tribal, territorial, international, public, and private port partners.

PROJECT IMPACT

1) Enhanced MDA and presence in the maritime domain.
2) Increased detections, tracking, and interdictions of illicit activity.
3) Increased efficiency, effectiveness and safety of personnel and equipment.
4) Enhanced information sharing to support DHS maritime safety and security missions.
5) Improved ability to protect fisheries and legitimate economic activity.

ACTIVITY AREAS

- Technology assessments of unmanned maritime platforms and sensor packages for MDA, law enforcement and deterrence, and maritime safety.
- Increase the MDA capability of our partners through identification and assessment of new technologies to:
  - Increase detection ranges and coverage.
  - Decrease costs of platforms and infrastructure.
  - Develop or improve MDA against new or evolving threats.

APPROACH

- Work with DHS component partners to identify prioritized areas of need.
- Leverage strategic sourcing vehicles to provide programmatic, technical, and testing support to technology solutions.
- Utilize the Secure Borders Long Range Broad Agency Announcement, Maritime Domain Awareness Technologies topic to solicit proposals to identify emerging capabilities.

PERFORMERS AND PARTNERS

- U.S Coast Guard Research & Development Center
- Naval Research Laboratory
- Naval Information Warfare Center
- Pacific Northwest National Laboratory, Richland, WA
- Defense Technical Information Center
- Advanced Technology International, Summerville, SC
- Raytheon BBN, Cambridge, MA