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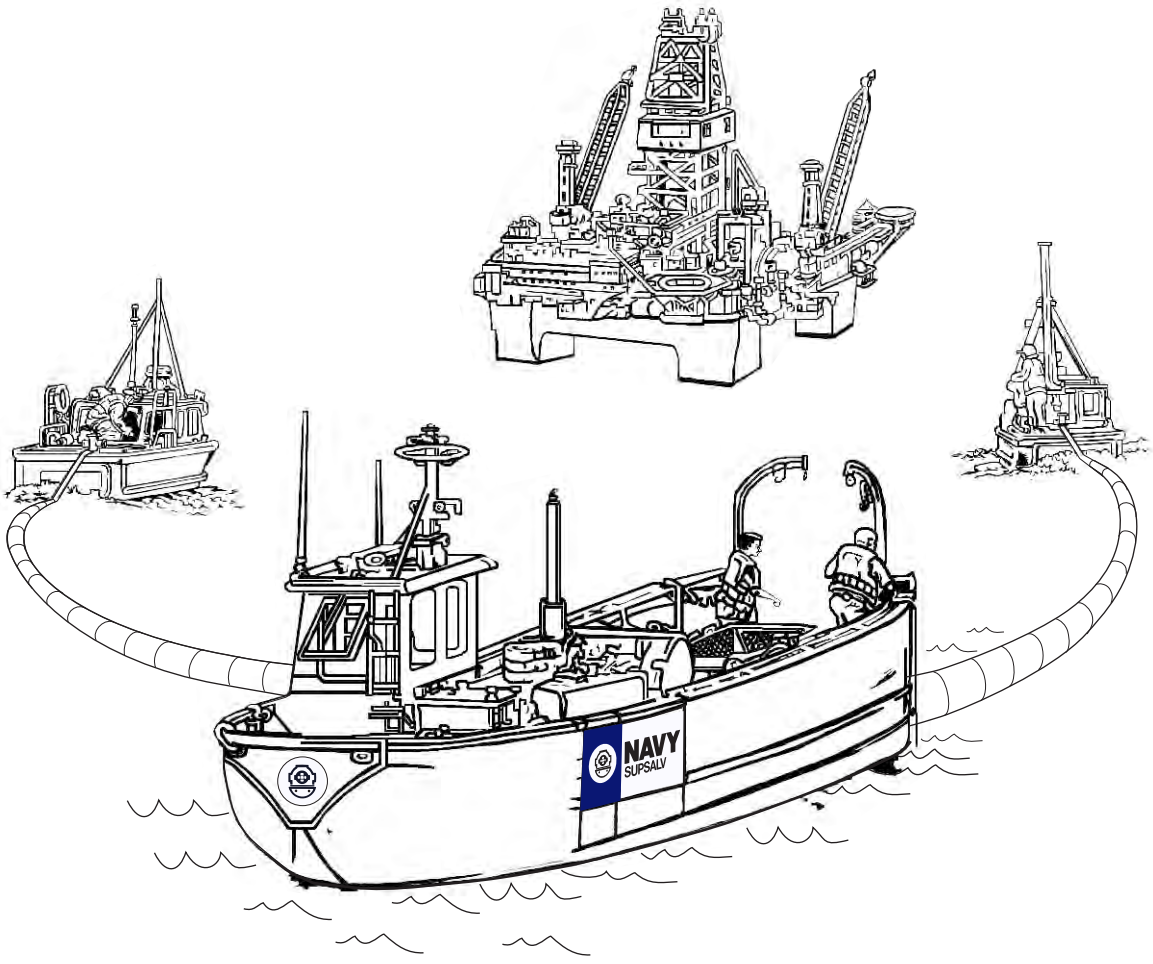
U.S. NAVY SALVAGE REPORT DEEPWATER HORIZON OIL SPILL RESPONSE



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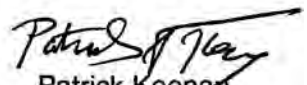
FOREWORD

The explosion and sinking of mobile offshore drilling unit Deepwater Horizon (DWH) in April 2010 was a significant event at a number of levels. First and foremost, it was a horrible tragedy for those individuals who lost their lives or were injured and for their families. It was also a shock and subsequent wakeup call to the oil drilling industry (oil companies, rig owners, and drilling operators) and their federal partners (Minerals Management Service (MMS) now the Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Enforcement (BSEE), Environmental Protection Agency, and U.S. Coast Guard) who oversee off-shore drilling operations. The blown out, then free flowing well caused serious contamination of the Gulf of Mexico, impacting Gulf coastal waters from Panama City, Florida to central Louisiana. In addition to the huge clean-up costs, the oil contamination had significant impacts on the Gulf economy through restrictions on commercial and recreational fishing and from loss of tourism.

When the National Response Team convened its first daily meeting on 22 April, it met with leadership across the federal government including the White House, U.S. Coast Guard, Department of Defense, Department of Homeland Security, Department of Interior, and Environmental Protection Agency. Concurrently, a Unified Area Command (UAC) was established on 23 April; SUPSALV assistance was requested on 27 April, and then two days later, on 29 April, Department of Homeland Security Secretary Janet Napolitano declared the DWH disaster a Spill of National Significance (SONS). This was the first declaration of a SONS event since the National Oil and Hazardous Substance Contingency Plan established the SONS framework. SUPSALV had been supporting USCG and participating in SONS exercises for a number of years - this was the real thing.

This report documents SUPSALV's operations during 6 months of support to the U.S. Coast Guard, Department of Interior (DOI) and Department of Justice (DOJ). SUPSALV provided oil spill response equipment and personnel at levels only matched by our response to EXXON VALDEZ in 1989, and also, engineering support at the Unified Command in Houston and ocean engineering expertise on the sea floor with our detailed survey of the DWH platform for the Department of Justice. Our crews worked exhaustively for months, in the extreme heat that is typical of summer in the Gulf Coast.

The SUPSALV team's work contributed significantly to securing the leak, protecting the Gulf's waters, and assisting in the investigation of the cause of the tragedy. Well done.



Patrick Keenan
Captain, USN
Director of Ocean Engineering
Supervisor of Salvage and Diving

TABLE OF CONTENTS

CHAPTER 1 -INTRODUCTION

CHAPTER 2 -COMMAND AND ORGANIZATION

CHAPTER 3 -TASKING AND FUNDING

CHAPTER 4 -MOBILIZATION

CHAPTER 5 -OPERATIONS

TABLE OF FIGURES

Chapter 1 - Introduction

1-1 Well Damage and Spill Details

Deepwater Horizon (DWH), a Dynamically Positioned Class 3 (DP3) column-stabilized Mobile Offshore Drilling Unit (MODU) was owned by Transocean and leased to BP. The oil drilling rig was positioned 50 miles offshore Southwest Louisiana in the "Macondo Prospect", Mississippi Canyon Block 252 site. On 20 April 2010, after completing drilling of the Macondo well (drilled to 18,000 feet below sea level) and cementing the final production casing, the rig exploded and burned. Eleven workers were killed and 17 others were injured.

On 21 April, the fire on the rig continued to burn and United States Coast Guard (USCG) Rear Admiral Mary Landry estimated potential environmental threat from the well was 8,000 barrels per day (bbls/day) of crude oil. On 22 April the rig sank, coming to rest on the seafloor in 5,100 FSW, 1,300 feet from the wellhead. The marine riser was damaged and broke as the rig toppled. The blow out preventers failed and oil/gas spewed from the well. At that point, BP estimated a spillage rate of 1,000 bbls/day.

On 23 April, the incident was federalized and a National Incident Command Structure (NICS) initiated. On 27 April, using an in-place Interagency Agreement, USCG verbally requested NAVSEA Supervisor of Salvage (SUPSALV) to support the oil pollution response and commence moving oil spill response (OSR) equipment from continental Emergency Ship Salvage Material (ESSM) bases to the Gulf of Mexico. SUPSALV and its ESSM contractor began their response. Figure 1-1 is a timeline that depicts the key events associated with SUPSALV's response.

1-2 SUPSALV Tasking and Response Summary

On 28 April, the verbal request from the USCG was followed up by a U.S. Coast Guard Marine Safety Unit (MSU) Morgan City tasking message. This message cited the USCG – USN Interagency Agreement of 15 September 1980 and the National Oil and Hazardous Substance Pollution Contingency Plan as justification for the tasking. The Federal On-Scene Coordinator (OSC), USCG Sector New Orleans, requested immediate NAVSEA USN Supervisor of Salvage support in response to the sunken MODU Deepwater Horizon and the ongoing pollution incident In the Gulf of Mexico. The task estimated a 30-day commitment and requested underwater engineering and remotely operated vehicle (ROV) support as well.

On the evening of 27 April, SUPSALV issued verbal orders to its ESSM contractor, Global, Phillips, Cartner (GPC), to prepare oil pollution response gear for shipping to the Gulf Coast. As of 29 April, 53 truckloads of gear had left the ESSM bases at Cheatham Annex and Port Hueneme and the first two government staff members and 19 GPC contractors had arrived in Gulfport, Mississippi.

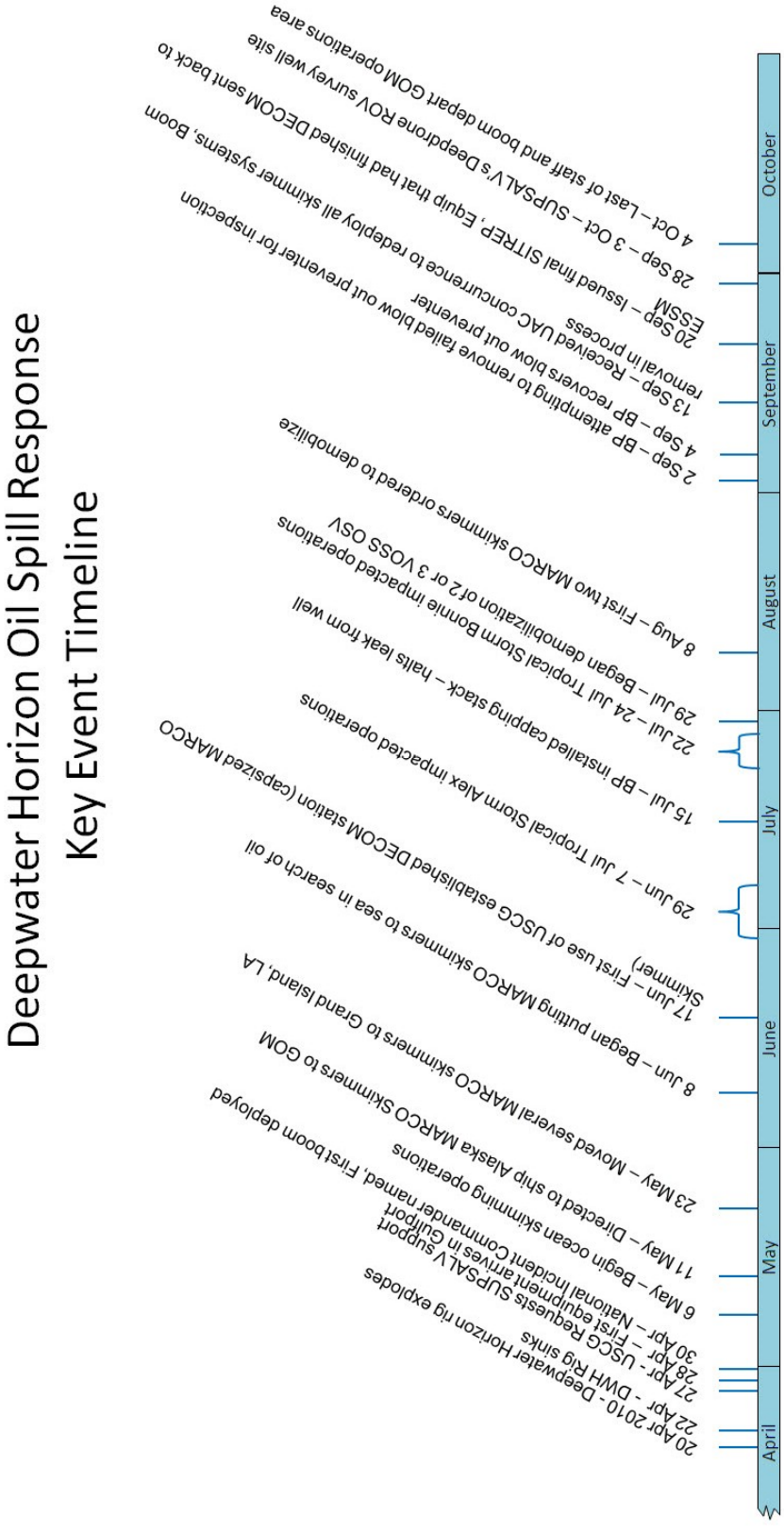


Figure 1-1- Key Event Timeline

SUPSALV response teams eventually totaling nearly 140 people contributed the following to the overall response efforts:

- Deployed 63,200 feet of oil containment boom (of the 98,000 feet brought to the Gulf of Mexico) in Louisiana, Mississippi, and Alabama at numerous sites.
- Manned eighteen Marco Class V skimmers operated from 4 states providing near shore skimming services
- Deployed three offshore deep ocean skimming vessels of opportunity equipped with 5 high speed oil skimming systems to collect at the source of the leak
- Provided shore collection and recovery in the vicinity of Grand Isle, LA
- Provided oil well engineering support at BP Headquarters in Houston
- Performed drilling platform underwater survey using ROVs.

SUPSALV maintained equipment and personnel on site through 4 October 2010. During this 5 month period, the SUPSALV teams recovered more than 23,000 barrels of oil.

1-3 Purpose of Report

This report has been prepared to document the efforts, activities, and accomplishments of SUPSALV's pollution response to the Gulf Coast oil spill. The report also documents results of using SUPSALV pollution response equipment, much of which has been extensively used in drill environments but only some of which had been used in actual spills. The report will also provide improvements and recommendations to enable SUPSALV to be more effective as a part of an Incident Command System (ICS) and recommend equipment and procedure improvements to support more effective oil collection. A separate final report, prepared by the ESSM contractor, GPC, contains a day to day dialog of events, summary of ESSM specific lessons learned, and additional photos of the oil spill recovery operation. It is included as Appendix A to this report.

1-4 Operational Considerations

1-4.1 00C Charter and Funded Oil Pollution Mission

SUPSALV's oil spill response mission has its origins in Public Law and OPNAV Direction.

Public Law

Code of Federal Regulations (CFR) 10 U.S.C. §7361-7364 (Salvage Facilities Act) authorizes the Secretary of the Navy to provide Salvage Facilities for public and private vessels, to maintain a national salvage capability and an oil spill response capability.

CFR 33 U.S.C. 154 (Facilities) and 155 (Vessels) require facilities and vessels to maintain response plans in event of an oil spill.

Oil Pollution Act, 1990, (OPA-90) states that the owner of a vessel and facility (Responsible Party) from which oil is discharged upon navigable waters or adjoining shorelines is liable for the removal cost and damages resulting from the spill.

OPNAV Direction

OPNAV Instruction 4740.2G, tasks NAVSEA 00C, SUPSALV, to execute the responsibilities of

the Salvage Facilities Act, to procure, maintain, and distribute salvage and related pollution abatement material to the Emergency Ship Salvage Material (ESSM) bases, and to provide capability for response to Oily Hazardous Substances (OHS) releases on the open ocean or incident to salvage operations.

OPNAV Instruction 5090.1C is the Navy's Environmental Readiness Program which ensures that the Navy operates worldwide in an environmentally responsible manner. The Program identifies spill preparedness and response guidance in Chapter 12. Specifically, it directs that facilities comply with 33CFR154 and *vessels* with the planning requirements of OPA-90 and 33CFR155 despite legal exemption as a "public vessel". Many Navy vessel and Navy facility plans cite SUPSALV as an Oil Spill Response Organization (OSRO) for Worst Case Discharge spills. OPNAVINST 5090.1C requires that SUPSALV:

- Ensures that the Navy's equipment inventory for major and offshore spill events is drilled/exercised in accordance with USCG implementing regulations of OPA-90
- Assist NOSCs in major OHS pollution response issues as they arise and in decision-making for major or offshore/salvage related response operations
- Provide expertise and equipment for spills exceeding local capability
- Provide advice, personnel, and equipment, as appropriate for joint/pollution operations.

1-4.2 Differences Between Planned Capability and this Operation

The Navy sizes its oil response capability to respond to its largest vulnerability as defined by 33CFR164/155. That vulnerability is the Fleet Oiler Champion Class which has a length on deck of 615 feet and a displacement of 40,000 tons. The fuel oil bunker capacity is 237,000 barrels. ESSM equipment is ordered and maintained to respond to a spill from a single one of these ships in either a harbor/river or in the ocean. With Naval bases focused on their own responsibility at the base, (in-shore capability), SUPSALV has emphasized preparations for an ocean event. The DWH oil spill was several orders of magnitude larger than this "Navy worst case" scenario. As a result, while SUPSALV could bring significant resources to the scene, the actions of SUPSALV alone could not come close to containing the estimated 40,000 bbls per day[1] (4.9 million bbls total) that spilled into the Gulf.

[1] The amount of oil spilling into the Gulf of Mexico was a matter of public speculation for a number of months. BP's initial estimate of 1,000 bbls was thought to be lower than the actual flow but independent estimates were not available until a 12 May video gave the public a first look at oil flowing from a recently cut drill riser. News outlets attempts to estimate the volume prompted the Coast Guard, on 19 May, to commission a Flow Rate Technical Group allowing for an informed independent estimate of the flow rate. On 11 June, based on the committee's analysis, the flow rate was estimated to be between 20,000 and 40,000 bbls per day. That week, Admiral Thad Allen was quoted estimating the oil flow rate between 12,000 and 25,000 bbls per day with a production (capture at the well head) between 6,000 and 10,000 bbls per day. On 4 August, the Flow Rate Technical Committee revised their estimates and reported that the well was initially dumping 62,000 bbs per day into the gulf and that rate had diminished to 53,000 bbls per day by the time the well was capped.

1-4.3 National Level Risk Management Decisions

Pulling SUPSALV equipment from the CONUS ESSM bases was a calculated risk management decision. OPA-90 (33CFR154) requires that facilities be equipped and trained to respond to any potential scenario at their own facilities which included SUPSALV assets in the case of Tier II and III worst case discharges and defined in 33CRF154. While responding to USCG requests, SUPSALV was still obligated to meet that OPA-90 requirement. Navy (OPNAV N45) decision to empty the Cheatham and Port Hueneme warehouses was based on the conclusion that because the Gulf of Mexico was centrally located, it was estimated that ESSM equipment could be deployed to the Gulf and if an emergency arose on the east or west coast, equipment could be redeployed to that location within specified timelines for worst case discharges. Due to the increased transport timelines, pollution response equipment was not deployed from Pearl Harbor or Bahrain. Some equipment was eventually deployed from the Alaska ESSM site. This significantly increased the time needed to fully respond to a potential Alaska incident.

The decision to deploy Commander, Navy Installations Command (CNIC) equipment (from individual Navy facilities) was more complicated. Both federal and state and local regulations had to be met. Coast Guard HQ, USCG Sector Commanders, and State/local approval was needed at each port to decrease local capacity below prescribed levels. Initially, CNIC scrubbed their inventory to identify any equipment in excess of prescribed response requirements. This equipment was the first of the CNIC OSR gear ordered to the Gulf of Mexico operating area. Then CNIC began the process of requesting waivers for each specific facility. After all parties granted waivers, additional equipment was deployed. By the time this was accomplished, and due to the inshore nature of the equipment, the CNIC equipment saw little actual use.

1-4.4 Organizational Structure

Due to the size of the spill and the widespread impact in the Gulf of Mexico and along the Gulf's shore, the response organization was equally extensive. SUPSALV worked within the Incident Command System (ICS) structure, reporting to the Unified Area Commander and serving the Mobile and Houma Incident Command Posts. Working alongside the Coast Guard was BP, the Responsible Party, and the state and local authorities. The overall organization was large and coordination among all was challenging and often cumbersome. The uncertain and evolving nature of the spill made the allocation and deployment of resources contentious. It was a good opportunity for SUPSALV to work with the ICS as mandated when a Spill of National Significance (SONS) event is declared.

1-4.5 Significant Local and National Press

This event generated a significant amount national interest and press coverage. The Chief of Naval Operations (CNO), the Chairman of the Joint Chiefs of Staff, and the President were routinely briefed on the progress of events taking place in the Gulf. While SUPSALV's role was small compared to the overall effort and exposure to the national press was limited, it did exist.

During the months of May and June, pictures of SUPSALV boom or SUPSALV skimming teams made it into local newspapers and were picked up by the national wires. As a result of this high level of visibility, SUPSALV's Oil Spill Response management team in Gulfport, MS, provided a number of briefings and tours and considerable time was spent responding to written inquiries.

1-4.6 Weather – Sea State

Weather impacted ocean skimming operations a number of times during the 4-1/2 month operation. Tropical Storm Bonnie and Hurricane Alex were the two named storms that hit the Gulf that summer but high waves and wind associated with unnamed storms also reduced the team's effectiveness. The Vessel of Opportunity Skimmer System (VOSS) teams were directly impacted by the weather. They sought shelter in port during the named storms, were forced to take in their gear above sea state 3 or 4 and lost skimming effectiveness above sea state 2.

Oil containment booms were also affected by weather conditions. Unlike skimming vessels, which could retreat in advance of storm conditions, boom, once set, had to ride out heavy weather. This resulted in torn, damaged, and unmoored boom being washed up on shore or, as in the case of boom laid in East Bay, LA, against oil well heads. Figure 1-2 shows an oil containment boom which was torn from its moorings and washed ashore after Tropical Storm Bonnie.

Figure 1-2. Oil Containment boom washed up on the shore of East Bay. This boom was blown from its moorings (tied to well heads) after an August storm on the Gulf.

Inshore skimming occurred in challenging conditions as well. The Gulf of Mexico is a large body of water and while SUPSALV's Class V Marco skimmers are capable of operating offshore, they are not capable of withstanding significant wind and waves or traveling very far as there are no facilities on board for crew members. The distance from their assigned locations (offshore barrier islands) to safe ports complicated the task of keeping the boat crews safe and making the systems effective. Assigning a jack up or spud barge to support the deployed Marco skimmers proved to be an effective solution. The barge could lift the skimmers on to their deck to give the skimmers a safe place to be stored during off hours or during heavy weather. Figure 1-3 shows a spud barge that provided secure shelter for 2 MARCO Class V skimmers operating out of Slidell, LA.

Figure 1-3. Resolve spud barge with 2 MARCO Class V skimmers on deck departing Gulfport. Barges provided secure storage for the skimmers and their crew when weather conditions exceeded their seakeeping capability.

With this operation taking place in the Gulf of Mexico during the mid summer months, the threat of extreme weather existed and was planned for. A United States Fleet Forces Command (USFF) Severe Weather Plan was promulgated for use in the event of a serious tropical storm/hurricane threat. The plan identified required tasks and Navy assets available to assist the Unified Command in evacuating the Gulf Region in the advent of a category 2 or larger hurricane impacting the area of operations.

Chapter 2 - Command and Organization

The Deepwater Horizon incident was federalized on 23 April 2010 when the National Response Team stood up the Unified Area Command (UAC) in Roberts, LA. As the incident and scope of response escalated and the Unified Command expanded, Incident Commands Posts (ICP) were established in Houma, LA, Mobile, AL, Galveston, TX, St. Petersburg, FL and a "source control" ICP in Houston, TX.

On April 29th, Department of Homeland Security (DHS) Secretary designated the incident a Spill of National Significance (SONS) which brought additional federal resources to bear in response to the incident. The SONS designation enabled appointment of a National Incident Commander (NIC), Admiral Thad Allen, to coordinate response at the national level and the Incident Command System (ICS) as the crisis management tool. Incidentally, this was the first named SONS incident since the Oil Pollution Act of 1990 created the response system. Working within the ICS system, SUPSALV responded to a established chain of command. The overall organization is depicted in Figure 2-1 and the Navy response organizational is shown in Figure 2-2.

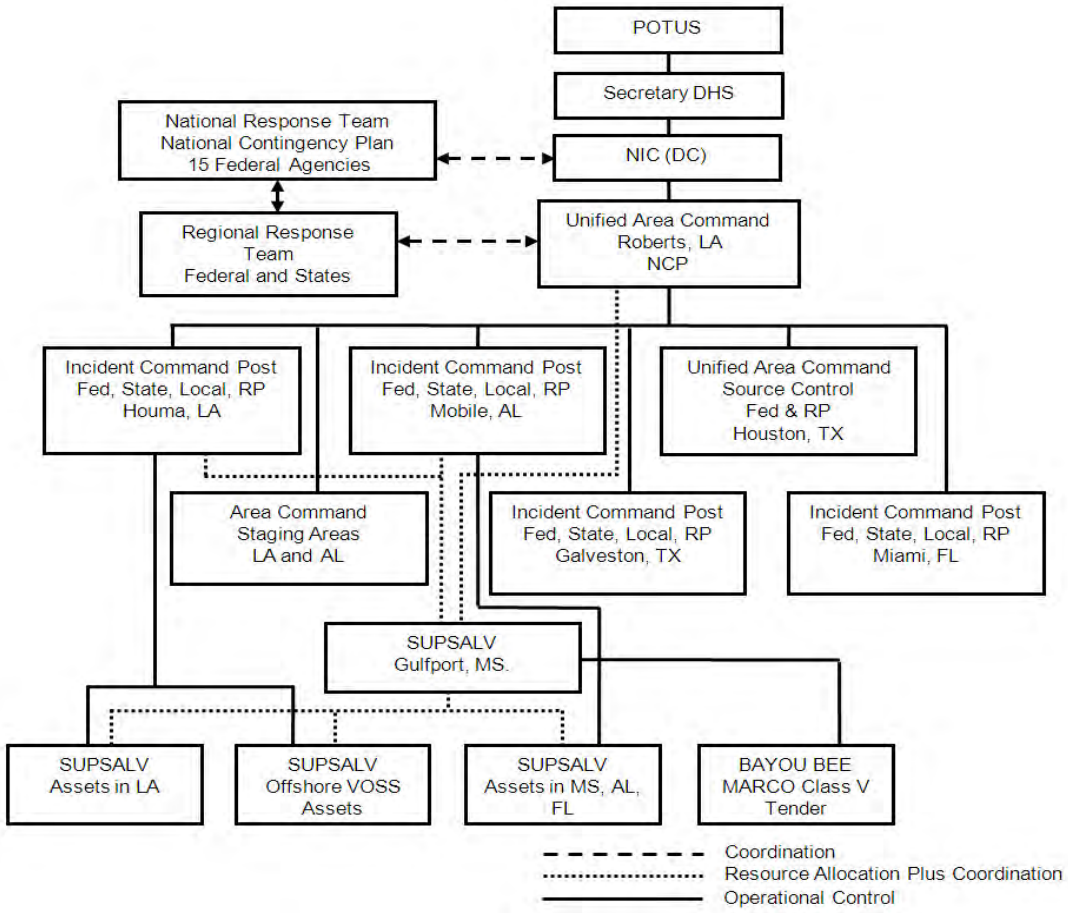


Figure 2 1. Deepwater Horizon ICS Organization

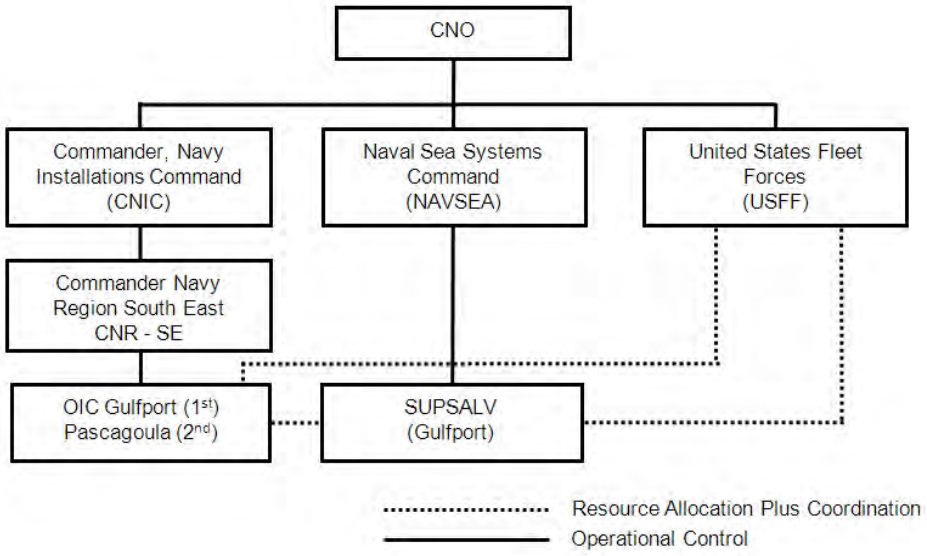


Figure 2-2. Navy Response Organization

2-1 Navy Organization

The Navy's initial response was primarily a SUPSALV response. In mid-June, Commander Naval Installations Command (CNIC) joined the task and provided management and operations staff. SUPSALV's team consisted of U.S. Government employees from NAVSEA Headquarters in the Washington, DC Navy Yard, ESSM contractor staff, and a supplemental cadre of uniformed Reservist and Engineering Duty Officers.

2-1.1 SUPSALV Team

SUPSALV's oil pollution staff, Kemp Skudin (00C25) and Stephanie Brown (00C25A) deployed to the Gulf of Mexico area on 27 April, the day SEA 00C received USCG's verbal orders to support the response effort. CAPT Patrick Keenan (SEA 00C) cut short a west coast trip and flew to New Orleans on 29 April. To maintain consistent, experienced oversight of the operation, Michael Herb, Director of Salvage Operations, (00C2) and Kemp Skudin, Environmental Program Manager, traded off management duties at Gulfport working with the ESSM contractor and Incident Command Posts (ICP) Mobile and Houma for operational issues and Unified Area Command (UAC) resource coordinator for allocation of assets.

CAPT Keenan and Deputy Director, Michael Dean (00CB) teamed to provide full time coverage at BP's Houston Headquarters providing their extensive undersea engineering experience to the team working to stop the leak. The team supporting Houston ICP also provided Navy representation on site keeping COMNAVSEA Vice Admiral McCoy and the CNO informed and facilitating any assistance the Navy could provide to the operation. Over the course of the 5-

month long operation, 10 members of the SUPSALV staff deployed to the Gulf region and a number of others provided support from NAVSEA HQ. A more comprehensive list of personnel appears in Appendix A.

2-1.2 ESSM Team

Global Phillips Cartner (GPC), SUPSALV's Emergency Ship Salvage Material (ESSM) contractor deployed its people to the Gulf region to support the operation. Staff from all U.S. ESSM bases were assigned to the operation. This included Cheatham, VA, Port Hueneme, CA, Pearl Harbor HI, and Fort Richardson, AK. On 28 April, the first 19 team members arrived in the Gulf. After consulting with USCG representative, they reported to the State Dock, Gulfport, MS and began to offload the earliest trucks. The number of staff from the ESSM bases exceeded 60 personnel but the number of people needed to operate all the ESSM equipment was far more than that. Using a standing contract with National Response Corporation (NRC), crews were supplemented so that experienced ESSM personnel were leading integrated ESSM and NRC teams. During the height of the operation, ESSM teams numbered more than 140 people.

Figure 2-1. ESSM Program Manager, Mr. Lloyd Saner conducting the morning brief at the State Pier, Gulfport, MS.

2-1.3 Supplemental Navy Support

SUPSALV's Reserve Detachment and a number of Engineering Duty Officers were utilized to support the operation. The SEA 00C Reserve Detachment's CO was CAPT Charles Gunzel who supported SUPSALV on site in Gulfport for nearly the entire duration of the operation. He also arranged to have a number of the Detachment's Sailors report for duty in the Gulf and a number

of them provided Navy - Coast Guard Liaison support at Coast Guard Headquarters in Washington, D.C. Engineering Duty Officers, who were available provided was on-site supervision and tracking. This was important because of the extensive geographic dispersal of SUPSALV equipment and contractor personnel. Gulfport management team not only needed to keep tabs on the ESSM operation and operators but also needed a report on any Task Force or ICP issues affecting their teams. Serving as a part of the SUPSALV team also provided the Reservist and ED Officers excellent training and experience in working in the ICS.

2-1.4 CNIC

A Coast Guard Request for Assistance (RFA) was approved by U.S. Navy for equipment belonging to Navy shore installations. That equipment belongs to the Commander, Naval Installations Command (CNIC). The plan was to ship their equipment to Gulfport where the CNIC management team would assign it as directed. On 22 June, the CNIC Management Team arrived at State Pier, Gulfport and was briefed by SUPSALV and a USCG Representative on site. A second ESSM Command Van was made available and CNIC began to organize their systems as they arrived in Gulfport.

CNIC provided the following equipment:

- 8 Kvichak belt skimmers
- 3 NOFI Harbor Buster
- Associated personnel and support boats

Because CNIC oil spill response equipment is assigned to specific facilities, it was not obtained or configured to be easily transportable or sustainable in the field. It was also generally designed for use in calm waters, harbors or ports, and not very suitable for use in open-ocean or exposed bodies of water. Given the CNIC system capabilities and lack of mobile logistics support, the CNIC equipment was initially co-located with SUPSALV, so the Navy (SUPSALV) could provide logistics support and simplify deployment, system operations, and crew support before follow-on deployment. CNIC distributed a concept of operations (CONOPS) with stability tables to ensure the ICP task force leaders understood the capabilities and limitations of CNIC's smaller Kvichak skimmer systems. CNIC equipment and operators fell under ICS Houma or Mobile if it was not deployed to a Navy Base (Pensacola Naval Air Station for example). However, CNIC exercised oversight remotely similar to how SUPSALV did with SUPSALV assets.

2-2 Issues Operating in Incident Command Structure (ICS)

SUPSALV has operated as a member of a federalized incident command system in the past including the federalized response to Hurricanes Katrina and Rita. This DWH incident resulted in creation of multiple ICPs and SUPSALV's role required interaction at multiple levels within the organization. As can be expected, there were challenges associated with operating in such a expansive organization. They included:

2-2.1 Multiple Lines of Authority.

Because ICP Houma and ICP Mobile each had lines of authority, both independently issued direction to SUPSALV. SUPSALV was unable to adjudicate Mobile and Houma's conflicting requests and requested relief from the Area Commander in Roberts, LA. On 6 May the Federal Reserve Asset Staging Unit in Gulfport, MS began reporting to the Area/Unified Command (Roberts, LA) vice ICP Houma. ICP Houma and ICP Mobile then had to submit requests through Area/Unified Command for SUPSALV oil spill response (OSR) equipment and assets. Once the assets were allocated, the ICPs had the authority to deploy operationally. Items that were staged but not deployed were occasionally transferred from one ICP to another without SUPSALV knowledge. This led to ESSM personnel "discovering" the gear they were intending to utilize was not present or available. Early on SUPSALV learned to periodically send personnel to visually check on equipment in staging areas without assigned SUPSALV personnel.

2-2.2 Turnover of Key Contacts

SUPSALV manned each of their key positions, Houston Source Control ICP and Gulfport, MS State Pier Command Van, with two fully committed senior staff members who each spent approximately 50% of their time on-site and the remaining 50% of their time back at NAVSEA HQ but still engaged on a daily basis in the conduct of the operation. In contrast, key Task Force Leaders and ICP management team members invariably rotated off the job after around 2 weeks. It became apparent that the turnover process was not comprehensive and issues and routines worked out with the past holder of that post had to be resolved anew with the current holder of the post. During the operation, a call to the ICP switchboard rarely found an operator who knew who was occupying what position within their own organization. In an attempt to work with this deficiency, the SUPSALV team had their reservist or visiting ED Diver trainee make almost daily contact with each Task Force and ICP POC to see who was occupying the key positions and if they had a copy of the Skimming and Booming Ops CONOPS and knew who and what SUPSALV was, where our equipment and personnel were, and what they were doing.

2-2.3 Responsible Party Coordination

BP played a significant role in coordinating the oil spill response. They were willing funders of the mission and assigned people who were knowledgeable and productive to the coordination task. BP's specific impact on SUPSALV's operation was the contracting of vessels of opportunity to support off shore skimming, boom handling boats for MARCO Class V skimming, and the OSVs used for boom laying and MARCO Class V tending. BP also demonstrated their responsiveness after SUPSALV identified the requirement for knuckle boom cranes for the VOSS boats.

2-2.4 Politics

Elected officials from local county and state organizations attempted to obtain and control resources. These local organizations served as “response managers” for their jurisdiction. They were ostensibly part of the ICS but exhibited considerable influence and independence in the allocation and control of OSR teams and equipment, including those of SUPSALV. Examples of this competition for assets and independent resource assignments were the “Skunkworks”, the self-named State-operated pollution response team answerable to the State of Alabama only. This organization requested and received SUPSALV booming teams to protect the entrance to Mobile Bay. In their enthusiasm to protect the bay, they deployed the boom in a fashion that did not account for the significant tidal currents, the boom was ultimately damaged beyond repair as a result. Another example of an independent response manager influencing the system was the response team from St. Tammany Parish which requested, obtained, and kept SUPSALV MARCO skimming assets in the Slidell, LA area for the duration of the spill even though oil never made it to the Parish waters.

2-2.5 Obtaining Critical Resources

SUPSALV was dependent on the Area Command (OSVs) and Incident Commanders (smaller VOOs and barges) for obtaining assets to support their assigned mission. SUPSALV’s OSR equipment is highly specialized but dependent on vessels of opportunity for supporting their deployment. The vessels of opportunity included capable OSVs for offshore high speed skimming, OSVs for laying oil containment boom, and an OSV for assisting in maintenance of the MARCO Class V Skimmers. Smaller boats were needed to work with the near-shore MARCO Class V skimmers. Shore and barge-based cranes were used for management of the boats in port, and jack-up and spud barges were used to facilitate off-shore use of the MARCO Class V skimmers. Generally, when resources were required, they were identified and made available. There was a vetting / learning process associated with the provisioning process though. For example, for smaller boats to support MARCO Class V skimmers, initially outboard powered runabouts were provided, then cabin cruiser type vessels, then, eventually, commercial shrimpers that were suitable for the task were assigned. Because there were conflicting and competing requests for these same resources, SUPSALV requests were subject to ICS prioritizations.

2-2.6 Requests for Information

Numerous (often 3 or 4 times daily) requests for information within the Navy left some staff working a greater portion of their time providing tailored responses and less time managing their tasks. An example was a 4 May request for information to be used in to prepare Deputy Assistant Secretary of Defense Whelan in his testimony before Congress. Three simple questions were asked, but the questions, as they were processed and forwarded through the OSD Policy Crisis Center and OPNAV Navy Crisis Action Team THREE Resource Situation Awareness Center (RSAC) Pentagon, to 00C Deputy, Michael Dean, to 00C Admiralty Attorney,

Richard Buckingham, and finally to the Command Center in Gulfport became a high priority, stop everything drill requiring immediate, high level attention.

After staffing ad hoc responses to numerous “good ideas” coming from both the public and private sector, the National Incident Commander established an Interagency Alternative Technology Assessment Panel (IATAP) to provide an established process to fairly evaluate the merits of plausible improvements to the oil cleanup process. The establishment of this assessment program took a significant load off the Navy staff, reducing the number of distractions and demands on their time for issues relating to suggested process improvements. Examples of the IATAP evaluations SUPSALV personnel took part in are included in Para 5-3.3.

2-2.7 Access to Fresh Oil

Crude oil bubbling to the surface has a different consistency than oil that has been floating for a couple of days. The aged oil turns into a thick, slimy mess and becomes contaminated with floating ocean debris. Clean fresh oil is more easily handled and can be separated from the water efficiently by SUPSALV’s skimmer systems. For these reasons, the SUPSALV VOSS teams always desired assignment to the Gulf waters in the vicinity of the flowing oil. Conflicting priorities at the well site didn’t always allow that access. Because multiple strategies were being employed; In-situ burn, mechanical recovery (large volume skimmers), and dispersal, SUPSALV’s VOSS teams were not always given access to the fresh oil. The decision makers were balancing multiple priorities but from SUPSALV’s perspective, their VOSS OSVs which were manned and ready to collect oil were not always placed where the fresh oil was.

2-2.8 Timely Aerial Reconnaissance.

Offshore Support Vessels (OSV) with NOFI VOSS skimmers deployed are limited to traveling at about 3 knots. Other VOSS skimmers are slower, at about 0.8 kts. MARCO Class V skimmers move at 1.0 kts unless rigged for towing where they are capable of 5 – 6 kts. Retrieving gear and redeploying it is time consuming. Because of this slow pace of advance, sending VOSS or MARCO belt skimmers off in search of oil spotted the day before was ineffective and wasteful. The delay between sighting oil and getting assigned to a patrol / skimming area meant that the skimmers were often looking for the spotted pockets of oil from the height of eye of the wheel house rather than having a timely aerial reconnaissance locate the oil.

In an attempt to improve timeliness of oil spotting reports, the Navy activated its airship, MZ-3A which arrived in the Gulf Region on 6 July to assist in spotting and monitoring oil and support command and control of skimming operations. The Airship began operating from a mooring three miles Southeast of Mobile Bay but was later based at Jack Edwards Airport AL, just east of Mobile Bay. It typically flew six-hour sorties and would report surface oil sightings to the task force. Communications with the afloat task force and ICP leadership proved difficult and the airship did not make the contribution that was hoped for.

2-2.9 Safety Policy

Generally, the ICS imposed prudent safety precautions in response to potential environmental health issues associated with crude oil cleanup. Examples of this included Tyvek suit requirements when coming into physical contact with oil, life jackets for workers within 15 feet of the water's edge (whether shore side or on a vessel), and pants, steel toe shoes and hard hats were required on vessels and at all staging areas. They enforced their policies by vigorously monitoring vessels and their crews as well as beach cleanup teams and carefully screened entrants to the staging areas for proper attire. These policies often conflicted with the hazards posed by the heat in the Gulf of Mexico during the summer creating other safety risks for workers such as heat exhaustion or heat stroke.

Training requirements (specifically Hazardous Waste Operations and Emergency Response Standard also known as HAZWOPER) were identified for which the SUPSALV team needed to prove their qualifications or take the prescribed training. Even though all ESSM staff produced their certificates and/or training records, each staging area and decontamination facility still wanted to require that all persons entering the facility complete a time consuming and unnecessary safety brief.

One area where no policy was in effect and precautions should have been taken was a way to ensure compliance with safe petroleum vapor exposure levels. SUPSALV manned three VOSS skimming vessels which were chartered by BP from Resolve Marine and SEACOR. These ships were not equipped with air monitors or crew members trained to conduct monitoring. 00C's crews were neither equipped nor trained either. During at sea operations when the ships were skimming heavy patches of oil, the vapors entered one ship's superstructure and were ducted throughout the pilot house. Crew members exposed to these vapors developed headaches and made their shore side management teams aware of the issues, who then informed the ICP in Houma. ICP took action immediately and deployed air monitoring equipment and a qualified industrial hygienist, who was trained to assess vapor exposure issues, to the vessel. The crew members were provided individual exposure indicators and testing was done on deck and inside the ship. Results indicated that unsafe conditions did not exist (when the assessment was conducted) but this testing capability should have been in place prior to the vessel's deployment. This is an issue SUPSALV will follow up on and ensure a capacity through self reliance or contracted capability is in place for future operations.

Chapter 3 - Tasking and Funding

3-1 USN/USCG Interagency Agreement (Obligation) and Mission Assignment

The 1980 Interagency Agreement between the United States Navy and the United States Coast Guard for Cooperation in Oil Spill Clean-up Operations and Salvage Operations provides conditions and procedures under which the USCG can request U.S. Navy support for oil spill clean-up or salvage equipment for non-Navy oil spills and which the U.S. Navy can request USCG support for U.S. Navy jurisdiction oil spills. The agreement also outlines reimbursement procedures and policies.

The Federal On-Scene Coordinator is responsible for ensuring proper cost documentation records are maintained. Activities providing assistance in support of clean-up operations are entitled to reimbursement for the following items:

- Travel, per diem, and overtime costs for personnel
- Rental costs as approved, for non-expendable equipment
- Replacement costs for expendable materials
- Replacement or repair costs for non-expendable equipment which is damaged during conduct of the operation
- Transportation costs
- Incremental operating and contract costs

This reimbursement process not only includes operating costs (to cover ESSM contractor salaries and operating expenses) but includes replacement costs for expendable items and/or rental rates for non-expendable equipment. (USCG used rental rates to reimburse SUPSALV for use of non-expendable equipment after the EXXON VALDEZ oil spill.)

3-2 Initial Tasking and Response.

As highlighted in the Chapter 1, Introduction, SUPSALV responded to verbal tasking on April 27 and formal message tasking on April 28, 2010. Other key milestones associated with SUPSALV tasking are provided below.

Date:	Event:
4/20/10	Deepwater Horizon well explodes and rig catches fire. (21:45)
4/22/10	Deepwater Horizon rig sinks in 5,100 feet of water. (10:21)
4/23/10	Incident federalized, National Incident Command Structure initiated
4/27/10	Using in-place ISSA, USCG verbally requests SUPSALV commence moving OSR equipment fm CONUS ESSM bases to GOM. SUPSALV/ESSM Contractor begin pack-out.
4/28/10	Written request and funding received, equipment begins moving
4/29/10	First equipment arrives in Gulfport, MS. Received first USCG MIPR for $3.5M for boom and skimming capability. Spill of National Significance declared
4/30/10	First boom deployed offshore
5/07/10	OSV VANGUARD with VOSS deployed
5/11/10	Directed to ship boom and skimmers from ESSM Alaska
6/08/10	MARCO Class V near shore skimmers deployed across nine locations in Gulf

6/09/10	Final SUPSALV protective boom laid totaling 63,200 feet.
7/15/10	BP installed capping stack on well. Leak secured
7/29/10	Demobilization of SUPSALV's offshore skimmers begins
8/16/10	Demobilization of SUPSALV's near-shore skimmers begins
9/13/10	First return shipment of equipment
9/20/10	Last equipment completes decontamination. Navy issues final SITREP.
10/04/10	Last SUPSALV personnel and equipment depart Gulf Region.

Table 3-1. Key Deepwater Horizon Events and Dates

3-3 Beach and Gulf Response Task

As mentioned in Chapter 1, SUPSALV's support to the Deepwater Horizon oil spill was initiated based on 27 April 2010 verbal orders and a 28 April message confirmation. Specifically, the On-Scene Coordinator, USCG Sector New Orleans, requested immediate SUPSALV support in response to the pollution incident in the Gulf. The specified requirement was for oil spill control and recovery equipment and operating personnel.

This request immediately generated "Prepare for Shipment" orders for both CONUS ESSM facilities for major portions of SUPSALV's deployable OSR gear. Two SUPSALV Oil Pollution Program Engineers and senior ESSM staff immediately deployed. They arrived in the Gulf and began preparing for the equipment arrival. En route, the destination for equipment and personnel was changed from Houma, LA to Gulfport, MS. SUPSALV directed trucks to the Naval Construction Battalion Center, Gulfport, MS before further redirecting them to State Pier, Gulfport, MS, which would soon become the official "Navy Asset Staging Area".

SUPSALV's earliest tasking was to prevent damage to Mississippi's off shore islands. This focus was later expanded to provide coverage west to Venice, LA, the central Gulf coast of Mississippi and Alabama, and east to Pensacola, FL. As the operation continued, SUPSALV began deploying its Vessel of Opportunity Skimmer Systems (VOSS) in support of source control operations.

SUPSALV managed these operations from the State Pier in Gulfport where they installed command vans and maintenance vans and stored the equipment until it was issued. A collection of USCG tasking messages and Requests for Assistance (RFA) documents are provided as Appendix B.

3-4 Well Head/Houston Engineering Tasking and Underwater Survey Task

SUPSALV Deputy, Michael Dean, reported to the BP Crisis Center in Houston on 2 May to be the conduit for Department of Defense assistance requests. He and CAPT Keenan rotated in that role throughout the duration of the incident. In this role, the SUPSALV representative meet daily with BP engineering teams and identified what role Navy could play in supporting the operation. One of the tasks identified and later accomplished was for SUPSALV to perform an underwater survey of the oil rig to aid in the Justice Department investigation.

3-5 Funding Process

As the operation progressed and funds were consumed, SUPSALV would notify the Unified Area Command when the balance was low, and additional funds were authorized to cover foreseeable future operations. Funding is summarized in Table 3-2.

Date	Amount	Task
02 May 2010	$ 3.5M	Initial tasking
21 May 2010	$ 3.75M	Mod 2 – increased funds and extended duration
18 June 2010	$ 5.5M	Mod 3 – increased funds and extended duration
02 July 2010	$ 0.138M	Mod 4 – Requested support to test advanced skimming technologies
21 July 2010	$ 8.524M	Mod 5 – increase funds and extended duration
Total:	$ 21.412M	

Table 3-2. USCG Funding Authorization Dates and Amounts

Funds provided used to replace equipment removed from service and determined to be beyond economical repair (BER) at the end of the operation are listed in Appendix B.

3-6 Replacement of Items Beyond Economical Repair vs. Rental Rates

Reimbursement for the operation was a subject of great discussion between Unified Area Command (UAC), the National Pollution Funds Center (NPFC), and SUPSALV from the beginning of the operation. Rental rates, based on a depreciation formula to capture recapitalization costs, are specifically allowed but not prescribed in Section VIII (c) of the Interagency Agreement (addressed in Section 3-1). In determining the applicability of rental rates, past practice was consulted. Typically, for smaller routine operations, the Navy had not charged rental rates to the Coast Guard. Rental rates were last used for the Exxon Valdez response, which was after the Interagency Agreement went into effect but predated OPA-90. Subsequently SUPSALV's practice has been to apply rental rates and charge non-government entities for use of SUPSALV equipment.

By Mid-June the issue of rental rates and replenishment of items BER had not been resolved. On June 21, SUPSALV had been maintaining a rental rates spreadsheet and forwarded it to the Coast Guard requesting action. SUPSALV made the case that the existing funding Request for Assistance (RFA) and its modifications to support SUPSALV's operation had been structured to support ongoing operational expenses and did not include recapitalization/depreciation of deployed gear. As of June 21, the rental rate charges were accumulating at a rate of $2M per week with a total of $16M accumulated to date. These figures were forwarded to the Coast Guard on 21 June requesting a funding document to provide separate funding for recapitalization.

Over the following month negotiations resulted in a solution that allowed for documenting the condition of demobilized equipment and determination that the equipment was damaged BER. 213RR forms were prepared for equipment identified as BER. This included: all 42" and 26" oil containment boom that had been in the water for greater than 60 days, all deployed NOFI Current Buster Vessel Skimming Systems, and a 50,000 gallon oil recovery bladder that had been damaged during decontamination. The UAC required an approved USCG inspector actually see the equipment SUPSALV claimed to be BER and concur with the assessment.

Picture documentation of the damage was also required to be submitted. The USCG Form 213RR was used to document the equipment BER and certify replacement costs. However, no funding was provided for machinery depreciation. Although a case could be made that the MARCO skimmers were substantially worn over the period of use, they were not unusable at the end of the operation. USCG Form 213RR's were used to replace key MARCO skimmer components including 18 bunker belts and 54 suction and discharge hoses that had been significantly worn and were beyond continued use. The Navy accepted this type of loss in exchange for the replacement of the major items (i.e. booms and NOFI skimmers).

3-7 Replacement by SUPSALV vs Replacement in Kind

A second challenge SUPSALV faced was to get the Coast Guard to accept the concept of providing funds to procure replacement equipment identified as BER. The suggested alternative, was to let the responsible party (BP) provide or procure replacement material also known as "replacement in kind". SUPSALV was resistant to this alternative because the procured material needed to meet very specific Navy and Military Specifications. The Navy specs require first article testing, operational testing, and destructive testing. They include packaging requirements (to simplify deployment), specialized fittings and configuration for integration into the ESSM System. The logical means to ensure the replacement material met these requirements was to allow SUPSALV to perform the procurement, conduct the testing to ensure the replacement items met Navy specifications and could be integrated into the ESSM system. The Coast Guard did accept the Navy position and authorized reimbursement for Navy procured replacement material.

Chapter 4 - Mobilization

SUPSALV initially directed deployment from ESSM Cheatham, VA and ESSM Port Hueneme, CA. Trucks began rolling on 27 April and without specific guidance, the intended destination was Houma, LA, the site of the UAC. En route, SUPSALV was told their destination was Gulfport, MS but not specifically where. The SUPSALV advance team made arrangements with the Naval Construction Battalion Center, Gulfport to take delivery but by the time the first trucks were arriving, the Coast Guard had negotiated for space at the State Pier in Gulfport to which the remainder of the trucks were diverted.

4-1 Initial Mobilization

SUPSALV initially responded with the deployment of 66,000 feet of oil containment boom, 2 salvage skimmer vans, 9 boom handling / tow boats, 1 High Speed Skimmer System (VOSS Current Buster) and 7 modular MARCO MK V skimmers. Other equipment included 4 shop and rigging vans, 2 command vans, 4 bunk vans, 4 work boats and 45 boom mooring systems. This represented a total of 57 truckloads from Port Hueneme and Cheatham ESSM bases. The trip from Cheatham generally took 2 days and from the west coast, 3 days. On 30 April, the order was placed for 9 wide-body skimmers, 5 from Cheatham and 4 from Port Hueneme. These wide loads were delayed while permits were arranged for interstate travel. The 30 April order represented an additional 18 truck loads.

By default, the equipment destination was State Pier, Gulfport but in some instances, where allocation assignments had already been made, trucks were diverted to Venice, Louisiana, ICP Houma's staging area. ESSM's transport was effective and by 4 May, 79 of 85 truckloads had arrived in-theater and by 6 May all of the originally shipped equipment has been received and staged at the designated locations throughout the Gulf Coast per USCG direction.

Figure 4-1. ESSM equipment sitting on trailers recently arrived at State Pier, Gulfport, MS on 2 May waiting to be unloaded.

Additional equipment was ordered as SUPSALV identified the need to bring the gear into the Gulf. On 1 May, additional mooring systems were ordered. By 10 May, the number of MARCO

Class V skimmers had grown to 16, VOSS systems to 4, and total boom in the Gulf to 98,000 feet.

4-2 Follow-on Mobilization

On 8 May, the Coast Guard issued a Request for Assistance for additional boom and OSR equipment from the ESSM facility in Alaska. SUPSALV's Alaska ESSM facility is located at the Joint Base (Air Force – Army) Elmendorf – Fort Richardson and is ready for immediate transportation. This request made it through channels to SUPSALV on 10 May. The shipment request was processed and routed through DOD (TRANSCOM) for Air Lift to New Orleans NAS, Belle Chasse, LA.

By 12 May, the Alaska ESSM Equipment including five Boom Vans and four Mooring Systems have arrived in Belle Chasse and were transferred to Amelia National Guard Warehouse Facility. Remaining SUPSALV ESSM OSR gear (Vessel Skimming Systems (3), Boom Handling Tow Boats (2), Boom Vans (4), Mooring Systems (10), and Oil Storage Bladders) was scheduled to start arriving at New Orleans NAS, Belle Chasse on 13 May. TRANSCOM was continuing to work issues concerning adequate weight handling and lifting equipment needed to offload equipment from the aircraft at New Orleans NAS. Boom Vans and Mooring Systems were initially stored in Amelia and the other items were immediately shipped to Gulfport, MS.

Figure 4-2. May 11, 2010 image of sailors unloading ESSM Alaska oil containment equipment from an Air Force C-17 transport aircraft at Naval Air Station Joint Reserve Base New Orleans.

Chapter 5 - Operations

SUPSALV's support for the DWH oil spill could be divided up into traditional OSR support - booming and skimming, and engineering support at BP's Houston headquarters and at the well site. Section 5.1 addresses the traditional oil spill response which was accomplished on the Gulf Coast and in the ocean waters at the Mississippi Canyon 252 (site of the well head).

5-1 Managing Beach and Gulf Water Operations

5-1.1 Gulfport Base of Operations

SUPSALV was allocated space to operate at the Mississippi State Port Authority at Gulfport often referred to as the State Pier, Gulfport MS. This facility is a bulk, break-bulk and container seaport which encompasses 204 acres and has nearly 6,000 feet of berthing space. The State Pier facilities allowed for very effective management, maintenance, receipt, staging, and allocation of Navy OSR equipment.

Other assets at the port included:

- Fenced and gated facility that provided excellent security and enabled CAC badge access.
- Fixed and mobile cranes.
- Pier space for configuring and equipping the OSVs.
- Parking lot space for a SUPSALV Base of operations (Command Vans, Shop Vans and other ESSM trailers).

An overhead view of the State Pier, Gulfport with an outline of the space allocated to the Navy is provided as Figure 5-1 and an image of SUPSALV's command vans used as a base of operations at the Gulfport State Pier is provided as Figure 5-2.

Figure 5-1. Overhead view of State Pier, Gulfport MS with area allocated for Navy use during DWH Operation highlighted in green.

Figure 5-2. Shop Vans and Command Vans arranged for use in State Pier, Gulfport MS.

5-1.2 Scope of Effort

The Deepwater Horizon Oil Spill Response effort was the largest oil spill response since EXXON VALDEZ incident on 24 March 1989. It was very comparable in scope and effort and required full deployment of all suitable continental United States ESSM oil spill response gear. A table comparing SUPSALV's response effort is provided as Table 5-1. A chart documenting the number of personnel deployed is provided as Figure 5-3. Figures 5-4 and 5-5 document the deployment of ESSM equipment at a single moment in June in the Gulf Region.

	Deepwater Horizon	EXXON VALDEZ
Date of Incident	20 April 2010	24 March 1989
Skimmers Deployed	5 VOSS / 18 MARCO Class V	2 VOSS / 20 MARCO Class V
Days of Operation	159 Days	205 Days
Boom Deployed	63,200	25,000
No. of Operators	140+	100+
Oil Recovered	23,205 BBLS	125,000 BBLS

Table 5-1. Comparison of SUPSALV's OSR Effort – Deepwater Horizon – EXXON VALDEZ

One of the differences between the Deepwater Horizon response and the EXXON VALDEZ response is the amount of oil recovered. A number of differences between the two operations can explain the relatively small amount recovered with DWH as compared to EXXON VALDEZ. They include:

- DWH oil was released from a depth of 5,100 feet whereas EXXON VALDEZ oil was released very close to the surface.
- DWH oil was released nearly 50 miles from land in a large body of water and EXXON VALDEZ oil was released just south of Valdez, Alaska in a confined sound.
- Dispersants used during the oil release prevented much of the DWH oil from reaching the surface.
- Other organizations responded to the DWH spill where as SUPSALV was the only major responder to EXXON VALDEZ and SUPSALV was able to position its skimmers to best collect the oil.

As with all SUPSALV operations, a daily Situation Report (SITREP) was issued at the end of the day. This email message accounted for equipment and personnel status, operation summary, intentions in the next 24 hours, and issues needing resolution. A Excel spreadsheet detailing the numbers and location of the equipment in the Gulf of Mexico operating region was attached to the message. Samples of these messages and spreadsheets are provided in Appendix C.

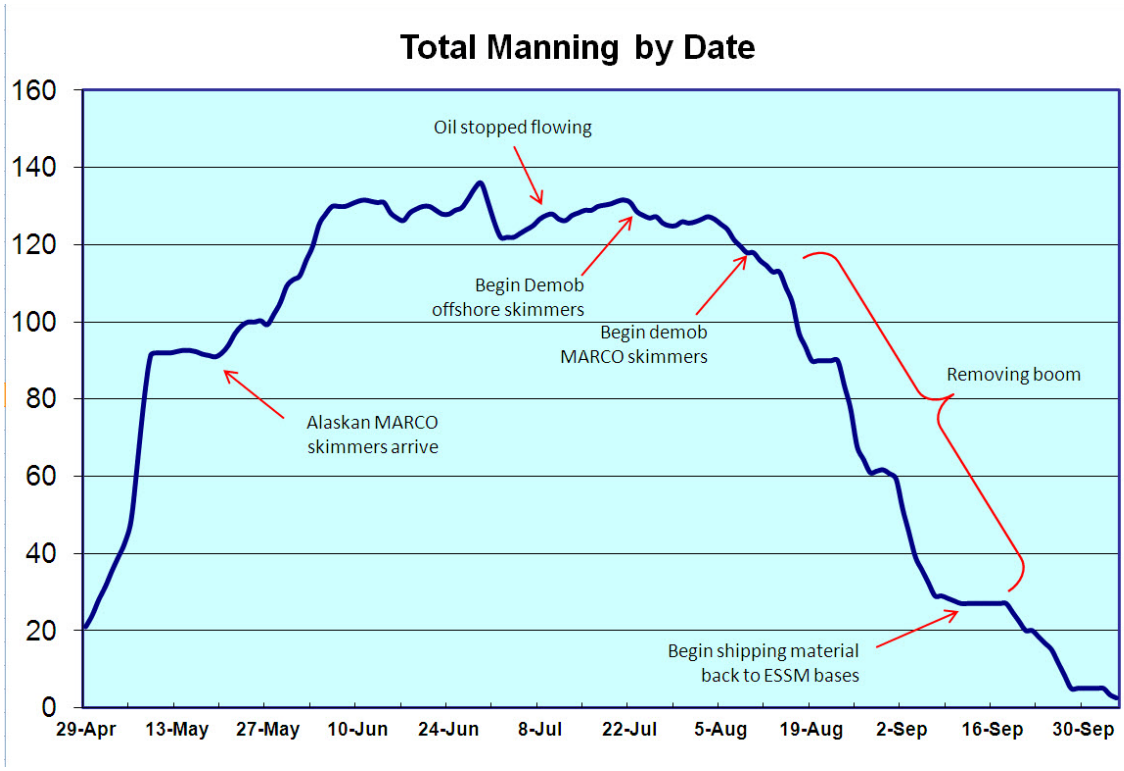


Figure 5-3. Manning by ESSM contractor (including subcontracted National Response Corporation personnel.

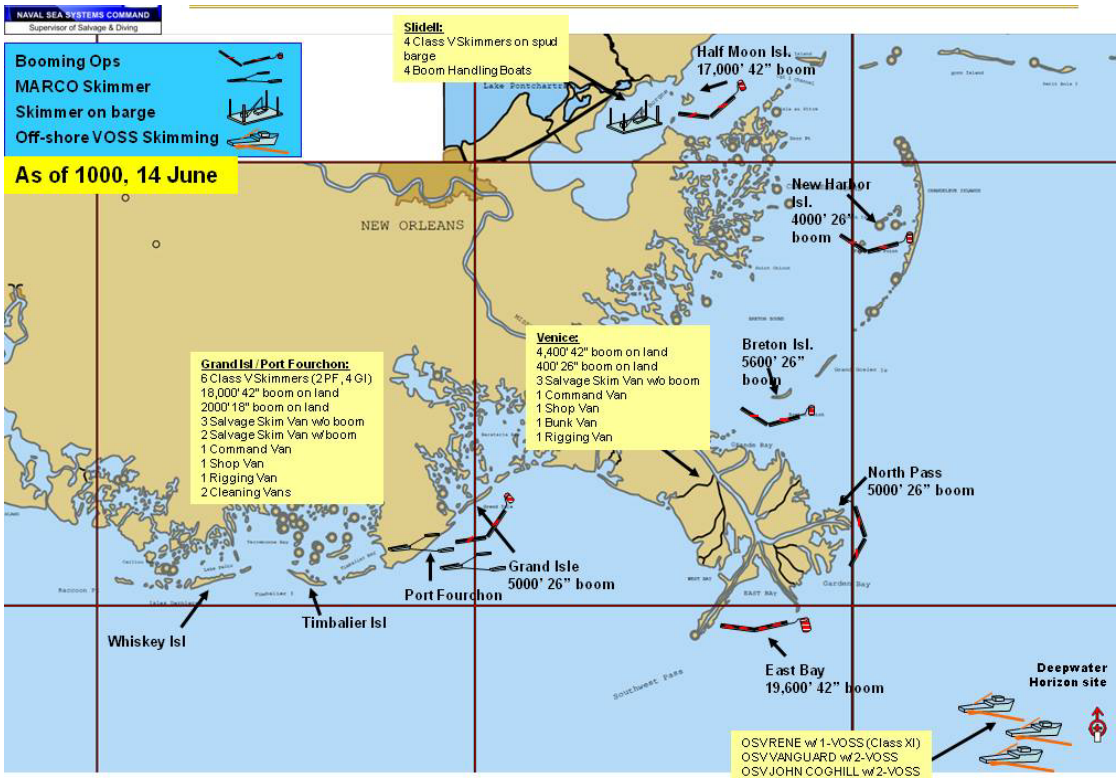


Figure 5-4. Equipment Deployed in support of ICP Houma as of week of 14 June 2010.

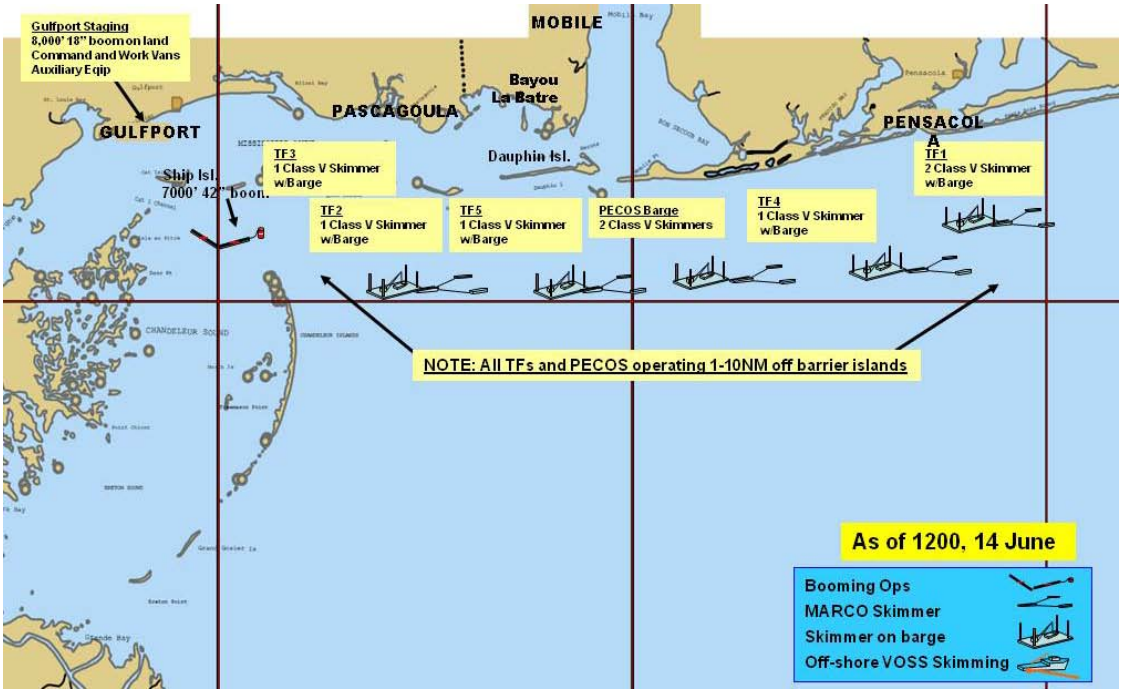


Figure 5-5. Equipment Deployed in support of ICP Mobile as of 14 June 2010.

5-2 Near Shore Skimming

5-2.1 Systems Used.

SUPSALV's near-shore skimming capability is provided by MARCO Class V skimmers. The two models employed to the Gulf Region were:

System # P16400 - a Class V 36-Foot Sorbent Belt Oil Skimmer. (Wide body) This is a 36-foot aluminum vessel that has a modular pilot house and is fitted with a rotating sorbent belt for oil recovery. The skimmer is self-propelled and can function in stationary, free skimming, or towed V-boom configurations. When used offshore or in open water, the skimmer is towed in a V-boom configuration by two boom handling boats (SUPSALV item No. P03100) or vessels of opportunity (commercial fishing vessel or work boat). This skimmer has a 12 foot beam and requires special shipping permits which are issued state by state.

System # P16100 - a Modular Vessel Skimmer System P16100. This is a modular 36-foot aluminum skimming vessel fitted with a rotating sorbent belt for oil recovery. The system is packaged in three modules: two separate 8' x 36' modules plus a cabin top on a separate pallet. The first large module contains the skimmer body. The second large module contains a separate sponson rack unit. The sponson rack unit contains the skimmer sides, boom, spill recovery bladder, spare parts, tools, rigging, and the ancillary equipment necessary to complete the system. The design of the system permits rapid field assembly with minimal support. The skimmer is self-propelled and can function in a stationary, free-skimming mode, or towed in the normal operational V-boom configuration.

Figure 5-6. MARCO Class V being towed by its booms by two gulf shrimpers.

5-2.2 Near Shore Employment.

These systems were used interchangeably and deployed across the entire area of operation. Eighteen of these systems were deployed across the Mississippi, Alabama, and Louisiana coast including two that were shipped from Alaska on May 11th. Skimmers deployed near harbors, like Grand Island, LA and Pascagoula, MS, were deployed and performed skimming operations near shore and in the harbors. Those deployed to offshore locations, like Dauphin Island or off Pensacola, FL, were deployed on barges which provided a safe platform for these low speed vessels. Advantages in deploying with a barge equipped with a crane included:

- Ability to stay on site overnight (MARCO Skimmer hoisted onboard barge).
- Easier provision of logistics (fuel, crew facilities).
- Ability to survive unexpected high seas and sustained winds.

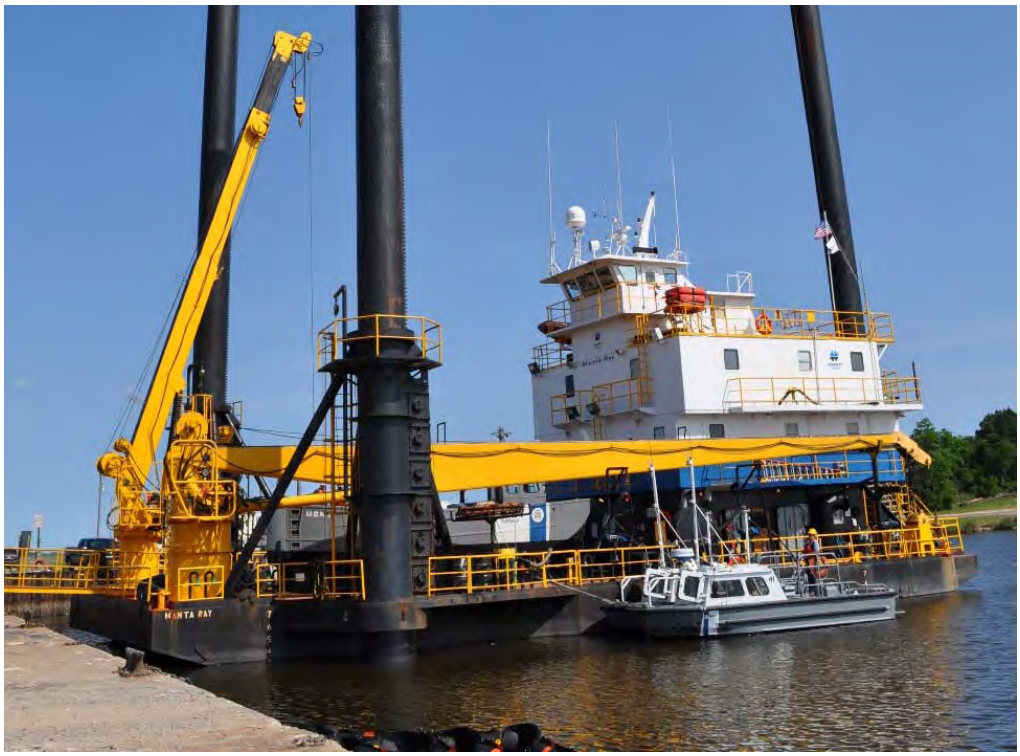


Figure 5-7. MARCO Class V loaded on jack-up barge *Manta Ray on 9 May 2010.* The Jack-up barges were instrumental in forward deploying the near shore skimmers to remote locations such as Dauphin Island.

MARCO skimmers normal mode of operation is to be towed by two assigned tow boats. SUPSALV deployed nine boom handling boats to the Gulf and requested additional vessels to support the remaining skimmer deployment. The most suitable vessels provided were commercial Gulf fishing vessels. These boats typically had at least 300 HP engines, a strong attachment point for towing, and true offshore sea keeping capability. Initially, the Federal

Resource Coordinator proposed smaller sport fishing boats and pleasure craft but after clarifying the requirements, appropriate commercial-duty craft were obtained.

In Grand Island, LA, 2 of 4 skimmers operated in free skimming mode. That is, they operated without tow boats but under their own power with rigid collectors spread ahead of the sorbent belt. This mode was effective in narrow channels and tight harbors and afforded a means to collect oil that had naturally pooled in pockets.

5-2.3 Management Challenges

With eighteen Marco skimmers deployed, servicing the skimmers became a challenge. Oil had to be offloaded, supplies provisioned and mechanical servicing performed. SUPSALV provided these services using the Offshore Support Vessel (OSV) BAYOU BEE which was put on contract on 12 June. This vessel, provided by the Federal Resource Coordinator, can be seen in Figure 5-8. She was configured and equipped with SUPSALV vans containing spares and servicing equipment, a mobile crane capable of lifting a MARCO skimmer on deck, and the means to take the skimmer's oil from the towed bladder or the 40 bbl onboard sump. Employing the BAYOU BEE proved to be a effective means to provide service to a widely distributed fleet of skimmers.

Figure 5-8. Stern deck of OSV BAYOU BEE configured with crane and shop vans to provide mobile MARCO Class V skimmer maintenance.

A second challenge SUPSALV faced in managing the operation of 18 MARCO skimmers across three states was the unfamiliarity of others in the response organization with the MARCO

skimmer system and their tendency to request employment in a manner incompatible with the system's capability. It was expected the MARCO systems could be moved around and reassigned great distances from their base of operations. In reality, these vessels move very slowly and traveling great distances exceeded what a skimmer could accomplish in a day and afforded no opportunity for crew rest. On 15 June a vessel assigned to the Pensacola's Task Force 3 was moved by inexperienced tow boat operators without the ESSM skimmer crew aboard. The maneuvering resulted in capsizing the skimmer and placing it out of commission for the remainder of the operation. After that event, the SUPSALV team prepared a Concept of Operations (CONOPS) guide for MARCO Class V skimmers which explained the capabilities and limitations of the systems. Once ICS managers were provided these operations guide, a better understanding of their employment was achieved. A copy of the CONOPS guide is provided in Appendix A. A more detailed list of MARCO skimmer operational issues and observations is provided in the DWH Lessons Learned document, Chapter 7.

5-3 Open Ocean Skimming

5-3.1 Systems Used

SUPSALV deployed two types of Vessel of Opportunity Skimmer Systems (VOSS) to the Gulf of Mexico. Five total systems were deployed, four NOFI High Speed Current Busters and one MARCO Class XI skimmer system. A basic description of these systems follows:

MARCO Class XI System Sorbent Belt Oil Skimmer System. The MARCO Class XI consists of a filterbelt module, an induction pump, a squeeze roller assembly, and an offloading pump. The skimmer assembly is designed to be towed through spilled oil and pick up the water and oil emulsion. As the mixture flows up the filterbelt, the oil and water separate. The water passes through the belt while the oil and debris continues on. A scraper located at the top of the belt scrapes off solid debris and heavy oil, while the oil entrained in the belt is forced out by a squeeze roller. The oil then drips into a hopper, where it is eventually pumped to a support ship or other vessel by the offloading pump. Other major components include components include: two 55' sections of standard 42" boom to herd the oil toward the skimmer belt, an outrigger assembly for separating the outboard end of the boom from the hull of the ship, a hydraulic power module to provide hydraulic power for the skimmer and pumps and a knuckle boom crane used to lift and maneuver the system components.

Figure 5-9. VOSS Class XI Sorbent Belt Oil Skimmer deployed on OSV RENE pulling through a thick pocket of oil.

NOFI High Speed Current Buster VOSS. The Current Buster is similar in that it uses boom material to herd the oil but the boom, manufactured by NOFI, is shaped to maximize oil capture and containment. The High Speed Current Buster Skimmer consists of a front sweep (standard opening 65 ft.) for guiding oil product into the combined collector/skimming device and then into the separator pocket where the oil is recovered by a simple pump or a skimmer. SUPSALV outfits the Current Buster system with 3 skimmers, a Lamor Model LWS-50 weir-type skimmer, a Douglas Engineering Skim-Pak SK0620 vacuum system, and a Lamor Minimax 12 brush wheel-type skimmer. Any of these skimmers can be used to pump or vacuum oil from the pocket to the support vessel. An outrigger assembly consisting of three light weight truss sections with an outboard float or a paravane was used provide separation to the end of the boom. A hydraulic power module operates the skimmer and pumps. The Current Buster is unique in the fact that it is capable of skimming at speeds up to 4 knots without significant loss of oil.

5-3.2 Deployment / Employment

During this operation, SUPSALV began ocean skimming onboard the leased vessel OSV VANGUARD. They loaded the equipment and configured the vessel with two High Speed Current Busters in Gulfport, MS for both port and starboard operations on 6 May and transited offshore reporting to USCG Cutter OAK (WLB-211) for assignment. The VOSS team operated several days looking for oil but did not find any of significance. During this period, the Coast Guard tasked the VANGUARD with investigating reported oil sightings due to her quick transit speeds. These diversions prevented them from completing the 50 + mile transit to the well head

operating area. They returned to port due to unsettled weather and on 15 May returned to sea and reported to the Mississippi Canyon 252 (site of the well head) for assignment. On 16 May OSV VANGUARD received assignment to an area with oil pooled on the surface and successfully deployed starboard current buster skimming system at 12:30 and reported that its pocket began filling immediately. OSV VANGUARD and her crew worked offshore for the next 3 months. She was joined by OSV JOHN COGHILL on 25 May also equipped with two High Speed Current Busters. The Class XI VOSS skimmer was initially installed on SEA SCOUT but the vessel proved unsuitable for the Marco Class XI system due to inability to weld in the area needed for the crane installation. In addition, the crane was damaged during testing. On 31 May a replacement vessel, OSV RENE, was identified to support Class XI operations and placed on hire by ICC Houma. OSV RENE completed Class XI installation, refueled and deployed to Mississippi Canyon 252 on 5 June. Over the course of the operation, these vessels and systems proved to be quite effective, collecting 21,176 barrels of product.

Figure 5-10. OSV VANGUARD pulling two NOFI High Speed Current Busters on the afternoon of 28 May, 2010. The port side NOFI is deployed with an outrigger assembly and the starboard side NOFI is employing a paravane to hold the boom open.

The crews experienced very satisfactory results, with the highest product recovery rates occurring during the period 12 June through 28 June. During those 16 days more than 11,400 barrels of oil were recovered by the three SUPSALV VOSS ships. This period of high productivity ended with the arrival of Hurricane Alex. After the weather settled, the ships again successfully collected significant quantities of oil until the leak was secured on 15 July.

The VOSS crews faced various challenges during their time at sea. One of the biggest was the amount of debris that was encountered at sea. The booms collected natural floating debris like sea weed, grasses and jellyfish, oil displaced sea life such as sea cucumbers, and various plastic and trash items. This material would overwhelm the grinder/macerators associated with the weirs and had to be removed to maintain pump effectiveness. Figure 5-11 shows a weir type skimmer pump being lifted from the Current Buster pocket for cleaning. While the pumps could be serviced onboard, the debris in the pocket was more difficult to remove.

Figure 5-11. OSV JOHN COGHILL's High Speed Current Buster weir pulled from water to allow cleaning of debris which was clogging suction.

A number of solutions were developed but none of them resulted in simple, problem free operations. Any time debris could be avoided through ship maneuvers, the ship did so. At night, the debris was impossible to see, so at first light the crew set about the task of cleaning up from the night before. A couple of solutions the crews employed to deal with the debris issues are highlighted below.

- Fabricating a removable wire mesh screen to protect the inlet suction. This removable screen needed to be hoisted out of the water for trash removal. It often was heavier than could be man-lifted and a boom/hoist needed to be rigged.
- Raking up the debris manually – Figure 5-12 shows cleanup of the Class XI skimmer on OSV RENE. On the Current Buster, which would not support crew as the Class XI would, ESSM personnel would rig a set of boat hooks for dipping into the calming pocket and removing trash.

Figure 5-12. SUPSALV crew maintaining the proper attitude while cleaning debris from the belt of the Class XI skimmer while deployed on OSV RENE (11 June 2010)

Handling the pumps, both Lamor weir and Minimax type proved to be difficult on the vessels that were not equipped with cranes. The crews had to become creative in order to lift these heavy items outboard the hull and into the VOSS pockets. Figure 5-13 shows outrigger assembly outfitted with a block and tackle to service the weir pump. On 6 June, in order to improve operations onboard OSV VANGUARD, two knuckle cranes were procured and installed both port and starboard. A set of these cranes were previously installed on JOHN COGHILL. As a result, cranes (vice outrigger booms) were used to lift skimmer systems from Current Buster pockets improving oil transfer and debris clearance efficiency. The use of these cranes proved to be such a success that as a post operation lessons learned, a knuckle crane has been incorporated into the High Speed Current Buster outfitting package.

Figure 5-13. Outrigger Assembly suspended over the side rail used to service the pump in the pocket of the High Speed Current Buster

5-3.3 Advancing Oil Spill Recovery Technology

An Interagency Alternative Technology Assessment Panel (IATAP), was established by the National Incident Commander to provide a well-defined, documented, systematic, and fair government-managed process to solicit, screen, and evaluate all suggested technologies in support of ongoing response activities related to the Deepwater Horizon spill. This greatly relieved the pressure on spill response managers who didn't have time to thoroughly respond to the constant stream of "what if" questions. Because SUPSALV showed up in the Gulf with equipment that was effective and operators that were experienced, they were asked to participate in the workgroup and RFA 121 was issued to fund GPC's participation as panelists. Their task was to help evaluate potential enhancements that were submitted and judged to be

worth considering. As a part of the IATAP, SUPSALV and GPC personnel participated in evaluation of the following systems:

- **A WHALE** – In late June, a 340-meter converted commercial oil carrier outfitted with a ventilated bow and oil separation equipment within the inner hull offered its services in support of the oil spill cleanup operation. Its owner claimed the ship could skim millions of gallons of oily water per day so the task force arranged for IATAP trials. SUPSALV through its PCCI representative, Bob Urban, participated in the 2 – 4 July trials. Results of the trials follow:
    - The large pulsing flow of water out of the jaw chambers defeated oil collection operations for most of the two day trial. Unless all waves were well below 0.5 meters, no oil could be collected. It was necessary to keep the speed below 0.5 knots as well; going faster caused enough bow wave to push surface oil away from the bow's openings.
    - Unless wing tanks were fully stripped, no significant oil would be transferred into the center cargo tanks. These tanks were not stripped during the first two test days.
    - The ship's ability to maneuver into the oil patches was impressive. The crew was able to control speed and angle of the ship to create a lee on one side of the bow.
    - The use of an oil boom to sweep the area is the most critical part of A WHALE's configuration as a skimmer. Prior to the tests, no planning or arrangements had been made to prepare the vessel to accept a boom. Attempts to attach a boom during trials were awkward at best and dangerous at worst.
    - No sufficient volume of oil was recovered during the tests therefore the IATAP was unable to fully evaluate the performance of A WHALE as an oil / water separator. The IATAP team did not see any tools with which the crew could measure the oil content or collect samples from the cascading tanks (Port and starboard wing tanks to #1 center to #5 center to #3 center) during the settling/stripping process.
- **VOSS Crabbing** – Coast Guard, NOFI representative (manufacturers of Current Buster VOSS) and SUPSALV representatives met in Houma ICP on 8 June to discuss ways to increase the efficiency of the Class XI and Current Buster systems. The ICS authorized IATAP trials to be conducted where the OSV, using its dynamic positioning (DP) system, would vary its point of attack and speed over the trial to see if improvements in efficiency could be gained. LT Shaun Hayes (00C2OA) and PCCI's Bob Urban participated in the trials using a 205' OSV and a NOFI Current Buster. The concept was to use the side of the vessel as part of the boom to channel oil to the rear of the vessel increasing the width of the skimming system. A sketch depicting the concept of crabbing is provided as Figure 5-14. A 16 June, 2011 white paper concluded single vessel skimming efficiencies could be improved by increasing the effective encounter width through use of crabbing practices. A copy of this report is included as Appendix D.

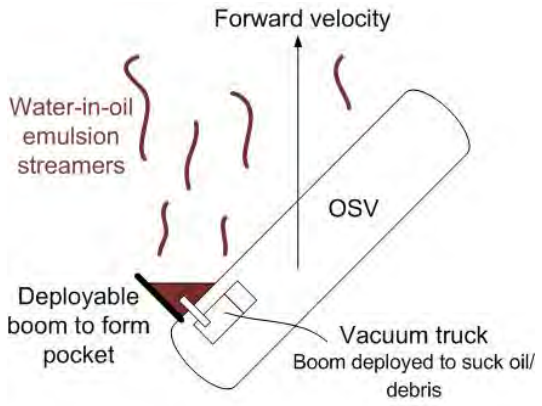


Figure 5-14. Concept of sideways motion of OSV to help concentrate oil which allows quick derigging to allow for rapid travel to a new site.

5-3.4 Performance / Results

Concentrate SUPSALV's Vessel of Opportunity Skimmer Systems were highly effective in collecting pooled surface oil. The three ships collected a total of 21,176 barrels of oil during the operation. The OSV's proved to be very capable as well. They stored the recovered product in internal mud tanks and decanted water off the bottom reducing the product to just oil. The oil was transferred at sea to barges positioned in the Mississippi Canyon operating area reducing the amount of time transiting away from the pooled oil. The SUPSALV team believed that they were as effective in collecting oil as any of the vessels employed at the well head and significantly more oil could be been collected if they had been allowed access to the thick patches of oil (in place of other less capable vessels). Additionally, real time aerial spotting with direct communication to skimming forces would have further increased productivity. Graphs of total oil recovered and average oil recovered are included in Chapter 6.

When the ships had relatively calm conditions, oil could be herded and collected. In rougher conditions, oil could be herded effectively but the weir pumps would pump a greater percentage of water than in calm conditions. Beyond sea state 3 the skimmer systems were hoisted out of the water to reduce the potential for damage.

The Paravane, a relatively new component in the VOSS systems, proved to be easier to deploy than the outrigger and gave the ship more options while maneuvering. As a result, the paravane is being included as a permanent addition to the High Speed Current Buster package. The outrigger floats, constructed of rubber, quickly deteriorated in the oily environment. As an upgrade, new aluminum floats have been specified to replace the rubber ones.

The MARCO Class XI Skimmer, while reliable and durable (standard 42" boom and hard components) was not as effective as the High Speed Current Buster. It did not handle higher seas as well and the heavy nature of the Class XI skimmer (4,300 lbs) made handling it in a seaway more problematic. SUPSALV has indicated that the Class XI system will be phased out

and retired and the High Speed Current Buster will be the only open ocean VOSS system in the ESSM catalog.

5-4 Booming

Oil Containment boom is a key component of oil spill response. It was used extensively to protect sensitive environments from Ship Island, MS to Grand Island - Port Fourchon, LA. Booms were briefly deployed further east to protect Mobile Bay, AL but the tidal currents were too great for a successful barrier as deployed. By early July, more than 63,000 feet of boom had been deployed but the mid-summer storms took their toll on exposed boom. Boom laying and servicing was time consuming and required substantial resources. OSV WES BORDELON and OSV CASPIAN were primary boom support vessels. After Hurricane Alex in July and Tropical Storm Bonnie in August, boom cleanup tasks were necessary as well as boom laying and tending. Figure 1-2 shows some boom that had washed up on the beach in East Bay, LA. The boom that was torn free from its moorings was damaged beyond economical repair and was removed from the daily reported boom available or boom deployed totals. By mid August, after recovery of a number of storm damaged booms it became apparent that much of the recovered boom was worn or damaged beyond economical repair.

5-4.1 Systems Used

SUPSALV deployed the following boom to the Gulf Region. This boom totaled 98,000 feet.

ESSM Cat No.	Boom Type	Length Deployed to GOM Region
P19090	26" BOOM SYS 3000'	9000
	26" BOOM (New, not assembled)	3000
P19100	42" FUG BOOM 2000'	22000
P19100	USS 42"HB BOOM 2000'	42000
P19100	USS 42" BOOM 2000'	4000
P16200	SALVAGE SKIM VAN (26” BOOM)	8000
P19070	18" NON-INFLATABLE BOOM	6000
P19080	18" INFLATABLE BOOM 4000'	4000

Table 5-2. ESSM Boom Deployed to the Gulf.

5-4.2 Deployment

Deploying and maintaining oil deflection boom was one of the major areas in which SUPSALV supported the Unified Command. Upon initial tasking, SUPSALV immediately ordered 66,000 feet of oil containment boom into the Gulf Region. Ultimately, this number was boosted to 98,000 feet. Boom deployment was the first task 00C accomplished. Even before all of its gear had arrived, SUPSALV began laying cascading sets of deflection boom off the western tip of

Ship Island, south of Gulfport, MS. Seacor Marine OSV, JOHN COGHILL, was assigned to SUPSALV to perform the booming operations. She was outfitted at Gulfport and could lay 2 to 4 1000-foot lengths of 42" ocean boom in one day.

On 6 May, booming operations began in Venice, LA with the survey of two areas for boom installation, West New Harbor Island and East Bay. 6000' of 26" boom was rigged on OSV WES BORVELON for deployment around West New Harbor Island. Following that task, the ship operated out of Venice, deploying and, when needed, repairing containment boom at four site sites (West New Harbor, East Bay, Breton Island, and North Pass) until engine failure on 17 June. OSV CASPIAN SEA was identified as the replacement vessel on 27 June and was used to conduct southern Louisiana booming operations.

Figure 5-15. June 6 2010 image of crews on OSV WES BORVELON preparing boom for deployment in vicinity of Half Moon Island, LA where pilings were driven as boom attachment points.

5-4.3 Challenges

High Current Deployment Strategy - Responding to Alabama State official concerns, SUPSALV committed 19,000 feet of 42" ocean boom to protect Mobile Bay from oil contamination. Using a barge and OSV JOHN COGHILL, SUPSALV began operating out of Theodore, AL on 12 May and began to set the moorings and boom at Mobile Bay entrance near Dauphin Island. Figure 5-16 shows the employment plan for this boom. Despite observations by SUPSALV that the plan was flawed due to high current, the booming began. Boom was employed perpendicular to the

2 to 3 knot current. On 19 May SUPSALV received reports that the strong current was impacting the boom and resulting in failures at the boom end attachment points and that anchors were dragging. Responding to these issues, SUPSALV requested GPC's Mr. Bob Urban, one of the designers of SUPSALV boom, to provide guidelines on Navy boom strength and oil entrainment characteristics. These guidelines were issued on 20 May. They indicated that the safe working load for the boom assembly is 20,000 lbs and that 1000 foot lengths of boom across the Mobile Bay entrance (with peak currents of 2.8 kts) would result in 66,000 lbs of tensile load. Additionally, booms were limited in their capacity to contain oil in currents above 0.8 knots. SUPSALV distributed this guidance and requested the Mobile Bay Task Leaders to adjust their booming plan accordingly. A copy of this guidance is provided in Appendix A. Within days of this incident, regional and USCG task leaders were indoctrinated in correct booming strategy in high current areas. Their follow-on plans reflected oil deflection strategy with boom nearly aligned with the current funneling oil to standby skimmers as opposed to blocking strategy.

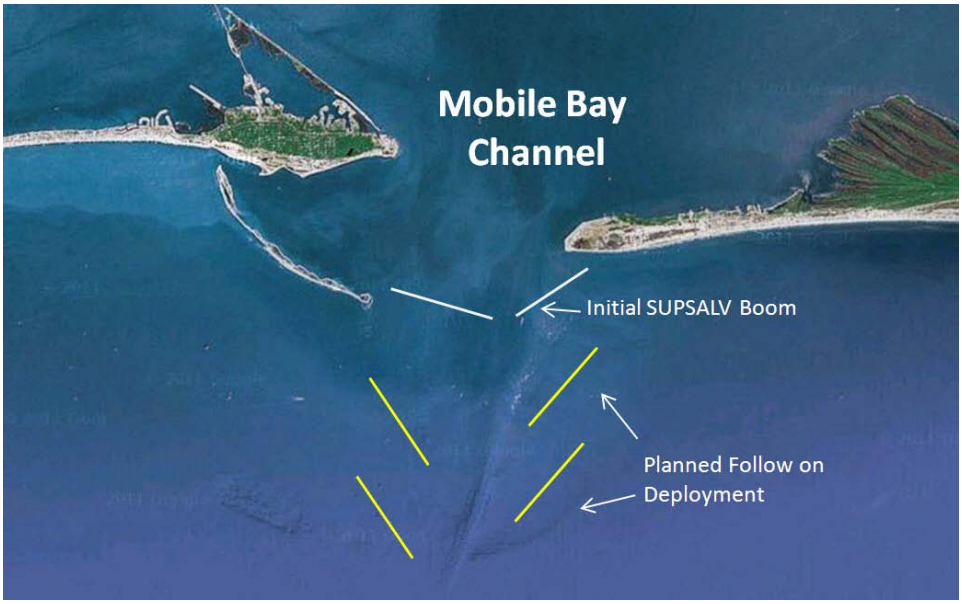


Figure 5-16. Mobile Bay Ship Channel initial oil containment boom deployment plan that lead to boom failure.

Mooring Systems - Initially, with Ship Island providing the first data point, it appeared that the number of mooring systems available in the ESSM inventory would be insufficient to deploy all of the containment boom brought to the Gulf. The concept of cascading boom required two mooring sets per 1000 feet of boom. With this strategy, the inventory was about 55 sets short (worst case scenario). Since SUPSALV ordered deployment of all of the prepackaged mooring sets, they began looking locally to identify anchors and mooring chain to supplement the ESSM gear. The forward deployed team set on the task of obtaining additional anchors and mooring chain suitable to the task from the local maritime economy. A significant number of mooring sets were obtained but the booming strategy evolved over the course of the operation and the crews

used alternative ways to anchor the boom ends. One strategy was to tie off booms to existing well heads, as documented in the East Bay Booming Operations image below (Figure 5-17). A second strategy used to defer anchor requirements was employed when deploying boom at the Biloxi Marsh Project. Pilings were driven every 500 feet and used to anchor the boom. As a result, more anchors and mooring chain were available than were ultimately needed.

Figure 5-17. Booming Operations off of East Bay, LA on June 22, 2010 demonstarting use of well heads as anchoring point for boom.

5-5 Decontamination

Decontamination of oil fouled equipment was necessary before removing that gear from deployed status. The USCG established and managed the decontamination process that proved effective although somewhat slow. After SUPSALV's MARCO skimmer was overturned on 15 June, SUPSALV began the process of returning the vessel to the Cheatham ESSM Facility for refitting. After salvaging the boat and returning it to port, it was discovered that no decontamination system or procedures had been implemented. SUPSALV performed the decontamination based on its own procedures with Coast Guard approval. Once implemented by the UAC, Resolve Marine and others provided decontamination services for the ICS. The system was effective but the nature of the activity slowed the overall redeployment process. When possible, equipment that was returned to Gulfport was decontaminated by ESSM staff at the State Pier. Figure 5-18 is a picture of SUPSALV material staged for cleaning at the Theodore / Resolve Marine Decontamination Facility.

Figure 5-18. SUPSALV equipment staged for decontamination inside Decontamination Pool No. 1 at Theodore, Alabama.

5-6 Houston Engineering Support and Underwater Survey

In addition to the Beach and Gulf Water Operations, SUPSALV supported the ICS from the Houston ICP. The original Coast Guard tasking requested "immediate support in following areas: oil spill control and recovery equipment, as well as operating personnel and additional salvage, diving, ROV services and consultation may be required as situation develops". This section describes SUPSALV's support of the Houston well containment mission as well as SUPSALV's support for Department of Interior and Department of Justice.

5-6.1 Houston Task, Manning, Coordination

SUPSALV was tasked with supporting the Unified Incident Command - Source Control in Houston, TX. Vice Admiral Kevin M. McCoy, Commander, Naval Sea Systems Command, tasked the Director of Ocean Engineering, SEA 00C, CAPT Patrick Keenan and Deputy Director, SEA 00CB, Michael Dean, to support the DWH response from the BP Crisis Center, in Houston. These two senior engineers rotated on site for the entire length of the oil spill. There were three principal reasons for deploying SUPSALV to the Crisis Center. They included:

1. Since the response had been federalized, the U.S. Navy wanted to assign engineering assistance to BP in the event there were avenues of additional assistance the Navy could provide during the source control process. The two primary tasks at the BP Crisis Center were well head closure and oil collection and containment at the well head. Supervisor of Salvage (SUPSALV) senior engineer, Michael Dean, (00CB) was assigned because of his extensive underwater ship husbandry experience and because he is the Navy's

Remotely Operated Vehicle (ROV) subject matter expert. SUPSALV was a member of an industry-government team that was developing and implementing a blow out preventer (BOP) diagnostic and source containment course of action. Examples of Navy support which SUPSALV identified and forwarded to NAVSEA HQ or SUPSALV's support team included:

- Latch Cap design – After making headquarters aware of the need, NAVSEA enlisted the Navy Submarine Design community (Electric Boat and Newport News) to contribute to the task.
- Measuring oil pressure in the well - BP was trying to get a better picture on the oil pressure in the containment device on the ocean floor. SUPSALV asked our Search and Recovery contractor, Phoenix, to identify what pressure transducers they had in stock that would function with the required accuracy at the sea floor environment (2250 psi) and provide specs for consideration.
- Reentry Control Procedures – This request was based on SUPSALV's undersea operations experience. Details of the effort SUPSALV provided in support of this request are addressed in Section 5-7.2.
- DOJ support for Underwater Survey – this request was based on SUPSALV's experience and Navy Owned equipment that would support Department of Justice's need to survey the scene of the blowout. Details of this task are addressed in section 5-7.3

2. Another part of this task was to provide the chain of command (NAVSEA and Navy) with an up-to-date, accurate, and highly detailed status report on the status of well head control actions. This was critical because of the extensive amount of oil containment and response equipment that was fully engaged in the Gulf of Mexico and not available for immediate use in the advent of a requirement at a Navy base or Navy ship incident. CAPT Keenan arrived in Roberts, LA on April 29th and either he or 00CB submitted SITREPs every day throughout the length of the operation. An example of the technically detailed source control info is provided in Figure 5-19.

6/28/2010 SITREP
Admiral,
The attached drawing depicts the next phase of BP's MC252 well containment and disposal plan (CDP). I will discuss the principle aspects of this plan as shown in the drawing.
Current situation:
1. Discoverer Enterprise is producing 15-18 M BOPD (thousands of barrels of oil per day) and 30-40 MM SCFPD (millions of standard cubic feet of gas per day) via LMRP cap #4, installed above the cut MC252 marine riser.
2. Q4000 is flaring 6-8 M BOPD and 18-19 MM SCFPD via, in series; the MC252 kill line, a flexible jumper to a manifold on the seabed (the old dynamic kill manifold), a flexible jumper to a riser termination package, the Q4000 drill string inside the Q4000 marine riser.
The short term goal is to increase product capture to the point where the LMRP cap can be removed and a combination BOP stack/valve manifold installed onto the MC252 LMRP. This would allow complete capture of all product w/o the risk of over-pressurizing the well bore and releasing product into the adjacent subsea formation, and subsequently the water column. Before the well can be completely capped (vice the partial cap that is currently installed w/four vent valves releasing product into the sea) additional product must be captured to eliminate the risk of over-pressurization.
Short term plan to capture additional product:
1. The MC252 choke line is already connected to the old dynamic kill manifold with a flexible jumper. Jumpers will now be connected in series from this manifold to a new manifold (CDP Manifold in the drawing) and from there to a free standing marine riser (Free Standing Riser #1 in the drawing). The CDP manifold is on the seabed and Free Standing Riser #1 has been installed. Unfortunately, the jumper installation has not gone well (missing gaskets, crimped goosenecks) and as of tonight, only one of the four required connections has been made.
2. A transfer line will be installed on top of Free Standing Riser #1 and connected to a buoy that can be pulled into a production vessel, securely latched into that vessel and then used to transfer product from the riser to the vessel. This is existing Floating Production Storage and Offloading (FPSO) technology. Once these connections have been made, and appropriate valve alignments on the manifolds completed, product can flow from the MC252 choke line, through the jumpers and two manifolds, into free standing riser #1, through the transfer line, into the buoy and then into the production vessel. In the drawing, this vessel is listed as Toisa Pisces. However there has been a change and production vessel Helix Producer (HP) will be used instead of Toisa Pisces. Tanker Loch Rannoch will be used to lighter product from HP once HP's tanks are full.
This system will allow capture of 20-25 M BOPD, enough to initiate the next phase in BP's plan, removing LMRP cap #4 and attaching a BOP stack/valve manifold to the MC252 LMRP. I will not discuss subsequent phases of the overall plan in detail in this report b/c multiple options are being studied and the short term work is not yet complete.
Short term prognosis:
Jumper installation will probably not be completed on night shift tonight. The seas are making up and I expect that all subsea installation work will be put on hold tomorrow until the weather improves. Estimate for re-initiation of subsea work based on current track of TS Alex is Saturday 7/3.

Figure 5-19. Sample SITREP from ICP Houston.

3. Lastly, NAVSEA 00 needed someone who was familiar with the activities in Houston to be able to respond to questions about the operation and suggestions for employing Navy assets. Questions ranged from those generated by U.S. Congressional staff to those asked by the Chairman of the Joint Chiefs of Staff. COMNAVSEA would typically forward them to SUPSALV for generating the response. Suggestions ran the full gamut from thoughtful and potentially useful to off the wall. Because many of these suggestions were not practical or would actually be detrimental to the effort, COMNAVSEA needed someone who could speak with authority on the pros and cons of those suggestions. The range of suggestions encountered included sending the SEALs in to stop the leak or to send a nuclear tipped torpedo down the well. A typical response to one of these suggestions would include the words “We have drawn on the insight and expertise of NAVSEA engineers (embedded for over a month with the crisis engineering team in Houston, TX) The proposed concept for this innovative suggestion is…”, “However, there is no current short-fall in that capability.”

5-6.2 Evidence (BOP and Upper Marine Package) Recovery and Reentry Procedure Support Task

On 12 August, the Department of Justice formally requested SUPSALV assist the Marine Board of Inquiry and the Deepwater Horizon Criminal Investigation Team. Since the both the Justice Department and Dept of Interior/USCG had initiated investigations into the events surrounding the explosion and sinking of the Deepwater horizon drilling rig and resulting discharges of oil into the Gulf, the collection of evidence became a critical task. The Department of Justice (DOJ) requested SUPSALV review all plans and proposals to salvage, transport and store equipment recovered from the sea floor and advise them on the soundness of the proposals.

The salvage of this equipment had to be conducted in a manner that would ensure the ability of the government to test and analyze the equipment and to maintain the proper chain of custody to allow for introduction of the equipment and results of the analysis and testing in any litigation undertaken by the government including potential criminal prosecution.

Throughout the period of 20 August to 06 September, CAPT Keenan, Mike Herb (00C2) initially and then Ric Sasse (00C22) during the final week, were off-shore on the drill ship Discoverer Enterprise and drill platform Q4000 observing evidence recovery procedures with DOJ/FBI and concurrently Mike Dean (00CB) and Ric Sasse were at the Unified Command in Houston, or working with officials at conducting procedure review.

5-6.3 Underwater Survey in Support of DOJ

The Coast Guard also tasked SUPSALV to perform an underwater survey of the drilling rig. SUPSALV tasked their Search and Recovery contractor, Phoenix International to perform the task. The video survey, which was requested by Office of Investigations and Casualty Analysis CG-545, began by outfitting the Motor Vessel (M/V) GENIE LAB, a 80M DP-II equipped Offshore Supply Vessel with Deep Drone ROV and a Xbot micro ROV. The vessel completed mobilization and deployed to the DWH site the evening of 27 September. The underwater DWH rig survey was managed by Ric Sasse (00C22). ROV dives commenced 28 September and continued through 2 October. Initial dives were conducted with the objective to confirm the location & orientation of the wreck, determine safe vectors of approach with the ROV, and note major entanglement hazards. A subsea transponder beacon was deployed to aid in ROV tracking. Figure 5-20 shows an image of Deep Drone being lowered into the water with the subsea transponder visible on the front of the ROV. Mapping was conducted of the highest elevations which were the pontoons with azimuth pods (the rig lay on the ocean floor inverted) and the riser pipe which ran in a north to south orientation. On 30 September the team used the xBot III, a micro ROV which was installed into Deep Drone's framework, to successfully enter, inspect, and videotape the inside of the bridge house. Figures 5-21 and 5-22 were taken during the bridge house survey.

The Video Survey Dive Table (Table 5.3 below) documents the dives, time on the bottom and missions accomplished during this survey. Eleven dives were conducted where Deepwater Horizon's main wreckage and the surrounding wreckage field were inspected, logged, mapped, and video documented. M/V GENIE LAB returned to port on 4 October for offload having conducted the mission successfully. Appendix G is the Phoenix Completion Report which provides more detail on this operation.

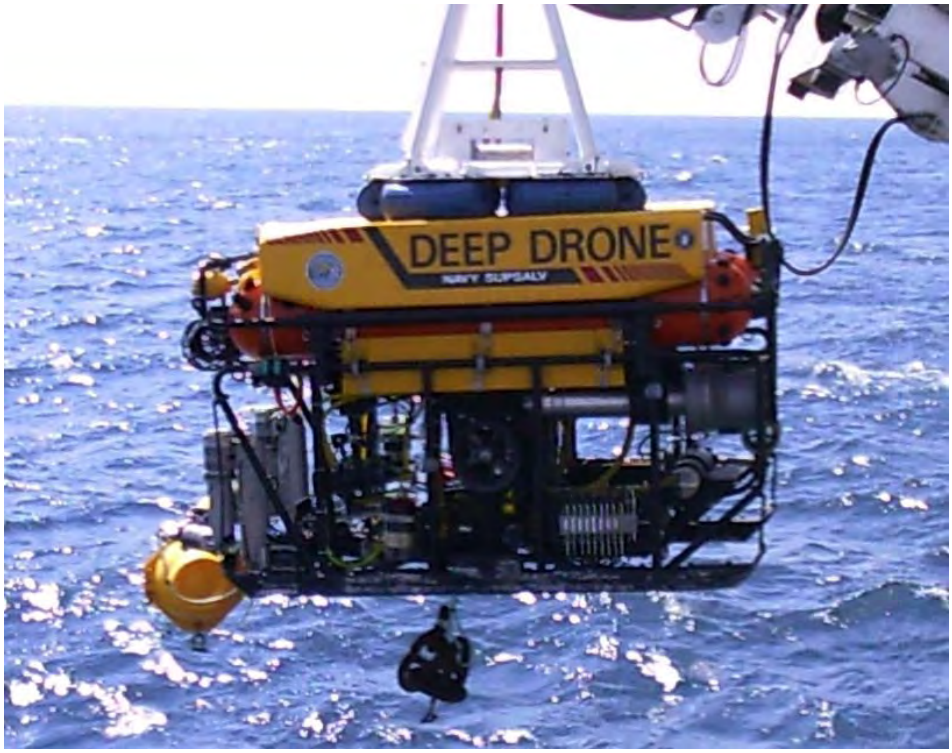


Figure 5-20. SUPSALV's Deep Drone deploying off M/V GENNIE LAB. In the portside manipulator is the transponder float and hanging under Deep Drone is the weight used to hold the transponder in position on the Gulf floor.

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Figure 5-21. Image of Deepwater Horizon bridge control room underneith wreckage from the helicopter deck.

Figure 5-22. Phoenix's xBot entering the bridge control room window. Photo taken from Deep Drone.

Dive No.	Date	Bottom Time (Hrs:Min)	Mission
1	9/29	7:37	Mapped pontoons NE sponson leg and N-S Riser
2	9/29	5:36	Mapped remaining extremes of DWH Structure
3	9/29	8:48	Deployed acoustic tracking beacon and located bridge house
4	9/30	3:48	Inspected interior of bridge house with Xbot
5	9/30	4:32	Surveyed top of DWH pontoons, attempted to reach moon pool with Xbot
6	10/1	11:18	Surveyed all reachable exposed surfaces of DWH, recovered acoustic beacon for reprogramming
7	10/1	14:21	Debris field mapping
8	10/2	0:0	Dive Aborted, sonar malfunction
9	10/2	2:29	Second xbot inspection of bridge structure
10	10/2	1:40	Verified positions & range and bearings between key items on seafloor
11	10/2	6:14	Final debris survey
Total Bottom Time		**66:38**	

Table 5-3. Video Survey Dive Table

Chapter 6 - Conclusion of Operation

BP crews working at the well head closed the recently installed three-ram capping stack on July 15, 2011 at 1425. While the closure was considered a test and not expected to fully contain the well pressure, it did hold and in essence, became the moment the well stopped leaking crude oil into the Gulf. At that time, SUPSALV had 128 operators on station, 17 MARCO Class V skimmers deployed, 3 Vessels equipped with five Vessels of Opportunity Skimmer Systems engaged, and 60,700 [2] feet of oil containment boom deployed in the Gulf region. The amount of oil spilling into the Gulf had been reduced in the last few weeks as more effective processes were employed to collect the oil at the well head. Additionally, poor weather conditions from Hurricane Alex had curtailed the ocean skimming process.

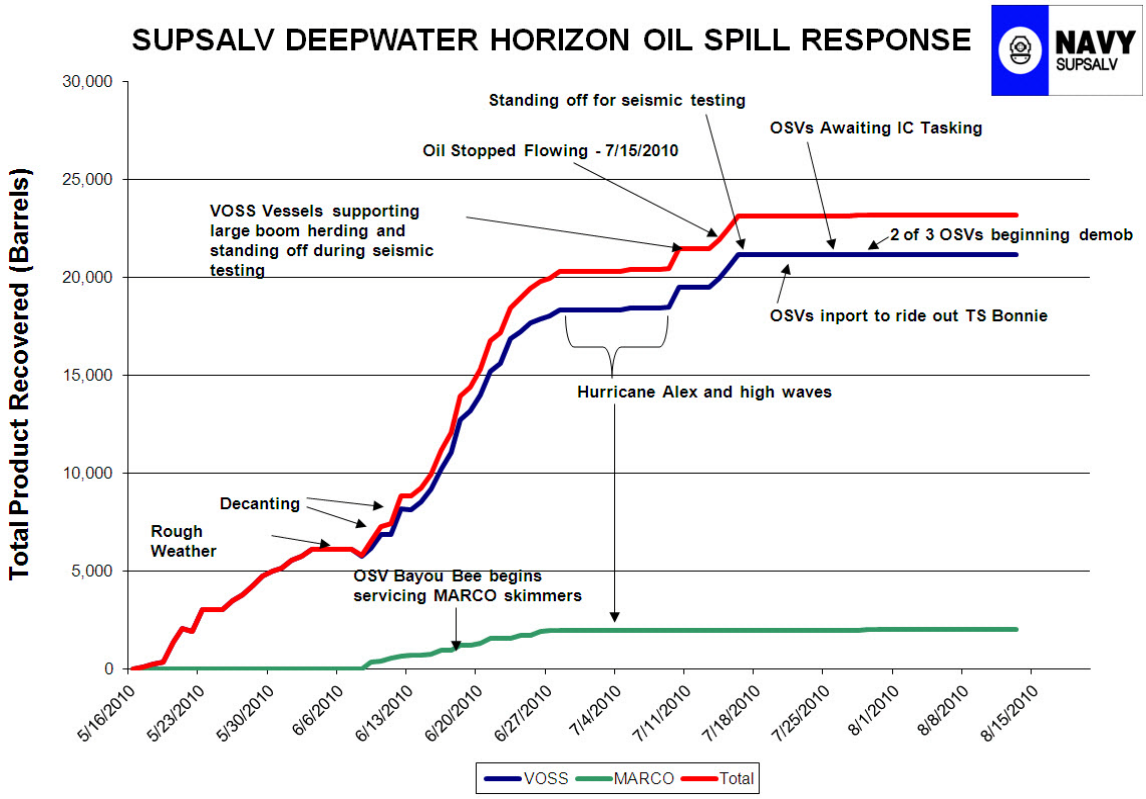

Figure 6-1. Total product recovered by SUPSALV assets during DWH Oil Spill Response.

There were three productive skimming days in the middle of July but no productive collection thereafter. A chart of product recovered by SUPSALV assets and average product recovered is

[2] SUPSALV deployed 98,000 feet of boom to the GOM operating area and installed 63,200 feet over the course of the operation. Tropical Storm Alex (29 Jun – 7 Jul) damaged boom in exposed areas and crews recovered portions that were damaged reducing the total set on July 15 to 60,700 feet.

provided as Figures 6-1 and 6-2. The charts visually demonstrate the effectiveness of the skimming systems in use during the high leakage phase.

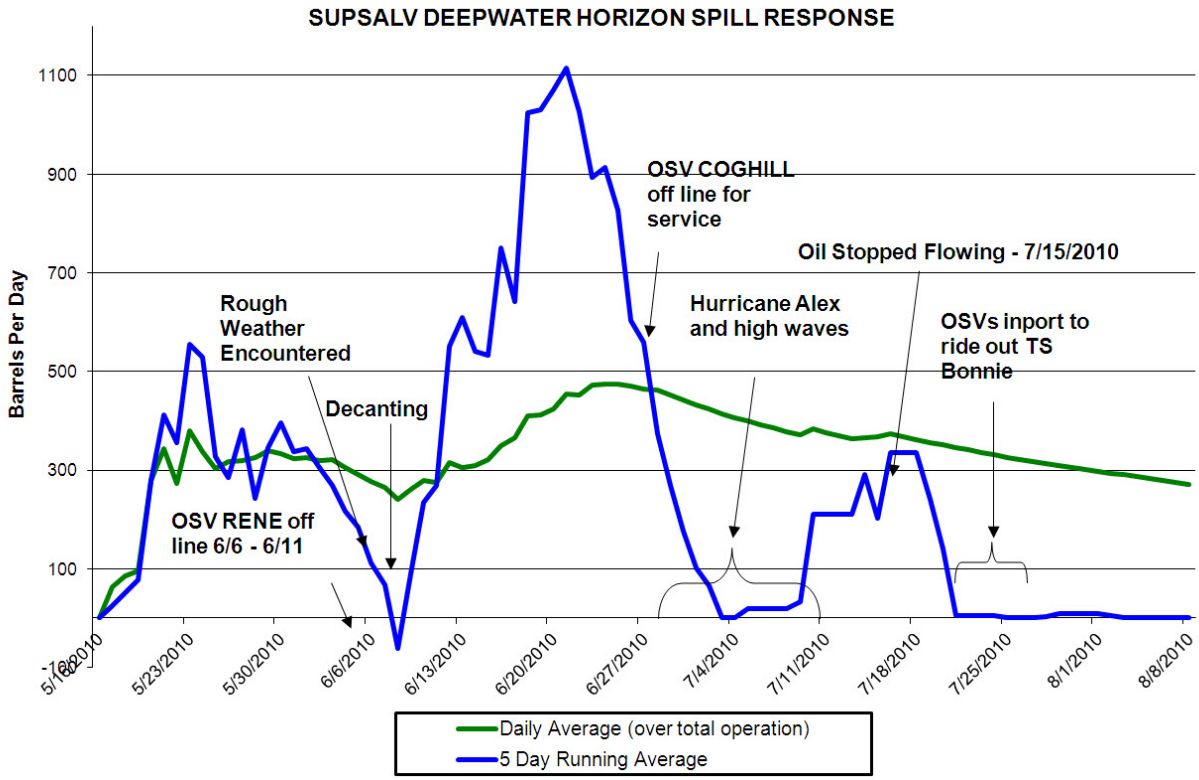

Figure 6-2. Daily average and 5-day running average product recovered by SUPSALV assets during Deepwater Horizon Oil Spill Response.

6-1 Demobilization – Redeployment

SUPSALV's operation began winding down with the closure of the well. The last day the VOSS skimmers collected any oil was 16 July. At that time, OSV RENE (Class XI Skimmer) was in the port of Gulfport getting a new crane installed. OSVs VANGUARD and VANTAGE (two Current Busters each) were either standing off for seismic testing, reporting no skimmable oil sighted, or riding out bad weather in port. On 29 July, SUPSALV was directed to begin demobilization of OSVs VANGUARD AND VANTAGE and their four Current Buster skimmer systems. The Federal On Scene Commander (FOSC) directed them to hold the VOSS systems in the area but to send the ships to Theodore for decontamination. RENE had completed the installation of its new crane and was awaiting tasking. RENE's status would not change until 18 August when SUPSALV finally received permission to unload and decontaminate the Class XI system.

The decision to demobilize the in-shore based skimmers was also delayed in coming. No one wanted to prematurely take systems off line when the potential for oil contaminating a harbor or wetland still existed. The decisions were made by the Unified Area Command after vetting them

with the state agencies and local jurisdictions. This added safety factor delayed demobilization for weeks after the last oil had been sighted. On 16 August, USCG FOSC Plans Chief gave concurrence to begin decontamination of all skimmers and directed SUPSALV to coordinate with Task Force Commanders for redeployment. This decision started the process. MARCO skimmers were collected by Bayou Bee and delivered for decontamination and because storing them at the State Pier, Gulfport relieved the local jurisdictions of taking care of them and their crews, the ICPs were satisfied with the compromise. The last Louisiana skimmers (ICP Houma) were decontaminated and restaged in Gulfport on 3 September and only 3 skimmers remained to be decontaminated from the Mississippi coast (ICP Mobile).

Meanwhile, oil containment boom, which had been exposed to extreme weather for several months, was being picked up as workboats were available. All material exposed to oil was taken to the decontamination sites. As expected, much of the recovered boom was deteriorated or damaged beyond economical repair. Individual boom removal decisions were dependent on the jurisdiction the boom supported. SUPSALV received permission at about the same pace they could sustain boom recovery operations.

SUPSALV was sending material staged at Gulfport, that was not used, back to its original ESSM base. This included material such as berthing vans, shop vans mooring systems and pumping systems. Finally, on 13 September, SUPSALV received permission to ship all skimmer systems back to the ESSM bases. That same day, SUPSALV vacated Venice, having completed shipping all boom and skimmers systems deployed there. Used bladders were evaluated and determined that disposal was more cost effective than cleaning which reduced decontamination time. The final SITREP was issued on 20 September. At that point, all OSVs were offloaded and awaiting demobilization, nearly all ESSM equipment had been shipped and final boom had just been recovered from New Harbor Island and was undergoing decontamination.

6-2 Restocking / Replacement / Upgrades Identified

Coast Guard RFAs were issued to replace all deployed boom that was damaged beyond economical repair. Oil storage bladders and NOFI Current Busters were also authorized for replacement. These are listed in Appendix B. After the long operation, all hardware and mechanical systems would be refurbished before storing the equipment ready–for–issue. As the oil spill response concluded, the ESSM system maintenance task was just beginning.

Beyond conducting maintenance and replacing damaged systems, SUPSALV and ESSM managers took the time to evaluate their ability to sustain oil spill recovery in the harsh environment of the Gulf of Mexico. They came up with a set of equipment improvement recommendations which could make the next employment easier. These included changes to the boom fittings and mooring systems. Improvements to the High Speed Current Buster systems were implemented such as increasing the number of spares of critical wearing parts, providing tools for cleaning the debris from the current buster pockets, and adding a knuckle crane and an aluminum outrigger float to the equipment van. These internal upgrades will help ensure SUPSALV can sustain operations if called upon to support another long-duration deployment.

6-3 Conclusion

As documented in this report, SUPSALV successfully executed a near immediate deployment of all continental U.S. OSR equipment to the Gulf region. They operated in a complicated ICS structure, recognized by and utilizing the Federal Resource Coordinator as a means to obtain needed VOO and shore side facility assets and allocate SUPSALV teams across the ICS. SUPSALV also interacted with two ICPs and five Task Forces managing operations across 4 states.

Equally successful was the effectiveness of SUPSALV teams in performing their tasks. The crews working the VOSS ships skimming oil at the well head were some of the most effective on station. During a 16 day period in mid June, the three ships recovered more than 11,000 barrels of oil product. The near–shore MARCO skimmer operations were equally smooth, with the one exception of the unmanned skimmer that was overturned. Many of these vessels operated far from shore and far from the shore based maintenance facility constructed at Gulfport. Provided the proper tools and supplies, including the mobile maintenance vessel BAYOU BEE, they were self–reliant and dependable assets to the ICS. Booming successes also became common place. An example is documented in Figure 6-3 which shows the encapsulation of New Harbor Island with SUPSALV 26” boom.

Figure 6-3. 26” SUPSALV boom completely circling New Harbor Island, part of the Chandeleur Islands east of New Orleans.

A final note, the Deepwater Horizon oil spill response task represented a far larger event than SUPSALV planned, practiced, or sized its equipment and response teams for. Even though our response represented a small subset of the total nationwide response, SUPSALV successfully fulfilled its role as a “National Asset” in the National Response Framework with exceptional responsiveness, transportability and sustainability.

Chapter 7 - Lessons Learned

The following Lessons Learned were generated by SUPSALV government staff after the conclusion of the operation. Internal ESSM lessons learned are identified in the ESSM Operation Report, Appendix A.

7-1 OPERATIONS

- Near Shore Skimming Operations - Poor communication between Task Force leaders and SUPSALV , resulting in a lack of operational control of assets:
    - Task Force Commanders continually tried to deploy MARCO Class V skimmers beyond their sea keeping ability or transit speed limitations to return for crew rest.
    - An Oil Transfer Bladder was torn during offloading due to mishandling when SUPSALV personnel were not present. Task Forces were trained in the use of offloading systems by SUPSALV but no trained personnel stayed in place longer than 1-2 weeks.
    - MARCO Class V skimmers are more effective skimming, as designed, in a “V” boom configuration vice the “free skimming” or even scouting mode often ordered by Task Force leaders.
    - SUPSALV operators used their personal cell phones to communicate their locations and Task Force assignments to SUPSALV managers. There was no formal communication plan that included SUPSALV at the IC level.

  Recommend distributing Operation Guides (CONOPS) upfront to entire Chain of Operational Command. Also recommend Task Force Leaders not be given control of SUPSALV equipment without the requirement to work with SUPSALV personnel in deciding deployment strategy of the assets. SUPSALV also needs to be included in IC communication plans during future operations.
- Due to the aforementioned communication issues with Task Forces, recommend a SUPSALV representative be designated to each Incident Command Post to approve and track use/transfer of assets and provide valuable technical advice to decision makers.
- Many near-shore skimmers, especially MARCO Class V systems, often traveled long distances in search of oil, only to be in the wrong place. Offshore VOSS skimmers were rarely assigned based on the most efficient use of their capability, wasting many hours searching for oil as well. Recommend mandatory, real time aerial spotting with direct communication to skimming forces. It is important to use available helicopters to support clean-up operations vice other interests and that there is a clear communication plan between skimmers and spotters. Skimming is only as effective as the oil spotting and communication.

- MARCO Class V systems were too widely dispersed to make optimal use of them. An OSV with a crane and installed tanks was outfitted with repair and maintenance equipment and personnel to make the rounds and service/offload the MARCO systems throughout the Gulf. This concept was successful, but for future operations, where MARCO Class V's go beyond 3-4 miles out, recommend deploying the skimmers from offshore vessels directly vice barges or on their own. A ship with this capability can be rapidly vectored to oil locations and provide skimming crew with accommodations and food, increasing usable skimming time and the safety of the skimming crew and skimmers.

- During offshore skimming operations, small vessels with low daily recovery capacities would often limit larger, more productive skimmer systems from accessing thick oil patches. Recommend that vessels vectored to the heavy oil should be prioritized based on capability, not organizational relations.

7-2 MANAGEMENT

- Planning was event driven as opposed to being objective driven. This resulted in response strategy reflecting political agendas vice being technically sound. As an example, one booming strategy insisted Mobile Bay was boomed across in a barrier mode. However, the current was too swift and boom was destroyed. Had it lasted, it would have been ineffective due to entrainment of any oil it met. In this situation, a "deflect and collect" mode would have been successful. Recommend setting the objectives of what needs to be protected and allowing technically informed personnel to develop sound strategies to meet them.

Figure 7-1. OSV JOHN COGHILL conducting booming operations off Mobile Bay.

- Management of the distribution of SUPSALV Assets:
    - The same SUPSALV assets were requested by the both ICP's simultaneously, causing confusion and arguments.
    - SUPSALV boom and skimmers waited idly at staging areas without assignment to Task Forces after being allocated by the UAC to an IC. Field personnel were often unaware resources were available and IC/UAC personnel were unaware of the needs of operators. Recommend IC's make available assets more visible to Task Force Leaders for assignment.
    - UAC would often send resources without proper coordination and/or logistics support plan in place. SUPSALV was ordered on more than one occasion to deliver boom and skimmers to areas that did not have sufficient capability to unload the trucks or aircraft and to areas with no use for the assets.
- Recommend that in a multi-IC environment, if operationally optimal, SUPSALV assets be assigned to one IC and kept within a smaller geographical area so that SUPSALV can more effectively man and assist with more objective planning for use of our resources. If distribution occurs to more than one IC, recommend establishing a POC upfront at the UAC level to be dedicated to the role of allocating SUPSALV assets to IC's.
- IC and UAC personnel, as well as Task Force leaders, turned over too rapidly causing mistakes to be repeated. SUPSALV managers had to constantly re-communicate issues. Also, at no point could either IC provide us with an up-to-date organizational chart or list of important points of contact. Personnel should not be relieved continuously and serially, but rather in a "tag team" arrangement with 2-3 people.
- SUPSALV managers on-scene were spending many hours per day answering data calls and attending mandatory conference calls, severely impacting their ability to manage operations. We were able to reduce the load by appointing a single POC in Washington DC to take most of the conference calls and insist that data calls be channeled through that POC.
- The security access and badging process was different at the UAC, the ICP's and many of the staging areas and bases. The required training and screening was redundant and very time consuming for SUPSALV personnel who were spread over 10 separate sites. Recommend standardizing access requirements (badges) and recognizing HAZWOPER training and DoD CAC card credentials.
- Wide-body MARCO Class V Skimmers were delayed several days for intra-theater transport due to perceived need for wide load permits. Eventually it was discovered that the various Gulf Coast state DOT's had granted blanket permits. It took several days to get copies of these permits and most personnel in the Ops and Resource Sections were

unaware of this blanket permit. Recommendation is to have transportation, weight handing, and lay down capabilities more visible throughout the IC organization.

- Managers on-scene were inundated by requests to evaluate or comment on technology to be sold and/or tested for use in response operations. These requests often came from higher authority, requiring answer, on behalf of vendors/inventors/interested citizens who had appealed to them. The situation proved a major distraction and an added workload. The problem was largely resolved by the organization and funding of a special team called the Inter-Agency Technology Assessment Panel (IATAP) formed to handle these requests. Recommend convening this type of panel early on for response operations with such public interest.

7-3 SAFETY

- Air monitoring guidance for offshore operations was not received in a timely fashion. OSV's were hired for skimming operations at the source but not provided this capability. UAC/ICs need to disseminate thorough guidance before deploying assets. OSV's should be provided with the capability or means to acquire it through the contract. SUPSALV must also ensure proper air monitoring devices and respirators are available to operators in accordance with these safety regulations prior to deployment and include it in their Operations Guide (CONOPS).

- Proper guidance and rescue personnel were not provided for wildlife encounters offshore prior to deployment. The guidance given after the fact was insufficient, instructing operators to merely contain oily wildlife and wait for rescue personnel to arrive 8-10 hours offshore at which point animals such as sea turtles would be deceased.

7-4 FINANCIAL

- There was no method for reimbursement in place for the replacement of government owned equipment that was damaged beyond economical repair during response operations. Numerous meetings and many man-hours were necessary to define a workable process acceptable to all parties. Recommend the USN and USCG agree to a standardized process for all future operations.

Appendix A

FINAL REPORT
SONS DEEPWATER HORIZON OIL SPILL
GULF OF MEXICO

27 April–24 September 2010

Prepared by:
GPC, A Joint Venture
P.O. Box JK
Williamsburg, VA 23187

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Sponsored by:
Naval Sea Systems Command
1333 Isaac Hull Avenue, SE (Mail Stop 1072)
Washington Navy Yard, DC 20376

18 November 2011

U.S. NAVY POLLUTION RESPONSE TO DEEPWATER HORIZON OIL SPILL

A Catastrophic Oil Drill Explosion Occurred on 20 April 2010 Spilling Hundreds of Thousands of Barrels of Crude Oil in the Gulf of Mexico

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF FIGURES (CONTD)

LIST OF APPENDICES

SECTION A – EXECUTIVE SUMMARY

On 20 April 2010, a catastrophic explosion caused an oil spill from a British Petroleum (BP) offshore oil-drilling rig in the Gulf of Mexico spewing millions of gallons of crude oil into the Gulf of Mexico. The Deepwater Horizon was a 9-year-old semi-submersible mobile offshore oil-drilling rig located about 41 miles off the Louisiana coast. The consequential oil flow continued from the wellhead until 15 July 2010. To date this was the largest offshore oil spill in the history of the United States. The federal officials and BP pronounced the well dead nearly 3 months to the day after the 20 April 2010 explosion. An estimated 53,000 barrels per day escaped from the well before the leak was stopped.

Late on 26 April 2010, the Supervisor of Salvage and Diving (SUPSALV) was requested by the U.S. Coast Guard (USCG) to provide Oil Spill Response (OSR) equipment in support of the cleanup in the Gulf of Mexico and began mobilization.

On 27 April 2010, GPC, a Joint Venture, SUPSALV's Emergency Ship Salvage Material (ESSM) contractor received official verbal authorization to prepare and ship OSR equipment from Cheatham Annex, Williamsburg, VA and Port Hueneme, CA as well as provide operating personnel from all ESSM bases to Gulfport, Mississippi.

SUPSALV eventually deployed 36′ Class V Skimmers (qty 18), Vessel of Opportunity Skimmer Systems (VOSS) (qty 5), High Speed Current Buster Skimmer Systems (qty 1), VOSS Class XI Skimmer System (qty 2), Command Trailers (VA0719) (qty 3), Workshop Vans (VA0508) (qty 3), Rigging Vans (VA0010A) (qty 3), 98,000 feet of USS-42″ Oil Containment Boom, and Boom Handling Boats (qty 9). Additional support equipment listed in Section E was also deployed.

At the height of the oil spill cleanup effort, 140 personnel were deployed.

Total SUPSALV oil volume recovered: 984,610 gallons (offshore 899,392 gallons) and (near-shore 85,218 gallons).

SECTION B – CHRONOLOGY OF EVENTS

Tuesday, 27 April 2010

GPC received verbal authorization to commence deployment of GPC personnel and SUPSALV pollution equipment to the Naval Base in Gulfport, MS, from ESSM base Port Hueneme, CA and Cheatham Annex, Williamsburg, VA.

Wednesday, 28 April 2010

GPC Program Manager, Lloyd L. Saner, departed for New Orleans, Louisiana, along with 19 other GPC personnel from Cheatham Annex, Williamsburg, VA, Port Hueneme, CA, Fort Richardson, AK, and Pearl Harbor, HI, ESSM bases. While in route, Mr. Saner received direction to contact U.S. Coast Guard (USCG) Representative, CWO Davenport, for specific direction. The trucks carrying ESSM gear were directed to report to the Naval Base in Gulfport. After making contact with CWO Davenport, he directed that all equipment be staged out of the Mississippi State Dock (West) in Gulfport. Mr. Saner proceeded directly to the Naval Base to re-direct approximately eight trucks (that had already arrived at the Naval Base) to Gulfport MS State Docks. Mr. Saner then notified all other GPC personnel and trucks (still in route) to proceed to Gulfport MS State Docks (West) to assist in receiving and offloading trucks. Mr. Saner then proceeded to the Port and met with CWO Davenport. GPC personnel commenced offloading trucks as they arrived for the remainder of the day.

Thursday, 29 April 2010

Of the 57 truckloads of ESSM gear that had left the CONUS ESSM bases, eight truckloads had already arrived at the Naval Base Gulfport. The Supervisor of Salvage & Diving (SUPSALV) Representatives, Stephanie Brown and Kemp Skudin, arrived in Gulfport along with the 19 GPC contractor team members. Kemp Skudin, Stephanie Brown, and Lloyd Saner met with CWO3 Peter Davenport to determine the USCG's first priority for the SUPSALV equipment. First priority was to position deflection Oil Containment Boom off the western tip of Ship Island, just south of Gulfport. The USCG contracted the SEACOR Marine Offshore Support Vessel (OSV) motor vessel (MV) *John Coghill* to assist in the deployment of Oil Containment Boom.

The USCG's second priority was assembling and preparing the Class V Vessel Skimmer for possible deployment between Cat and Ship Islands as weather permitted. Additional preparation took place for the deployment of two Current Busters (one on port side and one on starboard side) from the OSV MV *John Coghill* to skim for oil product near the oil wellhead as the weather permitted.

A team of GPC personnel was assigned to commence preparing and rigging of 4000′ of USS-42″ Oil Containment Boom and eight Boom Mooring Systems on board the OSV MV *John Coghill*.

Another team was assigned to continue offloading the trucks as they arrived and staging the equipment along with assembly of the Class V Skimmers.

Friday, 30 April 2010

Additional personnel continued assembling and equipment continued arriving in Gulfport. See Figures 1 and 2.

Figure 1. Daily Team Briefings

Completed loading and rigging 4000′ of Oil Containment Boom with Boom Mooring Systems on board the OSV MV *John Coghill.* The OSV MV *John Coghill* then proceeded to Ship Island to commence laying Oil Containment Boom.

The first 1000′ of USS-42″ Oil Containment Boom was deployed as planned. During deployment of the second 1000′ section, SUPSALV and GPC were redirected back to port with possible reassignments. The OSV MV *John Coghill* returned to the port with 3000′ of the original 4000′ of Oil Containment Boom still on the fantail.

While at sea, the crews at the State Pier in Gulfport prepared for loading an additional 4000′ of Oil Containment Boom on the OSV MV *John Coghill*. See Figure 3. The crews also set up the Rigging, Shop, and Command Vans on the pier. More SUPSALV equipment arrived and was offloaded as it arrived in Gulfport. See Figure 4. The USCG ordered additional SUPSALV wide body Class V Skimming Systems (five from Cheatham Annex and four from Port Hueneme) to be shipped to Gulfport.

Figure 2. ESSM Gear Continuous Arrival at Gulfport, MS State Docks

Figure 3. 4000′ of Oil Containment Boom with Boom Mooring Systems On Board the OSV MV *John Coghill*

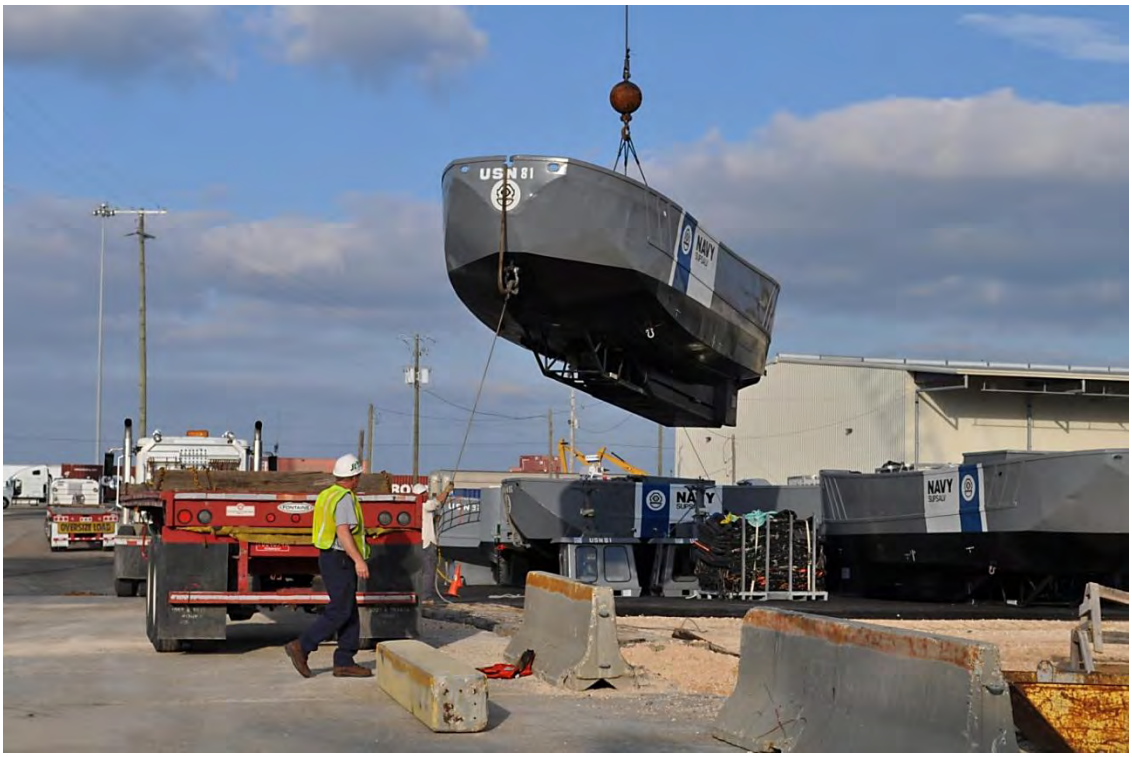


Figure 4. Class V Vessel Being Offloaded in Gulfport, MS

Saturday, 1 May 2010

Eighty-three truckloads carrying SUPSALV gear were in route from the CONUS ESSM bases. Twenty-eight trucks of SUPSALV gear had already arrived in Gulfport.

Twenty-one truckloads of equipment were redirected to Venice, LA (see Figure 5). Six GPC personnel were sent to Venice.

Five additional GPC personnel were expected to arrive in Gulfport, totaling 37 GPC personnel deployed for the operation.

An additional 2000′ of 42″ Oil Containment Boom was deployed off the western tip of Ship Island in a cascade configuration (see Figure 6) along with 1000′ of Oil Containment Boom previously deployed making a total of 3000′. The weather conditions were difficult for deploying and setting Oil Containment Boom. The fourth 1000′ section had parted. It was recovered and returned to port for repair.

Figure 5. SUPSALV Venice, LA Deepwater Horizon Support Site

Three Class V Modular Skimming Systems were then assembled in Gulfport, and support equipment for skimming operations was prepared.

Since there would not be enough SUPSALV Boom Mooring Systems available from ESSM bases Cheatham and Port Hueneme to moor all the 42″ boom onsite, the USCG directed that SUPSALV obtain this equipment commercially for the additional 50 Boom Mooring Systems that would be needed. A source for additional components was located in Texas.

Figure 6. Oil Containment Boom Deployed off the Western Tip of Ship Island in a Cascade Configuration

Sunday, 2 May 2010

Fifty-four total truckloads of additional gear had left the CONUS ESSM bases. Fifty-two truckloads of SUPSALV gear had arrived.

Three thousand feet of USS-42″ Oil Containment Boom had been deployed to date near the western tip of Ship Island in 1000′ cascaded sections. See Figure 6. The OSV MV *John Coghill*, carrying 2000′ of USS-42″ Oil Containment Boom on board, was rigged for deployment. Three thousand feet of USS-42″ Oil Containment Boom was staged pierside ready for load-out onto the vessel.

Three modular Class V Vessel Skimmers (SK0721) were assembled pierside and ready for load-out or deploying.

The rigging of 2000′ of Oil Containment Boom was prepared for deployment, however deployment operations were delayed due to bad weather. The USCG, SUPSALV, and GPC continued to configure and organize bases of operations. Kemp Skudin, Stephanie Brown (SUPSALV Representatives), Lloyd Saner (GPC Program Manager), and CWO3 Peter Davenport (USCG) met with the OSV MV *John Coghill* captain to discuss potential future VOSS skimming operations. The staging area was secured at 1500 due to thunderstorms and tornado warnings.

Monday, 3 May 2010

Continued to receive and stage SUPSALV equipment. The Command Trailers were set up. See Figures 7 and 8.

Figure 7. Command Trailer Arrival

Figure 8. Command Van and Command Trailer Setup

GPC placed orders for mooring systems through a commercial source. The commercial source only provided 25 of the 50 mooring systems ordered. GPC assembled 15 complete and 15 partial systems from spares at the ESSM bases. Other components (mainly anchors) would be obtained commercially as needed.

Oil Containment Boom deployment operations were delayed due to an engineering problem on the OSV MV *John Coghill*.

All Oil Containment Boom requested in Venice arrived. Manning was increased from a workforce of six to approximately 12 in preparation of anticipated Oil Containment Boom laying operations in Venice.

The base of operations at Gulfport was reconfigured to accommodate SUPSALV and commercial operations on the pier as well as for efficiency.

Another VOSS Current Buster System, from ESSM Base Williamsburg, was ordered as a spare to provide improved sustainability of potential future distant offshore VOSS skimming operations from the OSV MV *John Coghill*.

Tuesday, 4 May 2010

A mission's briefing and tour was conducted for the Chief of Naval Operations (CNO), Chief of Naval Personnel (CNP), Commander Naval Installations Command (CNIC), and Commander, Naval Sea Systems Command (COMNAVSEASYSCOM). Admiral Gary Roughead, CNO, attended. See Figure 9.

Figure 9. Admiral Gary Roughead, CNO, Visits the Gulfport, MS State Port (West) Command Post

Boom deployment operations resumed. Two thousand feet of USS-42″ Oil Containment Boom was deployed near Ship Island in cascading configurations along with previously deployed Oil Containment Boom. Another 2000′ of USS-24″ Oil Containment Boom was loaded onto the OSV MV *John Coghill*. SUPSALV gear continued to arrive in Gulfport (State Pier West) for staging.

Wednesday, 5 May 2010

The Federal Reserve Asset Staging Unit in Gulfport began reporting to the Area/Unified Command (headquartered in Roberts, LA) for resource allocation vice the Incident Command Post (ICP) (Houma, LA sector). The ICP Houma, LA sector and the ICP in Mobile, AL, were tasked to submit requests through the Area/Unified Command for SUPSALV Oil Spill Response (OSR) equipment assets. Operationally SUPSALV worked under the ICPs.

Oil containment boom deployment operations continued. An additional 2000′ of USS-42″ Oil Containment Boom was deployed from the OSV MV *John Coghill*, near Ship Island, in a cascade configuration with the previously deployed Oil Containment Boom. Command, Shop, and Rigging Vans were sent to Venice, LA to support oil containment operations near that site.

ICP Mobile sector requested a Class V Skimmer System and two BHBs with full support crews to be staged in Pensacola, FL and on Dauphin Island, AL in Mobile Bay. Two Current Buster VOSS were rigged (both port and starboard) on board the OSV Anchor Handling Tow and Supply (AHTS) *Vanguard* at Gulf Port for source skimming operations. See Figure 10.

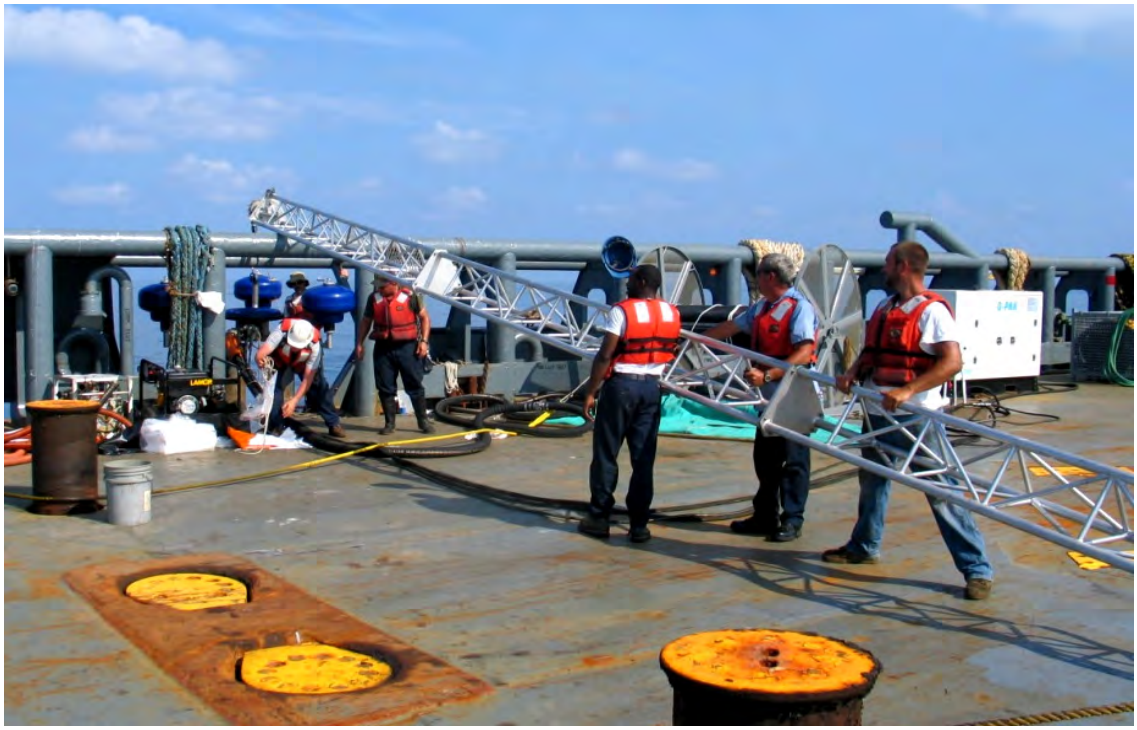


Figure 10. Assembling the Outrigger Assembly on the OSV AHTS *Vanguard*

Thursday, 6 May 2010

The Class V Skimmers and BHBs were prepared and transported to designated staging sites at Pensacola and Dauphin Island.

Operating crews were located at each site Pensacola and Dauphin Island for immediate deployment of Skimmer Systems as ordered by the USCG.

The crew completed deployment of 7000′ of USS-42″ Oil Containment Boom (at 1000′ per section in a cascaded formation) near western tip of Ship Island.

The crews began maintenance and installation of the lighting systems on the deployed Oil Containment Boom sections (for night visibility) around the west end of Ship Island.

Oil containment operations commenced in Venice with the surveying of two sites (West New Harbor Island and East Bay) for Oil Containment Boom and Boom Mooring Systems installation.

Six thousand feet of USS-26″ Boom was loaded and rigged on the OSV *Wes Bordelon* for deployment around West New Harbor Island. After deploying the 6000′ of USS-26″ Oil Containment Boom (see Figure 11), the OSV *Wes Bordelon* returned to be loaded and rigged with USS-42″ Oil Containment Boom for deployment in East Bay.

Two Current Buster VOSS were rigged on both the port and starboard sides of the OSV AHTS *Vanguard* for skimming operations.

The AHTS *Vanguard* got underway at 2200, south of Ship Island to rendezvous with the USCGC *Oak* Seagoing Buoy Tender for final tasking.

Friday, 7 May 2010

Two Class V Vessel Skimmers with complete crews were positioned afloat near Slidell, LA. One Class V Skimming System and crew were positioned afloat near Bayou La Batre, AL and one afloat near Pensacola, FL. All skimming systems and crew were ready for tasking.

The Resolve Marine Group Inc. spud barge was loaded with two Class V Skimmer Systems then positioned in the vicinity of Ship Island off Gulf Port for skimming operations.

The OSV AHTS *Vanguard*, with two Current Buster VOSS rigged port and starboard, got underway for skimming operations. The OSV AHTS *Vanguard* coordinated efforts with the USCGC *Oak* Seagoing Buoy Tender and the USCGC *Cypress* Seagoing Buoy Tender, conducting reconnaissance sweeps to locate oil product for skimming in vicinity of latitude 28 52.1 N., longitude 88 50.3 W.

Additional ESSM personnel were in transit to crew the remaining Class V Vessel Skimmers located at Federal Reserve Asset Staging Unit in Gulfport.

Figure 11. West New Harbor Island

Saturday, 8 May 2010

ICP Mobile sector requested USS-42″ Oil Containment Boom from the Federal Reserve Asset Staging Unit in Gulfport be deployed at the entrance to Mobile Bay near Dauphin Island. Oil Containment Boom was on board the OSV MV *John Coghill* for deployment.

The OSV MV *John Coghill* got underway for Theodore, Mobile Bay, AL.

The OSV *Wes Bordelon* was loaded and rigged with USS-42″ Oil Containment Boom for deployment in East Bay, LA. The vessel got underway early in the morning to deploy Oil Containment Boom between the wellheads in East Bay.

Equipped with two Current Buster VOSS rigged to its port and starboard sides, the OSV AHTS *Vanguard* underway for skimming operations for the day.

No significant concentration of oil was located or reported.

Two Class V Vessel Skimmers and crews were positioned afloat off of Pascagoula, MS.

Sunday, 9 May 2010

The USCG requested additional SUPSALV OSR equipment stored at the ESSM Facility in Fort Richardson, AK. The request was formally routed through Department of Defense (DOD), United States Transportation Command (TRANSCOM) to initiate preparations to airlift the equipment into the Gulf Coast area of responsibility (AOR).

The OSV MV *John Coghill* with 19,000′ of USS-42″ Oil Containment Boom arrived in Theodore for final preparations to deploy Oil Containment Boom at the bay entrance near Dauphin Island to protect Mobile Bay. Additional mooring systems were in route to Theodore to support oil containment operations there. See Mississippi Canyon 252 Tactical Situation Status Map in Appendix C.

The OSV *Wes Bordelon* got underway and deployed 3000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems between the wellheads in East Bay.

The OSV AHTS *Vanguard* (equipped with two Current Buster VOSS) got underway for skimming operations near the well head. See Figures 12 through 14.

Figure 12. OSV AHTS *Vanguard* Recovering Spilled Oil Using High Speed Current Buster

As the weather declined, the OSV AHTS *Vanguard* proceeded to Port Fourchon for shelter.

Figure 13. Oil and Debris Mix in Pocket of High Speed Current Buster VOSS

The OSV AHTS *Vanguard* was expected to remain in port for several days until the weather improved.

Monday, 10 May 2010

SUPSALV OSR gear and personnel were at this point dispersed between Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Robert, and Venice.

Eight Class V Vessel Skimmers and crews were pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), waiting tasking from the USCG.

There was no operational tasking of SUPSALV Class V Vessel Skimmers because no oil had been reported in coastal areas adjacent to Slidell, Ship Island, Pascagoula, Bayou La Batre, or Pensacola.

The OSV AHTS *Vanguard* (equipped with two Current Buster VOSS) remained in Port Fourchon due to adverse weather conditions.

The OSV MV *John Coghill* was in port in Theodore supporting USS-42″ Oil Containment Boom and Boom Mooring Systems deployment operations in Mobile Bay.

The OSV *Wes Bordelon* was in port in Venice preparing for USS-42″ Oil Containment Boom deployment between the wellheads in East Bay.

The USCG request for additional SUPSALV OSR equipment stored at the ESSM Facility in Fort Richardson, AK was processed and routed through DOD TRANSCOM for airlift tasking and transport of equipment into the Gulf Coast AOR. The OSR equipment from the Alaska facility was positioned at Elmendorf AFB and ready for transport.

Two Salvage Skimming Systems (Salvage Skim Vans) with light-duty Oil Containment Boom and skimming equipment were transferred to Grand Isle, LA. This was approved by the ICP Houma sector to support the oil containment plan.

Tuesday, 11 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG Federal On-Scene Commander's (FOSC) direction. Eight Class V Vessel Skimmers with full crews remained pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1).

Two Class V Skimming Systems at Ship Island were staged off a spud barge well offshore to alleviate lengthy transit time if/when needed.

The OSV AHTS *Vanguard* operating two Current Buster VOSS remained in Port Fourchon due to adverse weather conditions.

The OSV MV *John Coghill* continued to operate out of Theodore, supporting the deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay.

OSV *Wes Bordelon* deployed 3000′ of USS-42″ Oil Containment Boom between the wellheads in East Bay and returned to the port in Venice to pick up and rig additional boom for deployment.

Note: A total of 17,000′ of SUPSALV Oil Containment Boom was deployed and set to date.

SUPSALV OSR gear, normally stored at the ESSM Facility in Fort Richardson, AK, was staged at Elmendorf AFB and began airlift by TRANSCOM to the New Orleans Naval Air Station (NAS) Joint Reserve Base in Belle Chasse, LA. Two USAF C-17 Globemaster III aircraft, loaded with five Oil Containment Boom Systems and four Boom Mooring Systems, arrived. SUPSALV OSR gear was transported to a secure storage facility in Amelia, LA. The remaining SUPSALV OSR gear at Elmendorf AFB was estimated to constitute three more USAF C-17 Globemaster III loads. The loads were tentatively scheduled to start transportation to the New

Orleans NAS Joint Reserve Base in Belle Chasse on 12–13 May. The loads were pending arrangements by the NAS for adequate weight handling/lifting equipment to offload SUPSALV OSR gear from the aircraft safely upon arrival. Included in the load were four additional Oil Containment Boom systems and a 136K-Gal Oil Storage Bladder.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, was in port at Port Fourchon due to adverse weather at the site. The OSV AHTS *Vanguard* was projected to remain in port until Friday, 14 May.

Wednesday, 12 May 2010

The USCG re-evaluated the requirement for SUPSALV OSR equipment coming from ESSM base Fort Richardson, AK and reduced tasking by one Class V Skimmer System and two BHBs. Seven Boom Mooring Systems arrived from Elmendorf AFB at New Orleans NAS Joint Reserve Base in Belle Chasse. The SUPSALV OSR equipment was transported (for holding) to the National Guard Warehouse Facility in Amelia. The remaining gear was staged at Elmendorf AFB awaiting TRANSCOM transport to Gulf of Mexico (GOMEX) region. The USCG evaluated surface transport of Class V Skimmer Systems and Oil Storage Bladder-136k.

Eight Class V Vessel Skimmers with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1) all fully ready for tasking by the USCG. The teams conducted training and drills to maintain a high state of equipment and personnel readiness.

The OSV MV *John Coghill* continued to operate out of Theodore supporting the deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island protecting Mobile Bay. Six Boom Mooring System deployments were completed for a total of 10 Boom Mooring Systems deployed and set.

The OSV *Wes Bordelon*, loaded with 4000′ of USS-26″ Oil Containment Boom, attempted to deploy the Oil Containment Boom around Breton Island. Unacceptable weather conditions along with hazardous marine life suspended all operations and forced the vessel to return to port in Venice.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, was still in port at Port Fourchon due to adverse weather at the site. The estimated stay in port extended through Sunday, 16 May.

Note: Total of 17,000′ of SUPSALV Oil Containment Boom was deployed and set to date.

Thursday, 13 May 2010

Eight Class V Vessel Skimmers with full crews remained pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills to maintain a high state of equipment and personnel readiness. Two Class V Vessel Skimmers were staged on a spud barge near Ship Island.

Deployment of the oil containment gear continued. The OSV MV *John Coghill* continued to operate out of Theodore supporting deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring systems at the bay entrance near Dauphin Island to protect Mobile Bay.

Loaded 4000′ of USS-26″ Oil Containment Boom onto the OSV *Wes Bordelon*. Attempted to deploy the Oil Containment Boom around Breton Island. Unacceptable weather conditions suspended all operations and forced the ship to return to port in Venice.

Operating with two Current Buster VOSS, the OSV AHTS *Vanguard* was still in Port Fourchon due to adverse weather at the site. The estimated stay in port extended through Sunday, 16 May.

Friday, 14 May 2010

Two Class V Vessel Skimmers based in Alaska were awaiting truck transport to the GOMEX region. Additional SUPSALV OSR gear arrived in Gulfport from Port Hueneme, CA by truck. One salvage skimmer van w/1,000′ of 26″ boom, two Harbor Boom Oil Containment Boom System Vans of 4000′ of 18″ non-inflatable boom, one Inflatable Boom Oil Containment Boom System Van, with 4000′ of USS-18″ inflatable boom, arrived from Cheatham Annex, Williamsburg. These items were recent arrivals from the manufacturer and were only partially assembled into systems.

Eight Class V Vessel Skimmers with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. Teams conducted training and drills to maintain a high state of equipment and personnel readiness. Two Class V Vessel Skimmers were staged on a spud barge near Ship Island.

The OSV MV *John Coghill* continued to operate out of Theodore supporting deployment of 19,000′ of USS-42″ Oil Containment Boom and mooring systems at the bay entrance near Dauphin Island to protect Mobile Bay. Fair weather allowed for deployment of 1000′ of Oil Containment Boom.

The OSV *Wes Bordelon*, loaded with 4000′ of USS-26″ Oil Containment Boom, remained in port at Venice due to unacceptable weather.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, was still in port at Port Fourchon due to adverse weather at the site estimated to depart Saturday evening, 16 May.

Saturday, 15 May 2010

Two Class V Vessel Skimmers in Alaska were loaded on trucks and in transit to GOMEX region.

Eight Class V Vessel Skimmers with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills to maintain a high state of equipment and personnel readiness. Two Class V Vessel Skimmers were staged on a spud barge near Ship Island.

The OSV MV *John Coghill* continued to operate out of Theodore supporting deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay. Two thousand feet of Oil Containment Boom for a total of 3000′ was deployed.

The OSV *Wes Bordelon,* loaded with 4000′ of USS-26″ Oil Containment Boom, remained in port at Venice due to unacceptable weather.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, remained at Port Fourchon due to adverse weather at the site.

The overall Oil Containment Boom laying progress was hampered for several days by a combination of inclement weather in various areas and by shifting priorities of oil containment strategy as directed by the ICP sectors.

Sunday, 16 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Two Class V Vessel Skimmers were expected from Alaska. Shipping was arranged by BP logistics via RO-RO (roll-on roll-off vessels) to Seattle, and then trucked to GOMEX with an EDA of 21–22 May. See Appendix D.

Eight Class V Vessel Skimmers with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. Continuous lines of moderate to heavy thunderstorms hampered all on-water operations. Teams conducted training and drills as weather permitted.

At Mobile Bay, the OSV MV *John Coghill* continued to operate out of Theodore supporting deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay.

The OSV *Wes Bordelon,* loaded with 4000′ of USS-26″ Oil Containment Boom, remained in port in Venice due to inclement weather.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, got underway. The OSV AHTS *Vanguard* arrived onsite at Mississippi Canyon Block 252 (MC252) and established communications with C2 vessel *Seacor Lee* waiting assignment. The starboard Current Buster was deployed. Oil recovery began. See Figure 14. Configuration adjustments were made to accomplish the most efficient skimmer "pump transfer to mud tanks" process. Preparations were in progress to deploy the portside Current Buster System.

Figure 14. Oil and Debris Mix on Weir Skimmer in High Speed Current Buster VOSS

Productive oil containment operations totaled 20,000′ of SUPSALV Oil Containment Boom deployed and set to date.

Monday, 17 May 2010

Eight Class V Vessel Skimmers with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills as weather permitted.

The spud barge, with two Class V Vessel Skimmers, returned to Gulfport from Ship Island.

The OSV MV *John Coghill* continued to operate out of Theodore supporting deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay. Ten Boom Mooring Systems and 5000′ of Oil Containment Boom were in position.

The OSV *Wes Bordelon,* loaded with 4000′ of USS-26″ Oil Containment Boom, got underway, and its mission was to lay Oil Containment Boom in vicinity of Breton Island and return to Venice.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS onsite at MC252, recovered 126 barrels of oil as of 1700 hours.

Improved weather allowed successful boom deployment operations.

Tuesday, 18 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Two Class V Vessel Skimmers from Alaska were in route with EDA of 21–22 May.

Note: Total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′with 29,400′ deployed.

Eight Class V Vessel Skimmers with full crews remained pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills as weather permitted. A spud barge, with two Class V Vessel Skimmers in Gulfport, awaited repositioning orders.

The OSV MV *John Coghill* continued to operate out of Theodore supporting the deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay. Eighteen hundred feet of Oil Containment Boom was deployed (6,800′ of Oil Containment Boom was in place near Mobile Bay).

The OSV *Wes Bordelon* deployed 2600′ of USS-26″ Oil Containment Boom around Breton Island for a total of 5600′ at that location.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS onsite at MC252, recovered 254 barrels of oil to date.

Improved weather allowed Oil Containment Boom deployment operations.

Wednesday, 19 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Two Class V Vessel Skimmers from Alaska were in route with an EDA of 22 May. SUPSALV was tasked to move two additional Class V Vessel Skimmers from Gulfport to the Slidell area.

Eight Vessel Skimming Systems with full crews remain pre-positioned as follows: Slidell (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills as weather permitted. The spud barge, with two Class V Vessel Skimmers on board, was in Gulfport awaiting repositioning orders.

The OSV MV *John Coghill* continued to operate out of Theodore supporting the deployment of 19,000′ of USS-42HB, 42″ X 55′ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay. Due to heavy currents, the Oil Containment Boom and Boom Mooring Systems did not remain set and in place. Some Oil Containment Boom sections separated due to the strong currents. Currents of 3 to 4 knots rendered the oil containment systems ineffective. The Mobile Bay boom task force leaders adjusted the previous Oil Containment Boom laying plans to deflection mode due to the heavy currents affecting Oil Containment Boom deployment, maintenance, and effectiveness once placed.

SUPSALV provided boom deployment specifications to include current limits that the boom can withstand. See Appendix E.

The OSV *Wes Bordelon* loaded 5000′ of USS-26″ Oil Containment Boom and Boom Mooring Systems in Venice. The Oil Containment Boom deployment locations were to be determined at later time.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS onsite at MC252, recovered 384 barrels of oil total to date as of noon.

Concerns were expressed to the ICP Mobile sector regarding the effectiveness of the Oil Containment Boom operation strategy for the entrance to Mobile Bay because of current.

Thursday, 20 May 2010

Two Class V Vessel Skimmers were in route from Alaska with EDA of 22 May.

Two Class V Vessel Skimmers were moved from Gulfport to Slidell. Two SUPSALV personnel were sent to Grand Isle for possible shoreline skimming using two Salvage Support Skimmer Systems (Salvage Skim Vans) staged there.

Twelve Vessel Skimming Systems with full crews were pre-positioned as follows: Slidell (qty 4), Gulfport pier on spud barge (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills as weather permitted. The spud barges with two Class V Vessel Skimmers on board returned to Gulf port pier from Ship Island and were awaiting repositioning orders.

The OSV MV *John Coghill* continued to operate out of Theodore supporting the deployment of 19,000′ of USS-42″ Oil Containment Boom and Boom Mooring Systems at the bay entrance near Dauphin Island to protect Mobile Bay. Two thousand feet of additional Oil Containment Boom put 8,800′ of Oil Containment Boom in place in the Mobile Bay vicinity. The Mobile Bay oil containment task force leaders adjusted the previous Oil Containment Boom laying plans to deflection mode due to the heavy currents affecting deployment, maintenance, and its effectiveness once placed.

The OSV *Wes Bordelon* remained in Venice loaded with 5000′ of USS-26″ Oil Containment Boom and Boom Mooring Systems and anticipated location deployment orders.

The OSV AHTS *Vanguard*, operating two Current Buster VOSS, was onsite at MC252.

Note: Total oil recovered to date was 1395 barrels.

Friday, 21 May 2010

Two Class V Vessel Skimmers in route from Alaska were delayed with a new EDA of 25 May. The Class XI VOSS Skimmer System was ordered from Cheatham Annex, Williamsburg.

Twelve Class V Vessel Skimmers with full crews pre-positioned as follows: Slidell (qty 4), Gulfport pier on spud barge (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills as weather permitted. The spud barge, with two Class V Vessel Skimmers on board, returned to the Gulfport pier from Ship Island and were awaiting repositioning orders.

SUPSALV's Oil Containment Boom and Boom Mooring System operations from the OSV MV *John Coghill* were terminated at Mobile Bay. All Oil Containment Boom and Boom Mooring Systems were recovered due to the heavy currents encountered affecting deployment, maintenance, and the overall effectiveness once placed. A barge and the OSV MV *John Coghill* were directed to recover 9,800′ of Oil Containment Boom and all Boom Mooring Systems from the Mobile Bay vicinity.

The OSV *Wes Bordelon* remained in Venice, loaded with 5000′ of USS-26″ Oil Containment Boom and Boom mooring Systems, awaiting location deployment orders.

ESSM personnel in Grand Isle deployed 1000′ of USS-26″ Oil Containment Boom near-shore to allow recovery and skimming of oil expectations in that area. Four GPC personnel were working from the shore.

Two Class V Vessel Skimmers were moved to a barge at Rigolets in Slidell to be better positioned to protect the entrances to Lake Ponchartrain. See Figure 15.

Figure 15. SUPSALV Slidell, LA Support Site on Barge at Rigolets

OSV AHTS *Vanguard*, operating two Current Buster VOSS onsite at MC252, recovered 2060 barrels cumulative to date.

Saturday, 22 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Two Class V Vessel Skimmers from Alaska were in route with an EDA of 25 May.

One Class XI VOSS Skimmer System arrived.

Twelve Class V Vessel Skimmers total with full crews were pre-positioned as follows: Slidell (qty 4), Cat Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all

ready for tasking by the USCG. All the teams conducted training and drills. The spud barge, with two Class V Vessel Skimmers on board in Gulfport, was re-positioned near Cat Island. Two Class V Skimmer Systems were on a barge at Rigolets in Slidell for better positioning to protect the entrances to Lake Ponchartrain.

Oil Containment Boom and Boom Mooring Systems removal operations were in progress at Mobile Bay.

The OSV *Wes Bordelon* (in Venice) deployed 3000′ of USS-26″ Oil Containment Boom and Boom Mooring Systems at the North Pass.

The Grand Isle SUPSALV onshore crew deployed another 1000′ of USS-26″ Oil Containment Boom near-shore at the bridge to Grand Isle.

The OSV AHTS *Vanguard*, equipped two Current Buster VOSS onsite at MC252, recovered 1908 barrels of product total cumulative to date. There was a reduction in recovered product after decanting or stripping 337 barrels of water, which reflected a first-rate estimated recovery efficiency of 83 percent.

ICP Houma requested the loading of two High Speed Current Buster VOSS and one Class XI Skimmer onto three separate vessels of opportunity (VOO). SUPSALV advised ICP Houma that the two High Speed Current Buster VOSS would be more effective on a single larger VOO with internal tanks, same configuration used on board the OSV AHTS *Vanguard*. This configuration primarily eliminated the requirement to pump recovered oil into a Spill Recovery Bladder, and then manage offloading to larger capacity barges (double handling). ICP Houma operations understood this, but priorities were driving multiple smaller vessels skimming with SUPSALV equipment. Eventually ICP Houma agreed, and two High Speed Skimmers were loaded on the OSV MV *John Coghill* and a different OSV would be provided for the Class XI System.

Sunday, 23 May 2010

Having continued coordinating authority over the majority of SUPSALV OSR equipment, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Indications were that most, if not all, Class V Skimmer Systems awaiting assignment in Gulfport would be directed to Louisiana.

Twelve Class V Vessel Skimmers with full crews were still pre-positioned as follows: Rigolets (qty 4), Cat Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for tasking by the USCG. The teams conducted training and drills.

SUPSALV Oil Containment Boom and Boom Mooring removal operations were in progress at Mobile Bay.

The OSV *Wes Bordelon* left Venice and deployed 2000′ of USS-26″ Oil Containment Boom with Boom Mooring Systems at the North Pass for a total of 5000′ of Oil Containment Boom in that location.

GPC personnel onshore in Grand Isle continued to support near-shore oil recovery and protection.

The OSV AHTS *Vanguard*, operating two High Speed Current Buster VOSS, was onsite at MC252. The AHTS *Vanguard* offloaded recovered product onto a barge.

Note: Total oil recovered to date was 3031 barrels.

The OSV MV *John Coghill* completed recovery of the Oil Containment Boom and Boom Mooring Systems at Mobile Bay. The OSV MV *John Coghill* arrived at Gulfport to begin installation of two Current Buster VOSS Skimming Systems.

Monday, 24 May 2010

With continued coordination authority over the bulk of SUPSALV OSR equipment assets, the Federal Reserve Asset Staging Unit in Gulfport (State Pier West) anticipated additional positioning per the USCG FOSC direction. Preparations were made to move six Class V Skimmer Systems (with support equipment) from the Gulfport staging area, along with all USS-42″ Oil Containment Boom from Amelia staging area, to the Port Fourchon/Grand Isle area. The move took several days. The two Class V Vessel Skimmers arrive from Alaska.

All SUPSALV Oil Containment Boom recovered from Mobile Bay was sent to Gulfport to be refurbished.

The OSV *Wes Bordelon* (in Venice) loaded USS-42″ Oil Containment Boom. The target area was not identified at the time of this boom deployment.

GPC personnel onshore in Grand Isle continued to support near-shore recovery.

The OSV AHTS *Vanguard*, equipped with two High Speed Current Buster VOSS, moved to the barge collection area and offloaded mud tanks.

The OSV AHTS *Vanguard* got underway to MC252 to redeploy both VOSS and continued skimming operations.

The OSV MV *John Coghill* began loading two Current Buster VOSS Skimming Systems while pierside in Gulfport.

A Sea Scout Program vessel (OSV *Gulf Scout*), in port at Gulfport, was assigned to receive the Class XI VOSS.

Tuesday, 25 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. Six Class V Skimmer Systems with support equipment were moved from the Gulfport staging area, and all USS-42″ Oil Containment Boom and Boom Mooring Systems in the Amelia staging area, to the Port Fourchon/Grand Isle.

The OSV *Wes Bordelon* remained in port in Venice. The current oil containment mission was redirected to resetting the USS-26″ Oil Containment Boom's dragging anchors in the vicinity of Breton Island.

GPC personnel onshore deployed another 1000′ of USS-26″ Oil Containment Boom for a total of 3000′ of Oil Containment Boom. GPC personnel also continued to support near-shore recovery operations.

The OSV AHTS *Vanguard*, with two Current Buster VOSS, was back onsite at MC252 and redeployed VOSS Systems for skimming operations. No oil was encountered.

The OSV MV *John Coghill* continued loading two Current Buster VOSS Skimming Systems while pierside in Gulfport.

The crew prepared the Class XI VOSS for installation onto the OSV *Gulf Scout*.

The OSV MV *John Coghill* departure was delayed due to requirement of fuel and thunderstorms affecting the welding process for the VOSS skimmer installation.

Wednesday, 26 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. The process of moving six Class V Skimmer Systems and their support equipment from Gulfport staging area, and all USS-42″ Oil Containment Boom and Boom Mooring Systems in Amelia staging area to Port Fourchon and Grand Isle, was almost completed. SUPSALV was directed to send all recovered and/or refurbished Oil Containment Boom and Boom Mooring Systems used in Mobile Bay to BOH Brothers Shipyard in New Orleans, LA.

The OSV *Wes Bordelon* (from Venice) was underway to reset USS-26″ Oil Containment Boom dragging the anchors near Breton Island.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Equipment and personnel support for Class V Skimmers arriving in Grand Isle/Port Fourchon was coordinated.

The OSV AHTS *Vanguard*, with two High Speed Current Buster VOSS, was onsite at MC252 and redeployed the Current Busters for skimming operations.

The OSV MV *John Coghill* got underway with two Current Buster VOSS in route to offshore recovery area.

The OSV *Gulf Scout* proved unsuitable for the Class XI System installation due to the inability to weld in an area needed for crane anchoring.

Note: Total oil recovered to date was 3483 barrels.

Thursday, 27 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) consisting of positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV completed moving six Class V Skimmer Systems (along with support equipment) from the Gulfport staging area, along with all USS-42″ Oil Containment Boom and Boom Mooring Systems from the Amelia staging area, to Port Fourchon/Grand Isle. SUPSALV continued to move all recovered, refurbished Oil Containment Boom and Boom Mooring Systems to BOH Brothers Shipyard.

The OSV *Wes Bordelon* loaded 4000′ of USS-42″ Oil Containment Boom in Venice.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations.

Both the OSV AHTS *Vanguard* and OSV MV *John Coghill*, equipped with two High Speed Current Buster VOSS, were onsite at MC252 conducting skimming operations.

Waiting on replacement VOO for installation of Class XI System.

Note: Total oil recovered to date was 3821 barrels.

Friday, 28 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) which consisted of positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. Under the direction of the USCG FOSC, the recovery, refurbishment, and movement of all Oil Containment Boom and Boom Mooring Systems in Mobile was moved to BOH Brothers Shipyard.

Note: SUPSALV boom in GOMEX was 98,000′ with 30,600′ of Oil Containment Boom deployed.

The OSV *Wes Bordelon's* mission in Venice, with 4000′ of USS-42″ Oil Containment Boom on board, was revised. The OSV *Wes Bordelon* got underway to tend boom that had been dragging anchors near Breton Island.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, in the "free skimming" mode without "V" legs of boom, were launched.

Two VOOs to be used to tow additional Class V Skimmers with boom legs had not yet arrived. However, there were no oil concentrations large enough for effective skimming by the Class V Systems in the vicinity.

The OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two High Speed Current Buster VOSS, were onsite at the source conducting skimming operations.

Continued to wait for VOO to install the Class XI Skimmer System.

Note: Total oil recovered to date was 4241 barrels.

Saturday, 29 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The crews continued to move recovered and refurbished Oil Containment Boom and Boom Mooring systems to BOH Brothers Shipyard.

The total SUPSALV boom in GOMEX was 98,000′ with 30,600′ of Oil Containment Boom deployed.

There were sixteen Class V Vessel Skimmers with crews pre-positioned at: Slidell (qty 4), Grand Isle (qty 4), Port Fourchon (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for skimming operations.

The OSV *Wes Bordelon,* carrying 4000′ of USS-42″ Oil Containment Boom on board, was underway to East Bay for deployment operations.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, in the "free skimming" mode and without towed "V" legs of boom, were on standby.

The OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two Current Buster VOSS, were onsite conducting skimming operations.

Continued to wait for VOO to install the Class XI Skimmer System.

Note: Total oil recovered to date was 4754 barrels.

Sunday, 30 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) which consisted of positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. Movement of USS-42″ Oil Containment Boom and Boom Mooring Systems to BOH Brothers Shipyard was completed. Two thousand feet of the 19,000′ of USS-42″ Oil Containment Boom used in Mobile Bay was damaged beyond repair.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 32,100′ of Oil Containment Boom deployed.

Sixteen Class V Vessel Skimmers with crews pre-positioned in Slidell (qty 4), Grand Isle (qty 4), Port Fourchon (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola, (qty 1), all ready for skimming operations.

The OSV *Wes Bordelon* from Venice deployed 1,500′ of USS-42″ Oil Containment Boom before operations were secured due to the weather. The OSV *Wes Bordelon* returned to port and loaded 2000′ USS-42″additional Oil Containment Boom for a total of 4,500′. Weather kept the vessel in port at Venice.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers in the "free skimming mode" were still on standby. Two additional Class V Skimmers were now in the water. The VOOs obtained to tow the four Class V Skimmer Systems arrived and underwent inspection for suitability. Crew training was conducted. Operational training of VOOs with the Class V Skimmers was to commence over the next few days. There was no significant oil concentration large enough for effective skimming in any of the locations to which the Class V Skimmers had been assigned.

The OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two High Speed Current Buster VOSS, were onsite conducting skimming operations.

A suitable VOO was identified and scheduled to arrive in the next day or so for installation of the Class XI Skimmer System.

Note: Total oil recovered to date was 5012 barrels.

Monday, 31 May 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) which consisted of positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

Total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 33,600′ deployed.

Sixteen Class V Vessel Skimmers with crews were pre-positioned at: Rigolets (qty 4), Grand Isle (qty 4), Port Fourchon (qty 2), Ship Island (qty 2), Pascagoula (qty 2), Bayou La Batre (qty 1), and Pensacola (qty 1), all ready for skimming operations.

The final two unassigned Class V Skimmers were assigned to Mobile by Area Command and ordered to be shipped from Gulfport ASAP. One Class V Skimmer at Bayou La Batre was readied on a spud barge for deployment to skim oil headed for Dauphin Island. Two Class V Skimmers at Pascagoula embarked on a jack-up barge and headed to the same general vicinity off Dauphin Island. At this point, there was no significant oil concentrations large enough for effective skimming in any of the locations to which the Class V Skimmers were assigned.

The OSV *Wes Bordelon* deployed 1,500′ of USS-42″ Oil Containment Boom at East Bay before the operation was once again secured due to the weather. The vessel returned to port and loaded 2000′ additional Oil Containment Boom for a total of 5000′ on board.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers in the "free skimming mode" were on standby. The operational training of the first two VOOs (in tow operation configuration) with the Class V Skimmer began.

OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two Current Buster VOSS, conducted skimming operations.

Note: Total oil recovered to date was 5174 barrels.

Tuesday, 1 June 2010

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

Total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 33,600′ deployed. Oil appeared off Mobile Bay. Oil also appeared to be heading in the direction of Pensacola.

Six Class V Skimmers from Gulfport, Bayou La Batre, Pascagoula, and Pensacola were positioned on five spud/jack-up barges off Mobile and Pensacola. Two Class V Skimmers began active skimming. The last two Class V Skimmers in Gulfport were directed to postpone shipment until 3 June.

The OSV *Wes Bordelon* got underway to deploy USS-42″ Oil Containment Boom out of Venice to deploy boom between wellheads in East Bay.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in the "free skimming mode", were being used near-shore.

The OSV AHTS *Vanguard* and the OSV MV *John Coghill*, operating two High Speed Current Buster VOSS, were onsite conducting skimming operations.

Awaiting OSV *Renee* in Gulfport for the installation of the Class XI Skimmer System.

Note: Total oil recovered to date was 5543 barrels.

The OSV *Wes Bordelon* deployed 4400′ of USS-42″ Oil Containment Boom at East Bay.

Wednesday, 2 June 2010

SUPSALV OSR equipment and 113 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) which consisted of positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

Total SUPSALV Oil Containment Boom and Boom Mooring Systems in GOMEX was 98,000′ with 38,000′ deployed.

Two SUPSALV Class V Skimmer Systems off Dauphin Island were skimming oil. The CONOPS (refer to Appendix F) in Pensacola changed to have the single Class V Skimmer positioned there to operate in the harbor. Sixteen of the eighteen Class V Vessels Skimmer and crews were positioned at the USCG designated locations.

Two skimmers remained in Gulfport awaiting assignments.

Two Class V Skimmers in Port Fourchon were to be loaded on board the *Pecos* barge to perform skimming operations near Mobile.

The OSV *Wes Bordelon* spent the day reloading in Venice.

GPC personnel onshore in Grand Isle continued to support near-shore cleanup/protection and operated Class V Skimmers in the “free skimming mode”.

OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two High Speed Current Buster VOSS, conducted onsite skimming operations.

The OSV MV *Renee* arrived pierside in Gulfport, and the Class XI Skimmer System was in the process of being installed.

Note: Total oil recovered to date was 5763 barrels.

Thursday, 3 June 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 38,000′ of Oil Containment Boom deployed.

All eighteen Class V Skimmers and crews were positioned at the USCG designated locations.

The five Class V Skimmers positioned on board four spud/jack-up barges in Mobile did not get underway due to the weather.

Two Class V Skimmers from Port Fourchon were taken on board the *Pecos* barge with their crews for skimming operations in the Mobile/Pensacola area.

At the lower Mississippi River, the OSV *Wes Bordelon* was reloaded 4400′ of USS-42″ Oil Containment Boom at East Bay but could not deploy the boom due to the weather.

GPC personnel onshore in Grand Isle continued to support near-shore oil recovery operations. Two Class V Skimmers in the "free skimming mode" were on standby. Two Class V Skimmers under tow with full boom legs encountered oil.

OSV AHTS *Vanguard* and OSV MV *John Coghill*, each with two High Speed Current Buster VOSS, conducted onsite skimming operations.

OSV MV *Renee* was pierside in Gulfport with the Class XI Skimmer System being installed. The Class XI crane was being installed.

Note: Total oil recovered to date was 6098 barrels.

Friday, 4 June 2010

SUPSALV OSR equipment and 124 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 38,000′ of boom deployed. Eighteen Class V Vessel Skimmers with crews were positioned at the USCG designated locations.

Five Class V Skimmers, positioned on board four spud/jack-up barges off Mobile, did not get underway again due to the weather. Two Class V Skimmers from Port Fourchon were loaded on the *Pecos* barge to conduct skimming operations in Mobile Bay. Three bladder offloading systems and trainers were sent to Bayou La Batre to be taken offshore to support bladder offloading operations of task forces 1, 2, and 3 on barges in Mobile.

OSV *Wes Bordelon* was underway with 4400′ of USS-42″ Oil Containment Boom at East Bay but could not deploy boom due to the weather.

SUPSALV personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in "free skimming mode", were on standby near the shore. Two Class V Skimmers and the shore based operations encountered oil. See Figure 16.

Figure 16. Crude Oil Rolling off Skimmer Belt

OSV MV *John Coghill*, with two Current Buster VOSS, was at the oil site conducting skimming operations, but rough weather was encountered. OSV AHTS *Vanguard* was inbound to Gulfport to have knuckle cranes installed to lift Weir Skimmers from High Speed Current Buster pockets as had been accomplished on the OSV MV *John Coghill*. This had greatly accelerated debris clearance and maintenance.

OSV MV *Renee* was pierside in Gulfport with the Class XI Skimmer System installation completed. Testing and training were conducted. OSV MV *Renee* was to get underway midday Saturday to refuel in Theodore then proceed to sea.

Note: Total oil recovered to date was 6098 barrels.

Despite the USCG and SUPSALV direction to the contrary, it appeared that some SUPSALV Oil Containment Boom was deployed from staging areas without SUPSALV knowledge or the benefit of SUPSALV technical assistance. This created the possibility of damage, especially to inflatable Oil Containment Boom, if deployed by inexperienced operators (especially the boom now staged at the BOH Brothers Shipyard in Louisiana and boom shipped without SUPSALV knowledge from Amelia, LA) which was discovered not deployed in Bayou La Batre. ESSM Personnel from Grand Isle periodically checked on the equipment staged in Port Fourchon.

Saturday, 5 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 40,000′ of boom deployed.

The *Pecos* barge arrived in Mobile with two Class V Skimmers. One of the four spud/jack-up barges off the Mobile coast, with two Class V Skimmers on board, was ordered to Panama City, FL. The other three Mobile area barges, with three Class V Skimmers between them, did not encounter oil. Bladder offload training was conducted.

OSV *Wes Bordelon* got underway with 4400′ of USS-42″ Oil Containment Boom at East Bay but again could not deploy boom due to rough weather. GPC personnel onshore in Grand Isle, continued to support near-shore clean up and/or protection and operated the Class V Skimmers. Another 2000′ of USS-26″ Oil Containment Boom was deployed. Two Class V skimmers and the shore based operations recovered oil this day.

OSV MV *John Coghill*, with two High Speed Current Buster VOSS, was onsite but discontinued skimming operations due to rough weather. No oil was skimmed. OSV AHTS *Vanguard* in Gulfport was undergoing installation of knuckle cranes to augment manual outrigger boom assemblies. Cranes were used to lift Weir Skimmers from the High Speed Current Buster pockets improving oil transfer and debris clearance efficiency.

OSV MV *Renee* got underway to refuel in Theodore and continued out to sea for skimming operations with the Class XI Skimmer System.

Note: Total oil recovered to date was 6098 barrels.

Sunday, 6 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,000′ of boom deployed.

Pecos barge, with two Class V Skimmers, remained in Mobile awaiting USCG tasking. One of the four spud/jack-up barges off Mobile Bay, with two Class V Skimmers on board, was in route to Panama City. The other three Mobile area barges, with three Class V Skimmers on board, did not get underway due to rough weather and continued Oil Bladder offload training.

OSV *Wes Bordelon* got underway with 4400′ of USS-42″ Oil Containment Boom at East Bay.

The installation of 17,000′ of USS-42″ Oil Containment Boom, near Half Moon Island, was part of the Lake Ponchartrain protection strategy. The USCG contractor without SUPSALV knowledge was trying to conduct this installation by attaching the boom to pre-installed pilings. The contractor had problems figuring out how to deploy the boom. SUPSALV sent personnel to the barge to provide instruction on how to deploy the Oil Containment Boom. Upon providing instruction for deployment of Oil Containment Boom, the contractor was allowed to complete the installation.

Onshore GPC personnel in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers in the "free skimming mode" were used near-shore. Two Class V Skimmers in the full skimming mode and the shore based operations recovered oil.

OSV MV *John Coghill,* with two High Speed Current Buster VOSS, was onsite but unable to skim due to rough weather. OSV AHTS *Vanguard* completed installation of knuckle cranes.

OSV MV *Renee,* with the Class XI Skimmer System on board, arrived onsite for skimming operations in the afternoon.

Note: Total oil recovered to date was 6098 barrels.

Monday, 7 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, Port Fourchon, and Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 59,300′ of boom deployed.

The *Pecos* barge, with two Class V Skimmers, was in Mobile Bay awaiting USCG tasking. The three spud/jack-up barges, with three Class V Skimmers on board, were near Mobile. No oil was encountered. The spud barge, with two Class V Skimmers, arrived in Panama City.

OSV *Wes Bordelon* reloaded Oil Containment Boom in Venice.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in the "free skimming mode", as well as two Class V Skimmers used with VOO boats, recovered oil.

OSV MV *John Coghill* and OSV AHTS *Vanguard* (each with two Current Buster VOSS) and OSV MV *Renee* (with a Class XI Skimmer System) were onsite with skimmers deployed but found only small amounts of recoverable oil.

On OSV MV *Renee*, the Class XI Skimmer System, operated as designed on its first full day of operation.

Note: Total oil recovered to date was 6098 barrels.

Tuesday, 8 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 59,300′ of boom deployed.

The *Pecos* barge, with two Class V Skimmers in Mobile, was to be assigned to ICP Mobile offshore Task Force 706. Four spud/jack-up barges with five Class V Skimmers on board were skimming near Mobile and Panama City.

OSV *Wes Bordelon* deployed an additional 2000′ of USS-42″ Oil Containment Boom at East Bay then returned to Venice to reload boom.

GPC personnel onshore continued to support near-shore recovery operations. Two Class V Skimmers, both in "free skimming mode" without towed "V" legs of boom, and two Class V Skimmers being towed, recovered 22 barrels of oil in around Grand Isle.

OSV MV *John Coghill* and OSV AHTS *Vanguard*, each with two Current Buster VOSS, conducted offshore operations.

The knuckle boom crane on the OSV MV *Renee* was damaged while recovering the Class XI Skimmer System from increasingly rough seas.

OSV MV *Renee* was decontaminated and returned to State Pier Gulfport for repair evaluation.

Note: Total oil recovered to date was 5771 barrels.

Wednesday, 9 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews, were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 6169 barrels and Class V Skimmers in/near-shore - 372 barrels.

The *Pecos* barge, with two Class V Skimmers, assigned to near/offshore Task Force under ICP Mobile. The four spud/jack-up barges with five Class V Skimmers on board were near Mobile and Panama City skimming in sporadic oil pockets and streams.

OSV *Wes Bordelon* deployed an additional 1900′ of USS-42″ Oil Containment Boom at East Bay and returned to Venice to reload boom.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in the “free skimming mode”, and two Class V Skimmers being towed recovered no oil in vicinity of Grand Isle.

OSV MV *John Coghill* and OSV AHTS *Vanguard* operated two each Current Buster VOSS.

OSV MV *Renee* was in port with the Class XI Skimmer System. The damaged knuckle boom crane was repaired, and the deck layout was reconfigured for better launch and recovery capability.

Thursday, 10 June 2010

SUPSALV OSR equipment and 132 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews, were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 6870 barrels and Class V Skimmers in/near-shore - 406 barrels.

Pecos barge, with two Class V Skimmers, assigned to near/offshore Task Force under ICP Mobile. The four spud/jack-up barges with five Class V Skimmers on board were near Mobile and Panama City skimming in sporadic oil pockets and streams.

In Louisiana, OSV *Wes Bordelon* loaded 3000′ of USS-42″ Oil Containment Boom and awaited tasking.

GPC personnel onshore continued to support near-shore recovery operations. Two Class V Skimmers, both in “free skimming mode”, and two Class V Skimmers being towed recovered very little oil near Grand Isle.

OSV MV *John Coghill* and AHTS *Vanguard* operated two each High Speed Current Buster VOSS. No reportable oil was found.

OSV MV *Renee* with the Class XI Skimmer System was repaired and ready for tasking. SUPSALV agreed to task her offshore.

Friday, 11 June 2010

SUPSALV OSR equipment and 132 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews, were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 6870 barrels and Class V Skimmers near-shore - 570 barrels.

SUPSALV supported United States Fleet Forces (USFF) Deepwater Horizon Severe Weather planning effort.

Pecos barge, with two Class V Skimmers, assigned to near-shore Task Force under ICP Mobile. The four spud/jack-up barges with five Class V Skimmers on board were near Mobile and Panama City skimming in sporadic oil pockets and streams.

OSV *Wes Bordelon* loaded 3000′ of USS-42″ Oil Containment Boom remained in port in Venice waiting for tasking. The Venice team conducted boom repairs in the vicinity of Breton Island.

GPC personnel onshore in Grand Isle continued supporting near-shore recovery operations. Two Class V Skimmers, both in “free skimming mode”, and two Class V Skimmers recovered small amounts of oil near Grand Isle.

OSVs MV *John Coghill* and AHTS *Vanguard*, operating two High Speed Current Buster VOSS and OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in the vicinity of the Deepwater Horizon site. See Figure 17.

The AHTS *Vanguard* offloaded mud tanks to the offshore barge.

Figure 17. Skimming Using the Outrigger Assembly and Class XI Skimmer System

Saturday, 12 June 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 8185 barrels and Class V Skimmers near-shore - 667 barrels.

Pecos barge, with two Class V Skimmers, were assigned to near-shore Task Force under ICP Mobile. The four spud/jack-up barges with five Class V Skimmers on board were in the vicinity Mobile and Panama City skimming in sporadic oil pockets and streams.

The USCG assigned the OSV *Bayou Bee* for use as skimmer system maintenance support and an Oil Spill Recovery Bladder offloading vessel. OSV *Bayou Bee* reported to Theodore to load an 80-ton crane and then transit to Gulfport to complete loadout of SUPSALV various maintenance vans and other miscellaneous equipment. OSV *Bayou Bee* would then begin servicing the skimmer systems.

OSV *Wes Bordelon* got underway from Venice conducting Oil Containment Boom repair at Breton Island.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in "free skimming mode", and two Class V Skimmers did not recover any oil.

OSVs MV *John Coghill* and AHTS *Vanguard*, operating two High Speed Current Buster VOSS and OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in vicinity of the Deepwater Horizon site.

Sunday, 13 June 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of Oil Containment Boom deployed.

Note: Total oil recovered to date: VOSS offshore - 8147 barrels and Class V Skimmers near-shore - 695 barrels.

Pecos barge, with two Class V Skimmers, was assigned to near-shore Task Force under ICP Mobile. The four spud/jack-up barges with five Class V Skimmers on board were near Mobile and Panama City skimming in sporadic oil pockets and streams. There were difficulties with the operational control of the *Pecos* barge system. The Class V Skimmers were not being used properly and sustained damage. SUPSALV received messaging from ICP regarding CONOPS tasking of the *Pecos* barge to conduct concept trial operations for a few days to determine if improvements were forthcoming.

OSV *Bayou Bee* in Gulfport was completing loadout of SUPSALV maintenance and decontamination vans and small boats along with crew preparation (see Figure 18). The vessel was expected to be ready for service the next day.

Figure 18. OSV *Bayou Bee* Loaded with SUPSALV Equipment

OSV *Wes Bordelon* in Venice conducted Oil Containment Boom repair at North Pass and discovered five anchor lines cut and anchors not found (they were fortress anchors which were sought-after by locals). These incidents were reported to the local USCG.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. Two Class V Skimmers, both in "free skimming mode", and two Class V Skimmers did not recover any oil.

Eighteen thousand feet of USS-42″ Oil Containment Boom staged at Port Fourchon was tasked for Chandeleur Islands. Coordination was conducted with the local USCG representative for positions and mooring plans.

OSVs MV *John Coghill* and AHTS *Vanguard,* operating two Current Busters each, and OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in vicinity of the Deepwater Horizon site.

Monday, 14 June 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 8549 barrels and Class V Skimmers near-shore - 701 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* in Gulfport completed loadout of SUPSALV equipment.

OSV *Wes Bordelon* in Venice awaited tasking. GPC lead in Venice got underway to the Chandeleur Islands with the local USCG Oil Containment Boom coordinator to investigate booming strategy. Deploying boom at approximately 1.2 n.m. section east of the island area was not possible due to insufficient depth of 3′ or less and high surf. The USCG was to meet with Fish and Wildlife to develop additional options.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers recovered no oil.

OSVs MV *John Coghill* and AHTS *Vanguard*, operated two High Speed Current Buster VOSS each along with the OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in vicinity the of Deepwater Horizon site.

Tuesday, 15 June 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 9196 barrels and Class V Skimmers near-shore - 747 barrels.

The Deepwater Horizon Severe Weather plan was submitted.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* got underway proceeding to the near-shore skimming area off MS/AL/FL coasts to begin service rotation.

One Class V Skimmer (USN # 85) was overturned by VOO (local fishing trawler under BP contract) after they attempted to tow without the SUPSAV crew on board. See Figure 19. The fishing trawler towed the skimmer from the Oil Containment Boom end rather than by the bow towline at a high speed causing excessive water to go up the belt and onto the deck triggering the skimmer to turn upside down (see Figure 19). SUPSALV sent a message via email to ICP and reiterated no maneuvering of SUPSALV watercraft without SUPSALV personnel.

Figure 19. Capsized Skimmer

SUPSALV sent personnel to recover the capsized skimmer. The skimmer was then taken to the Theodore Decontamination Station in Theodore. The crew of the skimmer was also sent to Theodore to ensure that it was decontaminated as soon as possible.

The overturned skimmer would have to be repaired because the engine and electrical system had been flooded by salt water.

OSV *Wes Bordelon* in Venice conducted various Oil Containment Boom repairs. The USCG and ICP put the Chandelier Islands Oil Containment Boom project on hold pending review and evaluation of options.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers did not recover any oil.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two Current Buster Systems each. OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in the vicinity of the Deepwater Horizon site.

Wednesday, 16 June 2010

SUPSALV OSR equipment and 123 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All 18 Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations, including the Class V undergoing decontamination in Theodore.

Note: Total oil recovered to date: VOSS offshore - 10,232 barrels and Class V Skimmers near-shore - 962 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* completed offloading the storage bladder and conducted maintenance of one skimmer.

The decision was made that the previously capsized skimmer that was recovered from the water would be transported to Gulfport after decontamination. SUPSALV published CONOPS (see Appendix F) for Class V Skimmers in response to capsizing.

OSV *Wes Bordelon* in Venice conducted various Oil Containment Boom repairs.

SUPSALV personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers reported no recoverable oil.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each.

OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in the vicinity the of Deepwater Horizon site.

Thursday, 17 June 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews, were positioned at the USCG designated locations. This includes the one Class V out of commission undergoing decontamination.

Note: Total oil recovered to date: VOSS offshore - 11,081 barrels and Class V Skimmers near-shore - 979 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* conducted maintenance on skimmer #83.

OSV *Wes Bordelon* in Venice was out-of-service due to engine problems. Finding a suitable replacement was in progress.

Grand Isle received a request to move two Class V Skimmers from the pier at Port Fourchon to Grand Isle.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers had no reportable oil recovery.

OSVs MV *John Coghill* and AHTS *Vanguard*, operated two High Speed Current Buster VOSS each.

OSV MV *Renee*, with the Class XI Skimmer System, continued skimming operations in the vicinity the of Deepwater Horizon site.

Friday, 18 June 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations. This includes the one Class V out of commission undergoing decontamination.

Note: Total oil recovered to date: VOSS offshore - 12,740 barrels and Class V Skimmers near-shore - 1226 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* conducted skimmer maintenance.

The previously overturned skimmer was still in decontamination.

Thursday's request to move two Class V Skimmers from the pier at Port Fourchon to Grand Isle was changed. SUPSALV was redirected to send one to replace the skimmer that was overturned in Mobile. The other skimmer's destination would be determined later.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers reported no oil was recovered.

OSVs MV *John Coghill* and AHTS *Vanguard*, operating two High Speed Current Buster VOSS each, continued skimming operations near the Deepwater Horizon site.

Saturday, 19 June 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations. This includes the one Class V out of commission undergoing decontamination.

Note: Total oil recovered to date: VOSS offshore - 13,173 barrels and Class V Skimmers near-shore - 1226 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), and operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

Decontamination of the previously overturned skimmer could not be completed due to stormy weather.

SUPSALV worked to move two Class V Skimmers from Port Fourchon. One skimmer will be moved to Pensacola and one to Gulfport for further assignment.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers continued to search for recoverable oil.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each and continued skimming operations near the Deepwater Horizon site.

OSV MV *Renee* with the Class XI equipment Skimmer System continued skimming operations near the Deepwater Horizon site.

Sunday, 20 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations. This includes the one Class V out of commission undergoing decontamination.

Note: Total oil recovered to date: VOSS offshore - 13,973 barrels and Class V Skimmers near-shore - 1322 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

Two Class V Skimmers were moved from the pier at Port Fourchon. One skimmer was to be moved to Pensacola and one to Gulfport for further assignment.

SUPSALV personnel onshore in Grand Isle continued to support near-shore cleanup/protection and operate two Class V Skimmers in the "free skimming mode" as well as two towed skimmers.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each continued skimming operations near the Deepwater Horizon site.

OSV MV *Renee* with the Class XI Equipment Skimmer System continued skimming operations near the Deepwater Horizon site.

Monday, 21 June 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

All eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations. This includes the one Class V out of commission undergoing decontamination.

Note: Total oil recovered to date: VOSS offshore - 15,213 barrels and Class V Skimmers near-shore - 1561 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

The previously overturned Class V Skimmer completed decontamination and was in route to Gulfport.

OSV *Wes Bordelon* in Louisiana was removed from service due to engine problems. A replacement vessel was still being sought.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers skimmed sporadic oil pockets with little or no oil recovered.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each continued skimming operations near the Deepwater Horizon site.

OSV MV *Renee* with the Class XI equipment Skimmer System continued skimming operations near the Deepwater Horizon site.

Tuesday, 22 June 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

The previously overturned skimmer was returned to Cheatham Annex for repair after the engine and hydraulic systems were flushed in Gulfport.

The CNIC management team arrived, was briefed, and then set up their command post in SUPSALV's second Command Trailer.

Note: Total oil recovered to date: VOSS offshore - 15,627 barrels and Class V Skimmers near-shore - 1561 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

OSV *Wes Bordelon* in Louisiana was removed from service due to engine problems. A replacement vessel was still being sought.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. All Class V Skimmers continued searching for recoverable oil.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each and continued skimming operations in the vicinity the of the Deepwater Horizon site.

OSV MV *Renee* suffered a casualty to the Class XI Skimmer System and was in route to Gulfport for decontamination in Theodore.

Wednesday, 23 June 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in the GOMEX was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

The Class V Skimmer previously overturned was in the repair process. One Class V Skimmer returned to Gulfport from Port Fourchon and was on standby awaiting tasking.

The co-located CNIC management team organized the movement of their equipment.

Note: Total oil recovered to date: VOSS offshore - 16,876 barrels and Class V Skimmers near-shore - 1561 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance and bladder offloading. Rough weather prohibited most of the day's operations.

SUPSALV sought a replacement vessel for OSV *Wes Bordelon.* GPC personnel in Venice were using smaller vessels to inspect/repair Oil Containment Boom.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers continued searching for oil.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two Current Busters each and continued skimming operations in vicinity of the Deepwater Horizon site.

OSV MV *Renee* returned to Gulfport. GPC personnel repaired the Class XI Skimmer System and loaded provisions for OSVs MV *John Coghill*, AHTS *Vanguard*, and MV *Renee*.

Thursday, 24 June 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

The CNIC's equipment began to arrive. GPC personnel assisted in arranging transportation and offloading.

Note: Total oil recovered to date: VOSS offshore - 17,234 barrels and Class V Skimmers near-shore - 1729 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

SUPSALV was still seeking a replacement vessel for OSV *Wes Bordelon*. GPC personnel at Venice were using smaller vessels to inspect/repair Oil Containment Boom.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers conducted skimming operations.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each and continued skimming operations near the Deepwater Horizon site.

OSV MV *Renee* returned to sea with the Class XI Skimmer System to join OSVs MV *John Coghill* and AHTS *Vanguard*.

NAVSEA/SUPSALV joined the Coast Guard Lead Interagency Alternative Technology Assessment Program (IATAP). The IATAP planned to evaluate new technological concepts as related to the Deepwater Horizon response. U.S. Navy participants included Capt. Gunzel (SUPSALV 00C Reserve Det.), Dr. Hudson (NSWCCD), and Mr. Urban (PCCI). The group was formed to provide a conduit to U.S. NAVY resources as needed by IATAP.

Friday, 25 June 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

The CNIC management team continued to receive their equipment. GPC personnel continued to assist with offloading and placement of the equipment.

Note: Total oil recovered to date: VOSS offshore - 17,700 barrels and Class V near-shore - 1729 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers were on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

There was still no replacement vessel for OSV *Wes Bordelon.* GPC personnel at Venice utilized smaller vessels to inspect/repair Oil Containment Boom.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers continued skimming as directed.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each, and OSV MV *Renee* with a Class XI Skimmer System continued skimming operations near the Deepwater Horizon site.

Saturday, 26 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC. The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Tasking was received for CNIC equipment to be operated in the Pensacola area.

Note: Total oil recovered to date: VOSS offshore - 17,886 barrels and Class V Skimmers near-shore - 1909 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

A replacement vessel (OSV *Caspian*) was due to arrive Sunday for the OSV *Wes Bordelon*. GPC personnel at Venice utilized smaller vessels to inspect/repair Oil Containment Boom.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. SUPSALV received tasking for 8000′ of USS-42″ Oil Containment Boom to be deployed east of Grand Isle.

OSVs MV *John Coghill* and AHTS *Vanguard* operated two High Speed Current Buster VOSS each, and OSV MV *Renee*, with a Class XI Skimmer System, continued skimming operations near the Deepwater Horizon site.

Sunday, 27 June 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

The CNIC management team's equipment continued to arrive.

Note: Total oil recovered to date: VOSS offshore - 18,021 barrels and Class V Skimmers near-shore - 1958 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

OSV *Caspian* was accepted for boom handling operations out of Venice. The vessel needed to have the aft deck bulwark cut out and a portable capstan installed.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. The Class V Skimmers continued as directed. Received tasking for 8000′ of USS-42″ Oil Containment Boom to be set east of Grand Isle. SUPSALV was awaiting booming plans.

SUPSALV was tasked to reposition one or more of the four Class V Skimmers at the Rigolets (Lake Pontchartrain area) further east to encounter any oil that might have been moving into the Mississippi Sound near the MS/LA border.

OSV AHTS *Vanguard* operated two High Speed Current Buster VOSS, and OSV MV *Renee,* with a Class XI Skimmer System, continued skimming operations near the Deepwater Horizon site.

OSV MV *John Coghill* was in transit to Gulfport to perform maintenance on Current Busters.

Monday, 28 June 2010

SUPSALV OSR equipment and 136 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

GPC personnel continued assisting in receiving and movement of CNIC equipment.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and Class V Skimmers near-shore - 1966 barrels.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer maintenance.

GPC personnel with the OSV *Caspian* conducted Oil Containment Boom maintenance operations out of Venice.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations.

GPC personnel repositioned two of the four Class V Skimmers in the Rigolets (Lake Pontchartrain area) further east to skim any oil that might move into the Mississippi Sound near the MS/LA border.

OSVs MV *John Coghill,* AHTS *Vanguard,* and MV *Renee* returned to port due to the rough weather.

While Tropical Storm Alex was not forecasted to directly affect the Deepwater Horizon areas of operations, wind and seas resulting from the storm's passage to the west would likely preclude booming and skimming operations early to midweek.

Tuesday, 29 June 2010

SUPSALV OSR equipment and 138 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four of four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations. The Class V Skimmer USN #85 was still down for repair.

GPC personnel continued assisting in receiving and offloading of CNIC equipment.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and Class V Skimmers near-shore - 1966 barrels.

Minimal skimming operations were conducted due to local storms.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola skimming sporadic oil pockets and streams.

OSV *Bayou Bee* continued skimmer offload and maintenance.

GPC personnel and OSV *Caspian* were in port in Venice due to rough weather; equipment loadout was conducted for future oil containment operations.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations.

GPC personnel repositioned two of the four Class V Skimmers at the Rigolets (Lake Pontchartrain area) further east in Mississippi Sound and were on hold for weather.

OSVs MV *John Coghill,* AHTS *Vanguard,* and MV *Renee* were in port due to rough weather.

Tropical Storm Alex did not directly affect the Deepwater Horizon Operation area, but high winds and rough seas resulting from the storm's passage to the southwest were expected to preclude offshore skimming until late in the week.

Wednesday, 30 June 2010

SUPSALV OSR equipment and 134 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Skimming Systems, one Class XI Skimmer System, and four of four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

GPC personnel continued assisting the CNIC management team in receiving and offloading.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and from Class V Skimmers near-shore - 1966 barrels.

Skimming was restricted due to local storms.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), was reassigned between Pascagoula and Pensacola.

OSV *Bayou Bee* was at the staging area in Gulfport loaded with spares.

GPC personnel and OSV *Caspian* remained in port in Venice because of the weather and conducted equipment loadout for future oil containment operations.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations.

Two of the four Class V Skimmers at the Rigolets (Lake Pontchartrain area) were relocated further east into the Mississippi Sound.

OSVs MV *John Coghill,* AHTS *Vanguard,* and MV *Renee* were in the port due to the weather.

Tropical Storm Alex did not directly affect the Deepwater Horizon Operation area, but high winds and rough seas resulting from the storm's passage to the southwest were expected to preclude offshore skimming until later in the week.

Thursday, 1 July 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and Class V Skimmers near-shore - 1966 barrels. No skimming was conducted this day due to local storms.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated

between Pascagoula and Pensacola and remained on standby. Skimming operations were to resume as soon as the weather cleared.

OSV *Bayou Bee* got underway from Gulfport and Mobile Bay to continue skimmer services.

GPC personnel with OSV *Caspian* remained in port in Venice because of the weather conducting equipment loading for future oil containment operations.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. All Class V Skimmers were on standby due to the weather.

In Slidell, two of the four Class V Skimmers at the Rigolets (Lake Pontchartrain area) were relocated further east into the Mississippi Sound.

OSVs MV *John Coghill*, AHTS *Vanguard,* and MV *Renee* were in the port due to the weather.

Tropical Storm Alex continued to hamper the offshore skimming effort.

Friday, 2 July 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Panama City, Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued assisting CNIC management in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers (one Class V Skimmer still in repair), one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and Class V Skimmers near-shore - 1966 barrels.

No skimming was conducted due to local storms.

The *Pecos* barge, with two Class V Skimmers on board and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola and remained on standby, set to resume skimming operations as soon as the weather cleared.

OSV *Bayou Bee* in vicinity of Mobile Bay was ready to continue skimmer services.

GPC personnel with OSV *Caspian* were in port in Venice because of the weather.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. All Class V Skimmers operated as weather permitted.

OSVs MV *John Coghill*, AHTS *Vanguard*, and MV *Renee* remained in port due to the weather. SUPSALV was notified by ICP Houma to pull the OSV MV *John Coghill* offline for additional tasking and replace it with OSV *Vantage*. SUPSALV will begin demobilizing the two High Speed Current Buster VOSS and associated equipment/boom cranes from OSV MV *John Coghill* as weather permitted. No EDA for OSV *Vantage* as yet.

Tropical Storm Alex continued to hamper the offshore skimming effort.

Saturday, 3 July 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,340 barrels and Class V Skimmers near-shore - 1966 barrels. Very little skimming was conducted due to high winds.

The *Pecos* barge, with two Class V Skimmers and four spud/jack-up barges with five Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola remained on standby to resume skimming operations as soon as weather permitted.

OSV *Bayou Bee* was near Mobile Bay area ready to continue skimmer services.

GPC personnel with OSV *Caspian* were in port at Venice due to the weather.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. No oil was encountered during the Class V Skimmer operations.

A SUPSALV representative and one GPC member of IATAP were underway on an experimental skimming vessel the *A Whale* (*A Whale* is the world's largest oil skimmer) assisting with an operational evaluation of this converted tanker.

OSV AHTS *Vanguard* got underway at the MC252 site assisting with the *A Whale* skimming vessel operational test. The weather at the site was too rough to allow skimming with Current Buster VOSS on AHTS *Vanguard*.

OSV MV *Renee* remained in port due to the weather. The demobilization of two High Speed Current Buster VOSS and associated equipment/boom cranes from OSV MV *John Coghill* was completed. Skimming equipment was ready to install on the AHTS *Vantage* upon its arrival.

The weather continued to hamper offshore skimming efforts.

Monday, 5 July 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,439 barrels and Class V Skimmers near-shore - 1966 barrels. Minimal skimming was conducted because of bad weather.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola remained on standby resuming skimming operations as soon as weather permitted.

OSV *Bayou Bee* returned to Gulfport for a crew change out.

SUPSALV personnel with OSV *Caspian* remained in port in Venice due to the weather.

SUPSALV personnel onshore in Grand Isle continued to support near-shore recovery operations. All Class V Skimmers were in operation. No oil was encountered.

A SUPSALV representative and one GPC member of IATAP returned from the *A Whale*. An operational evaluation report of this converted tanker was being compiled.

OSV AHTS *Vanguard* and OSV MV *Renee*, with Current Buster VOSS, got underway at the MC252 site. The AHTS *Vanguard* conducted one half day of skimming. The waters were too rough for OSV MV *Renee* and the Class XI VOSS.

OSV *Vantage* (OSV MV *John Coghill* replacement) in Gulfport completed installation of two Current Buster VOSS and was set to sail when directed by the offshore coordinator.

SUPSALV personnel met with ICP Houma offshore coordinator to discuss using VOOs working with SUPSALV USS-42″ Oil Containment Boom for an offshore collection and herding strategy to improve VOSS skimming effectiveness. SUPSALV was expected to conduct a trial run on this strategy once VOOs and an OSV were identified.

The weather continued to hamper skimming and oil containment operations.

Tuesday, 6 July 2010

SUPSALV OSR equipment and 125 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,439 barrels and Class V Skimmers near-shore - 1966 barrels.

No skimming was conducted due to the weather.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola and remained on standby resuming skimming operations as soon as weather permitted.

OSV *Bayou Bee* was in Gulfport waiting for skimmer operations to resume.

GPC personnel with OSV *Caspian* remained in port in Venice due to the weather.

GPC personnel onshore in Grand Isle continued to support near-shore recovery operations. All Class V Skimmers operated and no oil encountered.

A SUPSALV representative and one GPC member of IATAP compiled a report from the *A Whale* operational evaluation.

OSV AHTS *Vanguard* and OSV MV *Renee* with VOSS returned to port to wait for the weather to clear up along with OSV *Vantage*. SUPSALV continued to work with the ICP Houma offshore coordinator to develop a strategy for VOOs working with SUPSALV USS-42″ Oil Containment Boom offshore and near-shore collection and herding to improve VOSS skimming effectiveness.

The weather continued to hamper skimming and oil containment operations.

Wednesday, 7 July 2010

SUPSALV OSR equipment and 125 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

No skimming was conducted this day due to the weather.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Seventeen of eighteen Class V Vessel Skimmers, one Class V Skimmer (previously overturned was repaired and was in transit to Gulfport), one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,439 barrels and Class V Skimmers near-shore - 1966 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola and remained on standby resuming skimming operations as soon as weather permitted.

OSV *Bayou Bee* remained at Gulfport and waited for skimmer operations to resume.

SUPSALV met the oil containment coordinator for the Bay St. Louis, MS area to finalize a herding/capture and recovery strategy using 4000′ of USS-18″ Oil Containment Boom (as weather permitted) and identify the proper service craft.

GPC personnel on board OSV *Caspian* got underway from Venice to inspect the Oil Containment Boom around Breton Island. Wind and seas prevented repairs, but OSV *Caspian* would return when the weather permitted.

GPC personnel onshore in Grand Isle had to relocate the Command Van and the generators due to high storm/tidal water. No skimming was conducted due to the weather.

SUPSALV received the *A Whale* post-operational evaluation report from IATAP; one key observation was that the vessel was not capable of performing as envisioned due to the following:

- Backwash - basic hydrodynamic problems associated with the oil/water/ship interface and the size of the collection and piping to storage tanks.
- Bow wave - pressure from the hull/bulbous bow, even at 1/2 knot, causes enough of a bow wave to push the oil away from the ship.
- Swell/Sea State - anything more than a 0.5 meter significant wave height disrupts the flow of water/oil on the ocean's surface into the ship's openings.
- Pooling of oil - without Oil Containment Boom and without calm seas, there is no place and no easy way to pool oil calming it to facilitate collection. Attempts to attach boom were awkward at best and dangerous at worst.

OSVs AHTS *Vanguard*, *Vantage,* and MV *Renee* with VOSS remained in port waiting for the weather to clear.

SUPSALV continued to work with the offshore coordinator ICP Houma to develop strategy for VOOs working with SUPSALV USS-42″ Oil Containment Boom for offshore and near-shore collection and herding to improve VOSS skimming effectiveness.

The weather continued to hamper skimming and oil containment operations.

Thursday, 8 July 2010

SUPSALV OSR equipment and 125 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team in Gulfport as required.
The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

The previously capsized Class V Skimmer has been repaired and is in route to Gulfport from Cheatham ESSM facility.

Eighteen Class V Skimming Systems, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,439 barrels and Class V Skimmers near-shore - 1966 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola and remained in port. The vessels would resume skimming operations the next day.

The Bay St. Louis site continued planning of herding and/or capturing and recovering oil using 4000′ of USS-18″ Oil Containment Boom.

Ship Island Oil Containment Boom required repairs. Boom repair was to begin as soon as proper work platforms were available.

Venice GPC personnel with OSV *Caspian* got underway from Venice and repaired Oil Containment Boom around Breton Island.

Note: Grand Isle's back to shoreline and near-shore skimming accomplished 10 gallons. Recovered to date - 238 barrels.

Skimmer operations and equipment training were conducted at the Slidell site.

OSV AHTS *Vanguard* and OSV MV *Renee*, with VOSS, returned to the MC252 site and continued offshore skimming.

The ICP Houma offshore coordinator was still in the process of identifying VOOs to work with SUPSALV USS-42″ Oil Containment Boom for offshore and near-shore collection and herding strategy.

Friday, 9 July 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team in Gulfport as required.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

The previously capsized Class V Skimmer arrived in Gulfport and is awaiting assignment.

Eighteen Class V Skimming Systems, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 18,504 barrels and near-shore - 1967 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* in Gulfport continued Class V skimmer service operations.

SUPSALV's plans for the Bay St. Louis site to continue herding and/or capturing and recovering oil using 4000′ of ESSM USS-18″ Oil Containment Boom were still underway.

Venice GPC personnel with OSV *Caspian* got underway from Venice to North Pass to check and repair Oil Containment Boom (2600′ USS-26″ Oil Containment Boom) where some anchors had been stolen. Boom had washed ashore and was buried in the sand by past storms. Recovery and repair would begin the next day.

Skimmer operations and equipment training were conducted at the Slidell/Rigolets site.

GPC personnel in Grand Isle conducted shoreline and near-shore skimming.

OSVs AHTS *Vanguard*, *Vantage,* and MV *Renee* with VOSS got underway conducting oil skimming operations.

Saturday, 10 July 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team in Gulfport as required.

Rear Admiral Alexander (Commander Navy Region South East) visited the Gulfport support site. He was briefed on SUPSALV operations and received a guided tour of the staged areas.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Eighteen Class V Skimming Systems, one Class XI Skimmer System, and all four High Speed Current Buster VOSS with crews were positioned at the USCG designated locations.

Note: Total oil recovered to date: VOSS offshore - 19,488 barrels and Class V Skimmers near-shore - 1967 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* in Gulfport continued Class V skimmer service operations.

Oil herding/capture and recovery operations were conducted in the Bay St. Louis area using 4000′ of USS-18″ Oil Containment Boom. Ship Island boom repairs awaited assignment of suitable work platforms.

SUPSALV personnel and GPC visited ICP Mobile to help develop an oil containment strategy for St. Joseph Bay, FL and East Pass off Destin, FL.

Venice GPC personnel with OSV *Caspian* got underway from Venice to North Pass and began digging out 2600′ of USS-26″ Oil Containment Boom that had washed ashore and was buried in sand by past storms. See Figure 20.

GPC personnel in Grand Isle conducted shoreline and near-shore skimming operations.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting offshore skimming operations.

OSV MV *Renee* returned to Gulfport pending resolution of crane operations, which presented an unacceptable risk due to the crane height and reach. The ICP offshore coordinator was notified, and a crane or OSV change-out was requested.

Figure 20. Containment Boom Onshore

Sunday, 11 July 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued to coordinate operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 19,488 barrels and Class V Skimmers near-shore - 1972 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V Skimmer servicing.

In the Bay St. Louis area, SUPSALV continued oil herding/capture and recovery strategies, using 4000′ of USS-18″ Oil Containment Boom.

Ship Island boom repairs continued to wait for assignment of suitable work platforms. SUPSALV launched a mobile boom strategy team to St. Joseph Bay for site RECON and coordination.

Venice GPC personnel with OSV *Caspian* got underway from Venice to North Pass and continued digging out 2600′ of USS-26″ Oil Containment Boom that washed ashore and was buried in sand during past weeks of storms.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No significant oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting offshore skimming. Both vessels were directed by offshore coordinator to temporarily halt skimming operations to assist the *A Whale* test. The vessels were expected to resume skimming operations by Monday.

OSV MV *Renee* in Gulfport, with a Class XI Skimmer System, was waiting for a new crane.

Monday, 12 July 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 19,488 barrels and Class V Skimmers near-shore - 1972 barrels. No oil was recovered this day.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V skimmer servicing.

The Bay St. Louis site continued planning of herding and/or capturing and recovering oil using 4000′ of USS-18″ Oil Containment Boom. Ship Island boom repairs waited on assignment of suitable work platforms.

Venice GPC personnel with OSV *Caspian* got underway from Venice to North Pass and continued digging out 2600′ of USS-26″ Oil Containment Boom that had washed ashore and was buried in sand during past weeks of storms.

Skimming operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting offshore support at MC252 site. Both vessels were offsite while seismic seafloor movement tests were conducted.

Tuesday, 13 July 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 19,488 barrels and Class V Skimmers near-shore - 1972 barrels. No oil was encountered this day.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V skimmer servicing.

The Bay St. Louis site continued planning of herding and/or capturing and recovering oil using 4000′ of USS-18″ Oil Containment Boom. Ship Island boom repairs awaited assignment of suitable work platforms.

Venice GPC personnel with OSV *Caspian* got underway from Venice to North Pass and continued digging out 2600′ of USS-26″ Oil Containment Boom that washed ashore and was buried in sand during past weeks of storms.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil product was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway and conducted offshore support at MC252 site. No skimming was conducted. Both vessels were 9 n.m. offshore while the Deepwater Horizon well system conducted pressure tests.

OSV MV *Renee* with the Class XI Skimmer System in Gulfport was still awaiting new crane.

Wednesday, 14 July 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 63,200′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 19,958 barrels and Class V Skimmers near-shore - 1972 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V Skimmer servicing.

The Bay St. Louis site continued planning of herding and/or capturing and recovering oil using 4000′ of USS-18″ Oil Containment Boom, and Ship Island boom repairs were awaiting the assignment of suitable work platforms.

Venice GPC personnel on OSV *Caspian* got underway from Venice to Breton Island to conduct Oil Containment Boom repairs.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore-skimming operations. No oil product was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting offshore support at MC252 site; skimming resumed.

OSV MV *Renee*, with Class XI Skimmer System, remained in Gulfport awaiting a new crane.

The second phase of the *A Whale* operational test resumed after ship modifications. One SUPSALV and one GPC observer were on board.

Thursday, 15 July 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 20,487 barrels and Class V Skimmers near-shore - 1975 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V Skimmer service operations.

The Bay St. Louis site continued planning of herding and/or capturing and recovering oil using 4000′ of USS-18″ Oil Containment Boom, and Ship Island boom repairs awaited assignment of suitable work platforms.

Captain Gunzel from SUPSALV went to ICP Mobile for an Operations Planning Meeting regarding Navy Airship.

Venice GPC personnel with OSV *Caspian* got underway from Venice and recovered approximately 2500′ of USS-26″ Oil Containment Boom at North Pass; approximately one half of the recovered boom was damaged beyond repair.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting offshore support at MC252 site.

OSV MV *Renee* with Class XI Skimmer System at the Gulfport site was awaiting a new crane.

The second phase of the *A Whale* operational test continued. One SUPSALV and one GPC observer were on board.

Friday, 16 July 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 21,151 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V skimmer service operations.

The transfer of 4000′ of USS-18″ Oil Containment Boom to support the Bay St. Louis area herding/capture and recovery strategy was in progress.

Ship Island Oil Containment Boom repairs were on hold while awaiting the arrival of a CM-11 barge.

Captain Gunzel attended the A *Whale* assessment meeting.

Venice GPC personnel with OSV *Caspian* got underway from Venice tending to Oil Containment Boom at North Pass.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil product was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway conducting skimming operations at MC252 site.

Saturday, 17 July 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 21,151 barrels and Class V Skimmer near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

OSV *Bayou Bee* continued Class V Skimmer service operations.

Four thousand feet of USS-18″ Oil Containment Boom was transferred to support the Bay St. Louis area's herding/capture and recovery strategy.

ICP Mobile decided to remove (instead of repair) the 7000′ of USS-42″ Oil Containment Boom at Ship Island. Repair was set to begin Sunday upon arrival of the CM-11 barge.

Venice GPC personnel with OSV *Caspian* got underway from Venice tending Oil Containment Boom at North Pass.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS underway to MC252 site.

OSV MV *Renee* with the Class XI Skimmer System in Gulfport continued waiting for the new crane, which was approved by ICP Houma.

Sunday, 18 July 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 21,151 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* in area continued Class V skimmer service operations.

GPC personnel commenced removing 7000′ of USS-42″ Oil Containment Boom and mooring systems from Ship Island.

GPC personnel with OSV *Caspian* remained in Venice preparing for Oil Containment Boom servicing operations.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway at MC252 site but maintained a reasonable distance for seismic testing.

Monday, 19 July 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of Oil Containment Boom deployed.

Note: Total oil recovered to date: VOSS offshore - 21,151 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No oil encountered.

OSV *Bayou Bee* continued Class V Skimmer service operations.

GPC personnel continued to remove Oil Containment Boom and Boom Mooring Systems from Ship Island.

GPC personnel with OSV *Caspian* remained in Venice preparing for Oil Containment Boom servicing operations.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway at MC252 site. No recoverable oil sighted.

OSV MV *Renee* with the Class XI Skimmer System in Gulfport awaited the arrival of a new crane.

Tuesday, 20 July 2010

SUPSALV OSR equipment and 130 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 60,700′ of boom deployed.

Note: Total oil recovered to date: VOSS offshore - 21,151 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* in area continued Class V skimmer service operations.

GPC personnel continued removing, cleaning, and evaluating damaged Oil Containment Boom and Boom Mooring Systems from Ship Island.

GPC personnel with OSV *Caspian* remained in Venice preparing for boom servicing operations.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS got underway at MC252 site. No recoverable oil was encountered.

The new crane arrived and was installed on the OSV *Renee* in Gulfport.

Wednesday, 21 July 2010

SUPSALV OSR equipment and 133 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 58,700′ of boom deployed as boom recovery continued.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* continued Class V Skimmer service operations.

Removal of last 1000′ of Ship Island Oil Containment Boom was delayed due to coordination issues with the National Parks Service.

Hurricane preparations commenced.

GPC personnel, with OSV *Caspian* underway from Venice for Oil Containment Boom servicing, completed repairs to boom at Breton Island.

Skimmer operations and equipment training were conducted at the Slidell operations site.

GPC personnel in Grand Isle continued conducting shoreline and near-shore skimming operations. No oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon due to the weather.

OSV MV *Renee* with the Class XI Skimmer System remained in Gulfport. The new crane was ready for sea, although MV *Renee* remained in port due to the weather.

Thursday, 22 July 2010

SUPSALV OSR equipment and 131 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. OSV *Bayou Bee* moved into protected waters for storm evasion.

Removal of the last 1000′ of Ship Island Oil Containment Boom was completed.

Hurricane preparations continued in Gulfport.

GPC personnel with OSV *Caspian* at Venice conducted hurricane preparations.

Slidell Class V Skimmers and equipment moved to protected waters on barges for storm evasion.

Grand Isle equipment and skimmers were secured on the barges for storm evasion.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon due to the weather.

OSV MV *Renee* with the Class XI Skimmer System in Gulfport remained in port due to the weather.

Friday, 23 July 2010

SUPSALV OSR equipment and 129 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operating between Pascagoula and Pensacola were secured for storm evasion.

OSV *Bayou Bee* planned to go to Gulfport for storm evasion.

Hurricane preparations continued in Gulfport. Most of the equipment was transferred to Seabee Base.

GPC personnel with OSV *Caspian* at Venice continued hurricane preparations. All equipment was secured ashore, secured on the *Caspian,* or moved to Gulfport via a 10-truck convoy to Seabee Base.

In Slidell, the Class V Skimmers and other SUPSALV equipment were uploaded on the barges and moved to inland waters for storm evasion.

Grand Isle SUPSALV equipment was secured on barges for storm evasion.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon due to the weather.

OSV MV *Renee* with the Class XI Skimmer System remained in Gulfport due to the weather.

Saturday, 24 July 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operating between Pascagoula and Pensacola were secured for storm evasion.

OSV *Bayou Bee* remained in Gulfport for storm evasion.

GPC personnel with OSV *Caspian* at Venice secured for weather. All equipment was either secured ashore, secured on the *Caspian,* or moved to Gulfport.

The Class V Skimmers and other SUPSALV equipment at the Slidell site were placed on barges and moved inland for storm evasion.

Grand Isle SUPSALV equipment was secured on barges for storm evasion.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon.

OSV MV *Renee* with the Class XI Skimmer System remained in Gulfport due to the weather.

Sunday, 25 July 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), was redeployed between Pascagoula and Pensacola.

OSV *Bayou Bee*, in Gulfport, got underway to ICP Mobile to return Oil Containment Boom and Oil Storage Bladders stowed on board for the storm.

GPC personnel with OSV *Caspian* at Venice prepared to resume Oil Containment Boom servicing operations.

The Class V Skimmers and other SUPSALV equipment returned to Slidell for redeployment.

SUPSALV equipment in Grand Isle was placed on barges for redeployment.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon.

OSV MV *Renee* with the Class XI Skimmer System remained in Gulfport awaiting ICP tasking orders to return to sea to resume skimming operations.

Monday, 26 July 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No recoverable oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers in the ICP Mobile area.

GPC personnel underway on OSV *Caspian* at Venice conducted Oil Containment Boom servicing operations at Breton Island.

In Slidell, Class V Skimmers and other SUPSALV equipment were in the process of redeployment.

The Grand Isle site was in the process of redeployment. No recoverable oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* with VOSS remained in Port Fourchon.

OSV MV *Renee,* with the Class XI Skimmer System, returned to Gulfport and awaited ICP tasking orders to return to sea to resume skimming operations.

Tuesday, 27 July 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 1983 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No recoverable oil was sighted.

OSV *Bayou Bee* continued serviced Class V Skimmers in the ICP Mobile area.

GPC personnel got underway on OSV *Caspian* at Venice conducting Oil Containment Boom servicing operations at North Pass.

The Class V Skimmers and other SUPSALV equipment were on standby at the Slidell operations site.

Grand Isle SUPSALV equipment was redeployed, but no oil was encountered.

OSV AHTS *Vanguard* and *Vantage* with VOSS were underway from Port Fourchon with two High Speed Current Buster VOSS to a leaking wellhead in Bayou St. Denis, LA.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting ICP tasking orders to return to sea to resume skimming operations.

Wednesday, 28 July 2010

SUPSALV OSR equipment and 123 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2001 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between

Pascagoula and Pensacola as directed. Task Force Number 4 reported that 18 barrels of oil had been skimmed.

OSV *Bayou Bee* was servicing Class V Skimmers in the ICP Mobile area.

GPC personnel with OSV *Caspian* were in Venice preparing for Oil Containment Boom servicing operations.

In Slidell, the Class V Skimmers and other SUPSALV equipment were deployed. No oil was encountered.

The Grand Isle SUPSALV equipment was redeployed, but no oil was encountered.

OSVs AHTS *Vanguard* and *Vantage,* with two High Speed Current Buster VOSS each, got underway from Port Fourchon to the broken off wellhead in Bayou St. Denis. No oil was encountered.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting ICP tasking orders to return to sea to resume skimming operations.

Thursday, 29 July 2010

SUPSALV OSR equipment and 125 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 57,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. Another 28 barrels were skimmed.

OSV *Bayou Bee* serviced Class V Skimmers in the ICP Mobile area.

GPC personnel got underway with OSV *Caspian* in Venice to recover USS-42″ Oil Containment Boom in East Bay.

The Class V Skimmers and other SUPSALV equipment in Slidell were on standby.

Grand Isle SUPSALV equipment was redeployed, but no oil was encountered.

SUPSALV was directed to demobilize OSVs AHTS *Vanguard* and *Vantage* but hold the VOSS systems in the area.

AHTS *Vantage* offloaded VOSS components not requiring decontamination in Gulfport. The *Vantage* then proceeded to Theodore for decontamination of ship and VOSS components requiring decontamination. The AHTS *Vanguard* followed suit.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting ICP tasking.

Friday, 30 July 2010

SUPSALV OSR equipment and 127 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 56,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Two Class V Skimmers on the *Pecos* barge are in the process of being offloaded in Pascagoula and will be taken to decontamination.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers in ICP Mobile area.

GPC personnel got underway with OSV *Caspian* in Venice recovering USS-42″ Oil Containment Boom in East Bay. OSV *Caspian* was later tasked to get underway to Breton Island to service boom but was unable to do so due to the weather.

The Class V Skimmer and other SUPSALV equipment remained at the Slidell operations site deployed, but no oil was encountered.

Grand Isle deployed SUPSALV skimming equipment, but no oil was encountered.

SUPSALV continued to demobilize OSVs AHTS *Vanguard* and *Vantage* but held the VOSS systems in area.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Saturday, 31 July 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 56,700′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and near-shore - 2029 barrels.

Pecos barge, with two Class V Skimmers and four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers in ICP Mobile area.

GPC personnel with OSV *Caspian* at Venice got underway to Breton Island to service Oil Containment Boom but were again unable to do so due to the weather.

In Slidell, the Class V Skimmers and other SUPSALV equipment remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

SUPSALV continued to demobilize OSVs AHTS *Vanguard* and *Vantage* but held the VOSS systems in area.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Sunday, 1 August 2010

SUPSALV OSR equipment and 124 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 56,000′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Pecos barge continued to offload Class V Skimmers.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers in the ICP Mobile area.

GPC personnel got underway with OSV *Caspian* from Venice to Breton Island to service Oil Containment Boom.

In Slidell, the Class V Skimmers and other SUPSALV equipment remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

OSV *Vantage* offloaded VOSS components that did not require decontamination in Gulfport and proceeded to Theodore for decontamination of the vessel and VOSS components. The AHTS *Vanguard* was to complete offload and then proceed to Theodore for decontamination.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Monday, 2 August 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 56,000′ of boom still deployed.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Two Class V Skimmers had been offloaded from the *Pecos* Barge and remained on standby for decontamination in Pascagoula.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers.

GPC personnel got underway with OSV *Caspian* from Venice to recover East Bay Oil Containment Boom.

In Slidell, the Class V Vessel Skimmer and other SUPSALV equipment remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

AHTS *Vantage* was in Theodore for decontamination of the ship and the VOSS components. The AHTS *Vanguard* was in Gulfport offloading the VOSS.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Tuesday, 3 August 2010

SUPSALV OSR equipment and 128 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 51,670′ of boom still deployed. To date 9,010′ of boom has been identified as beyond economical repair.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers.

GPC personnel got underway with OSV *Caspian* from Venice to recover East Bay Oil Containment Boom.

The Class V Skimmers and other SUPSALV equipment in Slidell remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

The AHTS *Vantage* was in Theodore for decontamination of the ship and VOSS components. The AHTS *Vanguard* remained in Gulfport offloading VOSS and awaited orders to proceed to the Theodore decontamination station.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Wednesday, 4 August 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX to date was 98,000′ with 50,350′ of boom still deployed (9,065′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers.

GPC personnel transported and/or offloaded empty containers from Gulfport and loaded Boom Mooring Systems at Venice for Gulfport.

In Slidell, the Class V Skimmers and other SUPSALV equipment remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

The AHTS *Vantage* was in Theodore for decontamination of the ship and VOSS components. The AHTS *Vanguard* in Gulfport completed offloading of VOSS and was waiting on orders to proceed to Theodore decontamination station.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Thursday, 5 August 2010

SUPSALV OSR equipment and 126 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

Total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 45,565′ of boom still deployed (9,850′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* serviced Class V Skimmers.

GPC personnel in Gulfport repaired Oil Containment Boom from Venice.

In Slidell, the Class V Skimmers were on standby.

No oil was recovered near Grand Isle.

OSVs AHTS *Vanguard* and *Vantage* were in port at Theodore awaiting decontamination.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

SUPSALV conducted skimming operations as directed by ICP. Offloading, decontamination, and restaging the High Speed Current Buster VOSS on AHTS *Vantage* and AHTS *Vanguard* continued in Theodore.

SUPSALV continued oil containment operations out of Venice. Also continued servicing of Class V Skimmers by OSV *Bayou Bee* and loading Class V Skimmers on OSV *Great White* in preparation for tasking orders by ICP Mobile. The OSV was a concept to add mobility to Class V skimming operations and thereby allow the reduction of jack-up barges.

Friday, 6 August 2010

SUPSALV OSR equipment and 124 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 44,175′ of boom still deployed (10,620′ was identified as being beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* picked up Class V skimmer USN # 99 from the Theodore decontamination station to return it to Gulfport.

GPC personnel in Venice were removing Oil Containment Boom at East Bay.

The Class V Skimmers in Slidell remained on standby.

SUPSALV equipment was deployed in Grand Isle, but no oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* remained in port at Theodore awaiting decontamination.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Saturday, 7 August 2010

SUPSALV OSR equipment and 122 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 43,350′ of boom still deployed (11,280′ identified as being beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed. No oil was encountered.

OSV *Bayou Bee* returned the Class V Skimmer USN #99 from the decontamination yard in Theodore to Gulfport.

GPC Venice personnel continued removing Oil Containment Boom at East Bay.

In Slidell, the Class V Skimmers remained on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* were in Theodore in undergoing decontamination. All SUPSALV equipment was offloaded from *Vantage*.

Sunday, 8 August 2010

SUPSALV OSR equipment and 118 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 43,350′ of boom still deployed (11,280′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed.

All non-essential SUPSALV equipment was being collected by Task Force leaders for decontamination and restaged in Gulfport.

GPC Venice personnel continued removing Oil Containment Boom at East Bay.
In Slidell, all Class V Skimmers were on standby.

Grand Isle deployed skimming equipment, but no oil was encountered.

OSVs AHTS *Vanguard* and *Vantage* were in port in Theodore undergoing decontamination. The vessels were released by SUPSALV and were under the direction of ICP Houma.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Monday, 9 August 2010

SUPSALV OSR equipment and 119 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment assets as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,535′ of boom still deployed (12,170′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed.

All non-essential SUPSALV equipment was being collected by Task Force leaders for decontamination and restaged in Gulfport.

GPC personnel in Venice continued removing Oil Containment Boom at East Bay.

In Slidell, all Class V Skimmers remained on standby.

In Grand Isle, no oil was encountered.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Tuesday, 10 August 2010

SUPSALV OSR equipment and 117 personnel were positioned throughout Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed.

All non-essential SUPSALV equipment was being collected by Task Force leaders for decontamination and restaged in Gulfport.

GPC personnel in Venice continued removing Oil Containment Boom at East Bay.

In Slidell, the Class V Skimmers were on standby.

In Grand Isle, all non-essential equipment was collected and packaged for return shipment.

OSV MV *Renee*, with the Class XI Skimming System, remained in Gulfport awaiting further ICP tasking orders.

Wednesday, 11 August 2010

SUPSALV OSR equipment and 118 personnel were deployed and/or staged throughout GOMEX between Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile), operated between Pascagoula and Pensacola as directed.

All non-essential SUPSALV equipment was being collected by Task Force leaders for decontamination and restaged in Gulfport. All skimmers were out of the water and in route to a safe haven pending the passage of a storm.

GPC personnel in Venice secured SUPSALV equipment for rough weather.

In Slidell, the Class V Skimmers were in route to a safe haven from the storm.

In Grand Isle, the Class V Skimmers were out of the water and in route to a safe haven from the storm.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Thursday, 12 August 2010

SUPSALV OSR equipment and 113 personnel were deployed and/or staged throughout GOMEX between Pensacola, Mobile, Bayou La Batre, Pascagoula, Gulfport, Ship Island, Slidell, Venice, and Port Fourchon/Grand Isle.

SUPSALV continued coordinating operations from Gulfport (at State Pier) positioning, maintaining, and operating SUPSALV OSR equipment as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair).

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

Four spud/jack-up barges with seven Class V Skimmers on board (assigned to near-shore Task Force under ICP Mobile) operated between Pascagoula and Pensacola as directed.

All non-essential SUPSALV equipment was being collected by Task Force leaders for decontamination and restaged in Gulfport.

GPC personnel in Venice were standing by waiting for improved weather.

In Slidell, the Class V Skimmers remained safe from the storm.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Friday, 13 August 2010

SUPSALV OSR equipment and 113 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance and logistics.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair). Oil Containment Boom cleaning and inspection was conducted in Gulfport.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

The Class V Skimmers throughout the Florida, Alabama, and Mississippi coasts remained in safe haven while assigned to ICP Mobile Task Forces during the passage of recent storms.

Venice GPC personnel were on standby waiting for improved weather.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Saturday, 14 August 2010

SUPSALV OSR equipment and 113 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance and logistics.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair). Oil Containment Boom cleaning and inspection was being conducted in Gulfport.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

The Class V Skimmers throughout the Florida, Alabama, and Mississippi coasts remained in safe haven while assigned to ICP Mobile Task Forces during the passage of recent storms.

GPC personnel in Venice were on standby waiting for improved weather.

In Slidell, the Class V Skimmers were on standby waiting for improved weather.

GPC personnel in Grand Isle were on standby waiting for improved weather.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking.

Sunday, 15 August 2010

SUPSALV OSR equipment and 113 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance and logistics.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 41,400′ of boom still deployed (12,595′ identified as beyond economical repair). Oil Containment Boom cleaning and inspection was being conducted in Gulfport.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

The Class V Skimmers throughout the Florida, Alabama, and Mississippi coasts remained in safe haven while assigned to ICP Mobile Task Forces during the passage of recent storms.

GPC personnel in Venice were on standby waiting for improved weather.

In Slidell, the Class V Skimmers were on standby waiting for improved weather.

GPC personnel in Grand Isle were on standby waiting for improved weather.

OSV MV *Renee*, with the Class XI Skimmer System, remained in Gulfport awaiting further ICP tasking orders.

Monday, 16 August 2010

SUPSALV OSR equipment and 101 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance and logistics.

SUPSALV received direction from Plans Chief at UAC to begin decontamination of all SUPSALV skimmers and began coordination with local Task Force Commanders. The decision to fully demobilize the skimmers was deferred until after the final well was shut off.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 40,465′ of boom still deployed (13,035′ identified as being beyond economical repair). SUPSALV continued to clean and inspect the Oil Containment Boom in Gulfport.

Note: Total oil recovered to date: VOSS offshore - 21,176 barrels and Class V Skimmers near-shore - 2029 barrels.

The seven Class V Skimmers remained in port/on board barges with assigned ICP Mobile Task Forces during the storms. SUPSALV began to coordinate decontamination of all skimmers.

The Venice GPC boom crew conducted Oil Containment Boom repair at the North Pass and Breton Island then went on standby to wait on weather passage.

In Slidell, the Class V Skimmers remained on standby awaiting passage of the storm.

In Grand Isle, GPC personnel waited for improved weather to begin decontamination of skimmers and equipment.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting ICP direction.

Tuesday and Wednesday, 17–18 August 2010

SUPSALV OSR equipment and 90 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance and logistics.

SUPSALV received direction from Plans Chief at UAC to fully de-mobilize and begin decontamination of SUPSALV skimmers. SUPSALV began coordination with local Task Force commanders.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 38,925′ of boom still deployed (14,135′ identified as beyond economical repair). GPC personnel continued to clean and inspect Oil Containment Boom.

The seven Class V Skimmers remained in port/ on board barges assigned ICP Mobile Task Forces during passage of the storms. SUPSALV was waiting on decontamination of all skimmers. GPC personnel transferred unused Oil Containment Systems to Gulfport.

GPC boom crew personnel in Venice conducted Oil Containment Boom repair/recovery at East Bay.

In Slidell, the Class V Skimmers and other SUPSALV equipment awaited transport to Gulfport.

The Class V Skimmers, and other SUPSALV equipment in Grand Isle, were being decontaminated, inventoried, and repackaged for further transport.

OSV MV *Renee,* with the Class XI Skimmer System, remained in Gulfport awaiting direction.

Thursday and Friday, 19–20 August 2010

SUPSALV OSR equipment and 90 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 38,420 ′ of boom still deployed (16,500′ identified as beyond economical repair). GPC personnel continued to clean and inspect Oil Containment Boom at Gulfport.

The seven Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces coordinating decontamination of assigned skimmers.

Venice GPC personnel conducted Oil Containment Boom repair/recovery.

In Slidell, the Class V Skimmers and other SUPSALV equipment awaited transport to Gulfport.

The Class V Skimmers, and other SUPSALV equipment in Grand Isle, were in the process of decontamination, inventorying, and packaging for further transport. All transport of such gear to out-of-state locations was put on hold per ICP Houma.

OSV MV *Renee* remained in Gulfport as the Class XI Skimmer System was being offloaded and restaged on the pier.

Saturday–Monday, 21 –23 August 2010

SUPSALV OSR equipment and 90 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 34,085′ of boom still deployed (18,040′ identified as beyond economical repair). GPC personnel continued to clean and inspect Oil Containment Boom as well as decontaminate the Class XI equipment and other SUPSALV equipment.

The nine Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces coordinating the decontamination of five of the assigned skimmers.

OSV *Bayou Bee* recovered 330′ of stranded Oil Containment Boom from Cat Island.

GPC Venice personnel conducted Oil Containment Boom recovery.

The Class V Skimmers, and other SUPSALV equipment in Slidell, were cleaned and awaited transport to Gulfport.

Four Class V Skimmers, and other SUPSALV equipment in Grand Isle, were in decontamination. Also, consolidating all SUPSALV equipment was in progress for transport.

In Gulfport, OSV MV *Renee* offloaded; awaiting further tasking orders.

Tuesday and Wednesday, 24–25 August 2010

SUPSALV OSR equipment and 71 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations in Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 31,775′ of boom still deployed (19,690′ identified as beyond economical repair). GPC personnel continued to clean and inspect Oil Containment Boom and inventory and stage other SUPSALV equipment for transport back to ESSM bases.

The nine Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces or in Gulfport coordinating decontamination of five of the assigned skimmers and three oil recovery/storage bladders.

In Mobile Bay, OSV *Bayou Bee* began transporting SUPSALV equipment back to Gulfport.

GPC Venice personnel conducted Oil Containment Boom recovery.

Four Class V Skimmers, and other SUPSALV equipment in Slidell, were cleaned and awaiting transport to Gulfport within the next 24 hours.

In Grand Isle, four Class V Skimmers and other SUPSALV equipment were in decontamination. One was completed.

In Gulfport, OSV MV *Renee* and *Great White* were offloaded and awaiting further tasking.

Thursday and Friday, 26–27 August 2010

SUPSALV OSR equipment and 61 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 31,775′ of boom still deployed (19,690′ identified as beyond economical repair). SUPSALV continued to stage and repackage equipment in preparation for transport back to the ESSM bases.

The seven Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces in Gulfport. SUPSALV continued coordinating decontamination of five of the assigned skimmers and three oil recovery/storage bladders.

GPC Venice personnel conducted Oil Containment Boom recovery.

The four Class V Skimmers, and other SUPSALV equipment in Slidell, were transported to Gulfport.

The four Class V Skimmers, and other SUPSALV equipment in Grand Isle, were in decontamination, consolidation, and transport mode. Two of the four were clean and returned to Gulfport.

OSV *Bayou Bee* offloaded equipment in Gulfport in preparation for transporting other equipment from Pascagoula.

Saturday–Monday, 28–30 August 2010

SUPSALV OSR equipment and 62 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 31,775′ of boom still deployed (19,690′ identified as beyond economical repair).

The nine Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces in Gulfport. SUPSALV continued coordinating decontamination of five of the assigned skimmers and three oil recovery/storage bladders.

GPC Venice personnel waited for calmer weather to recover Oil Containment Boom at Breton Island.

Two remaining Class V Skimmers, and other SUPSALV equipment in Grand Isle, were in decontamination.

Seventeen thousand feet of USS-42″ Oil Containment Boom was still deployed in Half Moon Bay. SUPSALV investigated when the boom would be recovered.

OSV *Bayou Bee* planned to recover Oil Containment Boom at West New Harbor Island. SUPSALV was waiting on LA State Wildlife and Fisheries' approval to remove boom at North Pass.

Tuesday–Wednesday, 31 August–01 September 2010

SUPSALV OSR equipment and 58 personnel were deployed and/or staged throughout GOMEX from Pensacola west to Grand Isle.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued to assist the CNIC management team with maintenance, logistics, and demobilization.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 20,535′ of boom still deployed (22,275′ identified as beyond economical repair).

The seven Class V Skimmers remained in port/ on board barges with assigned ICP Mobile Task Forces in Gulfport. SUPSALV coordinated decontamination of four of the assigned skimmers and three oil recovery/storage bladders.

GPC personnel recovered Oil Containment Boom at Breton Island. SUPSALV was awaiting LA State Wildlife and Fisheries' approval to remove 2450′ of USS-26″ Oil Containment Boom at North Pass.

In Half Moon Bay, 14,030′ of USS-42″ Oil Containment Boom was still deployed and awaiting direction to retrieve or leave the boom.

OSV MV *Renee* in Gulfport (offloaded) awaited further tasking orders. The *Great White*, in Gulfport, was offloaded and awaited further tasking.

OSV *Bayou Bee*, in Gulfport, waited for the weather to improve and crew change prior to getting underway for Oil Containment Boom recovery at West New Harbor Island.

Thursday and Friday, 02–03 September 2010

SUPSALV OSR equipment and 39 personnel were deployed and/or staged throughout GOMEX from Pascagoula west to Venice.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 20,535′ of boom still deployed (22,275′ identified as beyond economical repair).

Equipment and personnel had moved out of Florida and Alabama. SUPSALV continued coordinating the decontamination of the three remaining oil recovery/storage bladders in Pascagoula.

GPC personnel assisted in the demobilization of CNIC equipment.

GPC personnel assisted with inspecting, staging, and preparing for the shipment of SUPSALV equipment.

All USS-26″ Oil Containment Boom was recovered from Breton Island. SUPSALV was awaiting LA State Wildlife and Fisheries' approval to remove 2450′ of USS-26″ Oil Containment Boom at North Pass.

All equipment and personnel in Grand Isle were being transported back to ESSM bases.

All Class V Skimmers and equipment were decontaminated, restaged in Gulfport, and being transported back to ESSM bases. See Figure 21.

In Half Moon Bay ,14,030′ of USS-42″ Oil Containment Boom was still deployed and awaited direction to retrieve or leave.

OSV *Bayou Bee* recovered Oil Containment Boom from West New Harbor Island.

Figure 21. Class V Skimmers and Equipment Decontaminated and Restaged in Gulfport

Saturday–Monday, 04–06 September 2010

SUPSALV OSR equipment and 29 personnel were deployed and/or staged throughout GOMEX from Pascagoula west to Venice.

SUPSALV continued coordinating response operations from Gulfport (at State Pier) as directed by the USCG FOSC.

SUPSALV continued assisting CNIC management team with maintenance, logistics, demobilization, and transportation of equipment to home bases.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 14,085′ of boom still deployed (22,275′ identified as beyond economical repair).

All equipment and personnel were out of Florida and Alabama. SUPSALV continued coordinating decontamination and/or disposal of the three Oil Recovery Bladders in Pascagoula.

Gulfport personnel continued staging and preparing all SUPSALV equipment for shipment.

Gulfport personnel continued cleaning the Oil Containment Boom recovered from West New Harbor Island.

Venice GPC personnel continued recovering Oil Containment Boom from North Pass and prepared to ship other SUPSALV equipment to ESSM bases. GPC personnel also recovered one section of USS-42″ boom from the East Bay wellhead.

SUPSALV received word authorizing the recovery of 14,030′ of USS-42″ Oil Containment Boom still deployed in Half Moon Bay. The USCG Contractors began removing and sending equipment to the decontamination station in Slidell.

In Gulfport, OSV MV *Renee* was offloaded and awaited further tasking. OSV *Great White*, in Gulfport, was offloaded and awaited further tasking.

OSV *Bayou Bee* in Gulfport offloaded recovered Oil Containment Boom and gear in preparation for demobilization.

Tuesday and Wednesday, 07–08 September 2010

SUPSALV OSR equipment and 29 personnel were deployed and/or staged in Pascagoula and Venice.

SUPSALV continued coordinating demobilization operations from Gulfport (at State Pier).

SUPSALV continued to assist CNIC management team with maintenance, logistics, demobilization, and transportation of equipment to back to ESSM bases.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 14,085′ of boom still deployed (22,275′ identified as beyond economical repair).

SUPSALV efforts continued in coordinating decontamination or disposal of three Oil Recovery Bladders in Pascagoula. Gulfport GPC personnel staged and prepared SUPSALV equipment for shipment.

GPC personnel prepared SUPSALV equipment for shipment in order to vacate the Venice site.

SUPSALV was awaiting the recovery of 14,030′ of USS-42″ Oil Containment Boom still deployed in Half Moon Bay.

OSV MV *Renee,* in Gulfport, was offloaded and awaited further tasking. OSV *Great White,* in Gulfport, was offloaded and awaited further tasking.

OSV *Bayou Bee,* in Gulfport, offloaded recovered SUPSALV equipment.

Thursday and Friday, 09–10 September 2010

SUPSALV OSR equipment and 27 personnel were deployed and/or staged in Pascagoula and Venice.

SUPSALV continued coordinating demobilization operations from Gulfport (at State Pier).

SUPSALV continued to assist CNIC management team with maintenance, logistics, demobilization, and transportation of equipment to back to ESSM bases.

The total SUPSALV Oil Containment Boom in GOMEX was 98,000′ with 14,085′ of boom still deployed (22,275′ identified as beyond economical repair).

Gulfport personnel staged and prepared SUPSALV equipment for transport back to ESSM bases.

SUPSALV awaited the recovery of 14,030′ of USS-42″ Oil Containment Boom still deployed in Half Moon Bay.

Venice GPC personnel prepared equipment for shipment back to ESSM bases.

OSV MV *Renee,* in Gulfport, was offloaded and awaited further tasking. OSV *Great White,* in Gulfport, was offloaded and awaited further tasking.

OSV *Bayou Bee*, in Gulfport, had all SUPSALV equipment removed and remained in Gulfport awaiting further tasking.

Saturday–Monday, 11–13 September 2010

SUPSALV OSR equipment and 27 personnel were deployed and/or staged in Pascagoula and Gulfport.

SUPSALV continued to assist CNIC management team with maintenance, logistics, demobilization, and transportation of equipment to back to ESSM bases.

SUPSALV received direction from UAC leadership to ship all skimmer systems back to ESSM bases. Commenced shipping all SUPSALV equipment from Gulfport.

Half Moon Bay awaited on the recovery of 14,030′ of USS-42″ Oil Containment Boom still deployed.

SUPSALV equipment was shipped from Venice to ESSM bases. GPC personnel departed on 14 September.

In Gulfport, OSV *Renee*, OSV *Great White*, and OSV *Bayou Bee*, were offloaded and awaited further tasking.

Tuesday–Wednesday, 14–22 September 2010

SUPSALV OSR equipment was still being shipped back to ESSM bases.

SUPSALV continued to assist CNIC management team with transporting equipment back to home bases.

SUPSALV continued coordinating the replacement of three oil recovery/storage bladders in Theodore that was now considered for disposal pending the final approval of USCG certification.

Thursday, 23 September 2010

SUPSALV received the last Oil Containment Boom from Slidell; then SUPSALV packaged and shipped the boom to the ESSM base of origin.

All skimmer systems and other SUPSALV equipment were shipped to their ESSM base of origin.

Friday, 24 September 2010

The last SUPSALV personnel departed Gulfport.

SECTION C – PROBLEMS ENCOUNTERED

Problem:	Direction to GPC personnel by USCG teams varied widely at the SUPSALV Command Post in Gulfport.
Solution:	GPC field personnel should take operational direction on a task only when directed by the Program Manager or his assigned assistant. Direction given by team leaders of other agencies or organizations was often misleading and/or inaccurate.
Problem:	The Class V Skimmer cabs heated up and remained hot throughout the day.
Solution:	Installation of air conditioning units in the cabs of the Class V Skimmers worked well.
Problem:	The Fortress anchors used in 26″ boom mooring were stolen and had to be replaced.
Recommendation:	None.

SECTION D – LESSONS LEARNED AND RECOMMENDATIONS

Lesson:	Staging support for Venice was excellent. Support from the command group was undesirable. It took 2 months to get weight handling equipment.
Recommendation:	None.
Lesson:	Command centers moved SUPSALV equipment without notifying SUPSALV.
Recommendation:	SUPSALV personnel need an aggressive follow-up plan with the command centers to personally verify the location of the material not accompanied by SUPSALV personnel. This became especially apparent in Amelia, Grand Isle, Resolve Yard (Theodore, AL), Port Fourchon, and BOH Brothers Shipyard, LA.
Lesson:	A time delay occurred for the approval of ICS-213 RR USCG Resource Request for Services or Material.
Recommendation:	No real solution. SUPSALV personnel attempted to walk them through the process of trying to replace the damaged equipment.
Lesson:	A disaster of this magnitude is often considered to be "organized chaos" in the early phases of the response mode. For the most part, GPC management did an excellent job organizing the response. Minor shortfalls existed with the logistical aspect concerning food and accommodations for GPC employees.
Recommendation:	The establishment of a central command and control at the command trailer in Gulfport during the initial response was essential to the tracking of equipment, logistics, finance issues, coordination with ICS/UAC, etc.
Lesson:	In the early stages of the response, efforts receiving equipment in Gulfport as the trucks arrived proved to be time consuming and tedious work. Documenting ESSM gear and label information was a full time job for at least one GPC employee.
Recommendation:	The establishment of Enterprise, and one IT department employee in Gulfport, would have been beneficial in the documentation and tracking of all response gear arriving in Gulfport, specifically the establishment of the use of barcode scanners.

Lesson:	If the currents are more than 1 knot, boom should not be deployed across the currents.
Recommendation:	If boom must be laid, boom should be anchored in a cascade or deflection mode.
Lesson:	Mud and sand slowed the boom assembly progress.
Recommendation:	A flat hard surface working area is preferred during assembly of boom.
Lesson:	Boom deployment and/or recovery were difficult when the boom roller was not in line with boom.
Recommendation:	Add wings to the boom roller to assist bringing the boom in line when it is out of line. Also keep the connector plates in place and the chain guided on the roller.
Lesson:	Crown Buoys were damaged in heavy currents.
Recommendation:	Use large mooring buoys versus the Crown Buoys in heavy currents. Also connect the boom to the mooring buoy with snap hooks in the heavy current.
Lesson:	Few crew members had experience operating the Class XI Skimmer System.
Recommendation:	Class XI Skimmer System training needs to be added to the annual training commitment list.
Lesson:	The Shop Van inventory needs to have a metric socket/wrench set 1/4″ drive standard socket set and a Jabsco transfer pump with hoses.
Recommendation:	Add metric socket (with 1/4″ drive) and wrench set as well as a Jabsco transfer pump with associated hoses.
Lesson:	Shop Van -6 Aeroquip QD's male and female sets (qty 2) need to be added to inventory. Also another set of -16 male and female QD's to inventory.
Recommendation:	Add -6 Aeroquip QD's male and female sets to inventory. Add -16 male and female QD's to inventory.
Lesson:	The Class XI 8-ton crane toolbox needs to have all associated wrenches, ratchets, and socket sets for its bolts. Also add a supply of longer bolts. All bolts should have lock washers and Nylock nuts.
Recommendation:	Add associated wrenches, ratchets, sockets, bolts, lock washers, and Nylock nuts to inventory.

Lesson:	The pushpins for the boom connector plates were not holding; one pushpin fell out completely and was lost. We used 5/16″-18 x 2 1/2″ long stainless steel bolts to replace the pins temporarily.
Recommendation:	None.
Lesson:	Need to add a propeller puller to Shop Van inventory for 24′ BHB propeller.
Recommendation:	Add a propeller puller to Shop Van inventory for 24′ BHB.
Lesson:	Need to add a rotating tip to the Equipment Decon Van (VA2119A) inventory for the diesel pressure washer. Need to add an 80 degree/2.25 gpm for the Landa pressure washer burner as well as the rest of the pressure washers as needed in the Equipment Decon Van.
Recommendation:	Add a rotating tip and an 80 degree/2.25 gpm for the Landa pressure washer burner to the Equipment Decon Van.
Lesson:	When shipping from Port Hueneme, drivers were only given miscellaneous packaged loads (not by system) which caused some problems.
Recommendation:	Establish a method for personnel to document only what was loaded onto each truck.
Lesson:	The decontamination stations were inadequate early in the cleanup effort. The crew had some minor problems due to the decontamination crew not fully understanding SUPSALV equipment.
Recommendation:	Offer hands-on training before allowing non-ESSM personnel to decontaminate equipment.
Lesson:	The crews had difficulty pulling the Weir Skimmer in and out of the High Speed Current Buster pocket to clean debris out of it.
Recommendation:	Need portable hydraulic knuckle cranes that can be mounted on containers available for use on any vessel of opportunity.

Lesson:	Difficulty in making the various command centers understand what the capabilities of the SUPSALV equipment systems were. This was made more difficult because of the numerous changes in personnel at the command centers who were unfamiliar with the operational design of the equipment.
Recommendation:	A SUPSALV representative should have a direct line of communication with the operations and planning sector to ensure personnel are provided with the operating capability of all equipment and are involved in the planning on how they were to be utilized. This was partially accomplished later in the operation by producing a Class V Vessel Skimmer System CONOPS (see Appendix F) and presenting it to the centers.
Lesson:	Command centers continually tried using Oil Containment Boom in locations where the currents were too high causing boom to drag anchors and cause damage.
Recommendation:	SUPSALV should provide a review of boom capabilities to all command centers. See Appendix E.
Lesson:	Command centers were constantly providing VOO boats for the Class V Skimmers that were inadequate for towing the systems even after SUPSALV provided tow boat requirements.
Recommendation:	SUPSALV must ensure that the personnel in command centers understand the equipment requirements.
Lesson:	Skimmer servicing and Oil Bladder offloading at the many different skimmer locations proved inadequate.
Recommendation:	SUPSALV requested and received an offshore supply vessel with large mud tanks to allow it to be set up as a Skimmer System Maintenance Vessel along with bladder offloading capability. This vessel was then dispatched to the various system locations throughout the Gulf and acted as a roving service station, repairing and servicing Skimmer Systems as well as offloading its Oil Recovery Bladders.

Lesson:	Command centers requested, on short notice, to have Class V Skimmers skim at night or 24 hours a day as well as skimming too far off shore.
Recommendation:	During this operation, none of the Class V skimmers had been in heavy concentrations of oil during daylight hours. Also they should not be more than 10 n.m. offshore. SUPSALV did not see a real need to have skimmers skimming in the dark hoping to run into oil unless they were in a heavy concentration of oil at all times. It would be unproductive since the oil is not visible at night. Distribution of Appendix F was an attempt to address this issue that was partially successful.
Lesson:	Since SUPSALV was not allowed to set up its own cleaning stations, it was difficult and time consuming to get the equipment through the approved cleaning and decontamination stations throughout the region.
Recommendation:	In an attempt to ensure that the equipment was being cleaning adequately, SUPSALV stationed personnel at each location to shepherd the equipment through the process. In the future, SUPSALV needs to get the approval to complete some of this decontamination work since they are set up with the appropriate decontaminating systems designed for their equipment.
Lesson:	Need more direct SUPSALV involvement in the Unified Command Plans (UCP) & ICP's to liaison with someone who knows and understands how SUPSALV equipment is used and deployed.
Recommendation:	Assign USCG person to the SUPSALV Command and Control Center.
Lesson:	Using OSV MV *Renee*, the size and weight of the Class XI Skimmer made offshore operations tenuous.
Recommendation:	The Class XI Skimmer should be tasked near-shore versus offshore skimming.

SECTION E – EQUIPMENT MOBILIZED

SYSTEM NUMBER	SYSTEM NOMENCLATURE	ESSM NUMBER	ESSM NOMENCLATURE	QUANTITY
CONTAINMENT SYSTEMS				
P19100	OIL CONTAINMENT BOOM SYSTEM	VA0737	VAN, OIL CONTAINMENT BOOM (USS-42HB BOOM)	22 EACH
P19100	OIL CONTAINMENT BOOM SYSTEM	VA0738	VAN, OIL CONTAINMENT BOOM (USS-42 BOOM)	2 EACH
P19100	OIL CONTAINMENT BOOM SYSTEM	VA0720	VAN, OIL CONTAINMENT BOOM (FUG BOOM)	9 EACH
P19070	OIL CONTAINMENT BOOM SYSTEM, 18″ HARBOR BOOM	NA	Systems were not complete	2 EACH
P19080	OIL CONTAINMENT BOOM SYSTEM, USS-18SB IFL BOOM	NA	Systems were not complete	1 EACH
P04100	BOOM MOORING SYSTEM	MS0009	MOORING SYSTEM, BOOM, W/500# ANCHOR	30 EACH
P19090	OIL CONTAINMENT BOOM SYSTEM, USS-26 BOOM	NA	Systems were not complete	3 EACH
OIL RECOVERY SYSTEMS				
P16400	VESSEL SKIMMER SYSTEM	SK0721	SKIMMER, OIL, SORB BELT, 36′ VESSEL (CLASS V)	9 EACH
P16100	MODULAR VESSEL SKIMMER SYSTEM	SK0711	SKIMMER, OIL, SORB BELT, MOD 36′ VESSEL (CLS V)	9 EACH
P16300	VESSEL OF OPPORTUNITY SKIMMER SYSTEM	SK0050	SKIMMER, HIGH SPEED CURRENT BUSTER	9 EACH
P16300	VESSEL OF OPPORTUNITY SKIMMER SYSTEM	NA	CLASS XI SKIMMER SYSTEM	1 EACH
P04100	BOOM MOORING SYSTEM	MS0009	MOORING SYSTEM, BOOM, W/500# ANCHOR	30 EACH
P14100	OIL STORAGE BLADDERS, 136K-GALLON	OB0800	BLADDER, OIL STORAGE, 136K-GAL, TYPE L, RUBBER	1 EACH
NA	VARIOUS	OB0810	BLADDER, SPILL RECOVERY, 21K-GAL, TYPE E, RUBBER	14 EACH
NA	VARIOUS	OB0820	BLADDER, SPILL RECOVERY, 50K-GAL, TYPE F, RUB	1 EACH
SUPPORT BOATS				
P03100	BOOM HANDLING BOAT	WB0722	BOAT, 24′ BOOM HANDLING, 0 SERIES	9 EACH
P19900	PERSONNEL TRANSFER BOATS	WB0736	BOAT, 24′ RIGID HULL INFLATABLE	1 EACH
P03200	BOOM TENDING BOAT (RIGID)	WB0942	BOAT, 18′ BOOM TENDING	1 EACH

SYSTEM NUMBER	SYSTEM NOMENCLATURE	ESSM NUMBER	ESSM NOMENCLATURE	QUANTITY
SUPPORT BOATS (CONT)				
P16400	VESSEL SKIMMER SYSTEM	SK0721	SKIMMER, OIL, SORB BELT, 36′ VESSEL (CLASS V)	9 EACH
P03300	BOOM TENDING BOAT (INFLATABLE)	WB0730	BOAT, 19′ INFLATABLE, MK V HD, W/TWIN 50-HP MOTORS	1 EACH
FIELD SUPPORT SYSTEMS				
P16200	SALVAGE SUPPORT SKIMMER SYSTEM	VA2220	VAN, SALVAGE SKIMMER SYSTEM	8 EACH
P20300	OIL BLADDER TRANSFER SYSTEM	NA	NA	4 EACH
P17200	SUBMERSIBLE HYDRAULIC PUMPING SYSTEM, 2″ TO 6″	NA	NONE	1 EACH
P19600	RIGGING VAN	VA0010	VAN, RIGGING	3 EACH
P19700	SHOP VAN	VA0508	VAN, WORKSHOP	3 EACH
P19300	COMMAND VAN	VA0727	VAN, COMMAND, 20′	2 EACH
P19400	COMMAND TRAILER	VA0717	VAN, COMMAND TRAILER, 45′	1 EACH
P19400	COMMAND TRAILER	VA0719	VAN, COMMAND TRAILER, 40′	1 EACH
NA	NA	VA0715	VAN, COMMAND CONFERENCE CENTER, EXPANDABLE	1 EACH
P19200	EQUIPMENT DECONTAMINATION VAN	NA	NA	2 EACH
COMMUNICATIONS SYSTEMS				
P05100	COMMUNICATIONS SYSTEM (LAND-BASED)	NA	NA	13 EACH

SECTION F – EQUIPMENT EVALUATIONS

Various:	Boat operators needed an air conditioner in the workboat cabs in very hot weather experienced during this operation.
Recommendation:	Small portable A/C unit designed for forklifts were procured and installed in some of the Class V skimmers. Due to the limited availability of the A/C units, not all the skimmers were outfitted at all sites. Continue to install A/C units during refurbishment or maintenance as funds become available. Install A/C units on all workboats with cabs. Also add at least two shade devices to each skimmer.
SK0050:	The High Speed Current Buster's exterior covering started deteriorating and bladders began leaking. Ordered replacement bladders, however exterior covering was not available. Had to sew covering together with sail twine to make it last.
Recommendation:	Review a heavier upgrade and more durable fabric for the covers.
OA0010:	The aluminum pulley on the lower part of outrigger's king post where towline goes through is too small, and line would hang up between it and the framework causing the line to chafe and cut through.
Recommendation:	Replace the aluminum pulley with larger Delrin roller.
SK0050:	Weir Skimmer bellows continued to come off the skimmer pocket.
Recommendation:	Install bolts and washers in several locations through the mount point.
SK0711:	The Class V Skimmers' offloading pumps continually froze up and had to be worked on. These pumps are old, and parts are not readily available.
Recommendation:	Replace with newer hydraulic submersible pumps.
Various:	The Class V Skimmers' skimmer-to-boom attachment tow points (aluminum female intrusions) were wearing to the point that the boom-to-skimmer attachment tow points (male extrusion) detached on several skimmers. The skimmers had to be removed from the water to weld the female intrusion.
Recommendation:	Need to design a permanent attachment setup.
Various:	The Boom Mooring Systems for 42″ boom were adequate; however, SUPSALV's inventory did not have enough systems to support all the Oil Containment Boom on hand.
Recommendation:	Procure to the inventory objective as a priority

BM0760, BM0765:	The 26″ Oil Containment Boom was adequate when used around islands until storms came through. Fortrucse anchors held well.
Recommendation:	None.
VA0508:	There was an issue with the buss bar in the remote electrical panel in the shop van. One buss bar overheated and melted. The contracted electrician repaired the panel and indicated that the buss bar currently used was rated too low for the electrical demand placed on it.
Recommendation:	Upgrade all shop van electrical panels to handle higher electrical loads.

APPENDIX A - PERSONNEL

The following personnel participated in the onsite operations:

SUPSALV Representatives:	Patrick Keenan Capt (NAVSEA 00C)
	Michael Dean (NAVSEA 00CB)
	Charles Gunzel Capt (NAVSEA 00CR)
	Mike Herb (NAVSEA 00C2)
	Kemp Skudin (NAVSEA 00C25)
	Stephanie Brown (NAVSEA 00C25A)
	Richard Thiel (NAVSEA 00C21)
	John Sasse (NAVSEA 00C22)
	Richard Buckingham (NAVSEA 00CL)
	George Southworth LCDR (NAVSEA 00COB)
	Shaub Hayes LCDR (NAVSEA 00C2OA)
	Jacob Nessel (NAVSEA)
	Chris Addington LCDR (SWRMC)
	Andrew LaValley LT (SERMC)
	William Sumsiuon LT (PSNSY)
	James Wilkins LT (MIT)
	James Fernan (MSC)
GPC Personnel:	
	Robert Urban GPC
Program Manager:	Lloyd Saner (CAX)
Project Manager:	Kevin Smith (CAX)

Base Managers:	Mike Pricola (CA)
	David Simmerman (AK)
	Jimmy Johnson (HI)
Assistant Base Managers:	Steve Gray (CAX)
	Jerry Hollenbeck (CA)
	Dante Castrence (HI)
	Dale Colby (AK)
Accounting Supervisor:	Kim Kurtz (CAX)
Documenter:	Allen Gardner (CAX)
Pollution Coordinator:	Ron Worthington (CAX)
Dive Coordinator:	Paul Schadow (CAX)
Field Technology Assessors:	Robert Urban (PCCI)
	Craig Moffatt (CAX)
Engineers:	Roy Ludi (CAX)
	Gus Ruetenik (PCCI)
	Tony Kupersmith (PCCI)
Foremen:	Matt Wenner (CAX)
	Cecil Harris (CAX)
	Ron Leverett (CAX)
	Calvin Scott (CAX)
	James Bailey (CAX)
Safety Supervisor:	Jimmy Johnson (HI)

Field Personnel:

Williamsburg (CAX), VA:	Brad Smith
	Matt Page
	Joey McKee
	Justin Rowe
	Ken Black
	Kenny Smith
	Clyde Bennett
	Brian Kurtz
	Duc Nguyen
	Ed Moore
	Bob Fisher
	Gabe Darber
	Kris Haselwood
	Butch Ranger
	Jeff Zagurski
	Mike Powers
	Keith Morrison
	Tommy Goens
	Keith Hirsh
	Chris Helbig
	Charles Frazier
	Michael Lane
	Jim Thompson
	Vernon Kertley
	Ben Beamon
	Bobby Washington
	Tony Bass
	Heath Barnett
	Tony Evans
	Ritchie German
	Bill Reiff
	Billy Eubanks
	Donald Morgan
	Chris White
	Mike Austin
	Thomas Murdoch
	Aaron Hogue
	Ryan Bauer
	Jessie Thielen
	Henry Steward
	Robbie Smith
	James Fracasse
	James Phillips
	Joe Forloines

Ft Richardson, AK:	Scott Caple
	Matt Gore
	David Petty
	Michael Longlet II
Pearl Harbor, HI:	Lawrence Scott Castanares
	Jared Diego
	Albert Kaahaina
	Christopher Levering
	Tapai Lifa
	Daniel Shimoko
Port Hueneme, CA:	Rex Avila
	Faustino Barajas
	Isidro Campos
	Raymond Carter
	Gary Astorga
	Grayson Chase
	Kevin Degeatano
	Rodrigo De La Cruz
	Robert Dettelbach
	Antonio Duenas
	Jonathan Hall
	Horacio Hernandez
	Arthur Joe
	Isaac Mejia
	Jose Morales
	Joseph Stewart
	Juan Valmon
	Kelly Willcuts
	Javier Yap

APPENDIX B – PHOTOGRAPHS

Figure B-1. SUPSALV Grand Isle, LA Main Support Site
(Command Van to the right)

Figure B-2. SUPSALV Grand Isle, LA Command Van
and Support Crew

Figure B-3. SUPSALV Grand Isle, LA (Secondary Site) Support Crew Evaluating New Light-Weight Life Vests

Figure B-4. SUPSALV Rabbit Island, LA Support Site

Figure B-5. SUPSALV Bayou La Batre, AL Support Site on OSV *Manta Ray* Jack-Up Vessel

Figure B-6. SUPSALV Theodore, AL Support Site at Resolve Marine Group

Figure B-7. Class V Vessel Skimmer in Hip-Tow Configuration with Grand Isle Based Shrimp Boat, *Night Rider*

Figure B-8. SUPSALV Personnel and Contractors at Rigolets in Slidell, LA

Figure B-9. Equipment Training in Gulfport (at State Pier)

Figure B-10. Decontamination in Progress at Resolve Marine Group at Resolve, AL Site

Figure B-11. SUPSALV Personnel and Contractors at the Decontamination Site at Resolve Marine Group, Theodore, AL Site

Figure B-12. Boom Washed Ashore by Storms

Figure B-13. Laying Boom in Venice, LA

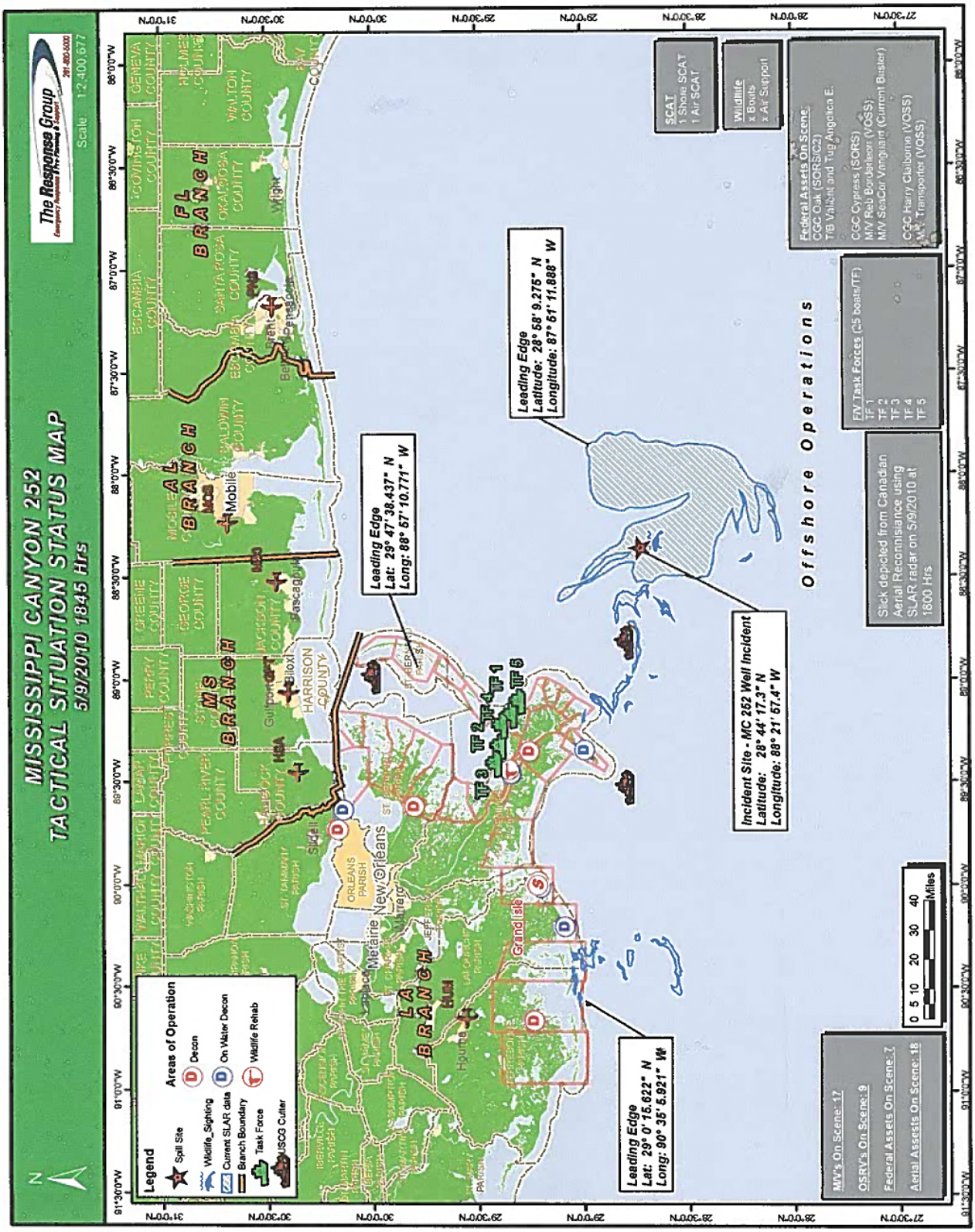
Figure B-14. The *A Whale* Vessel (World's Largest Oil Skimmer)

Figure B-15. SUPSALV Bayou La Batre, AL Support Crew

Figure B-16. SUPSALV Command Van in Gulfport (at State Pier)

Figure B-17. Departing the Gulf of Mexico

APPENDIX C – MISSISSIPPI CANYON 252 TACTICAL SITUATION STATUS MAP



APPENDIX D – THE KLONDIKE TO BAYOU SKIMMER JOURNEY

APPENDIX E – TENSION AND OPERATING LIMITS FOR USS 42 BOOM

PCCI
Marine and Environmental Engineering

May 19, 2010

To: Lloyd Saner - GPC
From: Bob Urban - PCCI
Subject: Tension and operating limits for USS 42 Boom
References: (a) USS 42 HB Boom Specifications
(b) World Catalogue of Oil Spill Response Products, 2008

1. Operations today involved setting approximately 1000 feet of boom near the entrance to Mobile Bay. Two large drag anchors were set resulting in a mouth opening of about 800 feet with currents of 2.8 knots at peak. Using established oil boom catenary loading formulas (reference b) this arrangement would result in a maximum boom tensile load of about 66,000 lbs. The use of more anchors was prevented because of underwater pipelines.

2. The USS 42 boom fabric structure has a minimum tensile capacity of 37,000 lbs, reference (a). The bottom ballast and tensile member is a ½ inch lashing chain with an ultimate tensile strength of about 40,000 lbs. The assembled boom strength consists of some combination of the fabric and chain tensile strength. However, the elongation of the fabric when under load makes it difficult to determine total load sharing between fabric and chain. Therefore, it is reasonable to use a short-term installation safety factor of 2 on only the chain to result in a 20,000 lb. working load for the boom assembly. This working load limit can be achieved by decreasing boom Gap Ratios and the use of multiple anchors, particularly in high current conditions.

3. All oil booms are limited in their capacity to contain oil in currents above 0.8 kts. Even if the maximum tensile load on the USS-42 boom at Mobile could be reduced to 20,000 lbs, the value of booming a channel with 2.8 knots of current makes little sense because the oil will quickly go under the boom.

4. It is possible, however, to design a boom installation for high current. This requires the careful design and installation of multiple anchors, deflection booming and other established techniques.

APPENDIX F – CLASS V VESSEL SKIMMER SYSTEM CONOPS

NAVSEA 00C2
6-17-2010

DEEPWATER HORIZON OIL SPILL RESPONSE

Class V Vessel Skimmer System CONOPS

The U.S. Navy Supervisor of Salvage and Diving (SUPSALV) maintains a capability (equipment, personnel, planning and training) to respond to Navy pollution incidents throughout the world. SUPSALV has deployed oil spill response resources and personnel from several of its Emergency Ship Salvage Material (ESSM) bases in support of the Deepwater Horizon (MC252) Oil Spill Response to include the Class V Vessel Skimmer System.

The Class V Skimmer System is a 36-foot aluminum vessel designed for inland and near shore oil skimming operations. It has a modular pilot house and is fitted with a rotating sorbent belt for oil recovery. It can function in stationary, free skimming (without boom), or towed V-boom configurations. When used in open water, the skimmer is towed in a V-boom configuration by two SUPSALV boom handling boats or alternative Vessels of Opportunity (VOOs) towboats.

The following are operational and logistics requirements for the Class V Skimmer System:

Operational

The SUPSALV Class V Skimmer System is not designed for offshore skimming; following are operating area guidelines:

- Operating independently with towboats/VOOs – out to10NM
- Operating with barge and ability to lift (32,000 lbs) and place onboard – out to 20NM

Maximum operating parameters:

- Maneuvering of a Class V Skimmer System requires a SUPSALV operator onboard and direct communication with the VOOs/towboats.
- Skimming speeds of no greater than 1.5 knots
- Swells of no greater than 3 feet
- Waves/chop of no greater than 2 feet
  NOTE: The issue with sea state is not that the skimmers are not seaworthy but rather the skimming systems will be ineffective.
- Point-to-point towing speeds of no greater than 5 knots
  NOTE: Point-to-point towing must be by the bow (i.e., skimmer belt facing aft) with boom trailing.
- Night skimming operations should not be attempted with Class V Skimmers skimming independently. Night skimming operations MAY be possible if crews are doubled and there is sufficient forward lighting for oil spotting

Operational limitations may only be modified by the on-site SUPSALV Supervisor.

Logistics and Crew Safety

The SUPSALV Class V Skimmer System is designed for single-day, daylight-only skimming and is deployed with a single-shift SUPSALV crew (3-persons/skimmer). The following are crew and logistic considerations:

- All day on-water operations require VOOs or other immediate area craft with sufficient messing and air conditioned space for crew rest and rotation.
- 24-hour skimming operations require an attendant barge and a second SUPSALV crew onboard VOOs with sufficient messing/berthing and rest facilities.
- All SUPSALV skimmer crews must have at least one day off/ashore per week.
- OFFLOAD: Class V skimmers have 40bbl sumps, then they must offload. We can tow and offload to ~540bbl bladders however they are difficult to offload and decon so wherever possible MST-tanks or barges for offload are preferred.

MARCO Skimmer Maintenance: SUPSALV has out-fitted the OSV BAYOU BEE (210ft, DP2 and 6300 bbl off-shore vessel) with cleaning, pumping and maintenance capability and has set up a service rotation for conducting routine and repair maintenance on SUPSALV skimmer systems operating in the Gulf of Mexico. SUPSALV expects to conduct this maintenance approximately once every two weeks when that system will be off line for approximately 1 day.

APPENDIX G – OFFSHORE SUPPLY VESSELS USED

1. *John Coghill* 265′ Assigned 29 April 2010. Used for deploying boom offshore, at Ship Island, MS and Mobile Bay, AL as well as for skimming operations with two High Speed Current Busters offshore.

2. *Seacor Vanguard* 255′ Assigned 5 May 2010. Used for skimming operations with two High Speed Current Busters offshore.

3. *Seacor Vantage* 221′ Assigned 2 July 2010. Used as replacement for the *Seacor Vanguard* which had another mission. Two High Speed Current Busters were transferred from the *Vanguard* to her and she operated offshore skimming.

4. *Bayou Bee* 195′ Assigned 12 June 2010. Set up with maintenance equipment, crane, and used to visit various skimmer systems to perform maintenance on skimmers.

5. *Wes Bordelon* 150′ Assigned 8 May 2010. Used out of Venice, LA. To deploy Oil Containment Boom around several islands and between old well heads in East Bay, LA.

6. *Caspian Sea* 64′ Assigned 27 June 2010. Used to replace the *Wes Bordelon* (who broke down) *Caspian Sea* was performing the same functions.

7. *Renee* 195′ Assigned 2 June 2010. Class XI Skimming system was installed and used in offshore skimming operations.

Appendix B
Tasking and Funding Documents

Table of Contents

Cost of Operations

RFA #	ITEM	Obligated
Original RFA and 006, 006B, 006C, and 121 less funds unused to date*	Operations	20,144,736
NA	CNIC Support	1,700,000
	Total	21,844,736

* This figure represents the current obligated operations funds from 5 USCG RFAs minus funds returned. A final figure won't be available until Award Fees have been awarded.

Cost of Replacement Items Beyond Economical Repair

RFA#	ITEM	REC'D	OBLIGATED	LEFT	RETURNED	NOTES
141	42" BOOM	$8,466,944	$5,122,128	$0	$3,344,816	
142	CURRENT BUSTERS	$918,528	$918,528	$0	$0	
145 &146	MARCO BELTS & HOSES	$102,941	$79,257	$0	$23,684	
147	50K BLADDER	$200,783	$156,567	$0	$44,216	Replacing w/ (1) 25K bladder
151	26" BOOM	$2,231,545	$827,597	$0	$1,403,948	
154	23K BLADDERS	$463,384	$463,384	$0	$0	
	Total:	$12,384,125	$7,567,461	$0	$4,816,664	

UNCLASSIFIED//

R 281622Z APR 10 ZUI ASN-A08118000011 PSN 751190I23
FM COGARD MSU MORGAN CITY LA
TO RHMFIUU/CNO WASHINGTON DC//N3N/N30N//
INFO ZEN/CCGDEIGHT NEW ORLEANS LA//DRM// ZEN/COMLANTAREA COGARD PORTSMOUTH VA//ARMC/ARME// ZEN/COMDT COGARD WASHINGTON DC//533/311// RUEKJCS/JCS NMCC WASHINGTON DC RHMFIUU/COMNAVSEASYSCOM WASHINGTON DC//00C// RULSSEA/COMNAVSEASYSCOM WASHINGTON DC//00C// BT
UNCLAS
SUBJ/REQ FOR USN SUPSALV ASSIST ISO RESPONSE TO SUNKEN MODU DEEPWATER HORIZON AND ONGOING POLLUTION INCIDENT IN GULF OF MEXICO//
REF/A/IAA/USCG-USN/15SEP1980// REF/B//40 CFR PART 300// NARR/REF A IS USN/USCG INTER-AGENCY AGREEMENT FOR POLLUTION CLEAN-UP AND SALVAGE OPS.
REF B, NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN, ARE THE FEDERAL REGULATIONS PROVIDING FOR INTER-AGENCY POLLUTION RESPONSE COORDINATION// POC/DAVENPORT, PETER, CWO3, GST, DECK OFFICER, 251-680-9677//POC/-/-/-/-/EMAIL: PETER.J.DAVENPORTATUSCG.MIL//
RMKS/1. IAW REFS A AND B, COAST GUARD FEDERAL ON-SCENE COORDINATOR (OSC), USCG SECTOR NEW ORLEANS, REQUESTS IMMED NAVSEA-00C, USN SUPERVISOR OF SALVAGE (SUPSALV), SUPPORT IN RESPONSE TO SUNKEN MODU DEEPWATER HORIZON AND ONGOING POLLUTION INCIDENT IN GULF OF MEXICO.
SINKING AND ONGOING OIL RELEASE FROM DAMAGED WELL-HEAD HAS CAUSED SIGNIFICANT WATERBORNE POLLUTION THAT THREATENS ADJACENT COASTAL AREAS.
2. REQ IMMED SUPPORT IN FOLLOWING AREAS: OIL SPILL CONTROL AND RECOVERY EQUIPMENT, AS WELL AS OPERATING PERSONNEL. ADDITIONAL SALVAGE, DIVING, ROV SVCS AND/OR CONSULTATION MAY ALSO BE REQUIRED AS SITUATION DEVELOPS. ANTICIPATED DURATION OF DEPLOYMENT ESTIMATED TO BE APPROX 30 DAYS. FUNDING WILL BE UNDER THE OIL SPILL LIABILITY TRUST FUND, FPN N 10036 APPLIES.
3. REQ DIRLAUTH W/ SUPSALV.
4. SECONDARY POC IS LT PETER ZAUNER, USCG, TEL:251-680-8006//.
BT

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Eighth District

Hale Boggs Federal Building
500 Poydras Street
New Orleans, LA 70130-3396
Phone: (504) 671-2235
Fax: (504) 671-2005

13000
2 May 2010

MEMORANDUM

From: M. E. Landry, RADM, USCG
National Incident Commander (NIC)
Federal On-Scene Coordinator (FOSC)
Commander, CGD Eight

Reply to Attn of: D8 UAC Robert, LA (985) 902-5412

To: DoD Executive Secretary

Thru: Director, Joint Director of Military Support (JDOMS J34)
Commandant, US Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations:

a. Federal Project Number: N10036
b. Description of Incident: DEEPWATER HORIZON Incident and Oil Response.
c. Capability requested: US Navy Supervisor of Salvage, to include inventory of pollution response equipment to include boom, Marco skimming systems, anchors, skiffs, and pollution response personnel
d. Reason for capability: Increase capabilities to achieve unified command goals with regard to pollution response efforts (booming and skimming requirements).
e. Recommended employment site: Unified Area Command, Robert, Louisiana and deploy as required.
f. Message address/email address/phone/fax of the FOSC: CCGDEIGHTNEWORLEANSLA/DEIMTWATCH@uscg.mil/757-589-6223/985-589-2077.
g. Maximum funding authorized for DoD support: 3.5 million.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirm receipt of RFA via email response to FOSC.

#

Encl: ICS-213 Form

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U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Eighth District

500 PoydrasStreet
New Orleans, LA 70130
Staff Symbol: CG-4
Phone: (504) 589-6223
Fax: (504) 589-2077

13000
8 May 2010

MEMORANDUM

From: M. E. Landry, RADM, USCG
National Incident Commander (NIC)
Federal On-Scene Coordinator (FOSC)
Commander, CGD Eight

Reply to Attn of: D8 UAC Robert, LA (985) 902-5412

To: DoD Executive Secretary

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations:

a. Federal Project Number: N10036
b. Description of Incident: DEEPWATER HORIZON Incident and Oil Response.
c. Capability requested: Strategic DoD airlift of 150,000 ft of pollution response boom and Navy Supervisor of Salvage (Mr. Rick Thiel 202.907.6049) equipment from Anchorage, Alaska to New Orleans International Airport (MSY), Louisiana as soon as possible.
d. Reason for capability: Critical asset in support of DEEP WATER HORIZON oil spill response activities.
e. Recommended employment site: New Orleans International Airport, LA.
f. Message address/email address/phone/fax of the FOSC: CCGDEIGHT NEW ORLEANS LA/D8IMTWATCH@uscg.mil/757.647.5148/985.543.3340.
g. Maximum funding authorized for DoD support: Estimate $200,000 per flight and estimate 10 flights required to move equipment. $2,000,000 total estimated cost.
h. For specifics regarding employment site, quarters and transportation, contact the Unified Area Command Resources Unit at (985) 902-5410.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC §153.407.

3. Request JDOMS Watch Desk confirm receipt of RFA via email response to FOSC.

#

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U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Eighth District

500 PoydrasStreet
New Orleans, LA 70130
Phone: (504) 589-6223
Fax: (504) 589-2077

13000
21 May 2010

MEMORANDUM

From: M.E. Landry, RADM, USCG
National Incident Commander (NIC)
Federal On-Scene Coordinator (FOSC)
Commander, CGD Eight

Reply to Attn of: D8 UAC Robert, LA (985) 902-5412

To: DoD Executive Secretary

Thru: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: AMENDMENT: REQUEST FOR ASSISTANCE – DEEPWATER HORIZON OIL SPIL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations:

a. Federal Project Number: N10036.
b. Description of Incident: DEEPWATER HORIZON Incident and Oil Response.
c. Capability requested: US Navy Supervisor of Salvage, to include inventory of pollution response equipment to include boom, marco skimming systems, anchors, skiffs, and pollution response personnel,for an additional 30 days beginning on or about 21 May 10. This extends the period of performance under this RFA through on or about 21 Jun 10, or until such time the maximum authorized funding specified in paragraph h is exhausted.
d. Reason for capability: To achieve unified command goals with regard to pollution response efforts (booming and skimming requirements).
e. Recommended employment site: Unified Area Command, Robert, Louisiana and deploy as required.
f. Message address/email address/phone/fax of the FOSC: D8IMTWatch@uscg.mil 504-589-6223/504-589-2077.
g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 006.
h. Maximum funding authorized for DoD support: $7,250,000 ($3.5M for the original RFA and an additional $3.75M).
i. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC §153.407.

3. Request JDOMS Watch Desk confirm receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 Form
(2) Original RFA# 006

Copy: LANT-3R4, CG-532, CG-533, CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spill

Shell Robert Training & Conf. Center
23260 Shell Lane
Robert, LA 70455

3025

JUN 16 2010

MEMORANDUM

From: J.A. Watson, RADM, USCG
Federal On-Scene Coordinator (FOSC)

Reply to Attn of: UAC Robert, LA
(985) 902-5412

To: DoD Executive Secretary

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: AMENDMENT TO: REQUEST FOR ASSISTANCE (RFA) 006A – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations:

   a. Federal Project Number: N10036.
   b. Description of Incident: DEEPWATER HORIZON Incident and Oil Response.
   c. Capability requested: US Navy Supervisor of Salvage, including inventory of pollution response equipment to include boom, marco skimming systems, anchors, skiffs, and pollution response personnel for an additional 30 days beginning on or about 21 June 2010. This extends the period of performance under this RFA through on or about 20 July 2010.
   d. Reason for capability: To achieve unified command goals with regard to pollution response efforts (booming and skimming requirements).
   e. Recommended employment/transport site: Unified Area Command and deploy as required.
   f. Message address/email address/phone/fax of the FOSC: D8IMTWatch@uscg.mil 504-589-6223/504-589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 006B
   h. Maximum funding authorized: Funding for the period of extension is $5,500,000.00 ($142,080.59 for daily contractor cost for 30 days at $4,262,417.70, plus $1,000,000.00 for demobilization and remainder will be used as a buffer for equipment replacement cost). Amended time frame 21 June 2010- 20 July 2010.
   i. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC §153.407.

3. Request JDOMS Watch Desk confirm receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 Form

Copy: LANT-3R4, CG-532, CG-533, CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spill

Unified Area Command New Orleans
1250 Poydras
New Orleans, LA 70113

3025

MEMORANDUM

JUL 21 2010

From: P.F. Zukunft, RADM, USCG
Federal On-Scene Coordinator (FOSC)

Reply to UAC New Orleans
Attn of: (504) 525-2283

To: DoD Executive Secretary

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: AMENDMENT : REQUEST FOR ASSISTANCE (RFA) 006C – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations:

   a. Federal Project Number: N10036.
   b. Description of Incident: DEEPWATER HORIZON Incident and Oil Response.
   c. Capability requested: To extend mission of US Navy Supervisor of Salvage, including inventory of pollution response equipment to include boom, marco skimming systems, anchors, skiffs, and pollution response personnel.
   d. Reason for capability: To achieve unified command goals with regard to pollution response efforts (booming and skimming requirements).
   e. Recommended employment/transport site: Unified Area Command and deploy as required.
   f. Message address/email address/phone/fax of the FOSC: D8IMTWatch@uscg.mil 504-589-6223/504-589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 006C
   h. Maximum funding authorized: Funding requested for the period of extension: $14,524,835.40 ($8,524,835.40: cost of contractor at $142,080.59 per day for 60 days, $6,000,000.00 is still being discussed with the U.S. Navy Supervisor of Salvage. Other options may be more advantageous. Funding should not be held up while discussions over the $6,000,000.00 continue.) Amended time frame for 60 days to begin on or about 21 July ending on or about 18 September 2010, unless terminated or extended by proper authority.
   i. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC §153.407.

3. Request JDOMS Watch Desk confirm receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 Form
(2) RFA 006B

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U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

SEP 18 2010

MEMORANDUM

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: AMENDMENT : REQUEST FOR ASSISTANCE (RFA) 006D – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) and National Guard (NG) support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon, 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
   c. Capability Requested: To extend mission of US Navy Supervisor of Salvage, including inventory of pollution response equipment to include boom, marco skimming systems, anchors, skiffs, and pollution response personnel.
   d. Mission/Task Description: To achieve Unified Area Command goals with regard to pollution response efforts (booming and skimming requirements).
   e. Recommended employment/transport site: Unified Area Command and deploy as required.
   f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/(504)589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 006D
   h. Duration: Amended time frame for 27 days to begin on or about 19 SEPT 2010 and ending on or about 15 OCT 2010, unless terminated or extended by proper authority.
   i. Maximum funding authorized: $0.00 (This is a no cost extension)
   j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

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U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

MEMORANDUM

P.F. Zukunft 10/6/10

OCT 06 2010

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: AMENDMENT : REQUEST FOR ASSISTANCE (RFA) 006E – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon, 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
   c. Capability Requested: Demobilization of US Navy Supervisor of Salvage (SUPSALV) mission. Demobilization needs include decontamination, inspection, repair, and ordering replacement in kind assets which will return SUPSALV to their pre-Deepwater Horizon level of response readiness.
   d. Mission/Task Description: To achieve Unified Area Command goals with regard to pollution response efforts (booming and skimming requirements).
   e. Recommended employment/transport site: Unified Area Command and deploy as required.
   f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/(504)589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 006E
   h. Duration: Amended time frame for 60 days to begin on or about 16 OCT 2010 and ending on or about 15 DEC 2010, unless terminated or extended by proper authority.
   i. Maximum funding authorized: $0.00 (This is a no cost extension)
   j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

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CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spill

Unified Area Command New Orleans
1250 Poydras
New Orleans, LA 70113

3025
AUG 11 2010

MEMORANDUM

From: P.F. Zukunft, RADM, USCG
Federal On-Scene Coordinator (FOSC)

Reply to Attn of: UAC New Orleans (504) 525-2283

To: DoD Executive Secretary

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA) 141 – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: DEEPWATER HORIZON (DWH) Incident and Oil Response.
   c. Capability Requested: Replacement of up to 23 (ea), U. S. Navy Supervisor of Salvage (SUPSALV) 42-inch boom systems that are deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
   d. Mission/Task Description: In coordination with deployment of boom specified in RFA 006 and amendments, SUPSALV 42-inch boom systems already recovered have been found to be damaged beyond economical repair (BER). The requested maximum funding authorized is considering the worst case situation of replacing all 23 boom systems currently deployed, but funding will only be expended to the extent that boom is determined, by USCG inspection, to be BER. This funding will allow for continued readiness and to minimize capability gaps in fulfilling the Navy's repsonsibility to provide oil spill response for Navy facilities and vessels in CONUS and Alaska.
   e. Recommended employment/transport site: ICP Houma and ICP Mobile.
   f. Message address/email address/phone/fax of the FOSC: D8IMTWatch@uscg.mil 504-589-6223/504-589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 141.
   h. Duration: For duration beginning on or about 10 August 2010 and ending when all 23 SUPSALV 42-inch boom systems have been recovered, unless request is terminated by proper authority.
   i. Maximum funding authorized: $8,466,944 [Projected replacement costs in the event all 23 boom systems (42 inch) are found to be BER, at an estimated cost of $368,125 per system.]
   j. Funding Authority: USCG.

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spill

Unified Area Command New Orleans
1250 Poydras
New Orleans, LA 70113

3025

AUG 11 2010

MEMORANDUM

From: P.F. Zukunft, RADM, USCG for
Federal On-Scene Coordinator (FOSC)

Reply to Attn of: UAC New Orleans (504) 525-2283

To: DoD Executive Secretary

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U.S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA) 142 – DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: DEEPWATER HORIZON (DWH) Incident and Oil Response.
   c. Capability Requested: Replacement of soft parts for four (4), U. S. Navy Supervisor of Salvage (SUPSALV) Current Buster high speed Vessel of Opportunity Skimming System (VOSS) that were deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
   d. Mission/Task Description: In coordination with deployment of Current Buster VOSS specified in RFA 006 and amendments, soft components of the SUPSALV Current Buster VOSS systems recovered have been found to be damaged beyond economical repair (BER) by USCG inspection. The maximum funding authorized is for the replacement of the soft components (i.e., bladders, netting, liners, covering, etc..) associated with all four (4) Current Buster VOSS systems deployed. All reusable system components will be incorporated. The reconstitution of this equipment will allow for continued readiness and to minimize capability gaps in fulfilling the Navy's repsonsibility to provide oil spill response for Navy facilities and vessels in CONUS and Alaska.
   e. Recommended employment/transport site: ICP Houma and ICP Mobile.
   f. Message address/email address/phone/fax of the FOSC: D8IMTWatch@uscg.mil 504-589-6223/504-589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 142.
   h. Duration: For duration beginning on or about 10 August 2010 and ending when components for all SUPSALV Current Buster VOSS systems have been procured, unless request is terminated by proper authority.
   i. Maximum funding authorized: $918,528 [Projected replacement costs for the soft components of four (4) Current Buster VOSS system components.]
   j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursed in accordance with 33 USC §153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

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Enclosures: (1) ICS-213 RR CG
(2) RFA 006C

Copy: LANT-3R4, CG-532, CG-533, CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

AUG 21 2010

MEMORANDUM

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA145) - DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) and National Guard (NG) support to ongoing response and recovery operations.

a. This document authorizes reimbursement to the Recipient Agency from the Oil spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
c. Capability Requested: Replacement of MARCO Class V Skimmer Systems eighteen (18) bunker oil belts (System #P16400/16100, ESSM #SK0725) that are deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
d. Mission/Task Description: Reconstitute Marco Class V Skimmer Systems by replacing 18 bunker oil belts. Belts have been validated by a U. S. Coast Guard representative from the National Strike Force Coordination Center to be beyond economical repair. Procurement of 18 bunker oil belts to Navy specs is required. Source is Applied Fabrics Technology, Inc. Orchard Park, NY. Factory inspections required by U. S. Navy Supervisor of Salvage (SUPSALV). Best practices will be performed by Navy Emergency Ship Salvage Material contractors and SUPSALV for quality assurance, to include hinge inspections for compatibility with the MARCO Class V belt skimmer systems.
e. Recommended employment/transport site: ICP Houma and ICP Mobile.
f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/ (504)589-2077.
g. Upload information: Homeland Security Information Network (HISN)/Emergency Management/MC252/RFA: 145.
h. Duration: For duration beginning on or about 18 AUG 2010 and ending when MARCO Class V Skimmer Systems have been recovered, unless request is terminated by proper authority.
i. Maximum funding authorized: $43,840. Estimated cost for labor & material to replace 18 belts.
j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

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Enclosures: (1) ICS-213 RR CG

Copy: LANT-3R4
CG-532
CG-533
CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

MEMORANDUM

AUG 20 2010

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA146) - DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) and National Guard (NG) support to ongoing response and recovery operations.

a. This document authorizes reimbursement to the Recipient Agency from the Oil spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
c. Capability Requested: Replacement of MARCO Class V Skimmer Systems fifty four (54) discharge and suction hoses (System #P16400/16100) that are deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
d. Mission/Task Description: Reconstitute Marco Class V Skimmer Systems by replacing up to 54 discharge and suction hoses. Hoses have been validated by a U. S. Coast Guard representative from the National Strike Force Coordination Center to be beyond economical repair and either lost or disposed of at the decontamination stations. This will require procurement of up to 18 layflat discharge hoses 4" x 20' and 18 layflat discharge hoses 4" x 50'. Source is TITAN, part # SS242 and ANGUS. Also 9 suction hoses 6" x 20' and 9 suction hoses 6" x 50'. Source is TITAN, part # SWC509. Quality inspection to be performed by Navy Emergency Ship Salvage Material contractors upon receipt.
e. Recommended employment/transport site: ICP Houma and ICP Mobile.
f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/(504)589-2077.
g. Upload information: Homeland Security Information Network (HISN)/Emergency Management/MC252/RFA: 146.
h. Duration: For duration beginning on or about 18 AUG 2010 and ending when MARCO Class V Skimmer Systems have been recovered, unless request is terminated by proper authority.
i. Maximum funding authorized: $59,101 is estimated cost for labor and material to replace all 54 hoses.
j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

Copy: LANT-3R4
CG-532
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U.S. Department of Homeland Security
United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

MEMORANDUM

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA147) - DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
   c. Capability Requested: Replacement of one (1) 50,000 gallon, U. S. Navy Supervisor of Salvage (SUPSALV), oil recovery bladder (System #P14300) deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
   d. Mission/Task Description: Procurement of one (1) 50,000 gallon oil recovery bladder system "F-Type" Dracone. Original bladder was torn during handling at the decontamination station in Theodore, AL and was reported to the USCG as beyond economical repair. All components will be integrated and made up into the correct configuration for System #P14300 per NAVSEA Publication S0300-BV-CAT-02 (0910-LP-722-6800), and packaged ready for issue and transport. Components beyond economical repair are to be disposed of through the Defense Reutilization Management Office, if not already disposed of by the decontamination stations. This will ensure continued readiness in the Navy's responsibility to provide oil spill response capabilities for Navy facilities and vessels in CONUS and Alaska.
   e. Recommended employment/transport site: Port Huememe, CA
   f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/ (504)589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 147
   h. Duration: Replacement in kind no duration specified.
   i. Maximum funding authorized: $200,783
   j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

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U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spill

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

MEMORANDUM

8/30/10

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA151) - DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
   c. Capability Requested: Reconstitute up to five (5) each 26" inch boom systems [System #P19090 and Emergency Ship Salvage Material System (ESSM) #VA0760]. Systems will be reconstituted as and to the extent inspection validates boom is beyond economical repair.
   d. Mission/Task Description: This request will require procurement of up to 3000 feet of 26 inch boom per system to Navy specification. Destructive testing of critical components will be performed by Navy ESSM System contractors at Navy's ESSM base at Cheatham Annex VA. Missing ancillary equipment lost or beyond economical repair will be procured to the form, fit and function required to complete standard boom van systems. Any specialized rigging and mooring materials unique to this system will be made up and inspected by ESSM contractor personnel. Components beyond economical repair to be disposed of through the Defense Reutilization Management office (DRMO). Funds are to be expended only as USCG inspects and certifies boom as beyond economical repair.
   e. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/ (504)589-2077.
   f. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 151
   g. Duration: Replacement in kind no duration specified.
   h. Maximum funding authorized: Estimated cost per system is $446,309 for a potential total of $2,231,545.
   i. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

Copy: LANT-3R4
CG-532
CG-533
CG-DCMS

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator
United States Coast Guard
BP Oil Spills

Unified Area Command New Orleans
1250 Poydras Street
New Orleans, LA 70113

3025

SEP 27 2010

MEMORANDUM

From: P. F. Zukunft, RADM, USCG
Federal On Scene Coordinator (FOSC)

Reply to: UAC New Orleans
Attn of: (504)525-2283

To: Office of the Secretary of Defense

Info: Director, Joint Director of Military Support (JDOMS J34)
Commandant, U. S. Coast Guard
Commander, Coast Guard Atlantic Area

Subj: REQUEST FOR ASSISTANCE (RFA154) - DEEPWATER HORIZON OIL SPILL EVENT

1. The following Request for Assistance (RFA) is submitted to obtain Department of Defense (DoD) support to ongoing response and recovery operations.

   a. This document authorizes reimbursement to the Recipient Agency from the Oil Spill Liability Trust Fund for certain removal costs incurred in response to the following pollution incident, Mississippi Canyon 252 Deepwater Horizon, Federal Project Number: N10036.
   b. Description of Incident: Deepwater Horizon (DWH) Incident and Oil Response.
   c. Capability Requested: Replacement of three (3) 25,000 gallon, U. S. Navy Supervisor of Salvage (SUPSALV), oil recovery bladder (System #P14300) deployed in the Gulf of Mexico in conjunction with oil pollution response and mitigation efforts.
   d. Mission/Task Description: Procurement of three (3) 25,000 gallon oil recovery bladder systems "F-Type" Dracones. Units were used for oil stowage and offloading. In the process of this endeavor damage was done due to debris, handling, weather, transit, and oil entrapment. All components will be integrated and made up into the correct configuration for System #P14300 per NAVSEA Publication S0300-BV-CAT-02 (0910-LP-722-6800), and packaged ready for issue and transport. Components beyond economical repair are to be disposed of through the Defense Reutilization Management Office, if not already disposed of by the decontamination stations. This will ensure continued readiness in the Navy's responsibility to provide oil spill response capabilities for Navy facilities and vessels in CONUS and Alaska.
   e. Recommended employment/transport site: Cheatham Annex, Yorktown Naval Weapons Station, VA
   f. Message address/email address/phone/fax of the FOSC: D08-DG-DEEPWATERRESPONSE-ACSITU@uscg.mil (504)589-6223/ (504)589-2077.
   g. Upload information: Homeland Security Information Network (HSIN)/Emergency Management/MC252/RFA: 154
   h. Duration: Replacement in kind no duration specified.
   i. Maximum funding authorized: $463,384.00
   j. Funding Authority: USCG.

2. All costs for DoD support shall be reimbursement in accordance with 33 USC § 153.407.

3. Request JDOMS Watch Desk confirms receipt of RFA via email response to FOSC.

#

Enclosures: (1) ICS-213 RR CG

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Appendix C. Sample SITREPS

SITREP #1: DEEP WATER HORIZON OIL SPILL RESPONSE; 29 Apr 2010

Previous Activities: First Sitrep

Current Activities (29 APR): USCG MIPR received for $3.35M. ESSM gear per attached list ordered late 27 Apr by verbal authorization. Gear represents 57 truckloads of which 53 have left the CONUS ESSM bases and 9 arrived in Gulfport, Mississippi. Brown and Skudin arrived in Gulfport along with 19 GPC contractors, led by Lloyd Saner. Met with CWO3 Peter Davenport, USCG, onboard Seacor Marine offshore support vessel JOHN COGHILL. First priority is deflection booming western tip of Ship Island, just south of Gulfport. Staging on State Pier in Gulfport. Loaded and rigged 2000 feet of boom with moorings to drop. USCG's second priority is MARCO skimming between Cat and Ship Islands, when weather permits. Additional Current Buster requested and ordered (reflected in truck totals above). Intention at this point is to rig Current Busters on both port and starboard sides of JOHN COGHILL for skimming near well head as weather permits.

Intentions Next 24 Hrs (30 APR): Will rig an additional 2000 feet of 42” boom with moorings at 0700. Will continue to rig and deploy boom and moorings as they arrive. Assemble MARCO skimmers and sufficient vans to facilitate operations.

Issues/Concerns: Sufficient moorings have yet to arrive and may delay underway time to lay first 4000 feet of boom. Concept of cascading boom will require two mooring sets per 1000 feet of boom. With this strategy, we are about 55 sets short, worst case. Since we have ordered all of our prepackaged sets, we are looking locally to identify suitable anchors/ chain, and may need some ESSM salvage gear.

EQUIPMENT GULF OIL SPILL							
SYS #	ESSM #	WEB SITE INV #	NOMENCLATURE	QTY CAX	QTY PHE	FEET BOOM	REMARKS
P16100	SK0711	2.2	MOD SKIMMER	3	4		
P16400	SK0721	2.1	VESSEL SKIMMER	5	4		HOLD PENDING TASKING
P19300	VA0935	2.3	HIGH SPEED SKIMMER SYS	1			
P03100	WB0722	5.1	BOOM HANDLING BOAT	5	4		
P19090	VA0760		26" BOOM SYS 3000'	2		6000	
			26" BOOM (NEW NOT ASSEMB)			6000	
P19100	VA0720	1.1	42" FUG BOOM 2000'	6	3	18000	
P19100	VA0737	1.1	42' USS 42" BOOM 2000'	8	6	28000	
P19100	VA0738	1.1	42' BOOM 2000'		2	4000	
P16200	VA2220	2.5	SALV SKIM VAN	1	1	2000	
P19070	VA0907		18" NON- INFALB BOOM	1		2000	
P19300	VA0727	6.2	COMMAND VAN	1	1		
P19600	VA0010	6.3	RIGGING VAN	1	1		
P19700	VA0508	6.4	SHOP VAN	1	1		
P19500	VA0734	6.5.1	BUNK VAN SHORE	1	1		
P19500	VA0735	6.5.2	BUNK VAN SHIPBOARD	1	1		
P19900	WB0736	5.4	24' RIB BOAT		1		
P03200	WB0956		22' WORK BOAT TRI-HULL	1			
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT	1	1		
P04100	MS0009	1.6	MOORING SYS 500 LB	7	19		
P04100	MS0011	1.6	MOORING SYS 1000 LB	10	9		
				TOTAL BOOM		66000	

SITREP #2: DEEP WATER HORIZON OIL SPILL RESPONSE; 30 Apr 2010

Equipment and Personnel Status: ESSM gear per attached list ordered to date. Gear represents 57 (original) + 18 (new) truckloads of which all have left the CONUS ESSM bases and 22 arrived in Gulfport, Mississippi. 2 SUPSALV civpers are in Gulfport along with 21 GPC contractors. 10 more GPC contractors expected to arrive tomorrow.

Previous Activities: Met with CWO3 Peter Davenport, USCG, onboard Seacor Marine offshore support vessel JOHN COGHILL. First priority was deflection booming western tip of Ship Island, south of Gulfport. Staging on State Pier in Gulfport. Loaded and rigged 2000 feet of boom with moorings to drop. Additional Current Buster requested and ordered (reflected in truck totals above). Intention still to rig Current Busters on both port and starboard sides of JOHN COGHILL for skimming near well head as weather permits. Previous sitreps attached.

Current Activities (30 APR): Completed loading and rigging 4000 feet of boom with mooring systems on JOHN COGHILL. Dropped first 1000 feet as planned; during deployment of second 1000 foot section, we were redirected into port with possible reassignment. Returned to port with 3000 feet of the original 4000 feet of boom on the fantail. While at sea, crew left ashore prepared additional 4000 feet of boom for loading. Also set up Rigging, Shop, Command and SOLAS Bunk Vans on pier and received/ offloaded more equipment as it arrived. 1 more GPC contractor arrived. USCG ordered our wide body MARCO Class V skimming systems which were sourced (5) from Cheatham Annex and (4) from Port Hueneme. These represent the 18 additional trucks reported.

Intentions Next 24 Hrs (01 MAY): Waiting for changes in tasking from USCG but can productively continue to mobilize, configure and assemble systems. 10 more GPC contractors expected to arrive tomorrow.

Issues/Concerns: We are still about 55 mooring sets short, worst case. Since we have ordered all of our prepackaged sets, we are looking to make up sets from ESSM gear on hand at Cheatham/Port Hueneme and/or purchase.

EQUIPMENT GULF OIL SPILL							
SYS #	ESSM #	WEB SITE INV #	NOMENCLATURE	QTY CAX	QTY PHE	FEET BOOM	STATUS
P16100	SK0711	2.2	MOD SKIMMER	3	4		3 Gulfport, 4 in route
P16400	SK0721	2.1	VESSEL SKIMMER	5	4		Ordered on 30 APR, in route
P19300	VA0935	2.3	HIGH SPEED SKIMMER SYS	1	1		1 Gulfport, 1 in route
P03100	WB0722	5.1	BOOM HANDLING BOAT	5	4		5 Gulfport, 4 in route
P19090	VA0760		26" BOOM SYS 3000'	2		6000	2 Gulfport
			26" BOOM (NEW NOT ASSEMB)	1		6000	1 Gulfport
P19100	VA0720	1.1	42" FUG BOOM 2000'	6	3	18000	6 Gulfport, 3 in route
P19100	VA0737	1.1	42' USS 42" BOOM 2000'	8	6	28000	6 Gulfport, 8 in route
P19100	VA0738	1.1	42' BOOM 2000'		2	4000	2 in route
P16200	VA2220	2.5	SALV SKIM VAN	1	1	2000	1 Gulfport, 1 in route
P19070	VA0907		18" NON- INFALB BOOM	1		2000	1 in route
P19300	VA0727	6.2	COMMAND VAN	1	1		1 Gulfport, 1 in route
P19600	VA0010	6.3	RIGGING VAN	1	1		1 Gulfport, 1 in route
P19700	VA0508	6.4	SHOP VAN	1	1		1 Gulfport, 1 in route
P19500	VA0734	6.5.1	BUNK VAN SHORE	1	1		1 Gulfport, 1 in route
P19500	VA0735	6.5.2	BUNK VAN SHIPBOARD	1	1		1 Gulfport, 1 in route
P19900	WB0736	5.4	24' RIB BOAT		1		1 in route
P03200	WB0956		22' WORK BOAT TRI-HULL	1			1 Gulfport
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT	1	1		1 Gulfport, 1 in route
P04100	MS0009	1.6	MOORING SYS 500 LB	7	19		7 Gulfport, 19 in route
P04100	MS0011	1.6	MOORING SYS 1000 LB	10	9		10 Gulfport, 9 in route
				TOTAL BOOM		66000	

SUPSALV SITREP #7: DEEP WATER HORIZON OIL SPILL RESPONSE; 05 May 2010

Equipment and Personnel Status: ESSM oil spill response (OSR) gear per attached list ordered to date. Gear represents 85 total truckloads, additive through today. 83 trucks have arrived. SUPSALV has all equipment needed to accomplish current mission tasking from USCG.

Previous Activities: Staging on State Pier in Gulfport, MS. Laid a total of 5000 feet of 42' ocean boom near western tip of Ship Island cascaded in 1000 foot sections. 3 modular Marco self propelled skimming systems assembled pier side in Gulfport and ready. Base support vans operating. Equipment staged per attachment at Gulfport, MS and Venice, LA. Prior SITREPS contained in attached document for historical context.

Current Activities (05 MAY): Federal Reserve Asset Staging unit in Gulfport, MS will now report to the Area/Unified Command (Roberts, LA) vice ICP Houma. ICP Houma and ICP Mobile will submit requests through Area/Unified Command for SUPSALV OSR Equipment Assets. Boom deployment operations in progress. Additional 2,000 feet of 42" boom deployed off of OSV (offshore supply vessel) JOHN COGHILL by Ship Island in cascade with previous boom. Command Van, Shop Van and Rigging Van sent to Venice, LA to support operations at that site. ICP Mobile requested a Vessel Skimmer System with 2 Skimmer Tow boats and a full operating crew be staged in Pensacola and on Dauphin Island in Mobile Bay. A VOSS/Current Buster System is being rigged both port and starboard (two systems total) onboard OSV VANGUARD for source skimming ops.

Intentions Next 24 Hrs (06 MAY): As directed by USCG Federal Asset Staging unit, Gulfport MS: Continue deploying 42" boom as directed (OSV JOHN COGHILL to be rigged with 2000 feet). Conduct maintenance and repair as needed on deployed boom systems. Prepare skimmers/boats and transport to designated staging sites at Pensacola and Dauphin Island. Operating Crews (of 7 personnel each) will be positioned at each site (Pensacola and Dauphin Island) for immediate deployment of skimmer systems as ordered by USCG. Conduct skimmer ops using two VOSS/Current Buster System onboard OSV VANGUARD.

Issues/Concerns: NTR

SUPSALV EQUIPMENT - GULF OIL SPILL AS OF 5/4/2010

SYS #	ESSM #	*WEBSITE INV #	NOMENCLATURE	ASSOCIATED FEET OF BOOM	GULFPORT		VENICE		MOBILE		REMARKS
					ON HAND	EN ROUTE	ON HAND	EN ROUTE	ON HAND	EN ROUTE	
P16100	SK0711	2.2	MODULAR CLASS V SKIMMER		7						Inlcudes 26k TSC bladder s w/ each
P16400	SK0721	2.1	WIDEBODY CLASS V SKIMMER		7	2					Inlcudes 23-50k TSC bladder s w/ each
P19300	VA0935	2.3	VOSS HIGH SPEED SKIMMER SYS		3						
P03100	WB0722	5.1	BOOM HANDLING BOAT		9						
P19090	VA0760		26" BOOM SYS 3000'	6000			2				
			26" BOOM (NEW, NOT ASSMB)	6000	1						
P19100	VA0720	1.1	42" FUG BOOM 2000'	18000	3		6				24k feet of 42" boom is in Venice, and 26k feet in Gulfport
P19100	VA0737	1.1	USS 42"HB BOOM 2000'	28000	10		4				
P19100	VA0738	1.1	USS 42" BOOM 2000'	4000			2				
P16200	VA2220	2.5	SALVAGE SKIM VAN	2000	2						
P19070	VA0907		18" NON- INFLATABLE BOOM	2000	1						
P19300	VA0727	6.2	COMMAND VAN		2						
P19400	VA0717	6.1	COMMAND TRAILER		1						
P19600	VA0010	6.3	RIGGING VAN		2						
P19700	VA0508	6.4	SHOP VAN		2						
P19500	VA0734	6.5.1	BUNK VAN - SHORE		1		1				
P19500	VA0735	6.5.2	BUNK VAN - SHIPBOARD		2						
P19900	WB0736	5.4	24' RHIB BOAT		1						
P03200	WB0956		22' WORK BOAT TRI-HULL		1						
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT		2						
P04100	MS0009	1.6	MOORING SYS, 500 LB		23		12				Total of 29 of these mooring systems will be sent to Venice
P04100	MS0011	1.6	MOORING SYS, 1000 LB		18		4				
			MOORING SYS, MISC ASSMBY		15						
			MOORING SYS		6		19				Commercially sourced from Texas
			TOTAL FEET OF BOOM	66000							

*For more detailed information about this equipment, refer to the below website and click on corresponding website inv #

http://www.supsalv.org/essm/Pol_Inv.asp

SUPSALV SITREP #14: DEEP WATER HORIZON OIL SPILL RESPONSE; 12 May 2010

EQUIP/PERSONNEL STATUS:
ESSM Oil Spill Response (OSR) gear status per attached list. Total of 92 personnel (MIL, CIVPERS, Contractor) remain in-theater, spread out between Pensacola FL, Mobile AL, Bayou LaBatre AL, Pascagoula MS, Gulfport MS, Ship Island MS, Slidell LA, Robert LA, Venice LA, and Houston TX, per attached list.

Current Activities (12 May):
Federal Reserve Asset Staging Unit in Gulfport MS maintaining control over the bulk of SUPSALV OSR Equipment Assets still awaiting positioning per USCG FOSC direction. SUPSALV OSR gear (stored at the SUPSALV ESSM Facility in Ft Richardson AK) was positioned at Elmendorf AFB for airlift by TRANSCOM to New Orleans NAS, Belle Chase. Five (5) Boom Vans and four (4) Mooring Systems have arrived and are stored at the Amelia National Guard Warehouse Facility. Remaining SUPSALV ESSM OSR gear (Vessel Skimming Systems(3), Boom Handling Tow Boats(2) Boom Vans(4), Mooring Systems(10), and Oil Storage Bladder-136k) is scheduled to start arriving at New Orleans NAS, Belle Chasse on 13 May. TRANSCOM continues to work issues concerning adequate weight handling & lifting equipment needed offload equipment from the aircraft at New Orleans NAS. Boom Vans and Mooring Systems will be stored in Amelia and the other items will be stored at Gulfport MS staging site.

Eight (8) self-propelled Vessel Skimming Systems with full crews remain positioned at: Slidell LA (2), Ship Island MS (2), Pascagoula MS (2), Bayou LaBatre AL (1), and Pensacola FL (1), all fully ready for tasking by USCG. Teams conducting training and drills to maintain a high state of equipment and personnel readiness. Note: the 2 skimming systems are staged on a spud barge near Ship Island (~ 13 NM off shore) to alleviate lengthy transit times if/when needed.

OSV JOHN COGHILL is operating out of Theodore AL supporting deployment of 19,000 ft of 42" boom and mooring systems at the bay entrance near Dauphin Island to protect Mobile bay. Deployment of mooring systems commenced this morning, 4 mooring completed.

OSV WES BORDELON loaded with 4000 ft of 26" boom was underway today to deploy around Breton Island. Weather conditions were unacceptable for deployment and ship returned to port Venice.

OSV VANGUARD, with two VOSS/Current Buster Systems, is in port Fourchon LA due to adverse weather at the site; estimated to be in port through Saturday, 15 May.
Total of 17,000 ft of SUPSALV boom deployed and set to date.

Intentions Next 24 Hrs (13 MAY):

As directed by USCG Federal Asset Staging unit, Gulfport MS: JOHN COGHILL underway to continue boom ops at the entrance to Mobile Bay. WES BORDELON underway to deploy boom around Breton Island. Maintain and repair deployed boom as needed. VANGUARD to remain in port Fourchon until weather improves at offshore target skimming sites, estimate. Maintain Vessel Skimming Systems ready, conduct systems training and drills, and conduct skimming ops when directed by USCG. Maintain readiness on remaining Vessel Skimming Systems (8) for anticipated deployment as directed by USCG.

SUPSALV EQUIPMENT - GULF OIL SPILL AS OF 5/10/2010

SYS #	ESSM #	*WEBSITE INV #	NOMENCLATURE	GULFPORT		Amelia	Grand Isle	VENICE	SLIDELL	PASCAGOULA	MOBILE	PENSACOLA	REMARKS
				Spud Barge	OSV VGD								
P14300	OB0810		OIL RECOVERY BLADDER 23K	1					2	1	1	1	
P16100	OB0809		OIL RECOVERY BLADDER 26K	1									
P14300	OB0820		OIL RECOVERY BLADDER 50K							1			
P14100	OB0800		OIL RECOVERY BLADDER 136K										1 in transit
P20300	VA2290		OIL BLADDER TRANSFER SYS										
P19300	VA0935	2.3	VOSS HIGH SPEED SKIMMER SYS		2								
P03100	WB0722	5.1	BOOM HANDLING BOAT	*					4	*	2	2	2 in transit, * VOO Tow Boats (2) required for Skimmer Ops
P19090	VA0760		26" BOOM SYS 3000'					3					4k deployed West New Harbor Island
			26" BOOM (NEW, NOT ASSMB)					1					
P19100	VA0720	1.1	42" FUG BOOM 2000'			2		6			1.5		3k deployed Ship Island, 3k deployed East Bay
P19100	VA0737	1.1	USS 42"HB BOOM 2000'			3		4			8		5 in transit, 4k deployed Ship Island, 3k deployed in East Bay
P19100	VA0738	1.1	USS 42" BOOM 2000'					2					
P16200	VA2220	2.5	SALVAGE SKIM VAN				3	3					
P19070	VA0907		18" NON- INFLATABLE BOOM				1						
P19300	VA0727	6.2	COMMAND VAN					1					
P19400	VA0717	6.1	COMMAND TRAILER										
P19600	VA0010	6.3	RIGGING VAN					1					
P19700	VA0508	6.4	SHOP VAN					1					
P19500	VA0734	6.5.1	BUNK VAN - SHORE					1					
P19500	VA0735	6.5.2	BUNK VAN - SHIPBOARD										
P19900	WB0736	5.4	24' RHIB BOAT										
P03200	WB0956		22' WORK BOAT TRI-HULL										
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT										
P04100	MS0009	1.6	MOORING SYS, 500 LB	4		2		12			11		4 in transit
P04100	MS0011	1.6	MOORING SYS, 1000 LB			2		4			7		6 in transit
			MOORING SYS, MISC ASSMBY								30		
			MOORING SYS, COMMERCIAL					19			6		Commercially sourced from Texas
			TOTAL FEET OF BOOM										

*For more detailed information about this equipment, refer to the below website inv #

http://www.supsalv.org/essm/Pol_Inv.asp

SUPSALV SITREP #21: DEEP WATER HORIZON OIL SPILL RESPONSE; 19 May 2010

EQUIP/PERSONNEL STATUS:
ESSM Oil Spill Response (OSR) gear status per attached list. Total of 91 personnel (MIL, CIVPERS, Contractor) are in-theater, spread out between Pensacola FL, Mobile AL, Bayou LaBatre AL, Pascagoula MS, Gulfport MS, Ship Island MS, Slidell LA, Venice LA, and Houston TX, per attached list. Mr. Dean, SUPSALV Chief Engineer, is in Houston TX at the BP Engineering Crisis Center.

OPS Summary/Current Activities (19 May):
Federal Reserve Asset Staging Unit in Gulfport MS (at the State Pier) maintaining control over the bulk of SUPSALV OSR Equipment Assets awaiting further positioning per USCG FOSC direction. All USCG-requested equipment in GOMEX OPAREA, with the exception of 2 Vessel Skimming Systems from Alaska w/ ETA of 22 MAY. Tasked to move two MARCO Class 5 skimming systems from Gulfport to Slidell. Total SUPSALV boom in GOMEX is 98,000 ft.

Eight (8) self-propelled Vessel Skimming Systems with full crews remain prepositioned at: Slidell LA (2), Ship Island MS (2), Pascagoula MS (2), Bayou LaBatre AL (1), and Pensacola FL (1), all ready for tasking by USCG. Teams conducting training and drills as weather permits. Spud barge with 2 skimming systems aboard is in Gulfport awaiting repositioning decision.

Mobile Bay - OSV JOHN COGHILL continues to operate out of Theodore AL supporting deployment of 19,000 ft of 42" boom and mooring systems at the bay entrance near Dauphin Island to protect Mobile bay. 6,800 feet of boom in place vicinity Mobile Bay. Mobile Bay booming task force leaders adjusting booming plan due to heavy currents encountered impacting ability to deploy and maintain boom as well as it's eventual effectiveness once placed.

Lower Mississippi River - OSV WES BORDELON loaded 5,000 ft of 26" boom and moorings in Venice LA.; boom location TBD.

Offshore - OSV VANGUARD, w/ two VOSS/Current Buster Systems, on scene at Mississippi Canyon 252. 384 barrels (total cumulative to date) recovered as of 1200 (local) hours.

Total SUPSALV boom deployed and set to date is 29,400 ft.

Intentions Next 24 Hrs (20 MAY):

Distribute assets as directed by USCG Federal Asset Staging unit, Gulfport, MS.. This will include two Marco Class 5 systems from Gulfport to Slidell. JOHN COGHILL continue boom deployment ops at the entrance to Mobile Bay. WES BORDELON continue boom deployment ops out of Venice, LA. Reposition spud barge as/if directed (expected to be in the vicinity of Cat or Ship Islands). Maintain and repair deployed boom as needed. VANGUARD with VOSS systems continue skimming operations. Maintain readiness of prepositioned and staged Vessel Skimming Systems and crews; conduct systems training and drills, and conduct skimming ops when directed by USCG.

Issues/Concerns: Expressed concern to ICP Mobile about effectiveness of present booming strategy for the entrance to Mobile Bay because of current.

SUPSALV EQUIPMENT - GULF OIL SPILL AS OF 5/19/2010

SYS #	ESSM #	*WEBSITE INV #	NOMENCLATURE	FEET OF BOOM	GULFPORT			Amelia	Grand Isle	VENICE	SLIDELL	PASCAGOULA	MOBILE	PENSACOLA	REMARKS
					State Pier	Spud Barge	OSV VGD								
P16100	SK0711	2.2	MODULAR CLASS V SKIMMER		5	2									
P16400	SK0721	2.1	WIDEBODY CLASS V SKIMMER		3						2	2	1	1	
P14300	OB0810	4.11	OIL RECOVERY BLADDER 23K		6	1					2	1	1	1	
P16100	OB0809	4.11	OIL RECOVERY BLADDER 26K		3	1									
P14300	OB0820	4.11	OIL RECOVERY BLADDER 50K		3							1			
P14100	OB0800	4.6	OIL RECOVERY BLADDER 136K		8			1							
P17100	PU0281	4.1	TANKER OFFLOAD SYSTEM		4										
P20300	VA2290	4.7	OIL BLADDER TRANSFER SYS		4										
P19300	VA0935	2.3	VOSS HIGH SPEED SKIMMER SYS		2		2								
P03100	WB0722	5.1	BOOM HANDLING BOAT		1	*					4	*	2	2	* VOO Tow Boats (2) per Skimmer required for Skimmer Ops
P19090	VA0760		26" BOOM SYS 3000'	9000						3					4k deployed West New Harbor Island, 5.6K Breton Island
			26" BOOM (NEW, NOT ASSMB)	3000						1					
P19100	VA0720	1.1	42" FUG BOOM 2000'	22000	1.5			2		6			1.5		3k deployed Ship Island, 3k deployed East Bay,
P19100	VA0737	1.1	USS 42"HB BOOM 2000'	42000	2			7		4			8		4k deployed Ship Island, 3k deployed in East Bay, 3.8K in Mobile
P19100	VA0738	1.1	USS 42" BOOM 2000'	4000						2					
P16200	VA2220	2.5	SALVAGE SKIM VAN	8000	2				3	3					
P19070	VA0907		18" NON-INFLATABLE BOOM	6000	2				1						
P19080	VA9080		18" INFLATABLE BOOM 4000'	4000	1										
P19300	VA0727	6.2	COMMAND VAN		1					1					
P19400	VA0717	6.1	COMMAND TRAILER		2										
P19600	VA0010	6.3	RIGGING VAN		1					1					
P19700	VA0508	6.4	SHOP VAN		1					1					
P19500	VA0734	6.5.1	BUNK VAN - SHORE		1					1					
P19500	VA0735	6.5.2	BUNK VAN - SHIPBOARD		2										
	VA0715		COMMAND ANNEX		1										
P19900	WB0736	5.4	24' RHIB BOAT		1										
P03200	WB0956		22' WORK BOAT TRI-HULL		1										
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT		2										
P04100	MS0009	1.6	MOORING SYS, 500 LB		7			8		12			7		
P04100	MS0011	1.6	MOORING SYS, 1000 LB		7			6		4			8		
			MOORING SYS, MISC ASSMBY										30		
			MOORING SYS, COMMERCIAL							19			6		Commercially sourced from Texas
			TOTAL FEET OF BOOM	98000											

*For more detailed information about this equipment, refer to the below website and click on corresponding website inv #

http://www.supsalv.org/essm/Pol_Inv.asp

SUPSALV SITREP #41: DEEPWATER HORIZON OIL SPILL RESPONSE; 08 June 2010
EQUIP/PERSONNEL STATUS:

ESSM Oil Spill Response (OSR) equipment deployed/staged per attached list. Assets and 130 personnel spread between Panama City and Pensacola FL; Mobile and Bayou LaBatre AL; Pascagoula, Gulfport and Ship Island MS; and Slidell, Venice and Port Fourchon/Grand Isle LA. Mr. Mike Dean, SUPSALV Chief Engineer, is in Houston TX at the BP Engineering Crisis Center. Mike Herb, SUPSALV Dir of Salvage Operations has relieved Kemp Skudin, Oil Spill Response Program Manager as GOMEX as SUPSALV operations lead.

OPS Summary/Current Activities (08 June):

Continuing to coordinate SUPSALV operations from staging area on State Pier, Gulfport MS, positioning, maintaining and operating SUPSALV OSR equipment assets as directed by USCG FOSC. All USCG-requested equipment is in GOM OPAREA. Total SUPSALV boom in GOM is 96,000 FT w/59,300 FT of boom deployed. All eighteen (18) Marco Class 5 Skimming Systems with crews have been positioned at USCG designated locations.

Florida, Alabama, Mississippi Coast - Barge PECOS with two Marco Class 5 skimmers is out fitting in Mobile and will be assigned to ICP Mobile offshore TF 706 tomorrow, 9JUN. The 4 spud barges with 5 Marcos IVO Mobile and Panama City FL, no skimmable oil encountered.

Louisiana - OSV WES BORDELON deployed additional 2,000 ft of 42" boom at East Bay and is returning to Venice to reload boom. SUPSALV personnel on shore at Grand Isle, LA, continue to support in-shore clean-up/protection and operate Marco Class 5 Skimmers both in the "free skimming" mode (without towed "V" legs of boom) as well as with towing vessels of opportunity. Three Marco Class 5s recovered 22 bbls oil in vic Grand Isle.

Offshore - OSVs JOHN COGHILL and VANGUARD, each w/two NOFI "Current Buster" Vessel of Opportunity Skimming Systems (VOSS). OSV RENE with a Marco Class 11 skim system damaged installed knuckle boom crane while recovering Class 11 last evening in increasing seas. RENE rtp, was deconned and returning to State Pier Gulfport for repair evaluation, ETA 2000L. Little oil was encountered by COG/VAN today; total known product recovered to date by offshore skimming at 5771 barrels (total drop due to decanting).

Intentions Next 24 Hrs (09 June):

WES BORDELON deploy/service boom out of Venice, LA as directed by USCG. Continue shoreline skimming and/or boom ops with small skimmers from salvage skim vans and Marco Class 5s IVO Grand Isle as directed. OSVs JOHN COGHILL and VANGUARD, each w/two NOFI "Current Buster" Vessel of Opportunity Skimming Systems (VOSS). OSV RENE with the Marco Class 11 skimmer - investigate problem with crane and attempt repairs ASAP; b/c of size of Class 11 and handling configuration will recommend RENE be tasked closer to shore. Maintain readiness of pre-positioned and staged Marco Class 5 skimming systems/crews and conduct systems training/drills. Conduct skimming ops as directed by USCG.

Issues/Concerns: Heat and humidity are quickly becoming and area of concern for the front line workforce. In past 24 hours SUPSALV had three contract workers operating skimmers in the Grand Isle area taken to the area hospital for symptoms of headaches/nausea; varying degrees of heat exhaustion was diagnosed, all have been released and are now fully recovered. SUPSALV has notified UAC and both ICPs of need for on site evaluations, monitoring and work adjustments which will affect cleanup operation efficiency; SUPSALV is working various mitigation plans including periodic rotation to VOOs w/ A/C spaces, A/C units for skimmer pilot houses that crew can rotate through, workday shift management, etc.

SUPSALV EQUIPMENT - GULF OIL SPILL AS OF 6/08/2010																
SYS #	ESSM #	*WEBSITE INV #	NOMENCLATURE	FEET OF BOOM	Gulfport		Panama City	P'Goula	Mobile/ Bayou Labatre	P'Cola	P'Goula	PECOS	Port F/Grand Isle	Venice	Slidell/ Rigolets	REMARKS
					State Pier	OSV's	TF-1	TF-2	TF-3	TF-4	TF-5	TF-706				
P16100	SK0711	2.2	MODULAR CLASS V SKIMMER				2					1	6			
P16400	SK0721	2.1	WIDEBODY CLASS V SKIMMER					1	1	1	1	1			4	
P14300	OB0810	4.11	OIL RECOVERY BLADDER 23K		3		1	1	1	1	1	2	1		4	
P16100	OB0809	4.11	OIL RECOVERY BLADDER 26K				1						5			
P14300	OB0820	4.11	OIL RECOVERY BLADDER 50K		3			1*								Decon at Theodore, then back to Gulfport
P14100	OB0800	4.6	OIL RECOVERY BLADDER 136K		9											
P17100	PU0281	4.1	TANKER OFFLOAD SYSTEM		1				1				2			
P17200	VA0925	4.2	2-6" PUMP SYSTEM		1											
P20300	VA2290	4.7	OIL BLADDER TRANSFER SYS		2		1		1							
P16300	VA0930		DESTROIL SYSTEM		2											
P18100	VS8100	2.8	VAC TANK (2 TANK SYS)		1											
P18100	VS0010	2.8	VAC TANK (3 TANK SYS)		1											
P16300	VA0935	2.3	VOSS HIGH SPEED SKIMMER SYS			4										M/V Coghill (2), M/V Vanguard (2)
P16300	SK0924	2.4	MARCO CLASS 11 VOSS SKIMMER			1										M/V Rene
P03100	WB0722	5.1	BOOM HANDLING BOAT		1		*	*	2	2	*		*		4*	* VOO Tow Boats (2) per Skimmer required for Skimmer Ops
P19090	VA0760		26" BOOM SYS 3000'	9000										3		4k deployed West New Harbor Island, 5.6K Breton Island, 5K North Pass
			26" BOOM (NEW, NOT ASSMB)	3000										1		
P19100	VA0720	1.1	42" FUG BOOM 2000'	20000	1.5								2	6	0.5	3k deployed Ship Island, 11.2k East Bay, 2K bynd
P19100	VA0737	1.1	USS 42"HB BOOM 2000'	42000	2								7	4	8	4k deployed Ship Island, 4.5k in East Bay, 16K Half Moon Is
P19100	VA0738	1.1	USS 42" BOOM 2000'	4000										2		
P16200	VA2220	2.5	SALVAGE SKIM VAN	8000									5	3		5K 26" deployed Grand Isle (all 8 skim vans have boom deployed)
P19070	VA0907		18" NON-INFLATABLE BOOM	6000	2								1			
P19080	VA9080		18" INFLATABLE BOOM 4000'	4000	1											
P04100	MS0009	1.6	MOORING SYS, 500 LB		7								8	12	7	
P04100	MS0011	1.6	MOORING SYS, 1000 LB		7								6	4	8	
			MOORING SYS, MISC ASSMBY												30	
			MOORING SYS, COMMERCIAL											19	6	Commercially sourced from Texas
P19300	VA0727	6.2	COMMAND VAN		1								1	1		
P19400	VA0717	6.1	COMMAND TRAILER		2											
P19600	VA0010	6.3	RIGGING VAN		1								1	1		
P19700	VA0508	6.4	SHOP VAN		1								1	1		
P19500	VA0734	6.5.1	BUNK VAN - SHORE		1									1		
P19500	VA0735	6.5.2	BUNK VAN - SHIPBOARD		2											
P19200	VA2119	6.6	CLEAN VAN										2			
	VA0715		COMMAND ANNEX		1											
P19900	WB0736	5.4	24' RHIB BOAT		1											
P03200	WB0956		22' WORK BOAT TRI-HULL		1											
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT		2											
			TOTAL FEET OF BOOM	96000												
*For more detailed information about this equipment, refer to the below website and click on corresponding website inv #																
http://www.supsalv.org/essm/Pol_Inv.asp																

SUPSALV SITREP #78: DEEPWATER HORIZON OIL SPILL RESPONSE; 15 July 2010

EQUIP/PERSONNEL STATUS:

ESSM Oil Spill Response (OSR) equipment deployed/staged per attached spreadsheet. Assets and 128 personnel spread between Pensacola FL; Mobile and Bayou LaBatre AL; Pascagoula, Gulfport and Ship Island MS; and Slidell, Venice and Port Fourchon/Grand Isle LA. Mike Dean, Deputy SUPSALV, in Houston, TX at the BP Engineering Crisis Center. Kemp Skudin, 00C25, (228-822-0492) has relieved me as SUPSALV lead.

OPS Summary/Current Activities (15 July):

Coordinating SUPSALV operations from staging area on State Pier, Gulfport MS, positioning, maintaining and operating SUPSALV OSR equipment assets as directed by USCG FOSC; assisting CNIC management team co-located w/SUPSALV command element; CNIC craft formation at dress-right-dress attached. All USCG-requested SUPSALV equipment is in GOM OPAREA. Total SUPSALV boom in GOM is 95,000 FT w/60,700 FT of boom deployed. Total SUPSALV volume recovered to date: VOSS off-shore: 20,487 BBLs and Marcos near-shore: 1,975 BBLs.

Florida, Alabama, Mississippi Coast - (10) Marco Class V skimmers w/6 barges operating in ICP Mobile Task Forces between Pascagoula, MS and Pensacola, FL, as directed. The skimmer service vessel, OSV BAYOU BEE in area continuing Class V skimmer service OPS. Bay St Louis area herding/capture and recovery strategy using 4000' of SUPSALV 18" boom, and Ship Island boom repairs awaiting assignment of suitable work platforms; expect boom to be picked up tomorrow. CAPT Gunzel from SUPSALV at ICP Mobile for OPS Planning mtg regarding Navy Airship.

Louisiana - SUPSALV personnel w/OSV CASPIAN U/W from Venice recovered abt 2500' of 26" boom at North Pass, LA; abt half is beyond repair. Skimmer OPS and training conducted at Slidell/Rigolets area. SUPSALV personnel in Grand Isle, LA, continue shoreline and near-shore skimming operations - no oil encountered.

Offshore - OSVs VANGUARD and VANTAGE w/VOSSs U/W conducting off-shore support at MC252 site. RENE w/Class XI in Gulfport awaiting new crane. Second phase of A-WHALE operational test continues - two SUPSALV observers onboard.

Intentions Next 24 Hrs (16 July):

Continue booming operations out of Venice, LA w/OSV CASPIAN and shoreline and Class V skimming/boom ops IVO Grand Isle. Class V systems continue near-shore operations along LA, MS, AL, and FL coastlines. OSVs VANGUARD and VANTAGE conduct off-shore skimming OPS, RENE in port awaiting crane and continue system maintenance. Continue work with CNIC command team to transport additional CNIC equipment to Gulfport to await assignment.

Issues/Concerns: NTR

SUPSALV EQUIPMENT - GULF OIL SPILL AS OF 7/15/2010

SYS #	ESSM #	*WEBSITE INV #	NOMENCLATURE	ASSOCIATED FEET OF BOOM	Gulfport			Ship Island	P'Cola / Panama City	P'Goula	P'Cola	P'Cola	P'Goula	Cat Island	off Dauphin IS	Port F/Grand Isle	Venice	Slidell/ Rigolets	REMARKS
					State Pier	Bayou Bee	OSV's		TF-1	TF-2	TF-3	TF-4	TF-5	TF-6	TF-706				
P16100	SK0711	2.2	MODULAR CLASS V SKIMMER						1	1	1			1	1	4			
P16400	SK0721	2.1	WIDEBODY CLASS V SKIMMER		1					1		1	1		1			4	
P14300	OB0810	4.11	OIL RECOVERY BLADDER 23K		2				1	2	1	1	1		2	1		4	
P16100	OB0809	4.11	OIL RECOVERY BLADDER 26K		2									1		3			
P14300	OB0820	4.11	OIL RECOVERY BLADDER 50K		3					1*									*Torn at Decon in Theodore
P14100	OB0800	4.6	OIL RECOVERY BLADDER 136K		9														
P17100	PU0281	4.1	TANKER OFFLOAD SYSTEM		1						1					2*			* 1 of 2 in Grande Isle issued to CG for off-shore offload
P17200	VA0925	4.2	2-6" PUMP SYSTEM		1														
P20300	VA2290	4.7	OIL BLADDER TRANSFER SYS		1	1			1		1								
P16300	VA0930		DESTROIL SYSTEM		2														
P18100	VS8100	2.8	VAC TANK (2 TANK SYS)		1														
P18100	VS0010	2.8	VAC TANK (3 TANK SYS)		1														
P16300	VA0935	2.3	VOSS HIGH SPEED SKIMMER SYS				4												M/V Coghill (2), M/V Vanguard (2)
P16300	SK0924	2.4	MARCO CLASS 11 VOSS SKIMMER				1												M/V Rene
P03100	WB0722	5.1	BOOM HANDLING BOAT			1			*	*	2	2	*			*		4*	* VOO Tow Boats (2) per Skimmer required for Skimmer Ops
P19090	VA0760		26" BOOM SYS 3000'	9000													3		4k deployed West New Harbor Island, 5.6K Breton Island, 5K North Pass
			26" BOOM (NEW, NOT ASSMB)	3000													1		
P19100	VA0720	1.1	42" FUG BOOM 2000'	20000				1.5								2	6	0.5	3k deployed Ship Island, 11.2k East Bay, 2K bynd
P19100	VA0737	1.1	USS 42"HB BOOM 2000'	42000				2								7	4	8	4k deployed Ship Island, 4.5k in East Bay, 16K Half Moon Is
P19100	VA0738	1.1	USS 42" BOOM 2000'	4000													2		3.9k East Bay
P16200	VA2220	2.5	SALVAGE SKIM VAN	8000												5	3		5K 26" deployed Grand Isle (all 8 skim vans have boom deployed)
P19070	VA0907		18" NON-INFLATABLE BOOM	6000	2											1			
P19080	VA9080		18" INFLATABLE BOOM 4000'	4000	1														
P04100	MS0009	1.6	MOORING SYS, 500 LB		15			7									12		
P04100	MS0011	1.6	MOORING SYS, 1000 LB		14			7									4		
			MOORING SYS, MISC ASSMBY		30														
			MOORING SYS, COMMERCIAL		6												19		Commercially sourced from Texas
P19300	VA0727	6.2	COMMAND VAN		1											1	1		
P19400	VA0717	6.1	COMMAND TRAILER		2														
P19600	VA0010	6.3	RIGGING VAN		1	1										1	1		
P19800	VA0740		SUPPLY VAN			1													
P19700	VA0508	6.4	SHOP VAN		1	1										1	1		
P19500	VA0734	6.5.1	BUNK VAN - SHORE		1												1		
P19500	VA0735	6.5.2	BUNK VAN - SHIPBOARD		2														
P19200	VA2119	6.6	CLEAN VAN		1	1										1			
	VA0715		COMMAND ANNEX		1														
P19900	WB0736	5.4	24' RHIB BOAT		1														
P03300	VA2260		19' INFLATABLE BOAT			1													
P03200	WB0956		22' WORK BOAT TRI-HULL		1														
P20400	VA2400	5.5	EQUIPMENT TRANSFER BOAT		2														
			TOTAL FEET OF BOOM	96000															

SUPSALV SITREP #121 DEEPWATER HORIZON OIL SPILL RESPONSE; 20 SEP 2010

NOTE: Final SITREP this OP.

EQUIP/PERSONNEL STATUS:

ESSM Oil Spill Response (OSR) equipment and 20 personnel deployed/staged throughout GOMEX from Pascagoula MS, west to Gulfport, MS.

CURRENT OPS SUMMARY (14-20SEP):

Coordinating SUPSALV demob from staging area on State Pier, Gulfport MS, as directed by USCG FOSC and assisting CNIC management team with similar demob. Received concurrence from UAC leadership to ship all skimmer systems back to Emergency Ship Salvage Material bases of origin. Total SUPSALV oil volume recovered to date: VOSS off-shore: 21,176 BBLs and Marcos near-shore: 2,029 BBLs.

Mississippi Coast - Coordinating replacement of 3 oil recovery/storage bladders currently in Theodore, AL now considered BER pending final USCG certification. Gulfport pers assisting demob of CNIC and SUPSALV equipment and expect to complete this week. Gulfport pers cleaning/sorting 26" boom recovered from West New Harbor Island. 17 of 18 Skimmer systems shipped to ESSM Bases. Expect to ship last remaining skimmer next 24 hours.

Louisiana - Coordinating the decon/cleaning/inventory of now recovered 42" boom from Half Moon Bay at Slidell, LA.

Offshore - GREAT WHITE departed. RENE in Gulfport, offloaded, awaiting decon/demob. BAYOU BEE in Gulfport, offloaded, awaiting decon/demob.

INTENTIONS to complete this OP:

Continue coordinating boom cleaning/shipment and all remaining equipment demob/shipments back to ESSM bases. Complete CNIC demob assist. Continue to coordinate funding request for replacement of three (3) 25K oil storage bladders determined beyond economical repair. Final SITREP this OP.

Appendix D.

White Paper:

Combined Forward/Sideways Motion of a Ship to Direct floating Oil into a Collection Device

In Response to Research Opportunity Number

Broad Agency Announcement (BAA) HSCG32-10-R-R00019, Amendment 0001

Agency

United States Coast Guard (USCG)

Research and Development Center (RDC)

Research Opportunity Title

Deepwater Horizon Response

Program Name

Interagency Alternative Technology Assessment Program (IATAP)

Technology Gap Area:

Traditional Oil Spill Response Technologies

June 16, 2010

Offerors

Prof. Alexander Slocum MIT, 77 Massachusetts Ave, Room 3-445 slocum@mit.edu, 603.591.7505	Keenan, Patrick J Jr CAPT NAVSEA, SEA 00C patrick.keenan@navy.mil
Prof. Alexandra Techet MIT, 77 Massachusetts Ave, Room 3-445 ahtechet@mit.edu 617.452.2266	Hayes, Shaun, LT USN Assistant for Salvage - NAVSEA 00C2OA Shaun.p.hayes@navy.mil
Brown, Stephanie A CIV NAVSEA, SEA 00C Stephanie.a.brown@navy.mil	Bob Urban PCCI, Inc., 300 North Lee Street, Suite 201 Alexandria, VA 22314 burban@pccii.com
Dag Nilsen R&D Manager NOFI dag@nofi.no	

SECTION A: Technical Approach:

Background

A review of past oil skimming approaches developed during/after the Bravo and Ixtoc blowouts[1,2,3] revealed the following characteristics:

1. Crude oil spills initially form large thin layers which are best cleaned by large barriers towed slowly to prevent the oil from becoming entrained deep into the water column where it can flow by the barrier. Furthermore, higher speeds can form instabilities in the water/oil interface of the pool of oil that forms in the "bucket" of the barrier which can lead to more loss of oil.
2. VOCs in the oil rapidly evaporate and within a few weeks highly viscous strips of water-in-oil often called "chocolate Mousse" which spread out over large areas. These "stringers" will have a total volume an order of magnitude greater than the thin blue sheens of oil, and consequently their collection presents the greatest potential benefit.
3. Skimmers typically use inflatable booms, with each leg pulled by a vessel or by a single vessel with an outrigger or paravane. Oil is concentrated into the bucket region (vertex of the caternary) and skimmed into a collection ship.

NOFI's OceanBuster[4] technology has been particularly effective, because the boom arms funnel the oil into a separate collection zone known as the *Pocket*. The boom arms thus remain straighter and a plastic sheet submerged "shelf" in the collection zone helps retain the oil once it is funneled in; hence the OceanBuster is capable of collecting oil at speeds approaching 5 knots.

Problems

As the spill matures and more strings form and spread out, single skimmer operations will be necessary. The following issues will still need to be addressed:

1. In using only a single skimmer per vessel, encounter width is reduced.
2. In traditional dual-towed skimming systems, skimming operations are limited by the smaller vessel's sea-handling capabilities.
3. As the oil ages and progresses nearer to shore, the bucket region of towed barrier, or *Pocket* in the case of the NOFI technology, will collect significant debris which can foul the operation of the skimmer or pump

Proposed Solution

The technical approach proposed below is a result of a recent brainstorming session, at ICP Houma, Louisiana, led by Captain Patrick Keenan (SUPSALV) and Ms. Stephanie Brown of NAVSEA and attended by Prof. Alexander Slocum of MIT, Mr. Dag Nilsen of NOFI, and ICP Houma Operations Section personnel.

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[1] The Bravo Blowout, IKU Report NO 90, Assignment NO 71, Norwegian Information Publishers A/S
[2] 1977 Oil Spill Conference Proceedings, Library of Congress Catalog No. 75-4161
[3] Jerome Milgram, "The Cleanup of Oil Spills from Unprotected Waters", **Index**, Volume 20 (1977), pp 86-94
[4] http://www.nofi.com/

The technical approach proposed is to use an Offshore Support Vehicle (OSV) or a towed barge propelled/towed at an angle with respect to a forward velocity vector (i.e., "crabbing") to channel surface oil to the rear of the vessel where it can be collected and pumped into tanks on the vessel (Figure).

In essence, the side of the vessel itself serves as a part of the boom to channel stringers to the rear of the vessel, thus increasing the encounter width of the skimming system. The vessel's offset travel, or "crab" forward, can be accomplished by the use of thrusters in the case of an OSV or an uneven-bridle in the case of a barge.

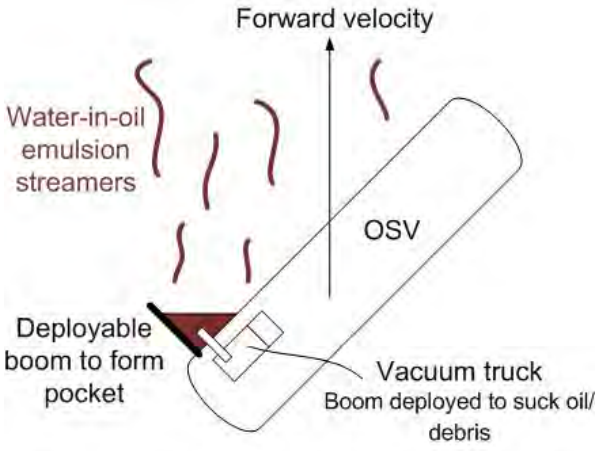


Figure 1: Concept of sideways motion of an OSV to help concentrate oil, and then allow for rapid travel to a new site.

In considering offshore skimming operations, the use of a single larger OSVs or towed barges enables operations in higher sea states. By using a deployable boom utilizing an outrigger or paravane removes the need for a second towing vessel. By eliminating the second towing vessel, higher sea state operations are possible.

To address oil pumping and debris handling, a large vacuum truck (e.g., catch basin cleaner) at the stern of the vessel can remove the accumulated flotsam and jetsam (e.g., seaweed, jelly fish…). A catch basin cleaner[5] with an extendable boom could vacuum the oil (and any flotsam and jetsam) from the pocket. Figure 2 shows the pocket conditions often found in current skimmers and illustrates why a vacuum truck is needed. This situation is likely to become more acute near shore.

Figure 2: Flotsam and Jetsam in skimmer pocket

Figure 3: View towards stern of an OSV crabbing forward (12 degrees) to use the side of the vessel to help direct oil into skimmer and pocket.

[5] E.g., a Vacall16 cubic yard SweeperCleaner, www.vacallindustries.com

At the conclusion of the brainstorming session, Captain Keenan (SUPSALV) directed the execution of a quick field test, with an existing vessel, of the effects of crabbing on skimming operations. LT Shaun Hayes and Mr. Bob Urban, PCCI, Inc., conducted a test with an available 205-ft OSV and NOFI CurrentBuster. Figure 3 is from the quick sea trial conducted which showed some initial promise.

Limitations:

Identified limitations to the proposed solution include:

1. Effective encounter width is limited by 1) the length of the vessel and 2) the angle of "crab"
   - A typical OSV might be 190 to 250 feet long; at a 20-degree "crab" this equates to a possible increased in encounter width of 65 to 86 feet
   - A typical towed barge might be 300 to 400 feet long; at a 20-degree "crab" this equates to a possible increase in encounter width of 103 to 137 feet
   - OSV with CurrentBuster field test identified 12-degree "crab" as optimal given the environmental conditions at the time
   - A towed barge system would be limited by the towing vessel's capability and hull and wave resistance of the barge
2. The skimming speed achievable by the system employed
   - It is anticipated that an OSV could skim at 3 knots and transit at 10-15 knots with skimming system recovered
   - It is anticipated that a barge could be towed at 3-4 knots while skimming at an angle and towed at 5-7 knots while in transit
3. Relative speed and direction of wind compared to oil skimming
   - Wind may limit OSV "crabbing" angle due to thruster power limitations
   - Wind may decrease or increase effective "crabbing" angle of a towed-barge
   - Wind effects on the skimming system may limit "crabbing" angle
4. Sea-state for transit and for skimming
   - Sea-state for transit is limited by vessels involved and towing configuration as applicable
   - Sea-state for skimming is limited by the size of the barrier and the rigging of the employed pump/skimmer

Recommendations:

1. Spill operations should plan for single skimmer operations as oil spill matures.
2. When conducting single skimmer operations, the vessels must have the capability of maintaining the "crabbing" angle while skimming and handling collected debris and skimmed oil
3. In anticipation of higher sea state operations, the use of larger OSVs or the development of a towed-barge system is necessary. For a towed-barge system, SUPSALV and NAVSEA can provide personnel to assist with this evaluation to include:

a. Analysis of an adjustable angle-of-attack system using a towed barge to determine requirements and specifications to meet or exceed currently available skimming systems; and
b. Numerical and/or scale model testing within a tow-tank with simulated wind to determine optimal angles for anticipated combinations of wind and speed through water (e.g., at the USCG Academy in Groton, NAVSEA Carderock facility, or at MMS facility in New Jersey).

SECTION B: Rough Order of Magnitude (ROM) Cost:

The cost of the SideSkimming technology would be less than current skimming costs because as a system, it would continue to deploy skimmers (e.g., OceanBusters) but would also make use of the OSVs and barges that skimmers currently offload to. In addition, it is anticipated that the OSVs and barges could operate in rougher waters and hence help protect shorelines when offshore storms create waves that force current skimmers and booms to be retracted.

Appendix E.

NAVSEA

NAVAL SEA SYSTEMS COMMAND

Supervisor of Salvage & Diving

UNDERSEA OPERATIONS REPORT

USCG DEEP WATER HORIZON INVESTIGATION (D.O. 0043)

TRANSMITTAL LETTER

This report documents the work performed by Phoenix International Holdings, Inc., during the investigation of the Deep Water Horizon drilling rig that sank in the Gulf of Mexico. Work was performed from September - October 2010.

PREPARED BY:

John Finke
Project Manager

REVIEWED BY:

William E. Lawson
Program Manager

Prepared under Contract N00024-06-D-4104, Delivery Order 0043, for the Naval Sea Systems Command, Code 00C2. Enclosed is the final report.

PIHI - 10096

UNDERSEA OPERATIONS REPORT

USCG DEEP WATER HORIZON INVESTIGATION (D.O. 0043)

OCTOBER 2010

PERFORMED FOR:
Department of the Navy
NAVAL SEA SYSTEMS COMMAND (SEA 00C2)
1333 Isaac Hull Ave. SE (Stop 00C12D)
Washington Navy Yard, DC 20376

UNDER:
Contract N00024-06-D-4104
Delivery Order 0043

BY:
Phoenix International Holdings, Inc.
9301 Largo Drive West
Largo, MD 20774
(301) 341-7800

EXECUTIVE SUMMARY

In September 2010, the Supervisor of Salvage and Diving, Code 00C2 of the Naval Sea Systems Command (NAVSEA) directed Phoenix International Holdings, Inc. (Phoenix) to perform an investigation of the sunken oil drilling platform, Deep Water Horizon. The work was performed under contract N00024-06-D-4104 Delivery Order (D.O.) 0043. The NAVSEA Representative was Ric Sasse.

On 15 September 2010, the Deep Drone system was mobilized and trucked to the Bollinger ship yard in Port Fourchon, Louisiana. The Support ship for the operation was M/V GENIE LAB leased by the United States Coast Guard from Laborde Marine. The vessel was inspected and a deck layout plan was created. The Deep Drone system was mobilized onboard, secured, and readied for sea.

Once on site, observation of other vessels and drilling rigs in close proximity to the sunken oil drilling platform showed that an exclusion zone around the vessel GENIE LAB would be needed to perform the visual investigation of the Deep Water Horizon rig. When this was accomplished the Deep Drone Remotely Operated Vehicle (ROV) was readied and dove on the wreckage site.

As Deep Drone approached the sea floor, an extremely large sonar target was observed. The vehicle was maneuvered close to the target and it was confirmed that the target was the main pontoon section of the Deep Water Horizon. The main pontoon section was inverted with seven of the eight Megastar thrusters standing proud up off the bottom of the pontoons. Condition, shape, and direction of the pontoons were recorded. A visual inspection of each of the four legs of the platform was then conducted. When Deep Drone approached the sea floor, a continuation of the inspection of the main drilling platform floor was completed. Damage to the platform and pontoon structure, plus the irregular bottom topography, indicated the rig impacted the bottom at a high rate of descent. During this inspection, the riser pipe was noticed to be lying across the pontoon and leg sections of Deep Water Horizon.

Inspection of the wreckage field and other parts of the main structure were the next items of interest. During this search, the bridge main control room and the control vans for an ROV were found. The same riser pipe that was crossing over the main pontoon and leg section was also adjacent to the bridge control room section. Close inspection of the bridge control room section showed that two windows on the right side of the bridge were missing, allowing access to the interior of the bridge control room.

Deep Drone was recovered to the deck of GENIE LAB and the Phoenix developed xBot III, a Micro-ROV, was installed into Deep Drone's framework. Deep Drone was checked, readied, and launched for an xBot penetration dive into the bridge main control room. Deep Drone was maneuvered under the riser pipe, which was suspended fifteen feet above the sea floor, and close to the two open bridge windows. xBot was released from its cage in Deep Drone and flown into the bridge window.

Once xBot was inside the bridge it was directed to observe instrument settings and conditions. A thorough video survey of the interior of the bridge section was completed. xBot was then flown out of the bridge window and back into the cage inside Deep Drone. The fiber optic umbilical

was severed by the Deep Drone manipulators and the vehicles were recovered to the deck of M/V GENIE LAB.

Three of the eleven dives during this investigation were performed with xBot attached to Deep Drone. On Dive #4, the first xBot dive, the interior of the bridge main control room was surveyed. On Dive #5, xBot was sent to survey the moon pool inside the legs of the pontoons. Dive #9, a more pointed inspection of the bridge interior was completed by xBot.

During the eleven dives, the oil drilling platform Deep Water Horizon's main wreckage and the surrounding wreckage field were inspected, logged, and video documented.

On 4 October, the vehicle was recovered to the ship's deck and secured for sea. M/V GENIE LAB got underway for Port Fourchon, LA. On 5 October, all equipment was demobilized and trucked back to the Phoenix Maryland facility.

Upon returning to the Largo Office, all documentation collected was formatted and delivered to the USCG office, Washington D.C.

Project Summary

Project:	USCG Deep Water Horizon Investigation
Date:	September 2010
Sponsor:	United States Coast Guard
NAVSEA 00C Representative:	Ric Sasse

Phoenix Personnel:

Project Manager:	John Finke
Assistant Project Manager:	Mark Bender, Evan Tanner
Senior Technician:	Damien Conaghan
Lead Operator Technician:	Mark Kress
Electronic Technician:	Dennis McVicker, Scott Woodard
Mechanical Engineer:	John Tomasi
Electrical Engineer:	Tim Coop

Support Ship:	M/V GENIE LAB.
Systems Employed:	Deep Drone, xBot
Depth:	5100 ft.
Number of Dives:	11
Total Bottom Time:	90 hours, 24 minutes
Results:	Successful inspection of the oil drilling platform Deep Water Horizon

TABLE OF CONTENTS

1.0 CHRONOLOGY

Monday, 20 September

Finke, Conaghan, arrived in Louisiana for a vessel inspection. Met with Ric Sasse. Began vessel inspection.

Tuesday, 21 September

AM Watch Summary

Completed vessel inspection. Arrived at Phoenix's Bayou Vista facility to coordinate flights, hotels, and rental cars.

PM Watch Summary

Arrived in New Orleans, LA.

Wednesday, 22 September

Continued to update hotel and rental car information for crew arrival.

Thursday, 23 September

Phoenix personnel arrived in New Orleans. Picked up rental cars and continued travel.

Friday, 24 September

AM Watch Summary

Equipment and personnel arrived at M/V GENIE LAB. Began system mobilization.

PM Watch Summary

Continued mobilization. High voltage connector on SH2 crane pins broken, reconnected to spare pins.

Saturday, 25 September

AM Watch Summary

Continued mobilization, SH2 crane erected. Vehicle checks completed, OK. High pressure hose on SH2 HPU side (yellow) had several fitting leaks.

PM Watch Summary

Hose was sent to have a new hydraulic fitting attached.

Sunday, 26 September

AM Watch Summary

Vessel turned around for access to the locator pole. Set up the locator pole. Pole was tested and secured for sea. Sonardyne beacons changed to job frequency.

PM Watch Summary

Transited to fuel dock to top off tanks. Completed Deep Drone wet check at fueling dock, O.K.

Monday, 27 September

AM Watch Summary

Crew transited to the vessel and moved aboard. At 1135, ship was underway to the operations site.

PM Watch Summary

Started shifts.

Tuesday, 28 September

AM Watch Summary

Started Dive #1.

PM Watch Summary

Ran counter bypass cable to correct failure in counter. Fixed Sonar on ROV. Fixed damaged Tygon on HD Camera. Started Dive #2.

Wednesday, 29 September

AM Watch Summary

Completed Dive #2. Rigged Programmable Generic Transponder (PGT) beacon for seafloor deployment with ROV, Dive #3. ROV readied for Dive #3, seafloor beacon deployment. Stood by for SIMOPS permission to proceed. Dive #3, deployed seafloor beacon but, received no valid replies. Surveyed the area west of the rig.

PM Watch Summary

Flew over the rig to the east side. Located west pontoon and surveyed pylons. Cross beam to east pontoon and surveyed pylons. Surveyed area east of the rig and located a Conex box, derrick section, crane boom, and control room (north of the rig). Recovered ROV for xBot integration.

Thursday, 30 September

AM Watch Summary

Moved the BC Q camera to the frame. Moved the old zoom to the pan and tilt. Completed xBot integration. Integrated the hydraulic cutter and secured in the port manipulator jaw. A steel awl was placed in the starboard manipulator jaw. Reviewed the Dive #3 video of the bridge section of the rig. Turned off FOG power inside Deep Drone. The 0500, xBot power turned on. Power consumption in sleep mode. Deep Drone/xBot pre-dive began. xBot locked down in cage, Dive #4. Maneuvered Deep Drone to the open bridge windows. Launched xBot and performed interior bridge survey. Recovered xBot to Deep Drone. Recovered Deep Drone to ship's deck.

PM Watch Summary

Dive #5, Surveyed ROV containers (operations and maintenance) and bridge section. Vessel was repositioned over the main rig. Surveyed the middle of the main rig with Deep Drone and xBot. Recovered xBot and Deep Drone to the vessel deck.

Friday, 1 October

AM Watch Summary

Removed xBot from Deep Drone. Pre-dive Deep Drone. Dive #6, surveyed the bridge and established sonar range and bearing to the rig and ROV vans. Identified sonar targets to the west of the rig. Video survey the west pontoon outboard face from north to south completed. Video surved the southern interior face to the north.

PM Watch Summary

Continued Dive #6, surved the southeast column. Recovered the PGT beacon. ROV pre-dive completed. Verified PGT operational by lowering alongside USBL pole, checked okay. Deployed the PGT beacon from the surface, no replies. Recovered the vehicle with the PGT to the deck. Tested PGT, OK. Dive #7, deployed PGT.

Saturday, 2 October

AM Watch Summary

Dive #7, surveyed the wreckage field. Sonar inoperative. Flew over rig to survey pylons north of the rig. Reviewed dive. Dove ROV north to south. Started recovery. Recovered the vehicle and repaired the sonar.

PM Watch Summary

Dive #8, sonar inoperative at 1200 fsw. Started vehicle recovery. Repaired sonar. Dive #9, xBot dove into the bridge. Recovered vehicles. Dive #10, sonar ranging to confirm nav.

Sunday, 3 October

AM Watch Summary

Dive #10, moved vehicle. Vehicle caught on riser. Sonar inoperative. Recovered vehicle. Repaired the sonar. Began Dive #11.

PM Watch Summary

Continued field survey. End of Dive #11, final dive. Secured equipment for transit. Transfered personnel to Lio platform. Underway to port, break shifts.

Monday, 4 October

Arrived in Port Fourchon. Started Demobilization.

Tuesday, 5 October

Loaded the Deep Drone system onto trucks. Trucks and Phoenix personnel departed for Maryland.

Wednesday, 6 October

Phoenix personnel arrived at their home base.

Thursday, 7 October

All equipment (Deep Drone system) arrived at the Maryland Phoenix facility

2.0 PROBLEMS ENCOUNTERED / LESSONS LEARNED

2.1

Problem Encountered: During mobilization a pin on the high voltage connector on the Seahorse Two crane was found to be bent and broken.

Lesson Learned: All connectors should be visually checked before mating. A spare pin was utilized during the operation and connector insert was replaced upon demobilization.

2.2

Problem Encountered: One of the two cable counter sensors was found to be defective.

Lesson Learned: A potted set of sensors will be made and carried as a spare.

2.3

Problem Encountered: The vehicle fiber optic gyro compass failed.

Lesson Learned: A proper wattage power supply was needed. It has been replaced and a spare acquired.

2.4

Problem Encountered: The Sun West 300 CTFM Sonar sound head was damaged.

Resolution: The spare sound head was installed. The damaged unit was repaired.

2.5

Problem Encountered: Vehicle independent power supplies were under-rated for equipment integrated on the vehicle.

Resolution: Replaced insufficient power with higher amperage power supplies.

2.6

Problem Encountered: The high voltage connector on the Seahorse II handling system was damaged during mobilization

Lessons Learned: Checking pin alignment prior to mating will rectify this problem.

2.7

Problem Encountered: The projector and hydrophone were lost after being struck by the oil rig riser pipe.

Lessons Learned: Position and altitude need to be closely watched when in close range to uncharted objects.

2.8

Problem Encountered: The HF sonar was inoperable. Ethernet communications multiplexing was not programmed correctly.

Lessons Learned: Check communications during dive descent.

APPENDIX A

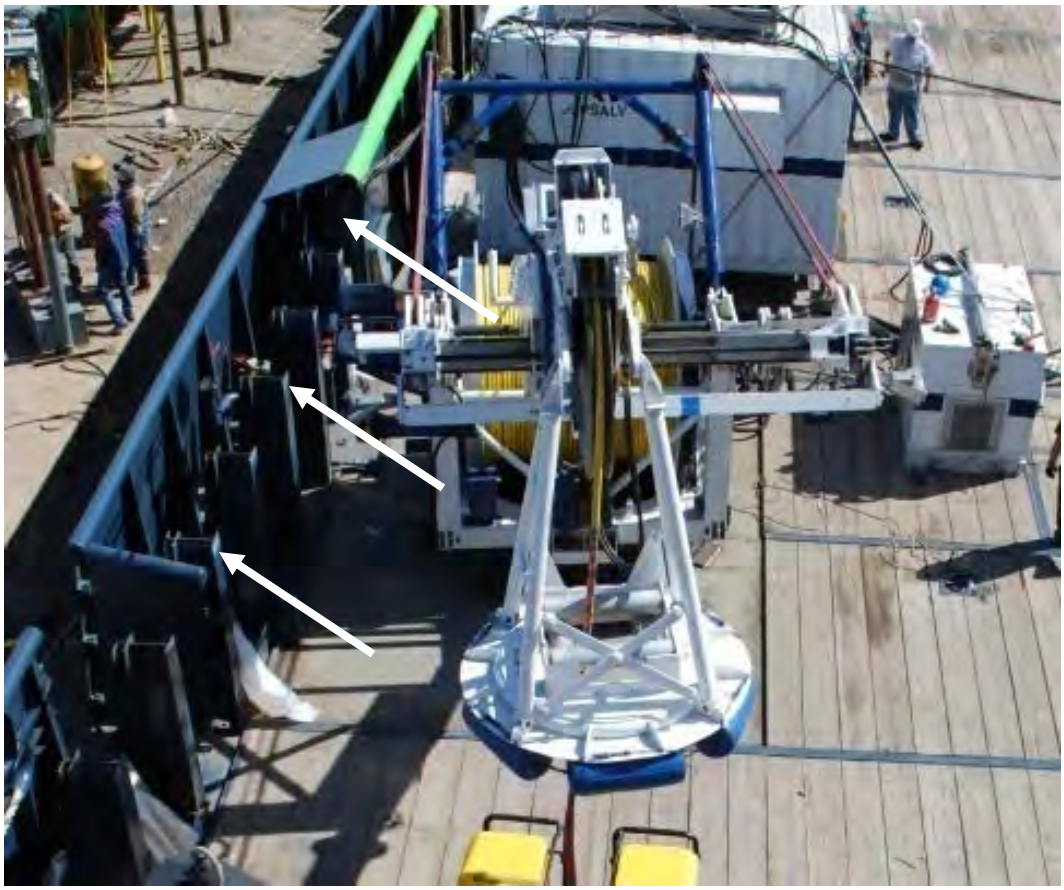
PHOTOGRAPHS

Photograph 1: M/V GENIE LAB

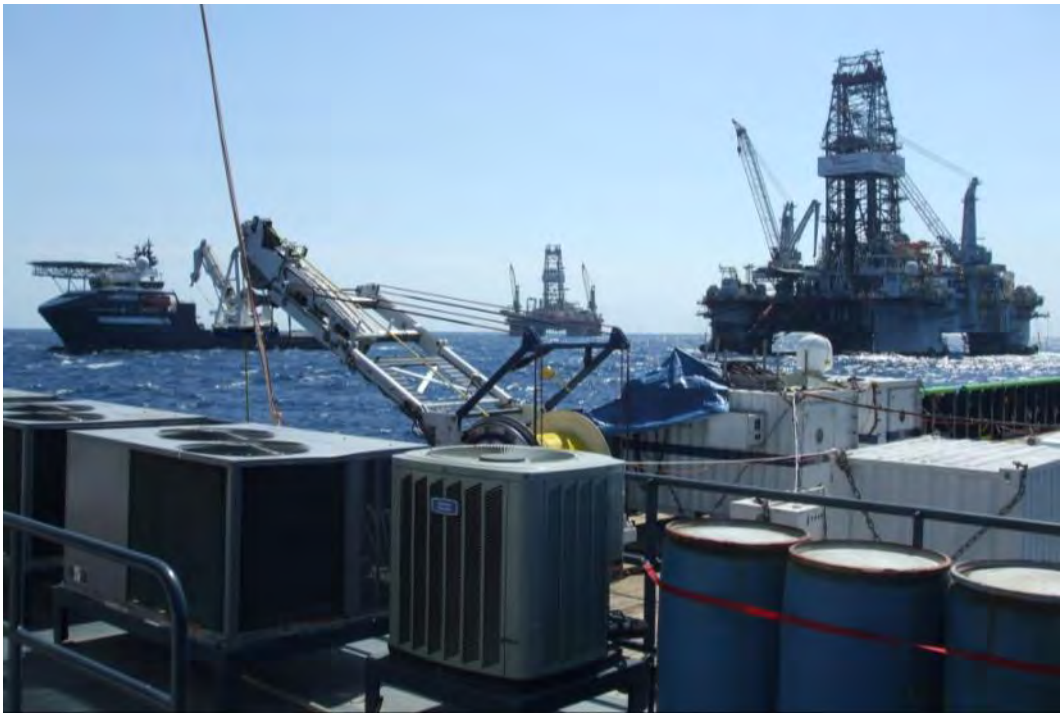
Photograph 2: Aft Deck M/V GENIE LAB Pre-installation

Photograph 3: Aft Deck during Mobilization

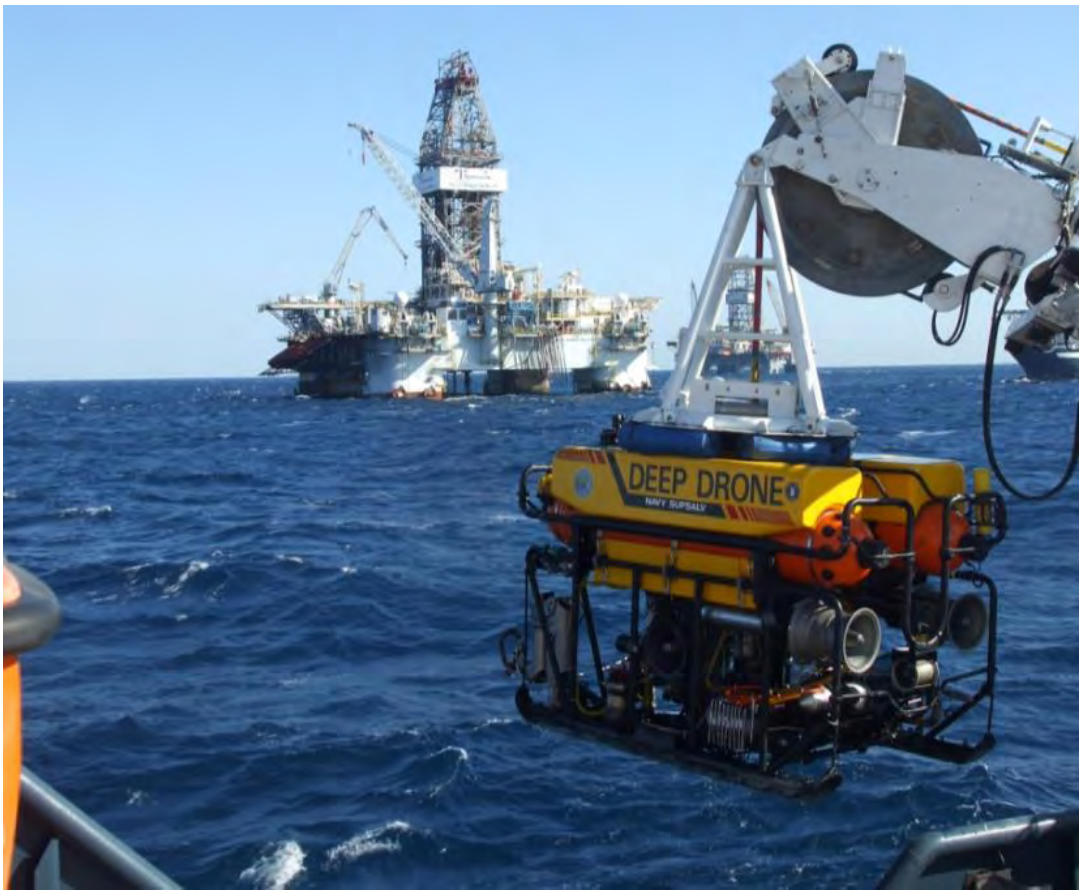
Photograph 4: Aft Deck Mobilized



Photograph 5: Section of Ship with Removed Pipe Rail (Green) for Crane Clearance

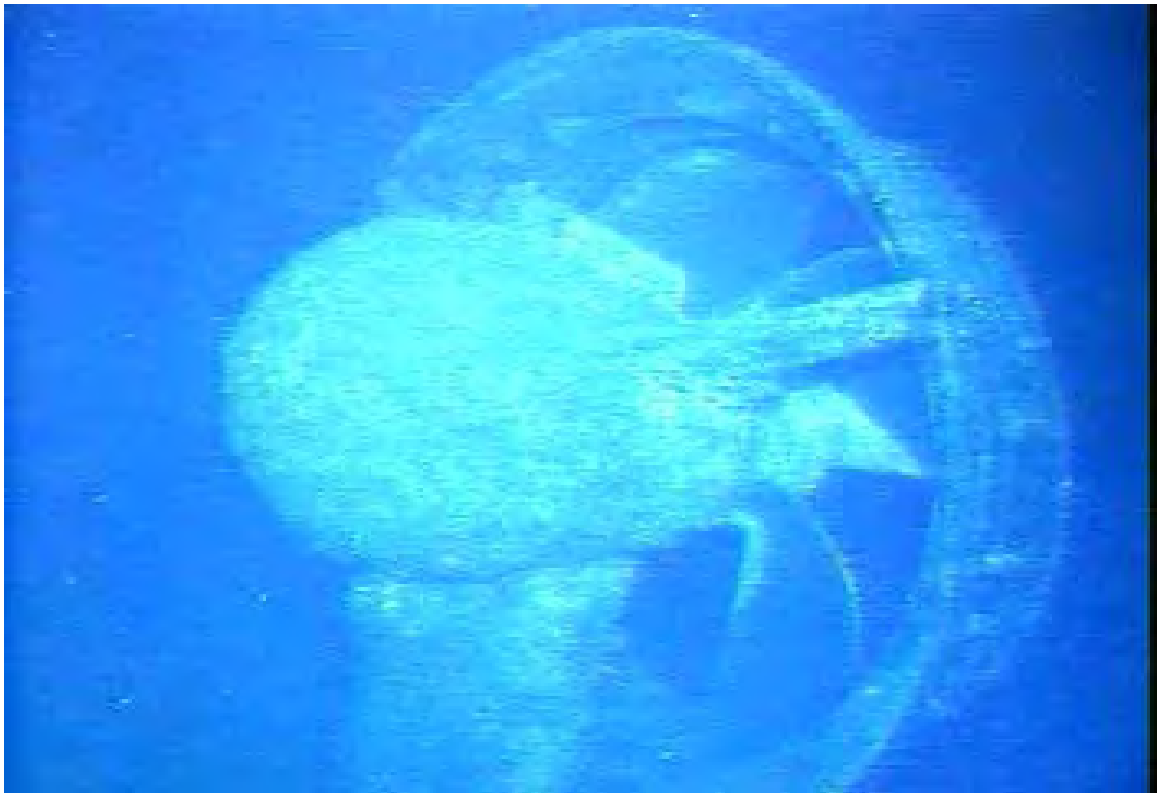


Photograph 6: Working in a Close Area



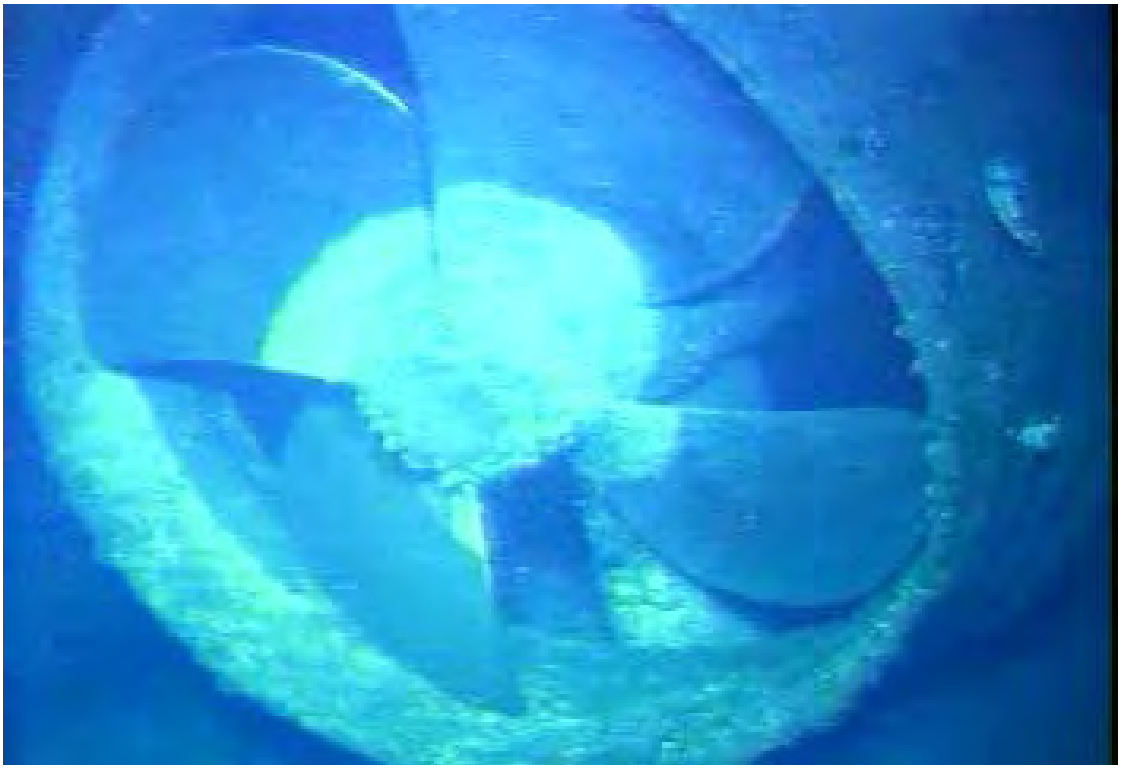
Photograph 7: Launching Deep Drone

Photograph 8: Deep Drone with xBot Ready to Launch



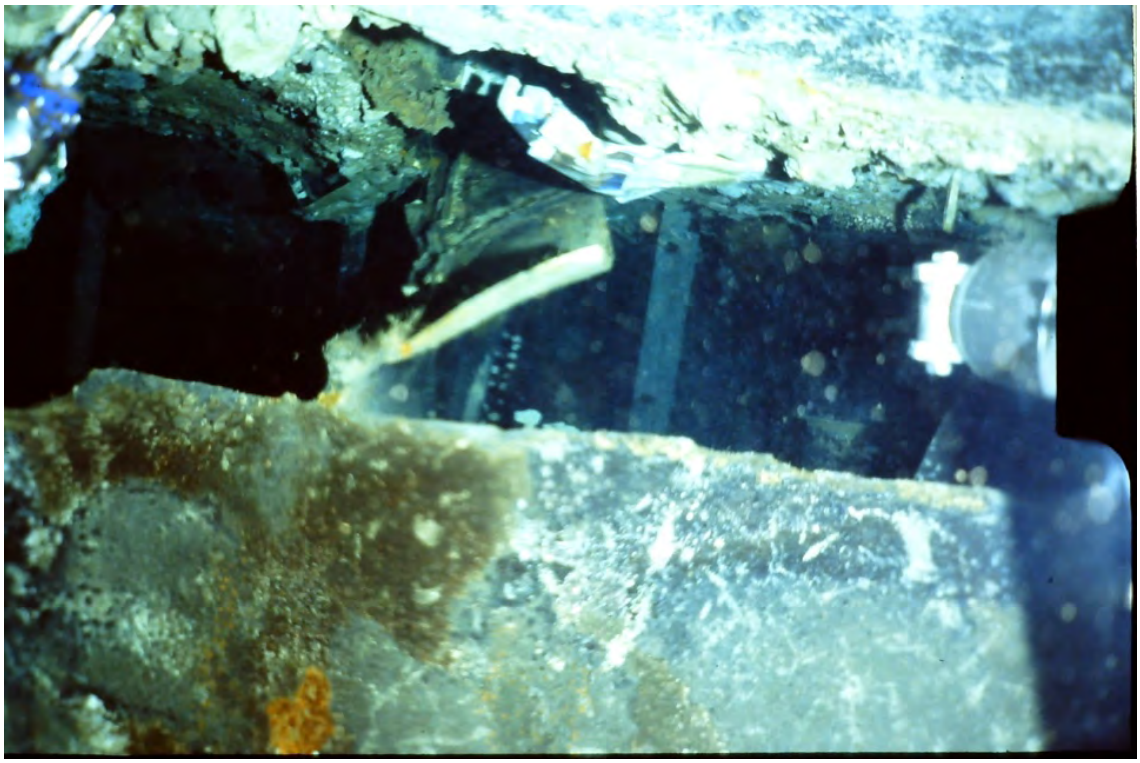
Photograph 9: Deep Water Horizon Megastar Thruster Pod

Photograph 10: Deep Water Horizon Pontoon Damage Port Side



Photograph 11: Deep Water Horizon Megastar Propeller

Photograph 12: Pontoon Leg Separation from the Main Platform Box



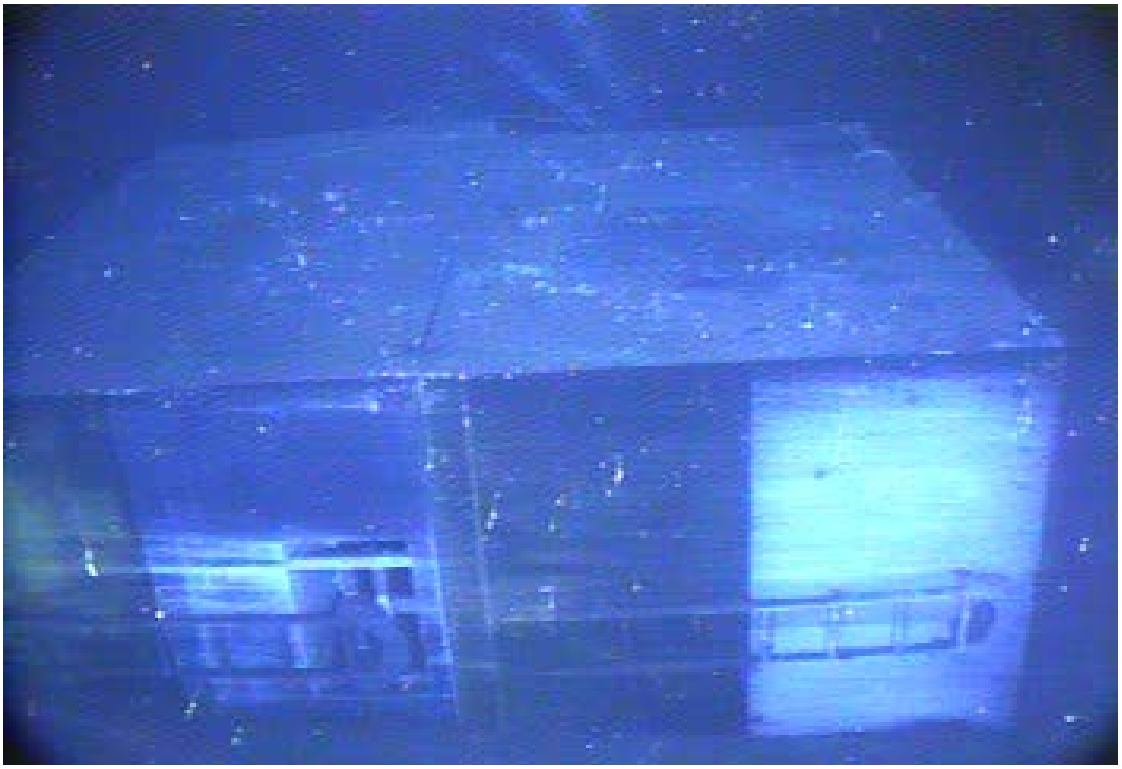
Photograph 13: Pontoon Leg Separation from the Main Platform Box

Photograph 14: Bridge Control Room with Helicopter Deck Wreckage

Photograph 15: Front of the Bridge Control Room Section

Photograph 16: Phoenix's xBot Entering the Bridge Control Room Window

Photograph 17: Bridge Consoles and Computers



Photograph 18: ROV Vans (Stacked)

Photograph 19: Deep Water Horizon Riser Pipe across Pontoons

APPENDIX B

CHARTS

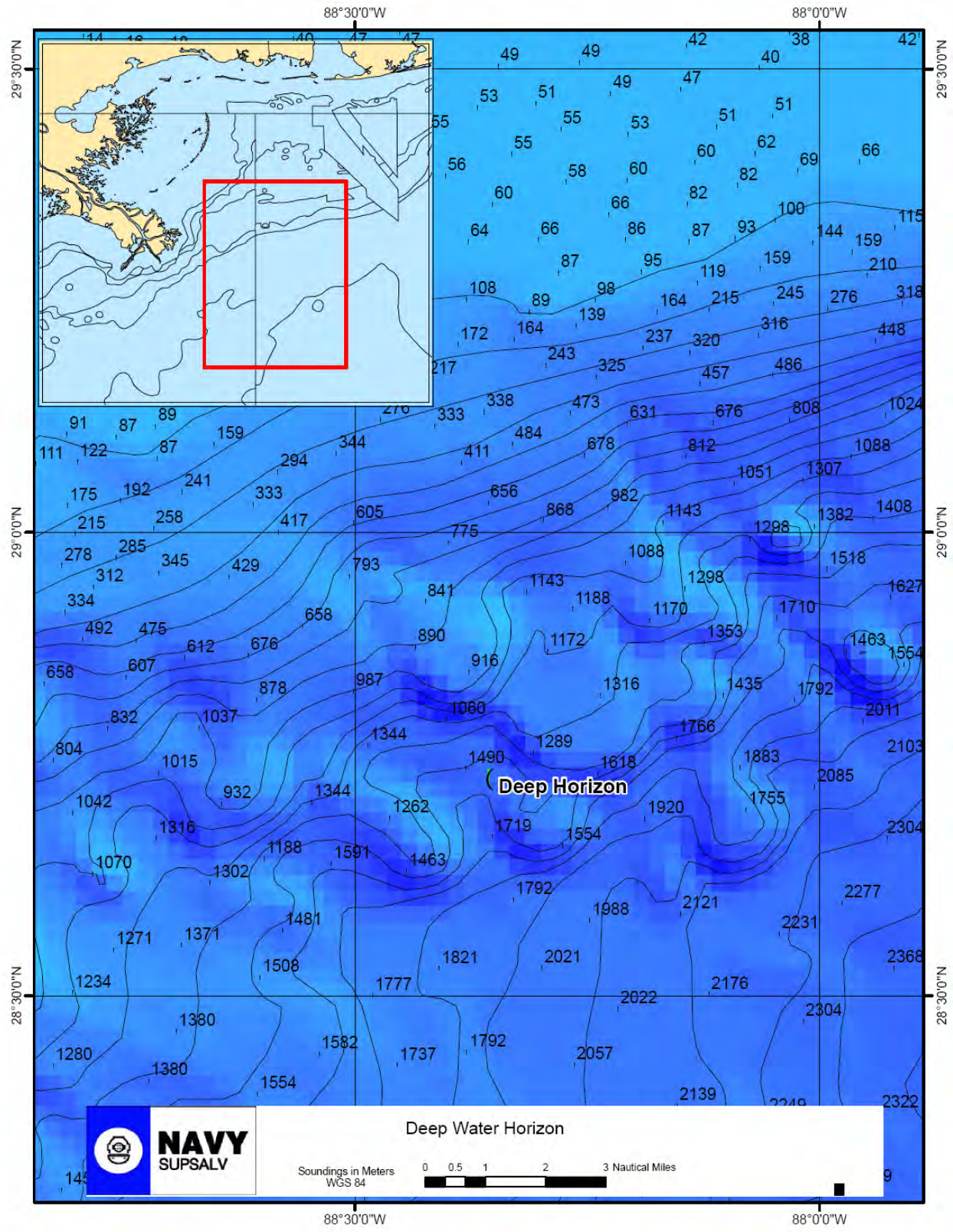


Chart 1: Ocean Depths at Deep Water Horizon Site

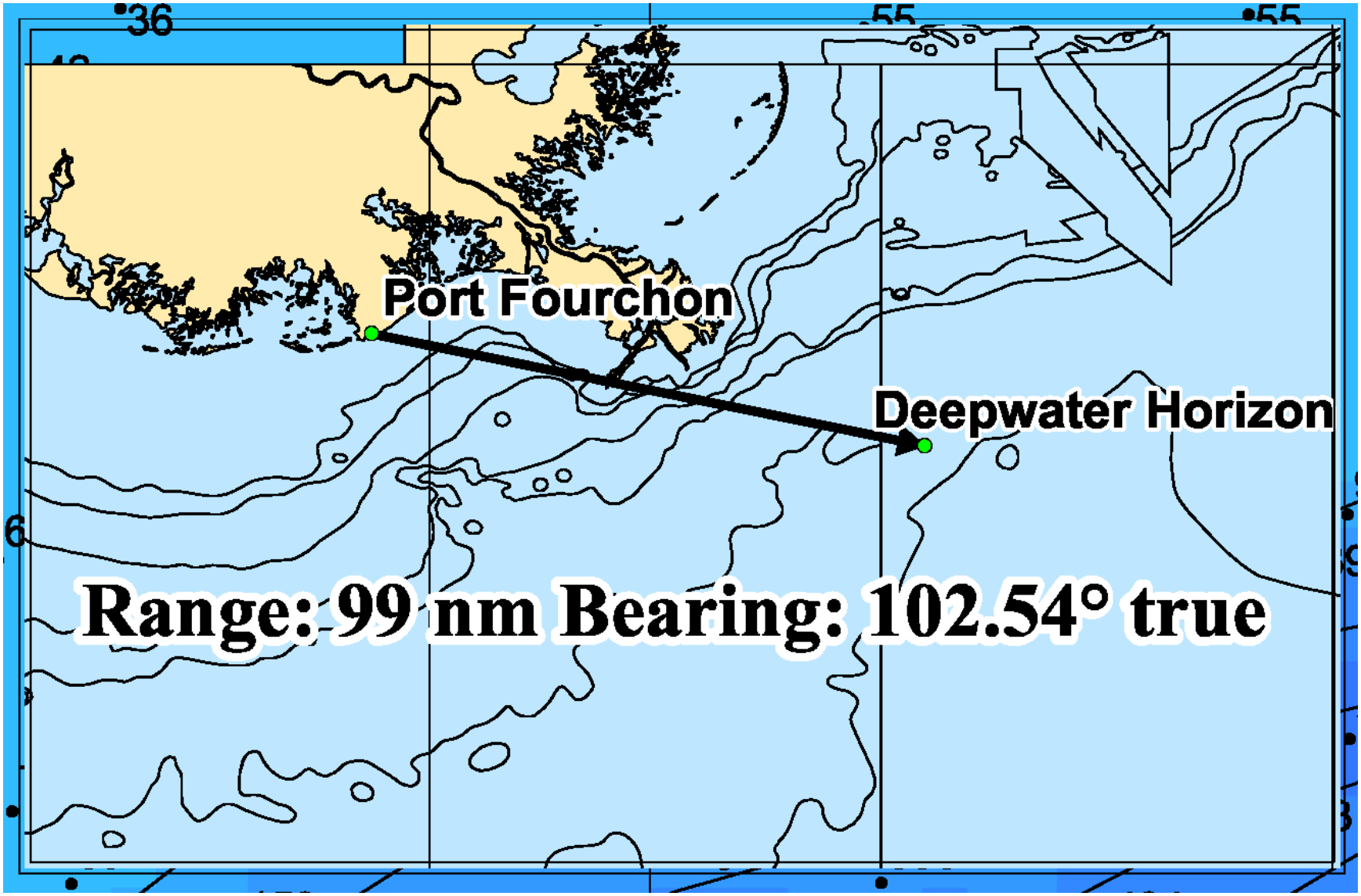


Chart 2: Deep Water Horizon Location Relative to Port Fourchon (Range 99 NM and Bearing 102.54°) and the Louisiana Landmass

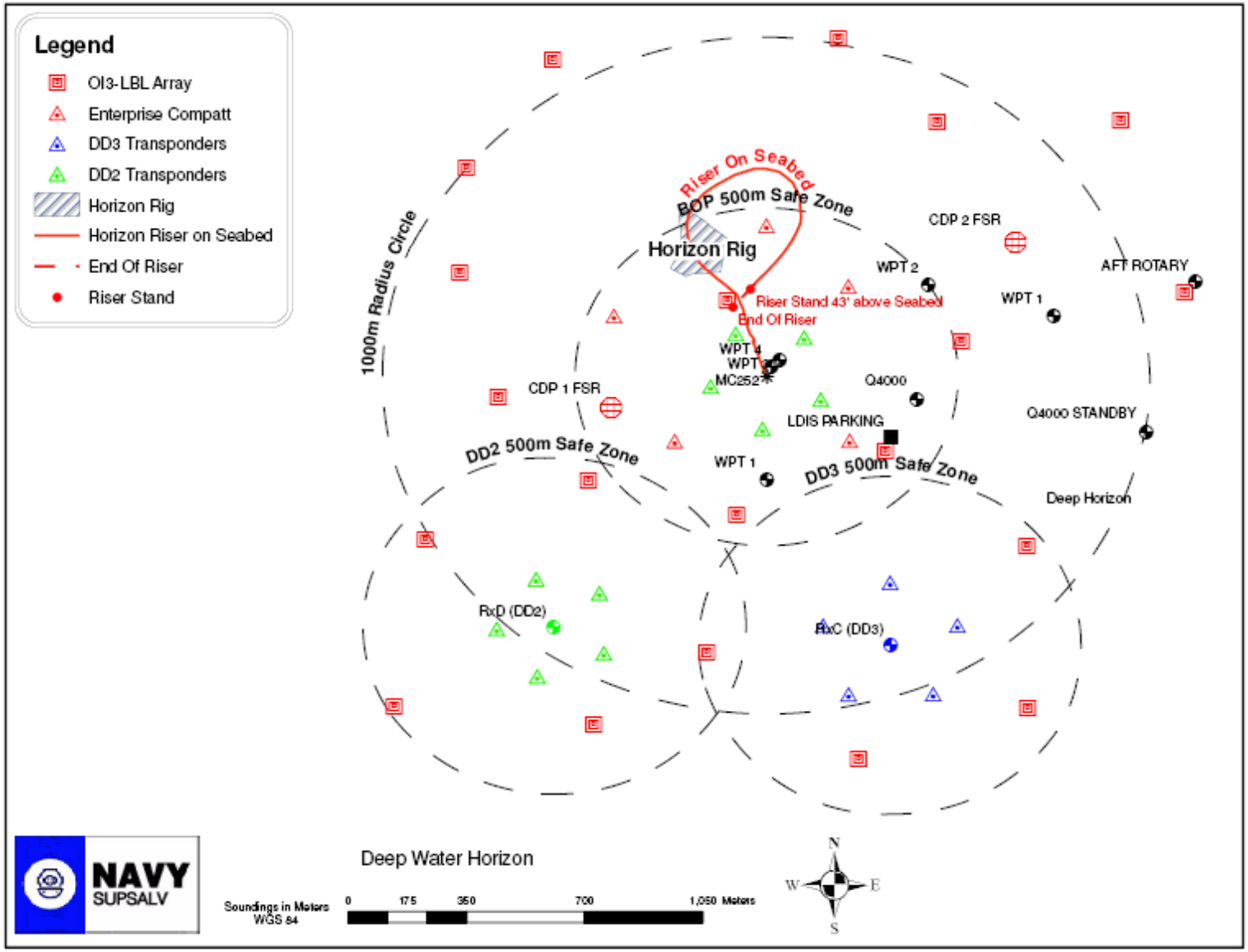


Chart 3: Acoustic Fields

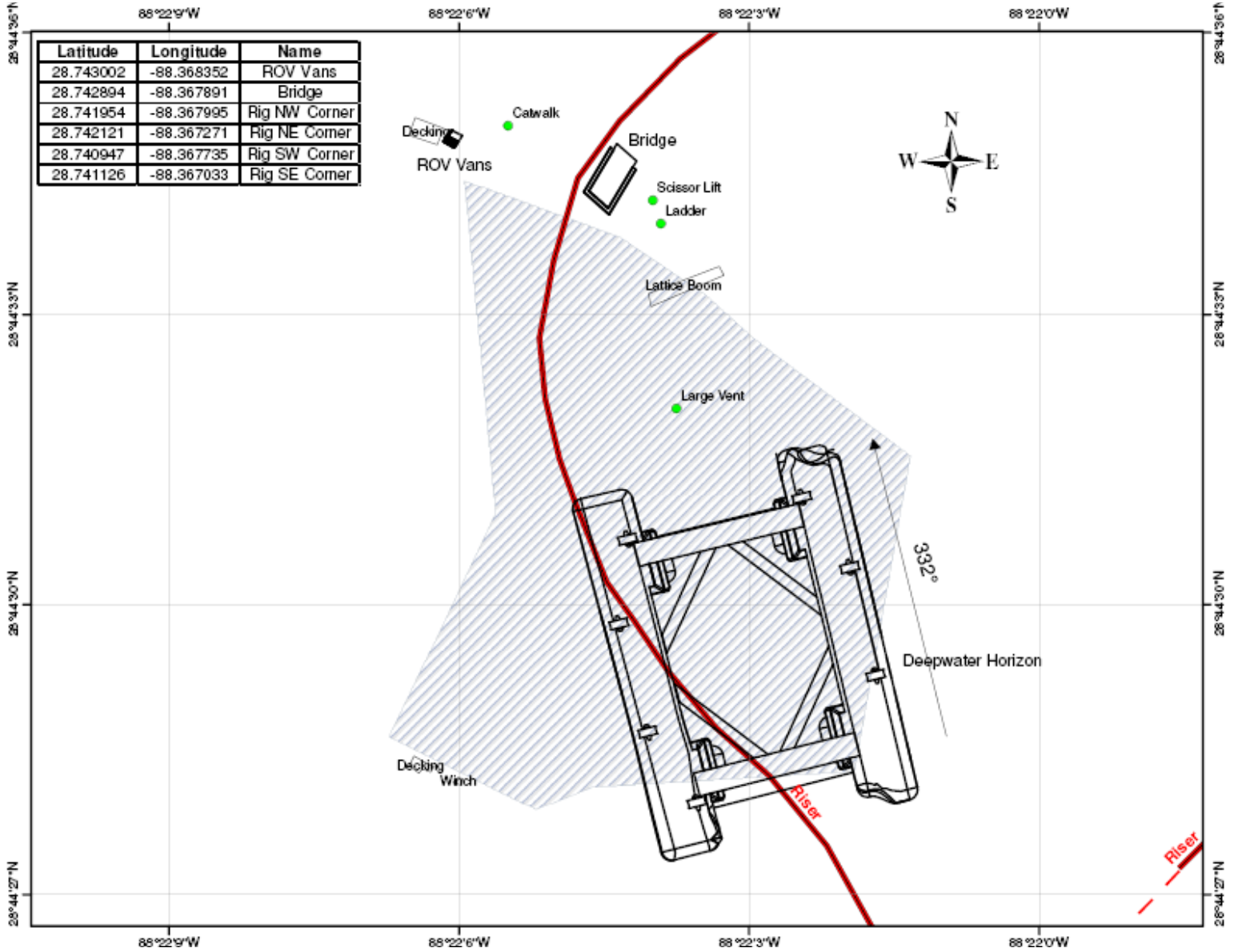
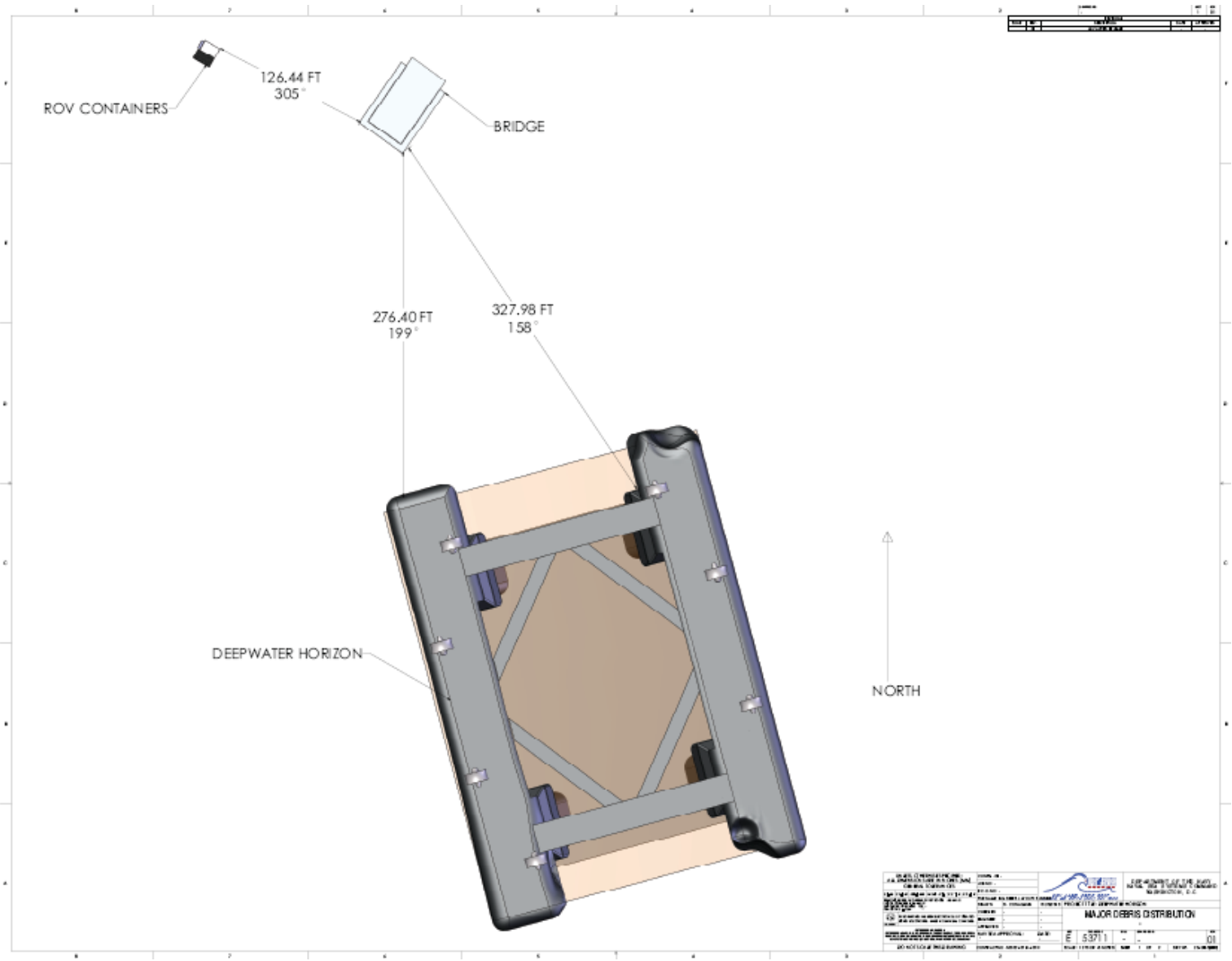


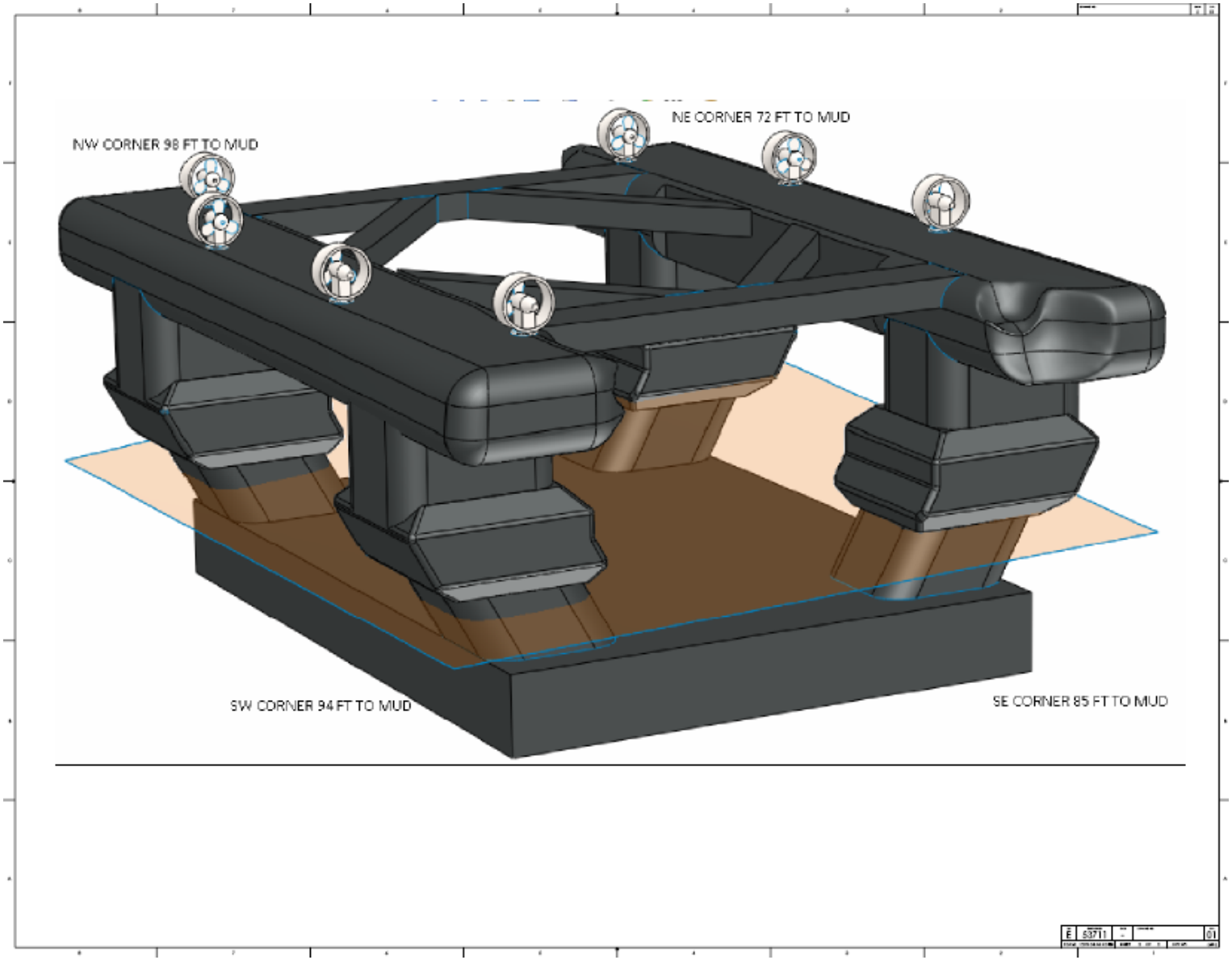
Chart 4: Positions of Deep Water Horizon Selected Items

APPENDIX C

DRAWINGS



Drawing 1: Distance and Headings



Drawing 2: Attitude of Deep Water Horizon Referenced to the Mud Line