NATIONAL STRIKE FORCE

YEAR IN REVIEW



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Petty Officer 1st Class Kenny Cook, with the Atlantic Strike Team, supervises as response crews insert roller bags in the 202-foot grounded freighter Jireh Sept. 3, 2012 to prepare the vessel for final removal and disposal. U.S. Coast Guard photo by Petty Officer 1st Class Crystalynn A. Kneen.

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Petty Officer 1st Class Travis Olson and Petty Officer 2nd Class Michael Johnson don Level D protective clothing while building an underflow dam during an emergency response drill at the Del Valle Regional Training Facility in Santa Clarita, Calif., Feb. 2, 2012. U.S. Coast Guard photo by Chief Warrant Officer Shane Barrington.

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Commander National Strike Force

Capt. David Haynes led the NSF through a gamut of unique cases in 2012 that proved the NSF's ability to adapt to a variety of challenging situations. Here, Haynes discusses the NSF's reputation, mission diversity, and expansive reach.

WHAT ARE SOME THINGS THE NSF DOES THAT PEOPLE MIGHT THINK ARE BEYOND

OUR CAPABILITIES? We are a national asset

designed to support the National Response System, and as a national asset we're called upon to support a wide variety of responses. There are a lot of things that even our own Coast Guard personnel don't think we do, like pumping out the Brooklyn Battery Tunnel after Hurricane Sandy. The response personnel with the other agencies didn't even know we had the capability to do it, or that we could get the equipment there within 24 hours and begin pumping. We basically advertised that we could do the job, and we got it done.



WHAT ARE SOME OF THE **CAPABILITIES THAT THE NSF POSSESSES** THAT MOST MAY NOT THINK OF? Most people

only think about us responding to oil spills and hear from the Federal On-Scene Coordinators that hazardous materials, but the portion that is lesser wellwhen we show up in our NSF uniform, they know right known, but just as important, is our ability to respond to away who we are. They know they have well trained and weapons of mass destruction, and chemical, biological, experienced personnel in the room and it makes them radiation, nuclear and explosives identification, or feel more comfortable. CBRNe for short.

WHAT ABOUT THE REACH OF THE AST, GST

THE NSF? 2012 has been a pretty good year for us. **AND PST MEMBERS?** *There is limited understanding* Unfortunately, we shine when other people are in need about how and where the team members can go. and in disaster. Our glory is typically at somebody else's We have three strike teams, but the teams are not suffering. I ask my teams to do anything and everything independent of the NSF as a whole. We are an entity they can to alleviate the stress of disaster. We are the made up of five smaller ones. Between the NSFCC, type of organization that sees problems for what they PIAT, AST, GST and PST, we have a global response are, and we will do what it takes to see the solutions capability. If I need to empty the hangars and send through, even if it is something outside of our comfort everybody to one incident, I can do it. We are not zones. constrained to just one team deploying... if the response dictates the need, we'll deploy the entire NSF.

DO YOU THINK PEOPLE MISUNDERSTAND THE NSF AND HOW IT RELATES TO THE CG?

Absolutely. We have a host of different organizations that

we work with and depend on during a response. We could be working for the Coast Guard, Environmental Protection Agency, the Department of Defense, the Department of *Energy, or other interagency* partners. It is because of our varied mission set and the breadth of our skill sets that we can do this. We could be doing a case in Tennessee in a horse pasture one minute and then turn around and do a case on the coast or inner harbor waterway. We can support operations inland, coastal, on a base, somewhere on a highway, railroads, etc. All jurisdictions can come into play.

WHAT DO YOU THINK PEOPLE ARE MOST **CURIOUS ABOUT WHEN THEY SEE US?** I usually

WHAT ARE YOU MOST PROUD OF WITH



Heritage and Future

National Strike Force

Our Heritage

The National Strike Force, originally comprised of three strike teams, was established in 1973 under the National Oil and Hazardous Substances Pollution Control Plan - or, the National

Contingency Plan which was a direct result of the Federal Water Pollution Control Act of 1972.

The NSF's roles and responsibilities in supporting the National **Response System** expanded through the years under subsequent major environmental legislation including the Clean Water Act of 1977 and the Oil Pollution Act of 1990.

Following the enactment of the Graham-Ruddman Act in 1986 and the OPA 90, the NSF was established in its current configuration.

Other regulatory authorities Response, Compensation, and

that govern the NSF are the **Comprehensive Environmental**



A member of the Atlantic Strike Team conducts an initial entry during an exercise, Jan. 24, 2008. U.S. Coast Guard photo.

Liability Act; the National Response Framework; and the National Response Framework Catastrophic Incident Annex.

The addition of the National Strike Force Coordination Center in 1991 took the NSF to a new

level of organizational and support capability.

In addition to coordinating the activities of the three teams and the Public Information Assist Team, the NSFCC also increased NSF support activities.

Our

Today's

Present

NSF totals more than 270 active duty, civilian, and reserve personnel and includes the Coordination Center, the Atlantic Strike Team, the Gulf Strike Team, the Pacific Strike Team, and the PIAT.

The NSF's area of responsibility consists of all Coast Guard districts and **Environmental Protection Agency** regions. Additionally, the NSF can respond internationally.

Personnel undergo a rigorous training program and are equipped to respond to oil discharges, hazardous materials releases, and weapons of mass destruction incidents. The NSF can assist Federal On-Scene Coordinators and incident commanders with preparedness and incident management activities, as well as staffing of critical incident management team positions.



Petty Officer 3rd Class Joshua LeDoux finds an unidentified cylinder along the Raritan River in South Amboy, N.J., Nov 23, 2012 during the Hurricane Sandy response. U.S. Coast Guard photo by Chief Petty Officer Andrew Ksenzulak.



Petty Officer 1st Class Tom Telehaney notes the air quality on the 20th floor of the World Financial Center Building Two, Sept. 17, 2001 after the 9/11 terrorist attacks. U.S. Coast Guard photo by Petty Officer 2nd Class Tom Sperduto.

The strike teams also train Coast Guard units in environmental pollution response, test and evaluate pollution response equipment, and operate as liaisons with response agencies within their areas of responsibilities.

The PIAT provides crisis media relations support to FOSCs during major or high visibility Coast Guard incidents. Additionally, the four-member team conducts joint information center training, media relations and risk communication training nationwide.

The NSFCC is responsible for oversight of the National Maintenance Contract, which is essential to the readiness of pre-positioned spill response

equipment, the classification of private sector Oil Spill Removal Organizations, the management of the Response Resource Inventory, and the development of an NSF logistics network.

Our Future

The NSF is evolving with the rest of the Coast Guard by examining ways to do business more efficiently, while maintaining the superb customer service to which the response community has grown accustomed. The NSF will continue to seek opportunities to demonstrate the versatile nature of its capabilities, such as it did during Hurricane Sandy and the Brooklyn Battery Tunnel dewatering.







Chief Petty Officer Alan Dooley clears a stray line before beginning pumping operations aboard the 112-foot grounded fishing vessel Mar-Gun, March 8, 2009, near St. George Island, Alaska. U.S. Coast Guard photo by Petty Officer 3rd Class Walter Shinn

"The NSF has a diverse pool of operational capabilities that many people, even within the Coast Guard, don't realize we have," said Capt. David Haynes, commander of the NSF. "It's my responsibility to ensure the NSF stays relevant and effective, even during the most unique and unimaginable responses. This flexibility and fluidity is a benchmark of the Coast Guard overall, and every day I look for ways to honor that legacy."



Coordination Center

National Strike Force

About:

The National Strike Force Coordination Center in Elizabeth City, N.C., provides oversight, strategic direction, and standardization for the NSF. With a staff of 24 members, the NSFCC manages strike team deployments, policy, training, equipment standardization and maintenance, and supports national preparedness and exercises for Coast Guard sectors nationwide.

On a daily basis, there are four major missions to which the NSFCC provides programmatic and managerial oversight, in addition to strike team administration. These are the Response Resource Inventory, the National Maintenance Contract, the Oil Spill Recovery Technician Course, and the Preparedness for Response Exercise Program.

"Directing these critical components of the National Response System ensures the Coast Guard and designated private oil and hazardous materials response companies are capable of providing adequate containment, recovery and cleanup equipment, personnel, and training," said Lt. Cmdr. JoAnne Hanson, the NSFCC operations officer. "These programs are vital to meeting rigorous requirements set forth in the National Contingency Plan."

The impacts of Hurricane Isaac and Superstorm Sandy to the Gulf and East coasts highlighted the unique and diverse operating environments where the NSF supported local, state, and federal agencies responding to catastrophes of unprecedented scale. For both of these natural disasters, the NSFCC was instrumental in coordinating resource allocation on a national scale, while simultaneously ensuring the NSF could continue to meet its National Contingency Plan mandated functions.



Programs and resources:

Response Resource Inventory

The NSFCC maintains the Response Resource Inventory, a national database of Oil Spill Removal Organization response resources. Mandated by the OPA 90, the RRI provides FOSCs with the ability to query OSRO owned/contracted response

equipment inventories and analyze response capabilities throughout the United States.



Additionally, the RRI provides OSROs with tiered classifications based on their response resource inventory,

Coast Guardsmen learn about a skimming system prior to an exercise aboard the Coast Guard Cutter Hollyhock in the Straits of Mackinac, Mich., Jan. 25, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield.

geographic location, and ability to effectively mobilize those resources to the Captain of the Port city or Alternate Classification City.

Twelve new Alternate Classification City sites in Alaska, American Samoa, and Oregon were added to the RRI in 2012. Their addition alleviated concerns in larger COTP zones, which span such great distances that a traditionally-classified OSRO could be prevented from responding within required timeframes. A Coast Guard and Burgan of Sofety and

A Coast Guard and Bureau of Safety and Environmental Enforcement workgroup continues to support national oil discharge planning, preparedness, and response for facilities located seaward of the coastline. Personnel conducted joint inspections with BSEE in Alaska, California, and Louisiana, which proved invaluable in aligning

Petty Officer 2nd Class Wyatt Ingram checks off a list of oil spill response equipment as part of a preparedness assessment verification in Honolulu, Sept. 18, 2012. U.S. Coast Guard photo by James Snyder.



NSF	FCC IN 2012
46	Preventive Maintenance Verifications conducted
140	Preparedness Assessment Verification site visits conducted
53	Exercises supported
400	Oil Spill Removal Organizations in the Response Resourse Inventory
56	Oil Spill Recovery Technician students
24	Vessel of Opportunity Skimming Systems
16	Spilled Oil Recovery Systems

"Our goal is to create an updated RRI application that is quick, intuitive, and capable of producing a near real-time comprehensive listing of response equipment located throughout the United States and the world," said Lt. Irvin Jones, RRI coordinator. "We continue to work with

industry and international advisors to make this a reality."

During 2012, the NSFCC provided customer support to over 330 Classified and Non-Classified Oil Spill Removal Organizations, completing over 1,450 RRI account modifications.



Coordination Center

National Strike Force



Dale Hemenway and Mike Crickard, with the NSFCC, clean up a simulated oil spill during training at Coast Guard Base Elizabeth City, Feb. 21, 2012. U.S. Coast Guard photo by Lt. Cmdr. Jacob Wamsley



Ensign Leigh Van Lear, with the PST, learns how to operate an oil skimmer at the OSRT course at a training facility in Leonardo, N.J., March 14, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield.

Programs and resources continued: Oil Spill Recovery Technician Course

The NSFCC, as course manager of the OSRT Course, coordinates all aspects of the course including

curriculum, scheduling, funding, and logistics support for lodging and travel. The OSRT Course is considered an entry-level course that supports developing NSF and Coast Guard operators of the VOSS and SORS oil spill containment and recovery systems that are used to facilitate oil spill cleanup efforts.

The course includes a combination of classroom and hands-on training using oil spill response equipment systems onboard Juniper class buoy tenders and district response advisory team/ NSF equipment. Training activities are held at the Oil Spill Response Research & Renewable Energy Test Facility in Leonardo, NJ.



Petty Officer 2nd Class Wyatt Ingram inspects a skimmer during a preparedness assessment verification in Honolulu, Sept. 18, 2012. U.S. Coast Guard Photo by James Snyder.

National Maintenance Contract

The National Maintenance Contract supports annual preventive maintenance and quality control on Coast Guard owned oil spill response equipment, as well as supporting repair and refurbishment of equipment that has been deployed. Administered by the NSFCC, the staff makes annual visits to more than 40 sites that house the gear.

Some of the responsibilities of the NMC administrator include providing logistics support for transporting NSF and district resources to the scene of environmental incidents; technical assistance on equipment system capabilities; and coordinating

with Juniper class buoy tenders, strike teams and district response advisory teams in refurbishment of their respective oil spill response equipment.

In 2012, the NMC invested in seven upgraded skimmer systems that are pre-staged at each strike team. When tested at the Oil Spill Response Research & Renewable Energy Test Facility in New Jersey, the new equipment showed a 65 percent improvement in oil recovery efficiency over the old skimmers.

Another NMC initiative this vear included an investment in new 80,000 gallon storage devices for the three strike teams, representing a 300 percent increase in storage capacity for the NSF.



Lt. Irvin Jones, Petty Officer 1st Class Eben Wilson and Chief Petty Officer Jared Taylor inspect boom during a preparedness assessment verification in Chesapeake, Va., Jan. 5. 2012, U.S. Coast Guard photo by Petty Officer 2nd Class Wyatt Ingram.



Coast Guardsmen learn how to assemble boom during the OSRT course at a training facility in Leonardo, N.J., March 13, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield



Petty Officer 1st Class Eben Wilson is hoisted off the deck of the vessel Aivig near Prudhoe Bay during an inspection in the Beaufort Sea, Alaska, Sept. 25, 2012. Photo by Christy A. Bohl, Bureau of Safety and Emergency Enforcement

Exercise Program

Maintaining momentum from previous years, 2012 was exceptionally busy with the NSF supporting more than 50 exercises in the U.S. and its territories.

The NSF Exercise Program consists of three major components: the Spilled Oil Recovery System, Vessels of Opportunity Skimming System, and the Preparedness for Response Exercise Program. Each component is supported by the strike team that covers the geographic area where the vessel, equipment, or

Coast Guard sector or district is located. An integral facet of the exercise program is to review all Area Contingency Plans, including Geographical Response Plans, to verify that NSF information is current to support an FOSC's request.

The NSF also provides key support to the Area Exercise Support Program team. During a three-phase meeting cycle, the requesting unit and NSF subject matter expert work together to determine the number of NSF personnel needed to serve in Incident Command System positions, as ICS coaches, and/or acting as exercise evaluators.



Petty Officer 1st Class Michael Shannon takes a sample photo by Petty Officer 2nd Class Jaclyn Young.



Petty Officer 2nd Class Heather Clark conducts site safety near a damaged tank that leaked during Sandy at the Motiva Terminal in Sewaren, N.J., Nov. 2, 2012. U.S. Coast Guard Guard photo by Petty Officer 2nd Class Andy Johnson.



Petty Officer 1st Class Travis Olson conducts a damage assessment of vessels in Great Kills Harbor in Staten Island, N.Y., Nov. 11, 2012. U.S. Coast Guard photo by Chief Petty Officer Andrew Ksenzulak



Kelli Lucarino, with the EPA, discusses with Petty Officer 1st Class Petty officers 2nd Class Karl Siegmund (left) and Gary David Caterisano the hazards concerning a propane tank found in Barnum discuss the cargo hold water levels onboard the John a debris field in Rumson, N.J., Nov. 10, 2012. U.S. Coast Guard B. Caddell in Staten Island, N.Y., Nov. 20, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Sara Romero. photo by Petty Officer 3rd Class Jon-Paul Rios.

Sandy's Shorelíne Heroes: THE NSF FULLY INTEGRATES TO SUPPORT RESPONSE

Story by Petty Officer 2nd Class Jaclyn Young

Hurricane Sandy became one of the largest and deadliest Atlantic hurricanes on record when it slammed into the East Coast in October. In addition to the loss of life, homes, and daily necessities that the storm caused, the powerful storm surge washed a plethora of hazardous materials into New York and New Jersey.

After floodwaters receded, response crews immediately began assessing Sandy's lasting effects; pollution from water-logged boats, industrial sites, and residential and commercial structures had been churned up and was choking waterways, rivers and shorelines, and even communities.

"Instead of the pollution being from one product, like oil from a tanker, there's pollution from a thousand different products instead, and it's scattered

over a thousand different locations." said Capt. Gordon Loebl, Captain of the Port of New York/New Jersev.

In the early hours after the storm, Coast Guard Sector New York was swamped with search and rescue cases, pollution reports, re-opening the marine transportation system, not to mention every day duties unrelated to Sandy. Loebl quickly recognized that the need for a dedicated pollution response incident command was imminent.

"We knew right after the storm that we were going to need the National Strike Force's help," Loebl said.

Within hours, Loebl requested the Atlantic Strike Team's assistance. He immediately formed the Hurricane Sandy Pollution Response Unified Command, to assess, mitigate, and eventually remove the numerous pollution threats, and named the AST's commanding officer, Cmdr.

Eric Doucette, the incident specific Federal On-Scene Coordinator.

Working in support of FEMA's Emergency Support Function 10, Doucette quickly amassed a team that included all five NSF components, Sector New York's Incident Management Division, the Atlantic Area Incident Management Assistance Team, and pollution responders from 45 other Coast Guard units.

Doucette said the five NSF components - AST, GST, PST, the PIAT and the NSFCC – are trained to provide an integrated, seamless surge response to support any sector, district, or external agency.

"This focused response allowed the NSF to come together and be a true NSF, because of our ability to integrate with other responders," said Doucette. "It meant we could focus on providing the surge support for the FOSC mission and enable the operational commander to

focus on other high priority operations that couldn't be delegated."

The unified command quickly grew to include responders from the Coast Guard, including the 167 from the NSF, the Environmental Protection Agency, National Oceanic and Atmospheric Administration, New York Department of Environmental Conservation, and New Jersey Department of Environmental Protection.

The storm's devastation meant there was no power and no way for the public to report pollution, so every day for the next two months, the command post dispatched patrols to conduct wide area assessments by air, water. and land of 1,245 miles of shoreline and neighborhoods in New Jersey and New York's five boroughs.

"We really became the first boots on the ground for these coastal maritime areas," said Doucette.

They dealt with oil spills at major refineries, orphaned or damaged drums of hazardous materials, marinas and small vessels destroyed by the storm, and even public schools that couldn't

be reopened until pollution was removed.

"From the very beginning this was a dangerous environment," said Doucette. "Sending out teams to areas with unknown hazards, lack of communication means, and with the [gasoline] fuel crunch, it was very difficult to manage powered equipment and the teams that traveled to remote areas far away from the command post."

One of the more complex pollution cases the team worked was the grounding of the John B. Caddell. The 184-foot tanker ship washed up on Staten Island as a result of Sandv's high winds and floodwaters, posing a serious navigation hazard and pollution threat. The Caddell was eventually lifted and removed from the beach using one of the largest commercially available barge cranes ever developed.

"The Caddell case was testament to the severity of Sandy's impact, because normally, it would have been a major incident in and of itself," Doucette said. "But because of the wide-spread disaster we were all



Petty Officer 2nd Class Heather Clark and Petty Officer 1st Class Karen Sinkey conduct a shore assessment in Arthur photo by Petty Officer 3rd Class Jon-Paul Rios.





Petty Officer 1st Class Ian Gable conducts an area assessment in Nov. 2, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

Petty Officer 1st Class Kenny Cook (center) and Petty Officer 2nd Class Jeffrey Nagel conduct a damage assessment with a facility supervisor in Linden, N.J., Oct. 31, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Annie Elis.





facing, it was simply another item we had to check off our list."

Doucette said the team was all the more successful because Sector New York and its partners on the Area Committee had an Area Contingency Plan that had established logical geographic divisions for the densely populated region.

"We pretty much organized the response according to the Area Contingency Plan," Doucette said. "It was all there, ready to go, so all we had to do was implement it. That plan makes a big difference when an emergency hits.

Loebl agrees.

"It gave me great peace of mind knowing that the pollution part of the puzzle would be handled by having the NSF involved," said Loebl. "The port community here is strong, active and engaged, but in a disaster like Sandy, this is when you really find out if your partnerships are working, and clearly they are."





Cmdr. Eric Doucette (center left) discusses the plan for the salvage of the John B. Caddell on Staten Island, Nov. 28, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield.

INTO THE TUNNEL



Petty Officer 1st Class Eugene Peters and Petty Officer 2nd Class Austin West conduct dewatering operations inside the Hugh L. Carey Tunnel in New York City, Nov. 9, 2012.



Petty Officer 2nd Class Jeffrey Burby and Petty Officer 2nd Class Karl Siegmund monitor a hydraulic prime mover while conducting dewatering operations at the tunnel in New York City, Nov. 9, 2012.

Petty Officer

1st Class Eric

Tomaszewski

equipment at

2012.

Pier 6 in Brook-

lyn, N.Y., Nov. 3

offloads pumping





Petty Officer 2nd Class Sharina Lamonica and Petty Officer 3rd Class Brian Lamoria monitor a hydraulic prime mover and pumping equipment during dewatering operations at the tunnel in New York City, Nov. 9, 2012.



Petty Officer 2nd Class Tony Pagador prepares to offload pumping equipment at Pier 6 in Brooklyn, N.Y., Nov. 3, 2012.

HURRICANE SANDY UNEARTHS UNIQUE NSF CAPABILITY

Story by: Lt. Joel Ferguson and Petty Officer 2nd Class Jaclyn Young Photos by Petty Officer 2nd Class Jaclyn Young

Hurricane Sandy brought destruction and devastation to the East Coast during the final days of 2012's hurricane season. Sandy's violent path destroyed homes, caused power outages throughout the New York and New Jersey region, created a fuel

crisis, and severely flooded the vital transportation infrastructure of New York City.

Sandy's storm surge pushed approximately 86 million gallons of water into the Hugh L. Carey Tunnel (also known as Brooklyn Battery Tunnel) making it completely impassable. In fact, massive flooding pushed water into many of the metropolitan tunnels of NYC. The severing of these transportation arteries led to massive traffic redirection and significantly strained the capacity of alternate routes into the city.

The U.S. Army Corps of Engineers, or USACE, quickly established a Joint Task Force that was responsible for removing hundreds of millions of gallons of flood water from affected transportation infrastructure.

es

Petty Officer 2nd Class Karl Siegmund works the rigging of a submersible pump inside the tunnel in New York City, Nov. 9, 2012.

Capt. David Haynes, the commander of the National Strike Force, heard reports about the task force, and immediately directed the operations department at the NSFCC to offer assistance.

"In the grand scheme this was what we do, but most people don't associate the Coast Guard with pumping water out of a highway tunnel," said Lt. Cmdr. JoAnne Hanson, operations officer at the NSFCC. "Fortunately, this was one more opportunity for us to fill a special niche that represents our ability to adapt and to bring something critical to a response."

Hanson and other NSF staff quickly tallied the NSF's total pump systems and pumping capacity: 17 standardized pump pallets, consisting of high-capacity pumps and support equipment, assembled from the three strike teams. Each pallet had a submersible pump capable of discharging 2,000 gallons of water per minute. "We ... reached out to the USACE to let them know what we could offer; by the end of the day, we started marshalling resources," Hanson said. Shortly after that, the NSF was ready to join the pumping effort with the USACE and contractors from the Metropolitan Transportation Authority.

A few days following the storm, 21 NSF members, representing all three strike teams, traveled under police escort to Pier 6 in Brooklyn to deliver seven



pumping systems that were already staged at the Atlantic Strike Team's facility in Fort Dix, N.J. One system was sent to the Brooklyn Plaza Tunnel entrance, and the remaining six were moved by barge to the tunnel's main ventilation building on Governor's Island.

Once at Governor's Island, the team faced a complicated engineering challenge. The water from the tunnel needed to be pumped up the tunnel's 120 to 150-foot vertical vent shafts in order to be extracted. To tackle this challenge, the team configured sets of two submersible pumps so that water could be pulled and pushed on the same sets of hoses.

"The pumps that the USACE brought in were too big, but we were able to

bring in a resource that is designed to be used on ships, because the pumps are small and compact," said Hanson. "Because of the team's critical ability to adapt, they were able to join the pump lines and lift higher than what the single pump could do."

Between the tandem line systems on Governor's Island and the single pump operating at the Brooklyn Tunnel Plaza entrance, the team cumulatively pumped 6,000 gallons of water from the tunnel per minute. Over the course of 118 hours – with only one brief pause in operations to wait out a Nor'easter – the NSF pumps discharged approximately 30.6 million gallons of water, while MTA accounted for the remaining amount. The tunnel was reopened on November 19th.

"Our partners in the U.S. Coast Guard played an important part in the effort to dewater the Brooklyn Battery Tunnel following Hurricane Sandy," said Ronald Pinzon, a USACE project manager. "The highly skilled and trained Coast Guard crews were essential to the removal of the tens of millions of gallons of salt water from the vehicular tunnel."

NATIONAL STRIKE FORCE READINESS & CAPABILITIES

Getting to the scene of a disaster early is critical - whether it's an oil spill, a chemical, biological, or radiological materials release, or a natural disaster.

One call to the NSF means that technical support is immediately available, and in as little as two hours, members of a strike team are on their way, bringing with them unique skill sets and specialized equipment to provide the full gamut of services to assist Federal On-Scene Coordinators to meet the demands of any disaster.

TWO HOURS after calling for NSF assistance an advance team of up to four people is ready to deploy.

SIX HOURS after

calling for NSF assistance up to eight additional strike team members and/or two PIAT members are ready to deploy.

24 HOURS after the initial request additional resources across the entire NSF can be made available.

FAQ's

O. How do I request assistance? A. Contact the nearest strike team or the NRC at 800-424-8802.

Q. If I am uncertain if an incident requires support from a strike team, what should I do?

A. Call. A strike team member will discuss details with you and recommend what equipment or personnel the NSF can provide.

Q. Where can I obtain an equipment list for various **Oil** Spill Removal Organizations in a specific area? A. Call the NSFCC at 252-331-6000 or visit the website at: https:// cgrri.uscg.mil

Q. Who pays for the NSF to respond?

 \tilde{A} . In most cases, the FOSC has the \$1 billion Oil Spill Liability Trust Fund or the Comprehensive Environmental Response, Compensation and Liability Act fund is available for associated costs resulting from oil spills or substantial threats of oil or hazardous material spills to navigable waterways of the United States. If the incident does not meet either of those funding specifications, the requesting agency would fund the strike teams' response through the Stafford Act or other means.

In 2012 strike teams deployed for 12,406 days, on 42 cases, providing support in the form of:

- Chemical, biological, & radiological detection, sampling, & identification
- Crisis communication oint information center establishment
- Hazardous material containment, inventory & categorization
- Incident Command System establishment & staffing
- Levels A, B, C HAZMAT qualified

INHALATION

HAZARD

NON-FLAMMABLE

GAS

TSUNAMI HAZARD

ZONE

100

DANGEROUS

WHEN WET

EXPLOSIVES

OXYGEN

DANGEROUS

- Damage control, salvage, & decontamination - Shoreline Assessment & Cleanup Teams
 - In-situ burn & dispersant use
 - Mobile command post support
 - Resource & cost documentation
 - Air, water, & soil sampling
 - Evidence collection
 - Exercise support
 - Technical support
 - Site assessment
 - Safety monitoring
 - Contractor oversight

NSF Trivia



The NSF is the only Coast Guard resource capable

of responding to, assessing and mitigating a large-scale Level 'A' HAZMAT incident.

The NSF maintains a total skimming

capacity of 1,140 gallons per minute. That's enough to skim

the total volume

RADIOACTIVE

of an Olympic-size swimming pool in nine hours.



The NSF maintains 19,024 feet of ocean containment boom. That's enough to span the length of two Golden Gate bridges.

Percent of cases in 2012, by type

3% - Radioloical

13.5% - Natural Disasters

13.5% - Other

30% - Oil Spills

40% - Hazardous M



NSF crews pumped more than 30 million gallons of water from the Brooklyn Battery Tunnel after Hurricane Sandy. That's enough water to fill about 30,000 fire engines.



Atlantic Strike Team

National Strike Force

Commanding Officer: Cmdr. Eric Doucette

About:

The Atlantic Strike Team is located at Joint Base McGuire-Dix-Lakehurst in Fort Dix, N.J. The AST's area of responsibility covers the Coast Guard's 1st, 5th, and 9th districts, Puerto Rico and the U.S. Virgin Islands in the 7th District and the northern portion of the 8th District.

This corresponds to the Environmental Protection Agency's 1st, 2nd, 3rd, 5th, and 7th regions.

The 81 active-duty, reserve, civilian and auxiliary members supported both Coast Guard and EPA Federal On-Scene Coordinators in a variety of interesting and complex chemical and oil spill response cases and natural disasters in 2012.

The AST also participated in numerous preparedness and readiness training exercises across the nation.





N.J., Oct. 31, 2012. U.S. Coast Guard photo by Coast Guard Petty Officer 2nd Class Annie R. B. Elis.

Coast Guard support

1. In February, Sector Delaware Bay requested 7. Sector New York requested assistance for an oil assistance with benzene monitoring in the Schuylkill spill in the Kill Van Kull in December. River in Philadelphia, Pa.

2. Sector Long Island Sound requested support with a gallium trichloride release in Fairfield, Conn., in April.

3. Sector San Juan requested assistance with the grounded tanker Jireh on Mona Island, Puerto Rico, in June.

4. Sector New York requested support following October's Hurricane Sandy.

5. Sector Delaware Bay requested assistance in November with shoreline pollution response after Hurricane Sandy hit New Jersey.

6. Sector Delaware Bay requested assistance in November after a train derailment caused a release of vinyl chloride in Paulsboro, N.J.

Coast Guard Atlantic Strike Team and Phillips 66 responders discuss post Sandy damage assessments at the incident command post in Linden,

Top 10 cases of 2012:

EPA support

- 8. EPA Region 2 requested assistance with the cleanup of a hazardous materials dump site in Byram Township, N.J., in February.
- 9. EPA Region 5 requested assistance in October to identify chemical hazards at the C.P. Morrow Power Plant in Comstock, Mich.

FEMA support

10. The U.S. Army Corps of Engineers requested assistance in November with the dewatering of Brooklyn's Hugh L. Carey Tunnel, which flooded as a result of Hurricane Sandy.

EREGHTHE BEACH

STORY BY CHIEF PETTY OFFICER PAUL ROSZKOWSKI

Like a stone table rising out of the Caribbean's warm azure waters, Mona Island greets visitors to its shores with a narrow sandy beach and a harbor nestled snugly against 200-foot cliffs of ancient rock. The remote island, sitting halfway between Puerto Rico and the Dominican Republic, is a sentinel in the Mona Passage.

It was along these rocky shores that the 202-foot coastal freighter Jireh grounded in the early morning hours of June 21. Carrying 84 Haitian passengers and loaded with a cargo of mangos, cinder blocks, animal feed, beverages, and a little hidden contraband, the Jireh came to rest a stone's throw from the beach.

The Jireh's passengers and crew abandoned ship shortly after the grounding, leaving the ship and its 3,000 gallons of fuel and other hazardous materials at the mercy of the elements.

A unified command made up of representatives from the Coast Guard, Puerto Rico Environmental Quality Board, Puerto Rico Department of Natural and Environmental Resources and other federal and state partners quickly formed at Coast Guard Sector San Juan, Puerto Rico to tackle the problem of the grounded vessel.

The team included several members from the National Strike Force's Atlantic Strike Team and the

Public Information Assist Team. These oil spill, Incident Command System and communication experts were on hand to supplement the local responders.

Strike team response members provided support in the command post and in the field, filling roles in the operations, planning, and finance sections, as well as the safety officer and the public information officer.



as well as the safety officer and the public information officer. Response crews cut and remove sections of the Jireh for removal and disposal, Aug. 18, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

"The motor vessel Jireh grounding evolved into a multi-faceted response that involved pollution response, vessel removal operations, migrant operations and drug enforcement operations," said Lt. Joel Ferguson, a response officer with the Atlantic Strike Team.

Supplies and equipment were brought in by boat or airplane because of the island's remote location. Coast

Guard and salvage crews slept on the island in rustic cabins; along with the heat and humidity, they learned to share their rooms with the island's bugs and iguanas.

The Jireh's passengers and crew were taken to a Customs and Border Protection facility in Puerto Rico for repatriation. Meanwhile, operations to remove the fuel and other possible environmental contaminates began.



Petty Officer 1st Class Rodney Wedner and Petty Officer 1st Class Seth Hartmann assess cleanup operations aboard the freighter, July 28, 2012. Photo courtesy Jireh Grounding Unified Command.

Responders reviewed the Jireh's blueprints as they sketched out a plan to remove the pollution threat, but once they actually got on board, they found some unpleasant surprises in the ship's construction.

"The ship's material condition was unknown and it was evident, as salvage progressed, that significant modifications had been made that were not reflected on the ship's plans," said Cmdr. David Berliner, the Incident Commander. While conducting salvage work, he said, crews found undocumented cargo spaces, one of which held 166 kilos of marijuana, and a second, which held 150 gallons of oil. "The Jireh seemed to throw some new wrinkle at us every day," said Ferguson. "But the whole response crew, including the NSF, sector, the Commonwealth of Puerto Rico, and all the other stakeholders, really rose to the challenge and got the job done."

Conducting operations on any unstable vessel is dangerous, but the Jireh's position on an exposed beach increased the risk. Each wave rocked and bucked the ship, causing it to slowly dig itself into the seabed. Multiple tropical



Coast Guard Petty Officer 1st Class Seth Hartmann provides Jackie Dickson from the Coast Guard Shore Infrastructure Logistics Center with an operations update, Aug. 9, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

storms that passed through the area, including Hurricane Isaac, compounded the stress to the ship's already compromised hull.

The ship's proximity to shore forced response crews to pump the oil/water mixture from the ship's spaces and tanks, 250 gallons at a time, and take it by small boat to a barge for disposal. Crews removed more than 3,000 gallons of oil and 2,000 gallons of oil/water mixture, and an additional 600 tons of oiled cargo, and 20 tons of debris.

In the end, Berliner said the only option for completely removing the pollution threats the Jireh posed was to dismantle the vessel piece by piece and haul it away on barges; more than 600 tons of the freighter's hull were brought back to Puerto Rico for disposal.



Petty Officer 1st Class David Edelson and Petty Officer 1st Class Seth Hartmann talk with Jireh Grounding Unified Command members Capt. Drew Pearson and Cmdr. David Berliner about response operations. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.



Pieces of the hull sit aboard a barge after response crews remove sections of the Jireh to prepare the vessel for disposal, Aug. 20, 2012.

AST RESPONDS TO HISTORY'S HAZARDS

STORY BY PETTY OFFICER 2ND CLASS JACLYN YOUNG

he world would be a disgusting place without modern waste dumping standards. For thousands of years humans burned waste, fed it to animals, buried it, and most commonly, tossed it over their shoulder. Some societies built over the waste, and others pioneered new ways to save their cities from vermin and disease. Waste disposal began as a necessity, but today it's a responsibility to the environment.

The United States had no waste dumping standards and regulations until the 1940's. Before that, dumping waste in the most convenient location - ocean, wetlands, or any accessible strip of land - was common practice. This disposal practice was due in part to a lack of technology and an unfamiliarity of the long term negative affects to the communities located close to dumpsites.

The Environmental Protection Agency set standards in the 1990's for groundwater and atmospheric quality near landfills, as well as regulations to address closed landfills. Although these standards proved significant for future sites, countless numbers of unofficial dumping sites had already been created, filled and, in some cases, abandoned.

In February, the EPA turned its attention to one such site, located near a small rural community in Byram Township, N.J. Nearly 12,000 tons of waste had been dumped at the site by the 1960's, before the federal government enacted programs to stop the practice.

To assist with the cleanup, EPA Region 2 On-Scene Coordinator Lou DiGuardia requested the Atlantic Strike Team to help eliminate the negative health



hazards associated with the abandoned, unregulated landfill.

"The strike team is very knowledgeable and each individual we worked with offered a different expertise at this site," DiGuardia said. "This worked out very well for the overall success of the cleanup."

Although the site in Byram Township had sat unused for decades, leaves and dirt covered hazardous waste that over the years had seeped into the soil and groundwater, threatening the residents who lived nearby.

"You really couldn't see anything bad just by looking at the area," said Petty Officer 1st Class Seth Hartmann with the AST. "It looked like a regular wooded area with a jogging and bike trail near a residential development. Nothing seemed out of the ordinary."

The site had five different dump areas, and the AST worked with the EPA to take composite samples of the soil, which contained readings of trichloroethylene. TCE, as it is commonly referred to, is a solvent that is a known carcinogen.

DiGuardia said that during an excavation, volatile organic compounds emit gases as the soil is disrupted. One of the AST's other responsibilities while excavations took place was to monitor the air and prevent hazardous vapors from reaching the nearby residents.

"We used our air monitoring equipment where contractors dug so that we could monitor the disturbed soil and determine the safe levels in that environment," said Hartmann. "It was crucial that the toxic air did not reach those homes or harm the responders."

Five members from the AST spent approximately four months at the site as the cleanup took place. DiGuardia said in addition to their regular duties, responders also made sure the nearby residents were informed about the process.

"We had to do some public relations while we were there and the residents liked to see the Coast Guard in uniform," said DiGuardia.



Petty Officer 2nd Class Jonathan Scott conducts air monitoring using a specialized gas meter during excavation operations at the dump site, Feb. 22, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Seth Hartmann



Contractors work to excavate hazardous material that seeped into the soil and groundwater over the years, Feb. 24, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jonathan Scott.



Nearly 12,000 tons of abandoned waste litters a wooded area near Byram Township, N.J., Feb. 28, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Seth Hartmann.

Wrangling VOSS Down East

Story by Petty Officer 1st Class Matthew Schofield

he deck of any Coast Guard buoy tender during a Vessel of Opportunity Skimming System deployment is a hectic and busy environment, and from July 29 to Aug. 3, the buoy deck of the Portland, Maine-based 175-foot Coast Guard Cutter Marcus Hanna, was no exception.

Four Atlantic Strike Team members deployed from Joint Base McGuire-Dix-Lakehurst, N.J., to assist in getting Marcus Hanna's crew well-versed in conducting VOSS oil retrieval safely and efficiently on its own.

Petty Officer 2nd Class Eugene Peters, a machinery technician with the AST, acted as a safety observer during the VOSS exercise. He said the AST was requested because of the team's familiarity with the VOSS equipment as well as their extensive training experience.

"It was a good educational experience... the last time we did VOSS training, the strike team pretty much set everything up and did everything," said Petty Officer 2nd Class Peter Niestempski, a boatswain's mate aboard the Marcus Hanna. "This time the crew was fully involved with the evolution."

Niestempski and eight other personnel make up the buoy tender's deck department, and during the VOSS deployment they are the ones who unpack, assemble and deploy the gear. They worked closely with the AST members to learn as much as they could.

The Coast Guard owns and maintains pre-positioned VOSS equipment suites at strategic sites throughout the country, including the three strike teams.

Since VOSS equipment turns virtually any vessel, including commercial vessels, with enough deck space into an oil recovery platform, VOSS deployments are an important mission to practice, said Dale Hemenway, the equipment branch specialist at the NSFCC.

Petty Officer 1st Class James Maida, the team leader and a boatswain's mate with the AST, said it's important that the cutter's crew has the opportunity to get hands on experience with the VOSS equipment since many of them had never seen the system deployed before. Although the VOSS is not complicated to operate, there are a lot of different components that must be assembled.

The Marcus Hanna's commanding officer decided to keep the cutter at the pier during the exercise because of heavy vessel traffic and high sea conditions in the area. Even though the cutter did not get underway to practice, Peters said the AST members were still able to teach many important aspects of how to assemble, deploy, and repack the gear.

"They were very professional," said Petty Officer 1st Class Matthew Burke, the operations officer aboard the Marcus Hanna. "They came in with a purpose, and stuck to the basic points of what we needed to do. I am confident now that we could get it set up in time, get out there, and facilitate a spill [cleanup]."



Coast Guard Cutter Marcus Hannah is affixed with a Vessel of Opportunity Skimming System. U.S. Coast Guard file photo.



Gulf Strike Team

National Strike Force

Commanding Officer: Cmdr. Arex Avanni

About:

The Gulf Strike Team is based in Mobile, Ala. The GST's area of responsibility includes the Coast Guard's 7th District, with the exception of Puerto Rico and the U.S. Virgin Islands, the southern portion of the 8th District and part of the 5th District.

This corresponds to the Environmental Protection Agency's 4th and 6th regions. In addition to these areas the GST also has international responsibilities for South America, Central America and the Caribbean.

The 78 active-duty, reserve, civilian and auxiliary members of the team responded to a variety of interesting and complex chemical and oil spill response cases and natural disasters in 2012 while supporting both Coast Guard and EPA Federal On-Scene Coordinators.

The GST also participated in numerous preparedness and readiness training exercises across the nation.





Petty Officer 1st Class Pat O'Hare and Petty Officer 3rd Class David Young perform decontamination procedures on an FBI SWAT member with artificial wounds during a joint agency exercise in Mobile, Ala., Feb. 16, 2012. U.S. Coast Guard photo by Lt. j.g. Crystal Barnett.

Coast Guard support

1. Sector New Orleans requested assistance with a sweet crude oil spill near La Place, La., in February.

2. Sector Mobile requested search and rescue support in March following the crash of Coast Guard helicopter 6535 in Mobile, Ala.

8. Sector New Orleans requested pollution response 3. Sector New Orleans requested assistance for a fire assistance following Hurricane Issac in New Orleans, on a Poydras Energy oil platform near Breton Sound, La., in October. La., in March.

4. District 7 requested salvage and pollution cleanup support with the motor vessel Sea Flower near Miragoane, Haiti, in April.

5. Sector New Orleans requested support with a No. 6 fuel oil spill in the Mississippi River near New Orleans, in April.

Top 10 cases of 2012:

6. District 8 requested support at the MEXUS Gulf exercise in South Padre Island, Texas, in April.

7. Sector New Orleans requested assistance after lightning struck a divinylbenzene tank in Plaquemines Parish, La., in August.

EPA Support

9. EPA Region 4 requested on-scene coordinator support at the vacant American Agriculture Chemical Company in Columbia, S.C., in February.

10. EPA Region 4 requested remediation support at the Welch Group Environmental site in Fair Play, S.C., in March.

A storm surge of support HURRICANE ISAAC

Story and photos by Petty Officer 1st Class Matthew Schofield

Slow-moving Hurricane Isaac rumbled through the Gulf Coast Aug. 29, 2012, fortuitously on the anniversary of Hurricane Katrina, bringing 80 mph sustained winds and torrential rain. In the immediate aftermath, residents in the disaster area were forced to pick up the pieces left in Isaac's wake and figure out how to recover from the widespread flooding caused by storm surge and record-breaking rainfall.

Lt. Cmdr. Lushan Hannah, the Coast Guard incident commander assigned from Sector New Orleans, said saving people stranded by floodwaters was the immediate

priority, but when the search and rescue case numbers decreased, responders shifted their attention to oil and hazardous materials pollution in the area.

Storm-induced pollution is inevitable during a hurricane, and responders like those with the National Strike Force come from all over the nation to assist in the cleanup effort.

Eight Gulf Strike Team members from Mobile, Ala., along with three each from the Pacific and Atlantic strike teams, deployed to New Orleans immediately following the storm to take the



Petty Officer 2nd Class Stephen Jakubowski, a response technician with the Gulf Strike Team from Mobile, Ala., inspects a facility for signs of oil pollution following Isaac, Sept. 12, 2012.

lead on oil and chemical spills, and identifying and recovering displaced hazardous materials containers.

"We were looking for active oil discharges and hazmat releases, anything from small storage tanks to whole facilities that may have been impacted by the storm," said Lt. Jason Scott, the response officer from the GST. "Prioritizing and addressing the environmental hazards in a coordinated fashion is critical to ensuring the safety of the public and the environment."

A few dozen of the 60 Coast Guard members working at the incident command post at Sector New Orleans were personally affected by the storm. Many of the sector's personnel were on duty at the time of the storm and needed to check on their families, homes, pets, and the general condition of their neighborhoods. The need for augmentation was answered by strike team members and a host of other federal, state and local entities.

Chief Petty Officer Bo Lisenby, a marine science technician and GST member, said that one of the advantages the National Strike Force has is that since they typically travel in from outside impacted areas, it is easier for their members to focus on the response

since they are not personally affected.

"We have the ability to show up and not worry about our homes, not worry about our families, because they are taken care of," said Lisenby.

All the responders had a large mission in front of them, and GST members tailored their contributions to address the unique operational challenges they encountered day-to-day.

"Our team seamlessly integrated with sector personnel and collectively we identified the need to send in [NSF] trained observers," said Scott. "Due to our aerial observation experience, strike team responders were able to provide the most accurate assessment information from the field including photos, GPS coordinates, and logistical concerns for the eventual mitigation."

It soon became clear that hazard mitigation operations would be long-term, so the Federal **Emergency Management Agency** issued an emergency mission assignment, a funding mechanism that allowed a second team of NSF personnel to deploy to continue removing the hazards. This second phase of the mission lasted until November 30th, when all hazardous containers had been assessed and/ or properly disposed of.

In total, during the initial response and the subsequent FEMA mission assignment, Coast Guard, federal, state, and local personnel assessed 1,000 and secured and recovered more than 800 orphaned containers.





Responders and contract workers place boom around a barge platform near Myrtle Grove, La., Sept. 2, 2012.



Capt. Samuel Walker, chief of response of the Eighth Coast Guard District, identifies areas of interest for Rear Adm. Roy Nash, Commander of the Eighth Coast Guard District, during an over flight, Sept. 1, 2012.

Coast Guard air crews conduct a survey flight over a flooded area near New Orleans Sept. 1, 2012 to check for any potential navigation hazards and pollution following Hurricane Isaac.



Farewell to the Fallen

The GST provides assistance during critical hours

STORY BY THE NATIONAL STRIKE FORCE COORDINATION CENTER STAFF

The hours following the crash of Coast Guard helicopter 6535 were excruciating for every Coast Guard member. Everyone waited for word that Lt. Cmdr. Dale Taylor, Lt. j.g. Thomas Cameron, Chief Petty Officer Fernando Jorge and Petty Officer 3rd Class Andrew Knight had been found safe and sound, and were headed home to their families.

When it became clear the story wasn't going to end that way, despair and sorrow sickened us as we contemplated the unfair finality of it.

For the Coast Guard members stationed in the Mobile, Ala., area, the tragedy was compounded by their closeness to it. Whether they were fellow aviators, administrators, or mariners, and regardless of whether they personally knew the missing aviators or not, the insistent urge to be a part of the search was overwhelming.

The crewmembers of the Gulf Strike Team, which is located on the same facility as the 6535 and the Aviation Training Center, were among those who responded to the search for the aircrew. GST's executive officer at the time, Cmdr. Mark Shepard, said rumors about an aircraft accident in the bay trickled in slowly at first throughout the evening of February 28, but when he confirmed the rumors were true, he knew the search would be an all hands on deck operation.

The GST immediately put small boat crews on standby in the event ATC or Sector Mobile needed additional resources for the initial search, and they remained in contact with the Incident Command Post throughout the night.

Petty Officer 1st Class Ken Bond said when he arrived for work February 29, the GST's offices and hangar were a ghost town; 95 percent of the crew was in the field, somehow involved with the search efforts.

One of GST's responsibilities was to organize and supervise shoreline reconnaissance teams to look for any signs of the 6535's crew, or evidence from the helicopter. Bond, a safety officer during part of the search, spent most of his days out on small boats and salvage barges with the search crews, watching for hidden dangers. He said one of the major challenges he faced was the crew's unwillingness to quit, and the subsequent fatigue and stress brought on by the emotional ups and downs of searching for shipmates.

"People wanted to do more," Bond said. "I knew they needed to get swapped out, take a break, but some of the guys were really hit hard. It brought a sense of mortality to everyone because it made us realize that maybe we're not invincible after all."

In addition to shoreline searches, GST team members helped develop a salvage plan to raise the helicopter, established a marine safety watch to complement ATC's 24-hour aviation safety watch, provided boat crews, made GST's commercial driver license holders available, and opened up GST's training room for the convening mishap analysis board.

Rescuers found Jorge the night of the crash, and recovered Taylor and Cameron late on the night of March 1, but Knight remained missing.

A tragedy such as befell the crew of 6535 tends to bring out the best in a community, and the loss of these four men echoed in the hearts of a lot of people. Amidst the crushing solemnity and quiet determination as everyone searched for the last man. some GST members felt a suffocating helplessness, and so looked for ways to honor the aircrew and the sacrifice they made.

The GST's Chiefs' Mess arranged for the Coast Guard Ensign to be flown at half-staff in front of the hotel where a forward operating base for the search was housed, and hotel management promised it would stay up until the last air crewman was brought home.



The GST's Ombudsman Andrea Brensinger and many other spouses and significant others provided babysitting services and prepared meals for all the responders working around the clock, organized logistics for the ATC's ombudsman, and made ribbons for the memorial service.

Bond said that as days went by with no sign of Knight, the GST responders became more and more disheartened. Finally, on March 8, with the memorial service over and Knight's family headed home, the call came in that Knight's body had been recovered.

"It was like he knew what was happening and didn't want to be left behind," Shepard said.

For the GST responders, finding Knight was the only thing that could come close to bringing even a small measure of closure.

Shepard said that throughout the 16-day operation, the GST crew expressed a full range of emotions and thoughts, but there was one common thread that ran

among them: a bond with the four lost souls, even if they'd never met them.

"So many of them said they felt a closeness to the aircrew, because it could have been any of us," Shepard said. "I mean, you've got some shipmates out there. GST, ATC, the Sector, the community, volunteers, we all threw everything we had at it."

Crewmembers with the GST salute the flag in honor of the crew from Coast Guard helicopter 6535 in Mobile, Ala., March 10, 2012. Photo provided by the GST.



Petty Officer 1st Class Pat O'Hare and Petty Officer 3rd Class David Young prepare to perform decontamination procedures on an FBI SWAT member during a joint agency exercise in Mobile, Ala., Feb. 16, 2012. The GST worked with the FBI and the Alabama National Guard's 46th Civil Support Team to identify an unknown hazardous chemical aboard the USS Alabama

uss alabama **GST NAVIGATES THROUGH** HAZARDOUS SHIPBOARD DRILL

Story by Petty Officer 2nd Class Jaclyn Young Photos by L.t. j.g. Crystal Barnett

When most people think about a hazardous material threatening a local community, they might conjure the image of quiet, tree-lined residential neighborhood that sits, vulnerable, in the shadow of a nearby chemical facility or landfill. What they probably don't imagine is a 680-foot ship that is capable of housing hundreds of live-in residents, under that very same threat.

Multiple times a year the National Strike Force trains for the very real possibility of a shipboard

hazardous materials release. In February, the Gulf Strike Team led a multi-agency training exercise with FBI SWAT and the Alabama National Guard's 46th Civil Support Team.

Nearly 20 members from the GST participated in the drill that was designed to lead them and the other agencies through the simulated release of an unknown hazardous chemical aboard the USS Alabama at Battleship Memorial Park in Mobile, Ala.

The complexities of responding to a chemical release on a ship are unique because of the ship's restrictive passageways, hidden voids, and numerous man-holes separating one compartment from the next.



(From left) A member of the 46th Civil Support Team, Coast Guard Petty Officer 1st Class Jason Young and Petty Officer 2nd Class Noel Lindsay prepare to make an initial entry, Feb. 16, 2012.

This type of layout makes an emergency response not only challenging but extremely dangerous for responders without the proper training.

"The USS Alabama is a good training platform because it is a vessel with smaller compartments, which are realistic challenges during an actual shipboard mishap," said Petty Officer 1st Class Austin Hunt of the GST. "The smaller compartments could cause our protective suits to rip or tear while clearing a space."

Training in an actual environment with shipboard dangers helps prepare responders for the safest ways to navigate aboard a vessel with all of their extra gear. Not only are responders wearing a top layer of protective clothing, but they may have air canisters strapped onto their backs. All of this protective clothing can add a lot of additional physical strain on the member.

However, bulky protective clothing wasn't the only challenge built into the training exercise. The GST

also paired up with the other agencies to compare response tactics and standard operating procedures. The training, which included an entry and hostage extraction by FBI SWAT, incorporated both GST and Civil Support Team members into entry groups to conduct sampling and air monitoring. This cross-agency training provided an



Team, Feb. 16, 2012.

opportunity to compare methodology and equipment used by both teams.

"The potential of a response like this would involve multiple agencies, and they all operate under different SOPs," said Hunt. "Getting to know those procedures makes a response flow more effectively, and this was an excellent opportunity for that."

holding the exercise on the water was important



Petty Officer 1st Class Jason Young and Petty Officer 2nd Class Noel Furthermore, Hunt said Lindsay navigate through the USS Alabama, Feb. 16, 2012.

because of the unique maritime spill response and incident management expertise the GST members possess.

"The GST has response officers and supervisors trained to the level of a hazardous material incident commander, and all members are trained in the special equipment the GST brings for a response of this nature," Hunt said.

Petty Officer 2nd Class Matthew Patterson, who recently reported to the GST, said that not only was the training helpful, but it was rewarding to see that the other agencies operated under very similar procedures while working together to navigate through the ship and find the source of the chemical release.

"It was a very likely scenario, and everybody was

on Alabama National Guard Sgt. 1st Class Drew Boatright of the 46th Civil Support

on the same page," said Patterson. "Anything can happen and we need to be able to respond to shipboard threats together."



Pacific Strike Team

National Strike Force

Commanding Officer: Cmdr. William Carter

About:

The Pacific Strike Team is based in Novato, Calif., and its area of responsibility covers the Coast Guard's 11th, 13th, 14th, and 17th districts, and the northwest portion of the 8th District.

This corresponds to the Environmental Protection Agency's 7th, 9th, and 10th regions. Internationally, the PST covers Asia, the Arctic, Antarctic, and western Canada.

The 63 active-duty, reserve, civilian and auxiliary members of the team supported both Coast Guard and EPA Federal On-Scene Coordinators in a variety of interesting and complex chemical and oil spill response cases and natural disasters in 2012.

The PST also participated in numerous preparedness and readiness training exercises across the nation.





Petty officers 2nd Class Angela Korenko and Mark Wickman, both with the PST, pay out messenger lines to hoist a fuel pump from the decommissioned USNS Kawishiwi, in Suisun Bay, Calif., Feb. 8, 2012. U.S. Coast Guard photo by Chief Petty Officer Sarah Foster.

Coast Guard support

1. Sector San Francisco requested assistance with the sunken Tug Tiger at Point Potrero in Richmond, Calif., in late December 2011 through February 2012.

2. Sector Puget Sound requested support with the sunken fishing vessel Deep Sea near Penn Cove in Coupville, Wash., in May.

3. Sector Honolulu requested response assistance with the sunken fishing vessel Ocean Breeze (also known as Alice S) in Pago Pago, American Samoa, in June.

EPA support

4. EPA Region 9 requested soil sampling assistance near Yosemite Creek in San Francisco, Calif., in February.

5. EPA Region 8 requested assistance during dredging operations in Mackinaw Bay in Whitefish, Mont., in May.

Top 10 cases of 2012:

- **6.** EPA Region 9 requested assistance with radiological sampling of uranium ore in Red Valley, Ariz., in June.
 - 7. EPA Region 9 requested cylinder removal support in Pago Pago, American Samoa, in June.

8. EPA Region 9 requested assistance with mercury samplings at the McDermitt Mine in McDermitt, Nev., in June.

9. EPA Region 9 requested residential soil sampling assistance near Eureka, Calif., in October.

10. EPA Region 9 requested assistance with sediment removal in the Lauritzen Channel at the United Heckathorn hazardous material site in Richmond, Calif., in October.

NOTYOUR EVERYDAY LEVEL 'A' IN AMERICAN SAMOA...

Story and photos by Petty Officer 1st Class Matthew Schofield

Looking at the lush forests with the large Samoan mahogany trees and experiencing the laidback island lifestyle, one would never know that a potentially deadly threat was buried nearby – a threat that could potentially wreak havoc on the island at a moment's notice.

A large quantity of potentially dangerous high and low pressure gas cylinders containing chlorine and anhydrous ammonia were found at a scrap yard on the west side of American Samoa near the international airport, and the Environmental Protection Agency called the Pacific Strike Team to assist with the mitigation and removal of the hazardous materials.

Christopher Weden, the EPA On-Scene Coordinator in charge of the current operation in American Samoa, said chlorine and anhydrous ammonia pose a significant hazard to skin, eyes, and respiration, requiring the responders to operate in Level A personal protective equipment. PPE is classified as Level A, B, C, or D, according to the level of protection it provides a person who may be exposed to hazardous materials.

Level A provides the highest level of protection and is worn when a hazard is the greatest. It consists of a self-contained breathing apparatus, optional cooling vest, gloves, and a hard hat, all worn inside a fully-encapsulating chemical resistant suit.

Chief Petty Officer Carrie Lee Gagnon, a marine science technician, was one of the PST members who deployed to American Samoa. She said wearing the Level A equipment requires practice and training because it inhibits dexterity, visibility, and stamina.

Although the PST participates regularly in exercise scenarios that imagine the worst-possible disasters, real-world responses that require Level A equipment are quite rare. The PST more commonly responds to sites that require Level B or lesser protective gear. "When I received a call saying that I would be headed out here to do a real Level A entry job, I was nervous and excited, because we rarely get the opportunity to suit up and work with really dangerous chemicals," said Gagnon.

The PST members used a special drill to "tap" each cylinder and siphon off the chemicals into water tanks or chemical neutralizing baths. Throughout the operation, the American Samoa Fire Department was on hand to suppress chemicals and toxic vapors in the event of an uncontrolled release. The fire department was also responsible for evacuations of the nearby businesses and for air monitoring, if necessary.

Once all of the cylinders were drained and the chemicals neutralized, the team cleaned up the debris and decontaminated their Level A suits and all the equipment they used, getting everything ready for the next response.

"Practice always pays off, in this field and particularly with Level A... that's why I would always call on the strike team to help out in a Level A case," said Weden. "If we didn't take this action and the cylinders continued to deteriorate, they could have posed a significant threat to the health and welfare of the American Samoa public. Everything we do is to keep people safe."



Cylinders sit waiting for disposal after being emptied of their contents, June 12, 2012.



Maino Mose, a fireman with the American Samoa Fire Department, uses a fire hose to decontaminate a PST member who worked with anhydrous ammonia cylinders, June 11, 2012.



NSF and EPA responders use a special drill to tap an anhydrous ammonia high pressure tank to make it safe and prepare it for disposal, June 11, 2012.



Petty Officer 1st Class Josh Rogers dresses out for a Level A response at an EPA cleanup work site near the Pago Pago International Airport, June 12, 2012.

THE SAM STILL RISES IN SAME

Story by Petty Officer 2nd Class Jaclyn Young

t's been four days and nine hours since the fishing vessel Lili'afao sank at its mooring in Pago Pago Harbor, and the Coast Guard responders on scene have grown indifferent to the rain showers that are common in American Samoa. They wipe their faces with their wet shirt sleeves, to no avail, and continue their work in spite of the warm, South Pacific rain.

Although the daily rain showers don't usually impact life in American Samoa, an unusual nearconstant downpour for two weeks contributed to sinking the Lili'afao, June 3, 2012.

The 80-foot, Mexican-flagged vessel sat longneglected with an unknown amount of No. 2 diesel fuel and oil on board. Controlling the threat of pollution and preparing the derelict vessel for salvage was no easy task, and the three-person team at Coast Guard Marine Safety Detachment American Samoa called for assistance.

"This spill was different for us," said Lt. Steve Caskey of the MSD. "Usually whenever it rains it comes down from rivers and washes into the harbor, and we get mystery sheen. When this boat sank it had rained for almost two weeks straight."

The National Strike Force deployed Petty Officer 2nd Class Austin West with the Pacific Strike Team and Petty Officer 1st Class Seth Hartmann with the Atlantic Strike Team to aid the MSD in this response. Petty Officer 1st Class Russell Strathern from Sector Honolulu was also part of the response team.

Together, these three traveled down to the end of time on the International Date Line to assist the MSD with the vessel, which was resting on the bottom of the harbor. Collectively, their assignment was to provide contractor monitoring, booming expertise, site safety, and salvage oversight.



The Lili'afao rests against a support barge in the Pago Pago Harbor June 8, 2012 after it sank from years of neglect and heavy rain. U.S. Coast Guard photo by Petty Officer 1st Class Russell Strathern.

The first few days of the response, the team focused on implementing strategic guidance offered from the Coast Guard's Salvage Engineering Response Team. From there, the NSF worked with the MSD and Sector Honolulu to develop plans to dewater the vessel, remove the fuel and oil that remained on board, and prepare the vessel for salvage.

Caskey said that responders working a salvage job in the continental U.S. typically have the luxury of vacuum trucks, response boats, containment boom, and oil spill removal organizations, all at their fingertips. However, because American Samoa is a small island located so far away from any other U.S. state, resource availability is limited.

"This was essentially a low-level response, but due to our lack of resources and permanent personnel, this was more a medium-sized response," said Caskey. "Having sector and strike steam support available definitely helps us out in these situations."

But rain and lack of resources did not slow the response. The overall goal was to safely stabilize the



vessel and remove the threat of pollution to the navigable waterway. This was done patiently and during sweeping bouts of rain.

"The state of the vessel when we arrived had the potential of fully capsizing," said Strathern. "If it weren't for all of the expertise provided and great team work from everyone, all pollutants could have spilled in the water and the vessel could have become a serious hazard to the boating community and marine wildlife."

Contractors raised the vessel six days into the response, and strike team members could now move freely among compartments and identify areas where





Petty Officer 2nd Class Austin West tests a water sample taken from the Lili'afao for traces of oil during dewatering, June 11, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

Jaclyn Young.



Petty Officer 1st Class Dave Tonon with the MSD in American Samoa throws a bundle of absorbent pads to a contractor during cleanup operations on the Lili'afao in Pago Pago, June 8, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

fuel and oil remained. All Coast Guard responders on scene worked closely each day with the contract cleanup company to minimize pollution. In total, approximately 300-400 gallons of oily water was released into the harbor.

"I think we did extremely well mitigating the threat and minimizing the discharge," said Strathern. "We had zero injuries, and the negative impact to the harbor was small, but the best part about this response was the willingness and positive attitude of all parties involved."

for salvage, June 11, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class

BATTLING LEAD CONTAMINATION, ONE FISH BONE AT A TIME

Story and photos by Petty Officer 2nd Class Michael Anderson Deployable Operations Group

hroughout America's history, lead has been used in paint, batteries, gasoline and even water pipes, and environmental and health professionals use many methods to neutralize it to protect the public's health. However, lead contamination in one of the oldest Oakland, Calif., neighborhoods was not neutralized by more chemicals or hauling away tons of dirt, but by mixing ground fish bone into the soil.

The bone came from Alaskan pollock, a white fish used in fish sticks and imitation crab meat. It is also one of the world's largest fisheries in the United States with annual catches averaging more than two billion pounds per year. The ground bones, left over after the meat is harvested, contains phosphate that binds with the lead in the soil to become non-toxic



Petty Officer 3rd Class Blaine Nibley tests the air particle count at a West Oakland lead remediation site, June 21, 2012.



Petty Officer 3rd Class Blaine Nibley inspects one-ton bags of ground fish bone, June 21, 2012.



Members of the West Oakland Lead Project - South Prescott Neighborhood are shown in front of their incident command post, June 12, 2012.

body can't absorb.

The Pacific Strike Team supported the Environmental Protection Agency as the safety managers for the West Oakland Lead Project – South Prescott Neighborhood, a community-based project that started in January 2012 and cleaned approximately 150 residential properties upon completion.

"We rely heavily on the Pacific Strike Team in EPA Region 9," said Steve Calanog, the EPA's Federal On-Scene Coordinator for the West Oakland project. "Knowing faces, capabilities and having good working relationships with our partners like the Coast Guard are an important part of safely getting the job done at sites like West Oakland."

In the neighborhood, the average lead contamination level in

pyromorphite, a mineral the human the soil was twice the federal limit of 400 parts per million.

Exterior lead paint in the first buildings raised during the late 1800s, and lead-additive gasoline exhaust from the nearby heavily-trafficked freeways, were the likely significant contributing project area.

On their rounds, they used precise equipment to measure how many microscopic fish bone particles were in every million particles of air. From this data, the fish bone, water and soil mixture sources for lead contamination in the was adjusted to ensure the ground fish bone was being absorbed into the soil. They also oversaw PST members made hourly all aspects of site safety, which rounds throughout the neighborhood, included contractor oversight, which varied from abandoned lots to checking fire extinguishers, family backyards and ranged in size eye wash stations and personal protective equipment.



WARNING LEAD WORK AREA POISON

from two square feet to more than 5,000 square feet.

"It was ... a great opportunity to work with the community and see a project change a neighborhood," said Petty Officer 3rd Class Blaine Nibley, a reservist with the PST who worked at the West Oakland site. "It's giving them a lead-free environment for their children to play and places to grow gardens and vegetables."



Public Information Assist Team

National Strike Force

About:

The Public Information Assist Team consists of four highly trained professionals who specialize in risk communication and joint information center operations during oil and hazardous substance releases and natural disasters. The PIAT is co-located with the National Strike Force Coordination Center in Elizabeth City, N.C.

The PIAT's primary mission is to provide unique, interagency environmental response communication expertise to assist incident commanders and Federal On-Scene Coordinators in meeting their objectives of truth and transparency of operations for the public.

When not traveling to incident responses throughout all Coast Guard districts and Environmental Protection Agency regions, the PIAT provides joint information center and risk communication training to the nationwide response community.





Petty Officer 2nd Class Sharina LaMonica helps PIAT's Petty Officer 1st Class Matthew Schofield don protective equipment during a joint tunnel exercise in Standard, W.V., April 4, 2012. U.S. Coast Guard photo by Chief Petty Officer Paul Roszkowski. Petty Officer Paul Roszkowski.





PIAT's Chief Warrant Officer Amy Midgett and Petty Officer 2nd Class Jaclyn Young don protective clothing during an exercise in Standard, W.V., April 5, 2012. U.S. Coast Guard photo by Chief Petty Officer Paul Roszkowski.

Public Information Officer Chief Petty Officer Paul Roszkowski with PIAT (center) attends a Hurricane Sandy response meeting, Nov. 18, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Jon-Paul Rios.

2012 deployment highlights:

Coast Guard responses

1. Marine Safety Detachment American Samoa requested media assistance following the sinking of the vessel Lili'afao in Pago Pago, American Samoa in June.

2. Marine Safety Unit Duluth requested media assistance with flooding in Duluth, Minn., in June.

3. Sector San Juan requested JIC and risk communication support for the grounded freighter Jireh on Mona Island, Puerto Rico, in June.

4. Sector Detroit requested JIC and risk communication support for the sunken dredge Arthur J. in Port Huron, Mich., in July.

5. Sector New Orleans requested JIC and risk communication support following Hurricane Isaac in August in New Orleans.





Petty Officer 1st Class Matthew Schofield (center left) discusses response operations in New York, Dec. 11, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Sara Romero.

6. Sector New York requested PIAT support for Hurricane Sandy in October in New York.

7. Sector Delaware Bay requested support in November after a train derailment caused a release of vinyl chloride in Paulsboro, N.J.

EPA support

8. EPA Region 9 requested media assistance during cylinder removal operations in Pago Pago, Amercian Samoa in June.

Training and exercise support

- **9.** PIAT provided photography support during an Arctic oil spill exercise in the Straits of Mackinac in January.
- *10.* Sector San Juan requested JIC training for 34 people in Puerto Rico and St. Thomas, USVI in June.

NSF MEMBERS TUNNEL, TEACH AND TRAIN TOGETHER

Story by Petty Officer 1st Class Michael Shannon and Petty Officer 1st Class Matthew Schofield

Members of the Atlantic and Pacific strike teams suit up and head downrange to make a Level A entry into an unknown atmosphere. Their mission is to complete an initial assessment of the area and conduct a survey of 17 abandoned drums in the back of a damaged truck, and then report their findings to the response supervisor, a member of the Gulf Strike Team.

This scenario was the first of three day's worth of full-scale training exercises conducted at West Virginia's Center for National Response Memorial Tunnel. The

memorial tunnel is a 2,802-foot long, two-lane vehicular tunnel that formerly carried the West Virginia Turnpike traffic through Paint Creek Mountain in Standard, W.V.

The tunnel was closed to interstate traffic in 1987, and now serves as a venue to train military first responders to prepare for WMD, hazardous material, chemical, biological, and radiological releases.

"The benefit of the tunnel complex for training is it's an independent area, and it's not



Petty Officer 1st Class Daniell Lashbrook goes over dress-out procedures with Petty Officer 1st Class Truman Skang, and Petty Officer 1st Class Seth Hartmann, April 4, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield.



Petty Officer 2nd Class Jonathan Scott, a response supervisor for the drill, delivers a safety brief, April 5, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

something that we manufacture ourselves," said Petty Officer 1st Class Kenneth Bond, a damage controlman with the GST. "We can use some outside drill facilitators that work at the tunnel year-round to come up with different scenarios that we don't normally interject. Everybody at the team goes through it, and it is a great team building exercise."

The strike teams conduct individual "tunnel" training each year; the Atlantic and Gulf strike teams at the West Virginia facility, and the Pacific Strike Team at a similar facility in Castaic, Calif. This was the first year, however, that all three strike teams as well as the Public Information Assist Team met and trained together to ensure alignment of response tactics.

Each day presented a new scenario to challenge the strike teams' interoperability. Although each strike team shares the same mission, standard operating procedures and equipment, they do not share the same personnel.





Members of the NSF discuss a plan of action prior to unloading training materials into the tunnel, April 4, 2012. U.S. Coast Guard photo by Petty Officer 1st Class Matthew Schofield.

Members integrated and rotated through different supervisory and operator roles, a strategy that tested the ability of all three teams to work and coordinate together in order to complete their mission.

The Public Information Assist Team used the week to fully test its response gear in a simulated hazardous and toxic environment, said Chief Warrant Officer Amy Midgett, the PIAT supervisor. The PIAT members specifically wanted to test shatter proof and liquid resistant camera housings while wearing bulky Level A personal protective equipment.

However, Midgett said the real value for PIAT was getting to work with strike team members they

Paul Roszkowski.

hadn't met yet, a sentiment that other team members echoed.

"This was a great opportunity to test the National Strike Force's strike teams and the Public Information Assist Team working together as a whole," said Jim Pitkin, PST's training coordinator, and one of the organizers of the joint tunnel exercise. "Discovering strengths and weaknesses fosters the relationships for a real world event."



Petty Officer 2nd Class Eric Schenk and Petty Officer 3rd Class Jeff Nagel conduct a chemical sweep of a train car in the tunnel, April 5, 2012. U.S. Coast Guard photo by Chief Petty Officer Paul Roszkowski.



Petty Officer 2nd Class Juan Patino, Petty Officer 1st Class Truman Skang, and Petty Officer 1st Class Seth Hartmann lift Petty Officer 1st Class Matthew Schofield onto a stretcher during a drill, April 5, 2012. U.S. Coast Guard photo by Chief Petty Officer



Petty Officer 1st Class Seth Hartmann and Petty Officer 2nd Class Sharina LaMonica conduct an initial entry during a simulated hazardous material release, April 5, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.





Story and photos by Petty Officer 1st Class Matthew Schofield

t's a proven fact that oil and water don't mix. Removing any spilled oil from the land or water requires hundreds of man hours, specialized equipment, and good weather. But as more corporations turn to extracting oil from harder to reach places in some of the most extreme environments in the world, site safety support, cleanup responders must be prepared for every situation.

The Coast Guard and a group of federal, state, and private industry oil spill response organizations came together for four days in January in the Straits of Mackinac, home to some of the most challenging ice conditions in all of the Great Lakes' navigable waterways, to discover what tools

are needed to clean spilled oil in extreme cold and ice conditions.

The National Strike Force, which is purchasing the specialized equipment for ice operations, deployed representatives from each of its five components to provide expertise, and photo documentation for the project.

"The NSF is a necessary component for exercises to run smoothly," said Kurt Hansen, of the Coast Guard's Research and Development Center in New London, Conn.

The NSF's personnel were assigned to different boats during

the exercise to offer recommendations on how to use the new equipment and to teach the cutter and the civilian boat crews how to operate the hydraulic system and handle the skimmers.

"This project started a couple of years ago when we realized that we couldn't do oil spill cleanup in ice," Hansen said. "We started looking for how can we address the performance gaps."

Mike Crickard, the National Maintenance Contract manager from the NSFCC, was on hand to evaluate the skimmers being tested. The National Maintenance Contract supports the annual preventive maintenance, repair and

refurbishment, quality control and training on Coast Guard-owned oil recovery equipment.

The Coast Guard Cutter Hollyhock, homeported in Port Huron, Mich., provided the muscle for the exercise. The Hollyhock, a 225-foot buoy tender that can also break up to three feet of ice, moved through thick ice and thin ice, brash ice, and everything in between, to test the various skimmers in different conditions.

Crickard said the tests they conducted are really just the tip of the iceberg.

There is much more to do, and the next phase is to evaluate what



"We felt for us to be serious about an Arctic deployment we had to invest in something suitable to do the job," Crickard said. "This is the way to do ice oil spill cleanup in the future."

This was not the first time NSF personnel deployed to frigid northern environments to conduct oil spill training. The Pacific Strike Team routinely deploys to Coast Guard units throughout Alaska to assist with Spilled Oil Recovery



The Coast Guard Cutter Hollyhock transits through ice near Mackinac Island, Jan. 24, 2012.



Crewmembers aboard the Coast Guard Cutter Hollyhock use an oil skimmer to recover peat moss, acting as a substitute for spilled oil, near Mackinac Island, Jan. 24, 2012.

was learned during the testing in Michigan's icy waters. As for the strike teams, Crickard said working with the skimmers in the frozen environment will make the NSF

System and Vessel of Opportunity Skimming System deployments, and Preparedness for Response Exercise Program drills.

"The future of oil drilling is leading us to the Arctic, and although there is still a lot of work to be done to make sure we're prepared for an oil spill there, our participation in research and development and routine training keeps us moving in the right direction," said Capt. David Haynes, commander of the NSF. "This industry and our extreme operating environments are changing, and we need to change with them."



Final Look

National Strike Force















Photo Credits National Strike Force



Opposite page (clockwise from left):

Petty Officer 1st Class Ronald Lynn, with the AST, patiently waits for his signal to don his breathing apparatus prior to going downrange during an exercise at the Combined Arms Collective Training Facility on Joint Base McGuire-Dix-Lakehurst, N.J., June 4, 2012. U.S. Coast Guard photo by Dean Matthews

Chief Petty Officer Patrick Kriske, with the PST, secures a ladder used to transfer personnel on and off the 184-foot tank ship John B. Caddell in Staten Island, N.Y., Dec. 04, 2012, following Hurricane Sandy. U.S. Coast Guard photo by Petty Officer 3rd Class Sara Romero.

Petty Officer 1st Class Matthew Schofield, with the PIAT, photographs from a Coast Guard Station Duluth 20-foot airboat during a patrol June 29, 2012 in a Duluth suburb following massive flooding. Photo by Clint Austin, Duluth News Tribune.

Ed Primeau, a safety officer for the East Jefferson Street Bridge Derailment response site, and Petty Officer 1st Class Matthew Foster, both with the AST, discuss operations at the incident site, Monday, Dec. 10, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Cynthia Oldham.

Chief Petty Officer Broko Boland and Lt. Joel Ferguson, both with the AST, survey the Governors Island Ventilation Building for dewatering operations at the Brooklyn-Battery Tunnel in New York, Nov. 3, 2012.U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

Federal On-Scene Coordinator Cmdr. Eric Doucette thanks Petty Officer 2nd Class Sharina LaMonica, with the PST, at the Hurricane Sandy Pollution Response Incident Command Post in Staten Island, N.Y., following her efforts at the flooded Hugh L. Carey Tunnel, Nov. 14, 2012 . U.S. Coast Guard photo by Petty Officer 3rd Class Jon-Paul Rios.

On the Back (clockwise from left):

Petty Officer 1st Class Devin Marchut and Petty Officer 1st Class David Caterisano, both with the AST, monitor an Oil Spill Removal Organization boatcrew while they assess a partially submerged vessel in Navesink River, N.J., Nov. 10, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Andy Johnson.

Petty Officer 2nd Class Heather Clark, of the GST, uses a McGill net to sample product found in Great Kill near Staten Island, N.Y., Nov. 12, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Jon-Paul Rios.

Petty Officer 1st Class Michael Shannon, with the PST, takes an oil sample from Smith's Creek near the Motiva Terminal in Sewaren, N.J., Nov. 2, 2012. U.S. Coast Guard photo by Petty Officer 2nd Class Jaclyn Young.

Chief Warrant Officer Mike Jolly, a response officer with the Pacific Strike Team, inspects the Brooklyn-Battery Tunnel in New York, Nov. 7, 2012. U.S. Coast Guard photo by Petty Officer 3rd Class Tara Molle.

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Commander	Executive Officer	S
Capt. David Haynes	Cmdr. Michael Lebsack	C

Petty Officer 1st Class Matthew Hampton assists Petty Officer 2nd Class Steve Jakubowski into a Level B suit during an exercise at the Gulf Strike Team, Jan. 12, 2012. U.S. Coast Guard photo by the Gulf Strike Team.

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