



First Responder Training and Geographic Response Strategy (GRS) Testing Exercise Series – Swansea, Somerset

After-Action Report

September 10, 2024

The After-Action Report (AAR) aligns exercise objectives with the preparedness doctrine and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

EXERCISE OVERVIEW

Table 1: Exercise Overview

Exercise Name	2024 Swansea/Somerset FR Exercise
Exercise Date	September 10, 2024
Scope	This was a full-scale exercise planned for approximately six hours at Town Beach in Swansea, MA. Exercise play was limited to Cole River and the adjacent shoreline.
Mission Area(s)	Prevention, Protection, Response
Capabilities	Environmental Response/Health and Safety, Operational Coordination, Operational Communications
Objectives	<p>Demonstrate the ability of local first responders to:</p> <p>Objective 1: Conduct initial response activities within the first 4-6 hours of an oil spill incident by deploying MassDEP oil spill response equipment and implementing common Geographic Response Strategy (GRS) tactics in alignment with the MassDEP GRS Tactics Guide.</p> <p>Objective 2: Establish and maintain command and control in the first 4-6 hours of an oil spill incident response by identifying relative health and safety hazards, developing an initial response organization, and communicating response objectives, strategies, and tactics through the completion of an Incident Briefing form (ICS 201) and the facilitation of an Operations and Safety Briefing.</p> <p>Objective 3: Communicate information and actions between multiple local, state, and federal agencies within the first 4-6 hours of an oil spill incident by identifying a common UHF or VHF radio channel that can be utilized by all participants.</p>
Threat or Hazard	Discharge of oil into a navigable waterway
Scenario	An oil spill has occurred that threatens Cole River. The Swansea and Somerset Fire Departments will utilize various common Geographic Response Strategy (GRS) tactics to protect sensitive resources in Cole River and the surrounding area.
Sponsor	Massachusetts Department of Environmental Protection (MassDEP)
Participating Organizations	<p>Participating organizations included:</p> <ul style="list-style-type: none"> • Swansea Fire Department • Somerset Fire Department • MassDEP • United States Coast Guard Sector SENE • United States Coast Guard MSD New Bedford • Moran Environmental Recovery (MER) • Nuka Research
Point of Contact	<p>Julie Hutcheson, Marine Oil Spill Prevention & Response Program Coordinator Massachusetts Department of Environmental Protection Oil Spill Prevention and Response Program 100 Cambridge St., Suite 900 Boston, MA 02114 (617) 366-7424 julie.hutcheson@mass.gov</p>



Figure 1: Participants practice throwing a heaving line



Figure 2: Participants configure a shoreside anchor system



Figure 3: Participants practice connecting sections of boom



Figure 4: Participants learn about sorbents and culvert plugs

Photos courtesy of Nuka Research & Planning Group

EXECUTIVE SUMMARY

Exercise Planning

In preparation for the Swansea/Somerset exercise, both an Initial and Final Planning Meeting (IPM/FPM) were held with members of the Exercise Planning Team (EPT). The EPT was comprised of senior personnel from each of the participating organizations listed in the Exercise Overview section.

The following deployment plans were developed:

- Deploy 300ft of containment boom around a moored vessel in the area west of the boat ramp.

Exercise Conduct

Exercise controllers and senior participant personnel monitor weather forecasts and may also conduct pre-deployment site surveys to identify limitations and obstructions that could impact the deployment plan as described above. Deployment plan modifications (if necessary) and observed exercise-day conditions are detailed below.

Table 2: Summary of Observed Conditions

Factor	Observed Conditions
Wind speed and direction	7 mph, E
Tidal conditions	Flooding tide
Water depth (approx.)	3-6ft
Wave action & Current speed (approx.)	Minimal
Vessel traffic	Minimal
Harbor mooring field density	Minimal
Other observations	



Figure 5: Exercise Tactics Map

EXERCISE REPORT

Objective 1: Conduct initial response activities within the first 4-6 hours of an oil spill incident by deploying MassDEP oil spill response equipment and implementing common GRS tactics in alignment with the MassDEP GRS Tactics Guide.

Strength: Vessel and shoreside crews worked well to properly stage the response trailer on the boat ramp and unload 300ft of boom, load marine anchor systems onto vessels from the nearby dock, then utilize the heaving line to transfer sections of boom from the boat ramp to awaiting on-water vessels prior to tow.

Strength: Two vessels effectively towed sections of boom, with the lower-powered vessel towing 100ft and higher-powered vessel towing 200ft of boom. After arriving at the deployment location, vessel crews worked together to connect the two sections, then began deploying marine anchors for the containment array. All exercise activity was stopped when several participants were dispatched to a nearby emergency call, preventing crews from being able to complete the containment array.

Observation 1: Command Staff acknowledged that vessel crews should have identified the need to deploy a fourth marine anchor.



Figure 6: Crews load anchors onto awaiting vessels

Analysis: While three marine anchors would typically suffice to effectively complete a 300ft containment array, a fourth anchor is recommended to further stabilize the array and create a more adequate containment area.



Figure 7: Vessels tow boom to deployment site

Observation 2: Shore crews did not connect the two sections of boom prior to vessels engaging in booming towing operations.

Analysis: While vessel crews were able to effectively connect both sections of boom on-water to complete a 300ft containment array, this evolution would have been easier to complete onshore, and prior to towing. This is especially important in response/training events that occur during the evening hours or in rough weather conditions, where visibility may be limited.

Objective 2: Establish and maintain command and control in the first 4-6 hours of an oil spill incident response by identifying relevant health and safety hazards, developing an initial response organization, and communicating response objectives, strategies, and tactics through the completion of an Incident Briefing form (ICS-201) and the facilitation of an Operations and Safety Briefing.

Strength: Command Staff quickly developed and communicated deployment plans to all participants, assigned vessel and shoreside crew roles and responsibilities, identified a common radio channel, and conducted a radio check prior to on-water deployment.

Strength: Command Staff made quick decisions and provided immediate direction when it was recognized that the radio on Marine 3 was not working properly.

Observation 1: The incident command post could have been set up in a location that was more conducive to overseeing deployment operations.

Analysis: The incident command post was set up in an area of the Swansea Town Beach parking lot that was a significant distance away from the boat ramp. To maintain better visibility of deployment operations, Incident Command staff should set up their command post in a more centrally located position closer to the boat ramp and the on-water evolution.



Figure 8: Incident Commanders at the Incident Command Post

Objective 3: Communicate between multiple local, state, and federal agencies including fire, police and harbormaster departments using VHF and UHF communications.

Strength: Command Staff pre-identified a common UTAC frequency as the primary communications channel for the exercise, directed participants to join the channel, and conducted a radio check during the Operations briefing.

Strength: Vessel crews and shore team maintained excellent communications despite encountering technical issues with some of the radios.

Strength: Command Staff effectively involved dispatch in the incident notification process, and properly communicated the necessary incident details to both dispatch and the Massachusetts Emergency Management Agency (MEMA).

PARTICIPANTS & RESOURCES

Table 3: List of Participants

Participating Organizations	
Town of Swansea, MA	Participant Count
Swansea Fire Department	6
Town of Somerset, MA	
Somerset Fire Department	7
TOTAL TOWN/CITY PARTICIPANTS	13
State	
Massachusetts Department of Environmental Protection (MassDEP)	2
Nuka Research and Planning Group, LLC (contractor for MassDEP)	2
Moran Environmental Recovery (contractor for MassDEP)	3
Federal	
United States Coast Guard Sector SENE	2
United States Coast Guard MSD New Bedford	3
TOTAL	25

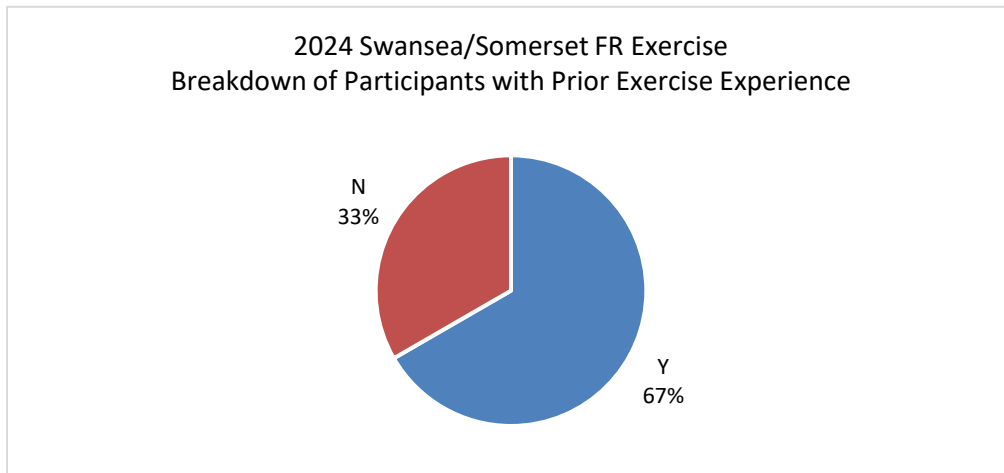


Figure 9: Participant Exercise Experience

Table 4: List of Resources

List of Resources			
Agency	Resource	Kind	Exercise Function
Swansea FD	13' Whaler	Vessel	Boom Deployment
Swansea FD	Inflatable (Marine 3)	Vessel	Safety
Somerset FD	17' Whaler	Vessel	Boom Deployment
Swansea	Oil spill response trailer	Trailer	Boom Deployment
Somerset	Oil spill response trailer	Trailer	Trailer Training