U.S. Coast Guard USCG – Oil Spill Response: Tech Efforts on the Horizon

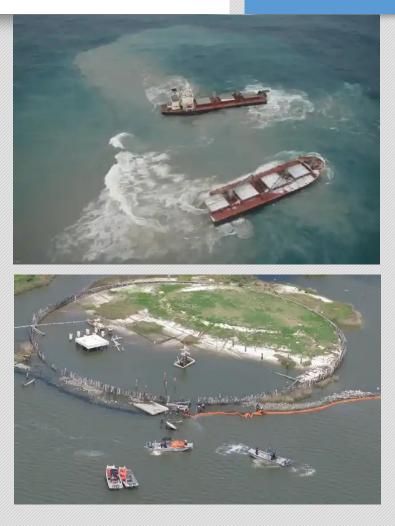


Ms. Kirsten Trego Deputy, Office of Marine Environmental Response Policy Sea-Air-Space Symposium April 3, 2023

Marine Environmental Response (MER) Policy

USCG MER Mission Overview

Provide guidance, policy, and tools for Coast Guard Marine Environmental Response planning, preparedness, and operations to prevent, enforce, investigate, respond to, and to mitigate the threat, frequency, and consequences of oil discharges and hazardous substance releases into the navigable waters of the United States.



USCG MER Research & Development Collaboration

Interagency Coordinating Committee on Oil Pollution Research (ICCOPR)

• ICCOPR is comprised of reps from 16 Federal agencies and serves to promote and collaborate on oil spill related research, and identify research priorities for the oil spill community.

Great Lakes Oil Spill Center of Expertise (GLCOE)

• Research, training, and testing center focused on fresh water and cold weather conditions during oil spill response.

U.S. Coast Guard Research and Development Center (USCG RDC)

• The USCG RDC is the hub for research and development for all Coast Guard missions.







USCG Unmanned System (UxS) Strategy

Strategic Objectives:

- Adopt a capability-centric approach
- Establish a framework for safe use of remotely operated and autonomous vessels and systems in the Marine Transportation System.
- "Test small, learn a lot, and scale smart" approach
- Leverage parallel efforts with interagency partners and ensure interoperability
- Support, integrate, and adapt to the evolution of unmanned systems and capabilities at speed and scale.



Research & Development Focus: Sea

Sub-Surface Remote Sensing:

- Remotely Operated Vehicles (ROVs)
- Long Range Autonomous Underwater Vehicles (LRAUV)

Emerging Pollution Response Technology Evaluation

• Assessment of innovative oil spill response methods & techniques

Special Monitoring of Applied Response Technologies

• On water application of dispersants



Research & Development Focus: Air & Space

Remote Sensing (Air)

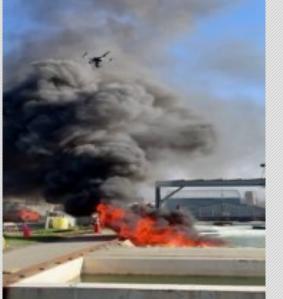
- Unmanned Aircraft Systems (UAS)
 - ScanEagle (Long-Range)
 - Parrot Anafi MIL USA & Skydio X2D (Short Range)

NOAA NESDIS (Space)

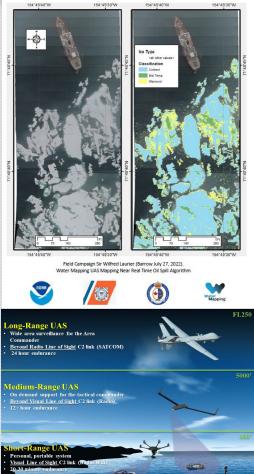
• Marine Pollution Surveillance Program

Special Monitoring of Applied Response Technologies

• On Water In-Situ Burns (ISB)



Near Real Time Oil Spill Classification (Artic-Ice Conditions)





Questions?

