A “SPILL OF national significance” (SONS) is defined in the U.S. Code of Federal Regulations (40 CFR 300.5) as a rare, catastrophic oil spill event that captures the nation’s attention due to its actual damage or significant potential for adverse impacts and requires extraordinary coordination of agencies to contain and clean up. Since 1994, the U.S. Coast Guard has been initiating SONS drills every three years as part of the U.S. Environmental Protection Agency’s National Contingency Plan that seeks to make sure various agencies can work together in the event of a major spill disaster.

The U.S. Navy’s Office of the Supervisor of Salvage (SUPSALV) and Diving participated in this year’s SONS exercise, which was held 24–25 March 2010, in the Northeast region off the coast of Maine. The simulated disaster involved more than 600 personnel from various other federal, state, and commercial organizations.

Overcoming heavy weather, SUPSALV personnel successfully deploy an oil boom over the pier and into the harbor.

SUPSALV’s fast current skimmer system is deployed from the pier to perform skimming demonstrations in Boston Harbor for the exercise.
SONS 2010 was an exercise designed to implement oil spill response plans that would require coordinated command response organization in accordance with the Department of Homeland Security’s National Response Framework. It was coordinated under the National Exercise Program within the National Preparedness Directorate of the Federal Emergency Management Agency.

A scenario was selected that involved a collision between a freight vessel and a crude oil tanker about 15 miles east of the Portland Head Lighthouse, Maine. This location was selected because Portland is the second largest oil port on the east coast. Six different equipment deployment locations were planned as a representative sample of the coordinated effort that would be brought to bear in a real response to a spill disaster. Some of the deployment sites were chosen because they were areas that would be impacted by the simulated spill trajectories; other sites were selected to broaden involvement throughout the region and to test backup strategies should an area’s main response assets be needed at the site of the main spill.

On 24 March 2010, the Incident Command System center in Portland received a phone call reporting the “spill.”

The demonstration consisted of deploying boom and skimmer systems for simulated clean-up in the vicinity of the Boston Coast Guard base and near the USS Constitution.
Officials went through the motions of making phone calls to the equipment deployers. Meanwhile, SUPSALV and their co-participants from government and private sectors demonstrated the clean-up equipment.

SUPSALV’s multi-level involvement in this exercise included a Salvage Officer at the unified command post in Portland, and a Department of Defense National Response Team representative—who is also the SUPSALV admiralty lawyer—at the agency leadership command post in Washington DC. SUPSALV also deployed oil spill response equipment to Boston Harbor from its Emergency Ship Salvage Material (ESSM) base at Cheatham Annex, VA.

The demonstration consisted of deploying boom and skimmer systems for simulated clean-up in the vicinity of the Boston Coast Guard base and near the USS Constitution. In the event of an actual spill, booms—which are floating barriers with skirts that hang below the water’s surface—are used for containment of the oil. Once the spill is contained, skimming systems are then employed to remove oil and other hydrocarbons from the water.

The skimming capability demonstrated during the exercise included the self-propelled MARCO Class V belt skimmer system, which skimmed in a “V” configuration while towing a 23,000-gallon oil storage bladder behind it. Also exercised was the “high-speed” Vessel of Opportunity Skimmer System (VOSS), which is a portable side-skimming oil-recovery system utilizing the NOFI Current Buster, a Norwegian-made product that is

Participating in drills such as SONS 2010 gives SUPSALV the opportunity to test new deployment techniques and skimming plans that could be used in an actual incident.
A full response was mobilized for this event with seven vans, including:

1. A command/office van used for planning and management of the operation;
2. A rigging van containing line, multiple rigging components and safety gear;
3. A shop van which carried every anticipated tool or repair part that could be needed;
4. A boom van which contained 2000 feet of 42-inch inflatable boom; and
5. Another van containing the VOSS system.

Along with these vans came four boom handling boats, the MARCO Class V Skimmer system and one equipment transfer boat, used for removing oil-covered debris from the operational area.

Participating in drills such as SONS 2010 gives SUPSALV the opportunity to test new deployment techniques and skimming plans that could be used in an actual incident, as well as simply providing a hands-on exercise of all the equipment. With this type of collaboration and involvement in other agencies’ drills, SUPSALV is able to meet the voluntary guidelines of the Preparedness for Response Program; fulfilling its role as the nation’s federal oil spill responder. The exercises also promote awareness of

able to effectively contain oil at higher towing speeds than previous equipment. All of the SUPSALV equipment is packaged as complete systems with any compressors, hydraulic power units, generators, reels, rigging or spare parts needed. These systems are stored in ISO containers, also known as “vans” for rapid mobilization.

SUPSALV’s MARCO Class V Skimmer System herds the oil with its 300-foot boom legs and picks up the oil via a belt system seen here. The oil is then pumped into the oil storage bladder shown in tow behind the vessel.

Allen Gardner

In demonstration of the latest oil spill technology, SUPSALV tows its fast current skimmer system called the NOFI Current Buster. This system would be used in high current situations, like Boston Harbor, to herd the oil into a calm pocket and enable more effective skimming.

Allen Gardner
Putting SONS Exercise Experience to Use in the Gulf

ON 20 APRIL 2010, less than one month after the SONS exercise, British Petroleum’s (BP) Deepwater Horizon mobile offshore drilling unit exploded and caught fire in the Gulf of Mexico. Five days later, it was discovered that the well continued to leak significant amounts of oil. As efforts to repair the leak failed, the spill was designated as a SONS, activating the U.S. Coast Guard’s oil spill response plan.

The U.S. Coast Guard formally requested support from SUPSALV and within four hours of receiving authorization, trucks loaded with SUPSALV’s pollution response equipment were in route to the spill. Coincidentally, as practiced in the SONS 2010 Exercise in Maine, this response required coordination among multiple states and Coast Guard sectors. With the recent operational experience gained through the exercise, SUPSALV’s response teams were prepped and ready for an event such as this.

SUPSALV’s resources were strategically divided among different equipment deployment locations to provide assistance to the affected areas. These federal resources were primarily staged at the Mississippi State Dock in Gulfport, MS, where they were deployed as necessary by the federal on-scene coordinator in support of the Department of Homeland Security and U.S. Coast Guard oil spill response efforts.

As of early June 2010, SUPSALV had sent over 85 truckloads of equipment including 96,000 feet of inflatable oil boom with mooring systems, 18 rapid deployment skimmer systems, related support gear, and approximately 130 Navy personnel (military, civilian and contractor) to support oil spill response efforts in Gulfport, MS, Venice, LA, and Mobile, AL. The Navy also agreed, via the U.S. Coast Guard, to allow BP contractors to use Naval Air Station Pensacola, FL as a staging area, and some SUPSALV resources were sent to augment the response there as well. Navy installations that may be impacted by the oil spill have facility oil spill response equipment ready to protect the shoreline as necessary. NAVSEA provided and coordinated the Navy’s response effort for this particular spill.

SUPSALV’s mission and educates participants about their extensive equipment inventory.

SUPSALV received some local media interest in Boston on the day of the exercise and provided an excellent cross-training opportunity for Coast Guard oil spill response personnel to see SUPSALV’s equipment operating in full-force and demonstrating their deployment footprint and logistic support requirements.

Despite inclement weather, with up to six-knot currents in the harbor and 17 to 20 miles per hour sustained winds with 40 mile per hour gusts, SUPSALV’s ESSM operators took full advantage of the opportunity to gain useful boat handling experience in adverse conditions and executed the skimming demonstrations flawlessly. Other equipment deployers included Marine Spill Response Corporation, working on behalf of Shell Oil Company, the State of Maine’s Department of Environmental Protection, and contractors from the State of New Hampshire’s Department of Environmental Services.

SONS 2010 was a great opportunity for a successful display of SUPSALV’s emergency spill response capability and commitment to help the Coast Guard, state, and local governments in planning and preparing for a worst case scenario maritime event.

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