

**ASSURING THE SAFETY OF DOMESTIC
ENERGY PRODUCTION: LESSONS LEARNED
FROM THE DEEPWATER HORIZON OIL SPILL**

(112-58)

HEARING
BEFORE THE
SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION
OF THE
COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

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October 28, 2011

MEMORANDUM

TO: Members, Subcommittee on Coast Guard and Maritime Transportation
FROM: Staff, Subcommittee on Coast Guard and Maritime Transportation
RE: Hearing on "Assuring the Safety of Domestic Energy Production: Lessons Learned from the DEEPWATER HORIZON Oil Spill".

PURPOSE

On Wednesday, November 2, 2011, at 10:00 a.m., in room 2167 of the Rayburn House Office Building, the Subcommittee on Coast Guard and Maritime Transportation will meet to examine the lessons learned in the wake of the BP DEEPWATER HORIZON oil spill, review the latest investigations into the causes of the spill and the Coast Guard response to it, hear the recommendations of those involved in these investigations, and find out what actions the Service has taken or will take in response to those recommendations.

BACKGROUND

Coast Guard Regulation of Offshore Drilling

Safety:

Under the Outer Continental Shelf Lands Act (OSCLA) (43 U.S.C. 1331 et. seq.), the Coast Guard and the Bureau of Safety and Environmental Enforcement (BSEE), formerly the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the Minerals Management Service (MMS), are responsible for promulgating and enforcing safety regulations governing certain operations of facilities,

fixed and floating platforms, and Mobile Offshore Drilling Units (MODU) on the Outer Continental Shelf (OCS). In order to execute such authority and avoid duplication of effort, the Coast Guard and BSEE operate under a Memorandum of Understanding (MOU) which delineates inspection and enforcement responsibilities between both agencies.

Based on the MOU, BSEE is responsible for inspecting the equipment and procedures aboard facilities, platforms, and MODUs used to drill or extract resources from the OCS. The Coast Guard performs inspections on floating platforms and MODUs focusing on manning and operational procedures including lifesaving, fire-fighting, employee health and safety, as well as hull integrity, vessel stability, means of egress, locations containing hazardous electrical equipment, machinery systems, electrical systems, helicopter facilities, cranes, and navigation. Under the MOU, each agency conducts scheduled and unannounced inspections to ensure compliance with its own requirements. If an inspector notices deficiencies that fall within the responsibility of the other agency, the deficiency is reported to the other agency for action.

The Coast Guard considers a MODU a tank vessel for the purposes of inspection under Chapter 33 of title 46, United States Code. As such, U.S.-flagged MODUs are required to apply for, receive, and maintain compliance with a Certificate of Inspection (COI) issued by the Coast Guard in order to conduct operations on the OCS. The COI ensures the MODU meets U.S. and international standards for marine construction, requires certain safety equipment to be properly installed, certified and maintained, sets minimum manning requirements, and mandates other procedures to ensure the safety of life at sea. Under 46 U.S.C. 3316, the Coast Guard may delegate authority to an approved classification society or recognized organization such as the American Bureau of Shipping to review ship construction plans and conduct inspections, but the Coast Guard reserves responsibility for issuing the COI.

In the case of foreign-flagged MODUs, the flag state or recognized organization working on behalf of the flag state has primary responsibility for ensuring compliance with applicable international standards. The Coast Guard does not generally perform a flag state inspection (as are done on U.S.-flagged MODUs) on foreign-flagged MODUs operating on the OCS. Under 46 U.S.C. 3303, if the MODU's flag state has an inspection and certification program equivalent to that of the U.S., and if the flag state is a party to the International Convention for Safety of Life at Sea (SOLAS), the Coast Guard requires the MODU to undergo a Port State Control (PSC) examination and receive a certificate of compliance which states it passed such inspection before it can operate in the OCS. A PSC inspection ensures the MODU is operating in compliance with its flag state certificate, is in compliance with SOLAS and other international conventions, and that the crew is properly trained in lifesaving and firefighting procedures.

Security:

Under 46 U.S.C. 70102, the Coast Guard is required to conduct periodic vulnerability assessments of certain facilities and vessel types to determine their risk of being involved in a transportation security incident. The assessments identify threats to the assets, as well as weaknesses in physical security, security procedures, security training and response plans. The Government Accountability Office (GAO) recently found that the Coast Guard has yet to conduct vulnerability assessments on 12 of the 50 facilities required to undergo such assessments (GAO-11-883T). The GAO also found that vulnerability assessments are not conducted on any MODUs operating on the OCS.

Under 46 U.S.C. 70103, the owners or operators of all facilities and platforms, as well as all U.S.-flagged vessels and MODUs operating on the OCS are required to submit to the Coast Guard for approval a facility or vessel security plan. The security plans identify the individual responsible for implementing security actions, establish security procedures, identify areas where controlled access is necessary, describe security equipment installed, and provide for training and drills of security procedures at the facility or aboard the vessel. A facility or vessel may not operate without an approved security plan.

The Coast Guard is required to inspect such facilities to ensure compliance with the plan at least two times per year. With respect to vessels, the Coast Guard ensures compliance with the security plan during periodic safety boardings and inspections.

The owners or operators of foreign-flagged vessels and MODUs are not required to submit vessel security plans to the Coast Guard for review and approval. Instead, the Coast Guard requires owners or operators of foreign-flagged vessels and MODUs to have security plans approved and verified by their flag state or recognized organization on behalf of their flag state, and must carry on board a valid International Ship Security Certificate issued in accordance International Ship and Port Security Code.

Oil Spill Response:

Section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1321) requires the owner or operator of a tank vessel, nontank vessel over 400 gross tons, offshore facility, and onshore facility to prepare a response plan for spills of oil or hazardous substances. The plans must identify a qualified individual with authority to implement removal actions, identify and ensure by contract the personnel and equipment needed to remove to the maximum extent practicable a worst case discharge, and describe the training, equipment, and other response actions that will be undertaken during a spill.

The Environmental Protection Agency (EPA) has authority to review and approve response plans for onshore facilities. BSEE is responsible for the review and approval of response plans for offshore facilities, and the Coast Guard is responsible for the review and approval of response plans for tank and nontank vessels. In the case of a MODU,

two response plans are submitted. One plan is submitted to BSEE usually by the lessee of the rights to the oil or gas production site which covers the response actions that would be taken when the MODU is in the process of drilling a well. A second plan is submitted by the owner or operator of the MODU to the Coast Guard covering response actions that would be taken when the MODU is operating in its capacity as a nontank vessel, such as when it transits between drilling sites. An owner or operator cannot conduct operations without an approved response plan.

Explosion and Sinking of the DEEPWATER HORIZON

The DEEPWATER HORIZON was a dynamically positioned mobile offshore drilling unit (MODU) owned by Transocean Ltd. Transocean was under contract with British Petroleum (BP) to use the DEEPWATER HORIZON to drill an oil and natural gas well at the Macondo exploration site in an area of the Gulf of Mexico known as the Mississippi Canyon Block 252 (MC 252). BP purchased the lease rights to MC 252 in 2008 for \$34 million and became the legal "operator" for any activities on that block. For the purposes of the Macondo site, BP partnered with two other companies, Anadarko Petroleum Corporation and MOEX Offshore to drill the well. BP owns a 65 percent share of the well, followed by 25 percent for Anadarko Petroleum, and 10 percent for MOEX Offshore.

On the evening of April 20, 2010, workers aboard the DEEPWATER HORIZON had completed the process of drilling the well and were conducting "temporary abandonment" procedures. The temporary abandonment process involves stabilizing the pressure in the drilled well, testing the integrity of the well and its casing, installing a cement plug, and in the case of the Macondo well, setting a lockdown sleeve over the well head. Once this process is complete, the MODU is free to remove its blow out preventer (BOP) and detach from the well. Later, a production rig is moved into place over the well to begin the extraction of oil and natural gas.

As workers were conducting integrity tests, pressure readings indicated problems with the well. At approximately 9:40 p.m., drilling mud began spewing into the DEEPWATER HORIZON followed shortly thereafter by natural gas. Efforts to close off the well by activating the rams and annular preventers on the BOP failed. At 9:49 p.m. the first of two explosions occurred. Eleven workers who were aboard the MODU at the time of the blowout and explosion were killed. On April 22, 2010, the DEEPWATER HORIZON sank and oil and natural gas began spewing from the uncontained well. It took the federal government and the responsible parties 87 days to secure the damaged blowout preventer and stop the flow of oil into the Gulf of Mexico.

Recent Reports on the DEEPWATER HORIZON Oil Spill

Joint Investigative Team (JIT) Report:

Pursuant to the MOU, the Coast Guard and BOEMRE (the predecessor to BSEE) conducted a joint investigation into the causes of the blowout, explosion and subsequent sinking of the DEEPWATER HORIZON. Volume I, released on April 22, 2011, addressed the areas of the investigation for which Coast Guard had responsibility, including the factors related to the vessel and its systems that caused the marine casualty. The Coast Guard investigation specifically examined the explosion, fire, evacuation, vessel sinking of the MODU, and the safety systems of DEEPWATER HORIZON and its owner-operator, Transocean. Volume II, released September 9, 2011, addressed the areas of BOEMRE responsibility, including the causes of the well blowout, drilling operations, and well abandonment procedures. This hearing will only focus on Volume I.

The Coast Guard investigation revealed numerous systems deficiencies that had an adverse impact on the ability to prevent or limit the magnitude of the disaster. These included poor maintenance of electrical equipment that may have ignited the explosion, bypassing of gas alarms and automatic shutdown systems that could prevent an explosion, and lack of training of personnel on when and how to shutdown engines and disconnect the MODU from the well to avoid an explosion and mitigate the damage from an explosion.

The Coast Guard investigative team also criticized the oversight and regulation of DEEPWATER HORIZON by its flag state, the Republic of the Marshall Islands (RMI). The Coast Guard investigative team faulted RMI for delegating all of its inspection activities to recognized organizations, without itself conducting onboard oversight surveys.

The Coast Guard investigative team made 52 recommendations for the Commandant of the Coast Guard to undertake to improve the safety of offshore drilling operations and the inspection of MODUs. The recommendations call on the Commandant to revise U.S. regulations and exercise greater oversight of foreign-flagged MODUs operating on the OCS and to work with the International Maritime Organization (IMO) to review and revise the international safety regulations governing MODU construction and operations. The Coast Guard investigative team made an additional 13 administrative recommendations, most of which involve the presentation of awards to workers aboard the DEEPWATER HORIZON and the offshore supply vessel DAMON B. BANKSTON for actions taken to save lives.

The Commandant's Final Action, released on September 9, 2011, as an enclosure to Volume I provides Admiral Papp's opinions of, and plan of action for the various recommendations contained within the report. Of the 52 recommendations made to improve the safety of offshore drilling operations and inspections of MODUs, the Commandant concurred fully with 11. The Commandant notes that he has already taken

or will take the suggested action with respect to these recommendations. He partially concurred, or concurred with the intent of another 31 recommendations. The Commandant noted he will further evaluate these recommendations and determine what, if any, action is appropriate. Finally, he did not concur with the remaining 10 recommendations and will not be taking any action regarding them.

The Commandant also dismissed the criticism of RMI and the actions of its recognized organizations, the American Bureau of Shipping and Det Norske Veritas, in the inspection and certification of the DEEPWATER HORIZON. The Commandant found that both RMI and its recognized organizations met all international guidelines for inspection of MODUs under SOLAS. Therefore, any deficiencies were the result of “inadequacies with the guidelines”. The Commandant noted that the IMO is currently revising such guidelines in response to the disaster.

Volumes I and II of the JIT and the Commandant Final Action available on the internet at the following website: <https://homeport.uscg.mil/mycg/portal/ep/home.do>.

Incident Specific Preparedness Review:

Following major oil spills, Coast Guard internal regulations call for an Incident Specific Preparedness Review (ISPR). On June 14, 2010, Admiral Papp chartered an ISPR for the Deepwater Horizon oil spill. The ISPR team was composed of independent industry and oil spill experts led by retired Coast Guard Vice Admiral Roger Rufe. The Commandant tasked the ISPR team with reviewing the integration of the National Contingency Plan (NCP) with other plans, the effectiveness of the response by the Federal On Scene Coordinator (FOOSC), communication with federal, state, local and industry representatives, the effectiveness of the Coast Guard’s overall performance, and the actual response efforts taken, including the training and experience of responders.

The ISPR made the following observations and recommendations:

- The Coast Guard’s Marine Environmental Response mission and programs have atrophied and been displaced as a result of the new sector construct and new homeland security missions. The Coast Guard must reverse this trend.
- Area Contingency Plans (ACPs) were ineffective for this spill. The Coast Guard should issue comprehensive guidance on ACPs to address these inadequacies.
- Environmentally Sensitive Areas (ESAs) were not adequately identified in plans and, therefore, not adequately protected. The Coast Guard should issue national guidance on identifying ESAs and work more closely with State and local partners to ensure ESAs are addressed appropriately.
- Alternate response methods, such as dispersants and in situ burns, were vital to the response effort, but were hampered by a lack of policy. Policies, protocols and guidelines should be established and articulated in the ACPS to govern the use of such methods.

- Dispersant issues, such as toxicity, volumetric limitations, and impacts on ESAs should have been foreseen as part of the National Oceanic and Atmospheric Administration (NOAA)/EPA preparedness programs, and should have been researched and addressed well before this event.
- Effective Daily Recovery Capacity (EDRC) guidelines should be revised to incentivize companies and oil spill removal organizations to invest in response research and development.
- The NCP is not well understood at the state and local level. The Coast Guard needs to conduct outreach to improve understanding of how spill response works under the NCP.
- The performance of crisis leaders during this incident was uneven at best. In some cases, it undermined public confidence in government and corporate officials. However, the National Incident Command (NIC) structure worked very well and highlighted the need for having national level leaders who are capable of handling such large scale events.

The Coast Guard received the ISPR in February 2011 and the Commandant issued a Final Action Memo on March 18, 2011. The memo notes that the Service is already taking steps to address many of the ISPR's findings and recommendations, including efforts to review all ACPs, and coordinate with EPA on developing appropriate standards and protocols for dispersant use. The memo further stated that remaining recommendations of the ISPR would continue to be evaluated by the Coast Guard.

The ISPR report is available on the internet at the following website:
<http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf>.

The Federal On Scene Coordinator Report:

Under the NCP, the FOSC is the designated federal official responsible for monitoring or directing responses to all oil spills and hazardous substance releases. The FOSC coordinates all federal efforts with, and provides support and information to, local, state and regional response communities. The FOSC is also required to provide a report on actions taken to respond to a spill to the National Response Team (NRT), which is an organization of 15 federal departments and agencies responsible for coordinating emergency preparedness and response to oil and hazardous substance pollution incidents.

The FOSC is an official of either EPA or the U.S. Coast Guard, depending on where the incident occurs. EPA FOSCs have primary responsibility for spills and releases to inland areas and waters, while Coast Guard FOSCs have responsibility for coastal waters and the Great Lakes. For the DEEPWATER HORIZON oil spill, this position was held by a Coast Guard official. Rear Admirals Mary Landry, James Watson, and Paul Zukunft all served as the FOSC at various times during the spill.

In September 2011, the Coast Guard released the FOSC report on the response effort to the DEEPWATER HORIZON oil spill response. It covers federal response

efforts from April 20, 2010 through March 1, 2011. The FOSC report does not contain any recommendations for action, rather it chronicles the response effort and makes observations on lessons learned.

The key points noted by the FOSC in the report are:

- Several issues developed with command and control of the response effort, especially relating to misunderstandings by state and local officials regarding the response to incidents under NCP versus the National Response Framework (NRF) created under the Stafford Act, as well as the integration of local officials into the response.
- The Coast Guard and other agencies faced challenges in providing sufficient numbers of personnel to manage the response over the duration of the spill.
- Most booming was often counter-productive to protecting coastal areas, but made necessary by public and political demand.
- Several logistics issues developed associated with procuring sufficient supplies such as boom and other response equipment to combat the spill.
- Safety was a priority and resulted in an exceptionally low injury incidence rate.
- ACPs were not always adequate and need to be readdressed to factor in appropriate roles for state and local agencies.
- Standardized protocols governing the use of vessels of opportunity need to be established before an incident.
- The solvency of BP as the responsible party was crucial to response operations.
- Oil Spill Liability Trust Fund (OSLTF) caps were not designed for a Spill of National Significance (SONS), such as the Deepwater Horizon oil spill, and hindered the response effort.
- The response highlighted the need for a common information reporting template.
- NOAA's Environmental Response Management Application (ERMA) was utilized as the Common Operating Picture (COP) and was vital to the success of the response. It should be adopted as the COP for all future response efforts.
- Responses of this size require a robust and well-trained external affairs staff.

The FOSC report is available on the internet at the following website:
<https://homeport.uscg.mil/mycg/portal/ep/home.do>.

Previous Reports on the DEEPWATER HORIZON Oil Spill

Report of the National Incident Commander

Admiral Allen, the former Commandant of the Coast Guard and National Incident Commander for the BP DEEPWATER HORIZON oil spill, provided a report to the Secretary of Homeland Security on his actions during the spill and his recommendations for improvements to spill prevention and response. In his report, Admiral Allen made the following recommendations to improve response to future spills:

- Ensure all appropriate federal, state, local and tribal government authorities and response structures are written into response plans and their elected leadership is invited to participate in oil spill response exercises.
- De-conflict and reconcile the roles of the NIC under the NCP and the Principal Federal Official under the NRF to ensure that both regulation and policy provide for a single individual to serve as the President's designee.
- Ensure the NIC has the appropriate organic authorities.
- Empower and grow the National Response Team roles and responsibilities to better serve as the primary body for planning, policy, and coordination for oil spill response.
- Incentivize the private sector to develop 21st century oil spill response capabilities.

The NIC report is available on the internet at the following website:

<http://www.nrt.org>.

National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

On May 22, 2010, President Obama signed an executive order creating the National Commission on BP Deepwater Horizon Oil Spill and Offshore Drilling. The bipartisan Commission was charged with examining the relevant facts and circumstances concerning the root causes of the Deepwater Horizon oil disaster, developing options for guarding against oil spills associated with offshore drilling, as well as making recommendations for changes to Federal laws, regulations and industry practices to improve the safety of the offshore drilling industry. On January 11, 2011, the Commission presented its report to the President. On February 11, 2011, the Subcommittee on Coast Guard and Maritime Transportation and the Subcommittee on Water Resources and Environment held a joint hearing on the Commission's recommendations.

The Commission made several recommendations to change offshore oil drilling industry practices and revise Federal government oversight of the industry through amendments to existing laws and regulations. The following recommendations pertain to the Coast Guard:

- EPA and Coast Guard should establish distinct plans and procedures for responding to a “Spill of National Significance” (SONS).
- EPA and the Coast Guard should bolster state and local involvement in oil spill contingency planning and training and create a mechanism for local involvement in spill planning and response similar to the Regional Citizens’ Advisory Councils mandated by OPA.
- The Coast Guard should issue guidance that offshore barrier berms and similar dredged material barriers generally will not be authorized as an oil spill response measure in the National Contingency Plan or Area Contingency Plans.
- The National Response Team should develop and maintain expertise within the Federal government to oversee source-control efforts.
- The National Response Team should develop and maintain expertise in the Federal government to obtain accurate estimates of flow rate or spill volume early in a source-control effort.
- The Coast Guard should provide scientists with timely access to the response zone so that they can conduct independent scientific research during an oil spill response and long-term monitoring in the future.

The Commission’s report is available on the internet at the following website:
<http://www.oilspillcommission.gov/final-report>.

WITNESSES

Rear Admiral Paul Zukunft
Assistant Commandant for Marine Safety, Security and Stewardship
United States Coast Guard

Admiral Thad Allen (Retired)
National Incident Commander
DEEPWATER HORIZON Oil Spill

Vice Admiral Roger Rufe, USCG (Retired)
Chairman, Incident Specific Preparedness Review
DEEPWATER HORIZON Oil Spill

Mr. Stephen Caldwell
Director, Homeland Security and Justice Issues
Government Accountability Office

Accompanied by:
Mr. Frank Rusco
Director, Natural Resources and the Environment
Government Accountability Office

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WEDNESDAY, NOVEMBER 2, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COAST GUARD AND
MARITIME TRANSPORTATION,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:59 a.m. in Room 2167, Rayburn House Office Building, Hon. Frank LoBiondo (Chairman of the subcommittee) presiding.

Mr. LOBIONDO. Good morning. The subcommittee will come to order. The subcommittee is meeting this morning to examine the lessons learned in the wake of the BP *Deepwater Horizon* oil spill, review the latest investigations into the causes of the spill, and the Coast Guard response to it, hear recommendations of those involved in investigations, and find out what actions the Service has taken or will take in response to those recommendations.

The BP *Deepwater Horizon* oil spill was an unprecedented tragedy. The explosion aboard the *Deepwater Horizon* tragically claimed the lives of 11 individuals and left a tremendous—almost unparalleled—natural and economic disaster in its wake. The Coast Guard mobilized over 7,500 personnel, and 150 assets from throughout the country to respond to the spill. While I am extremely proud of how the Coast Guard handled this incident, it is important that we review what went well and what we could do better in any future type event.

As such, today we will hear testimony on the Joint Investigation Team Report, the incident-specific preparedness report, and the Federal On-Scene Coordinator report. These reports each contain valuable insight into what caused the oil spill, and how the Federal Government responded to it.

Among the many findings and recommendations, a few stand out because they appear in nearly every report. Nearly all of the reports noted that the area contingency plans were not adequate for a spill of this magnitude, and that they must be updated to incorporate protocols for using dispersants and other response technologies, as well as the latest information on environmentally sensitive areas. They must also do a better job of involving State and local officials in the planning process. I hope the Coast Guard has

made some progress on this issue, and look forward to hearing when we can expect all ACPs will be revised.

I am also concerned with findings indicating the Coast Guard's oil spill response and Marine environmental protection mission has withered over the last decade, as a result of emphasis on homeland security missions. This is in line with the findings of the inspector general and others, which indicate that funding and resource hours dedicated to non-homeland security missions, as well as the oil spill response, research, and development activities have shrunk considerably over the last decade.

Finally, I am very concerned with the findings that officials at all levels of Government were unfamiliar with the national contingency plan, our Nation's 42-year-old blueprint on how to respond to oil spills. But I am particularly alarmed that senior leaders of the Department of Homeland Security were either unaware or simply misunderstood how the plan functions.

But these concerns speak to a larger issue this subcommittee has been concerned with since the Coast Guard was transferred to the Department of Homeland Security, and that is the Department does not understand nor appreciate the traditional missions of the Coast Guard. We talked about this extensively over the years, that when the Coast Guard has been asked to do so very much—and homeland security is a very critical mission—that the traditional missions cannot be overlooked.

And while critically important, port security accounts for only 20 percent of what the Coast Guard does on a daily basis. The remaining 80 percent are traditional missions like oil spill response. These missions require the Department's leadership to understand that they need to commit adequate resources and attention, as well as participate fully in training and preparedness activities.

MODUs like the *Deepwater Horizon* continue to operate in our waters, and will soon begin operations in Cuban waters. Each of these operations, if not properly regulated by the Coast Guard with the support of the Department, could potentially cause another catastrophic spill. As such, we cannot afford to sit back and take our time in implementing the lessons learned.

I look forward to hearing what the Coast Guard has done to date to implement the recommendations of these reports, and when they will complete action on the remaining recommendations.

With that, I would like to yield to Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman, and thank you for scheduling today's hearing to continue the subcommittee's oversight concerning the circumstances contributing to the *Deepwater Horizon* oil spill, and to hear recommendations to improve our energy development activities on the intercontinental shelf of the United States.

We learned a lot earlier this year, when members from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling in February provided us with their recommendations. I expect that this morning's witnesses will provide additional insights and new motivation for the Congress to take purposeful action.

The *Deepwater Horizon* oil spill was a major human and environmental disaster of potentially unprecedented proportions. The message today is the same as it was when we heard from the National

Commission 8 months ago. Undertaking deep water drilling requires a fuller understanding of the risks that accompany the clear benefits. It is great news that we now have a much more full understanding.

Several common themes run through the findings and recommendations contained in the various reports that we will review today, and many of these seem parallel—themes parallel the findings and recommendations contained in the National Commission's report.

For example, the Federal Government's regulation of offshore oil and gas drilling and of foreign-flagged MODUs was too lax. Also, Federal oversight of foreign-flagged registries and reliance on certifications of compliance issued by such registries deserves greater scrutiny.

Additionally, as reported in the Joint Investigation Team analysis, failures and deficiencies in the safety management system aboard the *Deepwater Horizon* and the dual command structure that existed prior to its demise each contributed to the disaster.

The need for greater integration and outreach on the State and local levels during the development of area contingency plans—or ACPs—also was emphasized in these reports. Moreover, efforts to better articulate the institutional and operational differences between Federal response efforts under the Oil Pollution Act and the Stafford Act are needed to improve coordination between Federal responders and their State and local partners.

Additionally, we learned that our limited tool box of response capabilities exposed a legitimate need for a new emphasis and resources to bolster research and development of new oil spill response technologies.

And, once again, these reports reaffirmed that the Jones Act, the law which protects and supports our domestic maritime industry, was absolutely no hindrance to the Federal Government's response to this environmental calamity. These reports also make clear that we need to provide Federal agencies with adequate resources to minimize the odds of another tragedy from happening again, and respond efficiently and effectively, should we have to.

The public depends on Federal agencies to ensure the safety of deep water drilling, and the safety of the men and women who work on those platforms. Diminishing this capacity through budget cuts is irresponsible, especially considering the call for increased investment borne out by these reports. As much as we may want the Coast Guard to do more with less, what this means in reality are fewer inspectors, less inspections, and less certainty for safe operations. And, as we have learned tragically, this has real consequences, in terms of loss of life and economic disruption.

Now that we have these recommendations in hand, Congress should act sensibly where it must to ensure that our policies for offshore drilling are rigorous, that they safeguard workers, that they benefit the economy, and protect the environment. Too many lives are at stake and too many jobs are at risk for Congress to remain complacent. If we cannot demonstrate that we can utilize our offshore resources in a way that protects lives and the environment, we stand to further lose our credibility and trust of the American people.

And that result could be devastating to the maritime industry, and the jobs that support our economy as a whole, including the ship builders, welders, and pipe fitters who work at places like Dakota Creek Industries, located in my district, who actually do work to develop and build supply vessels that support the energy industry in the gulf. No one is suggesting that we eliminate deep water drilling off our coasts. In fact, the record says just the opposite.

According to information provided by the Bureau of Safety and Environmental Enforcement, perhaps not all, but many of the drilling activities that were suspended as a result of this disaster have resumed operations. Moreover, 97.7 percent of the 1,413 requests to extend deep water oil and gas leases have been granted, and close to 300 new well permit applications have been approved since June 8, 2010.

But given what we now know about the risks of deep water drilling and the exposed deficiencies, we should put the pieces in place to ensure the highest level of safety and reliability. When the *Exxon Valdez* ran aground in Bligh Reef in Alaska in 1989, Congress responded with the passage of the Oil Pollution Act. And fortunately, over the past 22 years, the act has served its intended purpose, and greatly reduced the frequency and severity of oil spills in the navigable waters of the United States.

Nonetheless, the *Deepwater Horizon* disaster demonstrated a need to amend and strengthen the act to ensure that contemporary offshore drilling can be done safely, efficiently, and with minimal harm to the environment.

Last Congress, the House passed comprehensive legislation to reform and improve the Federal Government's oversight of energy development on the intercontinental shelf. The Senate did not act. Nevertheless, comparable legislation has been reintroduced this Congress, and that bill, H.R. 501, provides an appropriate starting point for discussions.

I suggest it is time for these discussions to begin in earnest, and I stand ready to work with Chairman LoBiondo and other members of this committee to shape legislation to meet this challenge.

And with that, Mr. Chairman, thank you for the chance to provide an opening statement, and I yield back.

Mr. LOBIONDO. Thank you. Mr. Mica, chairman of the full committee, would you like to make any opening remarks?

Mr. MICA. Well, just a comment, first, to thank you all for conducting this hearing. And it is important that our subcommittees conduct appropriate oversight, particularly of something so significant, so impacting on the Nation as the oil spill, the *Deepwater Horizon* incident, in which we lost lives and did damage to the environment of the gulf, and affected many of the surrounding States.

I hope from this hearing and from previous reports that we can also adopt measures and look at any changes in law or policy that can make certain that we have a better response when we do have an incident.

I am anxious to hear some of what will be the testimony given today in regard to progress of the Coast Guard and its ability to respond adequately and make certain that we give them the tools to—and again, any changes in Federal law that we need to make,

or in their response pattern, so that again they can do the job necessary.

I was concerned about several things I have heard lately. One is—will affect pending legislation to divide some proceeds from a legal settlement between the States and the Federal Government. And I think it is important that at some point the subcommittee ascertain who has been adequately compensated for their losses, and try to come up with some fair and balanced approach to make certain that people are made as whole as possible.

Congress will have to divide that compensation that the courts may soon decide upon, and we want it done fairly. I have told some of the participants that I our responsibility in Congress is representing the American people and the taxpayer, who did expend a considerable amount of resources and effort. And I thank the Coast Guard for their great job in helping direct the cleanup, and Admiral Allen's incredible work at a difficult time.

I was disappointed by some of the interagency problems that we experienced, particularly with EPA. It is making decisions that—on some of the chemicals and other treatment that was used back and forth, leaving the response in the lurch, so to speak, probably causing some delays and also uncertainty in what should move forward.

I think, finally, that it is nice to have the Federal Government prepared, and we have learned some lessons from this. A delayed response by the Federal Government, but finally getting in there. Part of that was based on inadequate flow information, and that can be corrected, and we will probably hear more about that today.

But I think, in the long term, the private sector has to be held responsible. They also need to be developing technologies or means to cap a spill like this as the disaster progresses. Some of those mechanisms, the technologies, equipment need to be in place. I understand they have taken some initiatives. I don't know how adequate they are, in case we ever experience something like this again.

And finally, that BP or anyone who was involved in and held responsible for this makes certain that folks are adequately compensated. I understand what initially started out as an adequate response to those affected has now experienced some problems, and people have not been adequately, again, assisted. And I think we have got to find out how we move that process forward and hold the private sector, as well as the Government's feet to the fire.

I thank you again for conducting this hearing. I hope some answers can evolve that will help us do our job better. And I yield back the balance of my time.

Mr. LOBIONDO. Thank you, Mr. Mica. We now welcome our panel of witnesses. We thank you very much for being here today.

Our panel includes Admiral Zukunft—I hope that is pronouncing it correctly. If it is OK with you, we will go with Admiral Z the rest of the way. The rear admiral is the assistant commandant for marine safety, security, and stewardship.

We also have retired Coast Guard Vice Admiral Roger Rufe, chairman of the *Deepwater Horizon* oil spill incident specific preparedness review, Mr. Steve Caldwell, director of the Government Accountability Office of homeland security and justice team, and

Mr. Caldwell is accompanied by Mr. Frank Rusco, director of GAO's National Resources and Environment Team.

I thank you all again for participating. Admiral Z, you are up.

TESTIMONY OF REAR ADMIRAL PAUL F. ZUKUNFT, ASSISTANT COMMANDANT FOR MARINE SAFETY, SECURITY, AND STEWARDSHIP, UNITED STATES COAST GUARD; VICE ADMIRAL ROGER RUFÉ, JR., (RETIRED), CHAIR, INCIDENT SPECIFIC PREPAREDNESS REVIEW, DEEPWATER HORIZON OIL SPILL, UNITED STATES COAST GUARD; STEPHEN L. CALDWELL, DIRECTOR, HOMELAND SECURITY AND JUSTICE, GOVERNMENT ACCOUNTABILITY OFFICE; AND FRANK RUSCO, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT, GOVERNMENT ACCOUNTABILITY OFFICE

Admiral ZUKUNFT. Good morning, Chairman LoBiondo, Ranking Member Larsen, and distinguished members of the subcommittee. I am honored to appear before you today to testify about the Coast Guard's status in regard to the 2010 Macondo 252 spill of national significance that resulted in a tragic explosion, loss of 11 lives, and sinking of the MODU *Deepwater Horizon*. I served as the Federal On-Scene Coordinator for over 6 months, leading more than 47,000 Federal, State, local, tribal, and private responders in the expansive response operation.

In the aftermath of the spill, the Coast Guard conducted a comprehensive review of several *Deepwater Horizon* after-action reports, including the incident-specific preparedness review, or ISPR, the Federal On-Scene Coordinator report, that I signed, the National Incident Commander's report, and the Joint Investigation Team Report. These reports provide a valuable body of lessons learned, perspectives, and opinions the Coast Guard is now using to spur initiatives that will ensure we are well prepared to respond to future spills of national significance.

While there are many areas for improvement that we are addressing through countless initiatives, we have concluded the overall response framework and the Oil Pollution Act of 1990 and the national oil and hazardous substance pollution contingency plan, or the NCP, is sound and effective.

The NCP established and organized a command and control structure that allowed the National Incident Commander and the Federal On-Scene Coordinator to effectively cooperate with one another while directly coordinating with other Federal, State, local, tribal, and private stakeholders to address the most critical needs.

Additionally, the NCP provided the necessary discretion and flexibility to address the very unique circumstances of the *Deepwater Horizon* response. Since the *Deepwater Horizon* spill, the Coast Guard and the Bureau of Safety and Environmental Enforcement, or BSEE, have forged an interagency partnership focused on improving compliance standards, oil spill response and preparedness efforts, and regulation of drilling activities on the outer continental shelf.

The director of BSEE and the Coast Guard deputy commandant for operations meet on a quarterly basis—and they are actually testifying together today—to discuss OCS activities. They have established working groups that are actively engaged on a wide range

of issues, including oil spill response planning, exercises, joint inspections, and of significant note, a comprehensive analysis of regional and area contingency plans. This effort includes a worst-case discharge gap analysis to identify the most accurate up-to-date information for offshore facilities in the Gulf of Mexico, Alaska, and Pacific regions.

One of the key lessons learned—one of our key lessons learned was that, although we planned with State officials, as prescribed in the national contingency plan, we need to drive the same effort down to the county, parish, local, and tribal levels. Accordingly, the Coast Guard has re-emphasized existing guidance to our district and sector commanders to develop an aggressive outreach program with local municipalities to facilitate a true whole-of-government approach under the NCP and future response efforts.

The various after-action reports highlighted 51 recommendations and areas for improvement. In response, the Coast Guard is reviewing each item and establishing goals, objectives, courses of action, and a timeline, as a followup. Our significant initiatives that are currently in progress include developing an on-scene Federal officer coordinating course, which has already been launched.

We have requested additional personnel in the President's budget for fiscal year 2012 to establish a national incident management assistance team that will provide immediate deployable incident management surge capability. We are working with DHS and the interagency to update documents and protocols, and we have also promulgated a National Incident Commander spill of national significance internal instruction that codifies a number of the lessons learned during the *Deepwater Horizon* response.

We are also implementing senior-level Coast Guard liaisons to State, local, and tribal levels during a future response. We have engaged with EPA and FEMA to develop improvements for whole-of-government responses under the national response framework and the national contingency plan, and we are also working closely with the national response teams, EPA and NOAA, to review and update guidelines for dispersant use and in situ burning, two tools that were critical in the *Deepwater Horizon* response.

The Coast Guard is aggressively pursuing updates to regulations governing activities on the outer continental shelf. These updates will identify safety gaps for critical equipment, as identified in the *Deepwater Horizon* reports, and reflect standards for new and emerging technological advancements within the industry.

On July 7, 2011, we announced policy in the Federal Register detailing a new risk-based oversight program that will target the highest risk foreign-flagged MODUs operating in the U.S. EEZ.

The Coast Guard is also addressing funding concerns with both the Oil Spill Liability Trust Fund and the research and development. To improve our response capability we need to modify current authorities to increase per-incident cap under the Oil Spill Liability Trust Fund permit multiple advancements from the fund to underwrite Federal emergency response activities, and provide access to funds for administration of claims.

There is also an urgent need to further invest in oil spill research and development funding. Fiscal year 2011 appropriations included \$4 million for oil spill response and development, and the Presi-

dent's fiscal year 2012 budget request includes R&D funding for spill response in the Arctic, Deepwater subsidy response, and for a full-time executive director on the interagency coordinating council on oil pollution response.

In conclusion, although we faced early challenges, particularly the technological challenges of oil recovery in sub-sea containment at a depth of 5,000 feet, the *Deepwater Horizon* oil spill response met its objectives through the prudent application of the national contingency plan, and unity of effort—of all efforts of Government and the private sector.

Gaps that are not addressed in the national contingency plan were implemented as best practices in the midst of this unprecedented response, and we continue to enact oil spill prevention and response initiatives with a focus on outer continental shelf activities.

Thank you for this opportunity to testify before you today, and I will be pleased to answer your questions.

Mr. LOBIONDO. Thank you, Admiral, very much.

Admiral Rufe?

Admiral RUFÉ. Good morning, Mr. Chairman and members of the committee, Ranking Member Larsen. I appreciate the opportunity to appear before you today to testify on the incident-specific preparedness review, which I chaired for the Coast Guard. My name is Roger Rufe. I am a retired Coast Guard vice admiral.

Our team was chartered by the commandant of the Coast Guard on the 14th of June—

Mr. LOBIONDO. Excuse me, Admiral, can you pull the microphone a little closer?

Admiral RUFÉ. Our team was chartered on 14 June 2010 by the commandant of the Coast Guard to assess the implementation and effectiveness of preparedness and response to the *Deepwater Horizon* oil spill. Our team was composed of 14 spill response experts from Federal agencies, State governments, industry, and a representative of the environmental advocacy NGO community.

It is important to note that we were focused solely on the oil spill itself, not on the fire and explosion, and that we were completely independent of the Coast Guard or any other oversight from the administration. We conducted 92 interviews, all of which were not for attribution, unlike some of the other investigations. Our members all signed nondisclosure statements and confidentiality agreements.

We are integrated fully with the President's National Commission, which was mentioned earlier. Their staff members participated fully in all of our interviews. And, in fact, chapter 5 of their report is based largely on the information gleaned during the process.

While the findings and recommendations of our report are all important, I would like to highlight a few and, at risk of being redundant, certainly some of them were mentioned already by the chairman and others, as well as by Admiral Z.

The ACPs are of uneven quality, especially with respect to identifying and prioritizing environmentally sensitive areas, and laying out detailed strategies for protecting them. It is also important that

they identify the resources that are necessary for responding to a worst-case discharge.

There is a need for the incident commander to quickly attain information dominance, and maintain it throughout the incident. A single source of authoritative information is critical to public confidence in the Government's response. It is also very difficult to achieve in our 24/7 cable news cycle, and in an era of social networking where it is so pervasive.

As already mentioned, there has been insufficient inclusion of local officials in the contingency planning or exercise process. That needs to be improved. And Admiral Z has already spoken to the fact that it is under scrutiny right now.

But the inadequacy of local involvement relates to my next point already mentioned, that it was unfamiliarity at all levels of Government on the national contingency plan, which led to what Admiral Allen described as the social and political nullification of the NCP.

State and local officials are much more comfortable with and familiar with the NRF model, which allows for the Stafford Act to support State and local officials with funding and resources, but the local officials are in charge. Obviously, that is different than the national contingency plan. And, as Admiral Z has already mentioned, our report indicates that we feel the national contingency plan is the right model for oil spill response, and there needs to be a better process of educating State and local officials in that process early in the game.

One thing not mentioned earlier is—and a central part of our report was—a failure of crisis leadership at virtually every level of response, from industry to Government, from Federal to local. Among the indications of this failure was the decisions being made on response tactics at political levels, rather than at the level of the response experts, which led to response tactics being implemented which were known to be inadequate at the outset and delayed, in many cases, an adequate response.

And finally, I want to emphasize the issue of funding. It was clear to our team that the support of the Coast Guard's oil spill preparedness program following the *Exxon Valdez* spill had atrophied over time. This was partly due to the preventative program's doing so well in lowering the number of major oil spills. But it also resulted from diversion of funding to critical homeland security responsibilities.

This is not an either/or proposition. The Coast Guard and the administration need to propose, and the Congress needs to provide, adequate funding to the Coast Guard for all of their critical missions.

Thank you, Mr. Chairman. I will be happy to answer your questions.

Mr. LOBIONDO. Thank you, Admiral.

Mr. Caldwell.

Mr. CALDWELL. Good morning, Chairman LoBiondo and Ranking Member Larsen, other members of the committee. I am pleased to be here to discuss the oversight of offshore facilities, based on some of the work GAO has done recently. As noted, I am accompanied

by Frank Rusco here, who is a director in our Natural Resources and Environment Team.

GAO has done a variety of work related to the *Deepwater Horizon* oil spill. We have reviewed the management of the Oil Spill Liability Trust Fund. My team has done work on protection efforts by the Coast Guard to secure these facilities from terrorist attacks. And Mr. Rusco's team has done work on Department of the Interior and their oversight of offshore facilities.

Today my testimony will focus on inspections of offshore facilities. It summarizes work we have done at both the Coast Guard and Department of the Interior. Such inspections are meant to ensure compliance with a variety of regulations, but particularly those related to security, safety, and production. One of the key purposes of these inspections is to prevent the type of incident that happened with the *Deepwater Horizon*.

Regarding the Coast Guard, we found that the Coast Guard had taken a number of steps, which are detailed in our recent report, to secure offshore facilities. However, one of the key components of the Coast Guard regime for security, the inspections, had not been done for the majority of the offshore facilities. Of the approximately 50 offshore facilities, the Coast Guard had only conducted 13 percent to 45 percent of the required inspections, depending on the year.

The reasons for not conducting these inspections varied. Some of this was confusion over which Coast Guard unit should conduct inspections and confusion over which types of facilities should be inspected. Some Coast Guard units were not tracking which inspections were coming up. And finally, there was reliance on owners and operators to tell Coast Guard when they needed inspections.

In addition, the Coast Guard's database for planning, conducting, and evaluating such inspections had a number of limitations, in terms of consistency, accuracy, and duplication of the data.

Regarding the Department of the Interior, we also found that the agency was not conducting all of the inspections required to fulfill its regulatory role. The Coast Guard delegates certain safety inspections to the Department of the Interior. And according to Interior officials, they met their internal targets for safety inspections, but those internal targets were only set at 10 percent of facilities within a given year. Interior has not met its internal targets for regulatory inspections to measure the production of oil and gas. These production inspections are important because they determine how much revenue is due the U.S. Government, as well as which facilities the Coast Guard then puts under its security regime.

We found that Interior had met its target for production inspections in only 1 of the 4 years we reviewed. We found Interior was not able to meet these inspections for reasons generally related to personnel, such as hiring, training, and retaining inspectors. More recently, we are concerned that Interior's reorganization of its bureau and its processes will further reduce the number of inspections being conducted.

Our written statement also goes into detail on the Coast Guard's security authorities over MODUs such as the *Deepwater Horizon*. And these authorities, in some ways, are more limited than they are for some of the other types of offshore facilities.

In summary, our work has shown deficiencies in both the Coast Guard and Department of the Interior regimes for doing these inspections. These deficiencies ultimately hinder these agencies' ability to ensure that the regulatory requirements are met for security, safety, and production. We have recommendations to the Department of the Interior, as well as the Coast Guard. I am glad to say the agencies both have steps underway to take corrective action.

And hopefully, our collective activities of the agencies of GAO and the Congress will help prevent another disaster like the *Deep-water Horizon*.

In closing, thank you very much. Mr. Rusco and I would be happy to answer any questions.

Mr. LOBIONDO. OK, thank you, Mr. Caldwell, very much.

Admiral Z, this is for you. Over the last year, five reports or investigations have come back on the causes of the spill and the Coast Guard response to it. These investigations and reports include several hundred recommendations for the Coast Guard to review and to implement to improve the safety of the offshore energy industry prevention of oil spills, and the Service's response to the spills.

With the exception of the Joint Investigation Team Report, we do not know whether the Coast Guard is currently taking action on any of these recommendations, and which they will take action on in the future. Can the Coast Guard provide this subcommittee with a list of the recommendations that the Coast Guard is taking action on, and which ones they intend to take action on for each of the five reports?

[The information follows:]

Insert for the Record (Page 30, Following Line 617):

Below is a list of recommendations from the Federal On Scene Coordinator Report (FOSC); Incident Specific Preparedness Report (ISPR); Joint Investigative Team Report (JIT); National Incident Commander Report (NIC) and National Commission Report (NC) on which the Coast Guard is taking action, Coast Guard intends to take action, no Coast Guard action is being taken, and which are recommendations for other agencies/entities.

Coast Guard Currently Taking Action:

Source Report	Report Recommendation
FOSC	Safety: The agencies charged with oversight of both worker and public safety, and those in command positions, from the federal and state governments, as well as the RP, made safety a priority. Considering the size of the response, the amount of oil released, the geographic scope of the area where response operations took place, and the time of year, the safety record of the entire response operation reflected an effective and persistent safety program. The efforts and commitment to ensure the safety of those who worked on the spill and of the public is one of the single most notable accomplishments of the Deepwater Horizon response.
FOSC	The Need for a Common Information Reporting Template: The response demonstrated the need to accurately capture where all of the resources were, what was deployed, what was staged, and what activities had taken place. Incident Action Plans are not suitable to communicating the status of the response to those outside the incident command. This is particularly true the larger the response. Pre-determined information reporting templates designed for executive use, along with established processes, including reporting times and protocols to limit information reporting outside the framework, are necessary. In any major spill the ability immediately to report accurate information about response activities and resources is essential.
FOSC	Common Operating Picture: The National Oceanic and Atmospheric Administration's (NOAA) Environmental Response Management Application (ERMA) was scalable and capable of performing as a Common Operating Picture (COP). It is currently available and unclassified. During the Deepwater Horizon response, it was modified to make much of the data in the COP available to the public. Because of its success, ERMA should be adopted as the COP for oil spill response. The need for a COP is linked to the requirement for a common information reporting template—it is essential to be able to adequately communicate with officials, the public and the media, as well as communicate within the response, in a uniform manner.
FOSC	Inventory of Response Equipment: The National Response Inventory does not function as an inventory of exactly what equipment is available throughout the country at any given time. Rather, it is a source against which OSRO classifications can be validated. An inventory of available spill response resources, ready for deployment, should be available and accessible to Federal On-Scene Coordinators (FOSCs). This would extend beyond what is in a specific vessel or facility's response plan and include trained personnel and physical equipment. If a measure of "excess inventory" for a long-term spill, or multiple spills, had been available, it would have been useful and utilized during the Deepwater Horizon Response.
FOSC	Area Contingency Plans: This response exposed a number of issues about the Area Contingency Planning process that need to be re-examined. There exists no bridge between Area Contingency Plans to provide an overarching construct to deal with spills that cross Area Contingency Plan boundaries. Such a means to coordinate across Areas is necessary.

	<p>For example, if two adjoining areas list the same equipment to meet planning requirements, and a spill impacts both Areas, existing plans do not account for simultaneous demands for the same resources. Worst Case Discharge amounts listed in Area Contingency Plans are ship and shore side facility focused. In the context of Plans covering locations where offshore drilling is taking place, Area Contingency Plans need to be coordinated with BOEMRE and the worst case discharge assumptions need to include the potential for a well blow out.</p>
FOSC	<p>Local Government Involvement: The plans currently assume any of the interests of local government are coordinated and represented through state involvement in the contingency planning process. While this may be true in many locations, it was not for all of the states impacted by the Deepwater Horizon. Since any spill impacts the local government of the affected area, as well as the state government, creating an explicit role for local government in the planning process is advisable. It was necessary in the case of a real spill.</p>
FOSC	<p>Other State Agency Involvement. States generally designate a specific agency as the one primarily responsible for carrying out the state's responsibilities under the NCP. For most spills, that works well. But the rest of state government is generally unaware of what happens in oil spills, until there is a major one and then, when a broader range of agencies and actors within state government become involved, lack of prior participation becomes problematic. Ensuring broader buy in by state government of contingency plans would enable state government to more easily adapt to wider participation for major events.</p> <p>Area Committees need to meet regularly in order to make sure the Area Contingency Plans are accurate and useful. Lack of regular meeting allows the plans to become outdated. Federal, State, Tribal, and Local government officials, as well as facility owners, become less familiar with one another. This allows for a breakdown in the planning process and reduces the efficacy of the plans themselves. Area Committees need to meet at a required level of frequency.</p> <p>Detailed planning and testing of response strategies is necessary. When committees do not meet frequently enough, the plans do not develop into detailed response strategies. Additionally, the plans need to be tested in order to be useful. When such gaps exist, it can lead, as it did in this response, to a requirement to negotiate those details in the midst of a response, and thus less than optimal results. The limitations of protective booming in open seas and in fast currents, for instance, are better understood through real deployment and exercises.</p>
FOSC	<p>State Integration into Unified Command: The NCP contemplates a robust role for states in the unified command structure. In the Deepwater Horizon response several of the states essentially did not embrace their role, by either not participating in the unified command, or not empowering their representatives to make decisions. Because of the high visibility and broad impact of any major spill, it is to be expected that more of state government than the oil spill response specialists will have to be involved. The NCP needs to anticipate such needs and find a way to still integrate state participation in the unified command construct.</p>
FOSC	<p>External Affairs: In order to meet the media demands of a large spill response, a robust external affairs staff, including one large enough and with the requisite skills to engage with social media is necessary. Also, it is important to be able to maintain a consistent battle rhythm for media engagements: daily press availabilities, press releases, management of embed opportunities, over flights, interview opportunities, etc.</p>
FOSC	<p>Ineffective Boom Deployment: Extensive petroleum-based containment boom was deployed in unmanageable areas, and then retrieved and disposed of as waste. Tending such long expanses of containment boom along the vast Gulf of Mexico shorelines while subject to</p>

	<p>tide, current and sea conditions, was not possible. Environmentally sensitive areas (ESAs) where containment boom was appropriate were not shown in plans, tested, or identified well. U.S. Fish and Wildlife Service (FWS) noted that this resulted in oil getting to the opposite side of boom, and then held it on the wrong (protected) side of the boom against the ESA. It proved difficult to explain the nuances of entrainment and permeability of containment and deflection boom. Most of the boom was counter-productive, but became viewed as necessary as oil approached the shore from 50 miles at sea.</p>
ISPR	<p>The Coast Guard should undertake an aggressive outreach program to engage State Governors, parish, county, and city officials, tribes, and emergency managers and local NGOs in the ACP planning process. This should be an ongoing process that recognizes changes in administrations and personnel turnover.</p>
ISPR	<p>The Coast Guard should review and evaluate ACPs and Area Committees around the country to determine best practices, including the establishment of subcommittees, executive steering committees, and State co-chairs. Based upon this review, the Coast Guard should develop guidelines and minimum standards for the scope, conduct, and composition of Area Committees nationwide.</p>
ISPR	<p>The Coast Guard should ensure that critical ACP components required by the NCP and Coast Guard policy are incorporated into ACPs and clarified for Area Committees, including but not limited to WCD scenarios from OSRPs where appropriate; identification and prioritization of environmentally sensitive and economically important areas; near-shore containment strategies; offshore control and removal strategies; the identification of equipment, trained personnel, and response resources to implement the tactics and strategies for a WCD.</p>
ISPR	<p>The Coast Guard should request that the National Response Team review and revise the NCP as necessary to incorporate advances in response management and planning, including Incident Command System doctrine and prescribe mission assignments for a Spill of National Significance event.</p>
ISPR	<p>The Coast Guard should build upon the successes achieved through the development of the COP systems used during the Deepwater Horizon incident. The Coast Guard should have a fully operational COP tool that will be available during drills, exercises, and actual events.</p>
ISPR	<p>The Coast Guard should ensure that crisis management and communications training and skills are factors used to select Sector Commanders.</p>
ISPR	<p>The Coast Guard should select and train qualified crisis managers to act as Area Command or Area OSCs as needed due to an incident's size, complexity, or scope.</p>
ISPR	<p>The Coast Guard should develop a graduate program for crisis management utilizing existing programs, such as the National Preparedness Leadership Initiative at Harvard University and the Institute for Crisis, Disaster and Risk Management at The George Washington University, to enhance knowledge of all facets of crisis management at the junior officer level and create a new cadre of crisis management experts.</p>
ISPR	<p>The Coast Guard should fully and aggressively adopt the application of the "Area Command" concept, articulated in NIMS, for all major incidents that pose a substantial threat to public health and welfare, not just oil spills.</p>
ISPR	<p>The Coast Guard should select and train qualified crisis managers to act as Area Command or Area OSCs as needed due to an incident's size, complexity, or scope.</p>
ISPR	<p>The Coast Guard should institutionalize the National Incident Commander concept through the pre-identification and selection of prospective National Incident Commanders based on their potential to perform the functions of a National Incident Commander during a national-level oil spill or other significant domestic incident.</p>

ISPR	The Coast Guard should work with DHS to formally reconcile the role of the DHS Secretary (under HSPD-5 authorities) and the National Incident Commander (under NCP authorities) during a SONS event. This includes: 1) Articulating the option of delegating the DHS Secretary authority to an alternate for events of extended duration; 2) Clarifying the roles and responsibilities of the PFO (e.g., food safety, public health, economic impacts, and critical infrastructure) and addressing areas of potential overlap with the National Incident Commander; 3) Incorporating HSPD-5/PFO roles and responsibilities into the NCP and 4) Clarifying the role of the DHS Secretary/PFO with regard to the NRT.
ISPR	The Coast Guard should continue to provide clarification and instruction to senior officials and DHS staff regarding the NCP/National Response System processes.
ISPR	The Coast Guard should recommend to DHS that future SONS exercises be elevated to National Level Exercise status in order to require participation by senior Federal officials. These exercises should include the participation of the PFO, a National Incident Commander, and the NIC organization.
ISPR	DHS should consider the National Incident Commander concept as a model for pre-designating experienced crisis leaders for managing other large, protracted domestic incidents.
ISPR	The Coast Guard should work with DHS to reconcile the NRF model of external communications with the NRT JIC model.
ISPR	The Coast Guard should work with DHS to develop a singular "whole of Government" crisis communications construct in preparation for future events of this magnitude. This construct should provide doctrine to: 1) Incorporate external influences on messaging and external communications from outside the response organization; 2) Identify the qualifications, roles, and responsibilities of DHS and Coast Guard officials who will develop, oversee, and administer the crisis communications program throughout the incident; 3) Encompass the full range of public information mediums (including social media) used during the Deepwater Horizon incident; 4) Define the roles and responsibilities of the PIAT, JIC (including national level), and LNO and develop protocols to coordinate their involvement in crisis communications; and 5) Establish protocols for efficient internal communications within the response organization (e.g., NIC, UAC, ICPs) that allow for coordinated messaging (one message, many voices).
ISPR	The Coast Guard should ensure that ISB equipment inventory, locations, and availability in the United States is made a part of the Response Resources Inventory (RRI) to ensure consistent reporting and recording of ISB equipment for use by Area Committees. Consideration should be given to expanding the inventory to include international capability as well.
ISPR	The Coast Guard should develop an enhanced Crisis Management Training program at Training Center Yorktown separate from the current FOSC Crisis Management Course, which builds on the current course, but that focuses on crisis leadership, crisis decision-making, large-scale organizational development, intergovernmental relations, and crisis communications. Successful completion of this course should be a prerequisite to assignment to any position of responsibility that may entail managing a crisis.
ISPR	The Coast Guard should request that the BOEMRE verify the availability of appropriate private sector subsea containment equipment, vessels, personnel, and capabilities for collecting flow from pipelines, risers, blowout preventers, flanges, and other subsea equipment at any water depth at which exploration and development activities are taking place.
ISPR	The Coast Guard, in cooperation with BOEMRE, should revise the current BOEMRE/Coast Guard Memorandum of Agreement to provide for routine BOEMRE participation in Area Committees in regions where offshore drilling is undertaken or contemplated to help ensure

	integration of the OSRP and ACPs and the availability of equipment, trained personnel, OSROs, vessel programs, and other response resources to implement near-shore recovery and protection strategies.
ISPR	The Coast Guard, in cooperation with BOEMRE, should establish requirements for review of OSRPs to assess the adequacy of planning and preparedness that ensures the availability of resources and response strategies to address the WCD scenarios for OSRPs.
ISPR	The Coast Guard should amend its Incident Management Handbook to provide for a "Flow Rate Technical Group" or its equivalent comprised of appropriate members of the scientific or technical community to be established as quickly as possible following an uncontrolled source event, or other event as appropriate. Depending on the size and complexity of the event, this group should be established at the ICP, UAC, or National Incident Command level as appropriate.
ISPR	The Coast Guard should review the relationship of plans described in the NCP and ensure that it accurately reflects current doctrine.
ISPR	The Coast Guard's Areas and Districts should be more involved in the contingency planning process to ensure high-quality regional plans that encompass coastal regions.
ISPR	The Coast Guard, with other appropriate agencies, should undertake a detailed review of EDRC, equipment caps, and other planning standards for oil spill response equipment and technologies to ensure that these planning standards accurately reflect equipment and best available technology capabilities in different operating environments. This review should ensure that adverse weather considerations are included as part of the planning standards.
ISPR	The Coast Guard should update its existing ACP policy guidance and provide increased oversight to ensure Area Committees are developing comprehensive and functional ACPs nationwide.
ISPR	The Coast Guard should ensure that critical ACP components required by the NCP and Coast Guard policy are incorporated into ACPs and clarified for Area Committees, including but not limited to WCD scenarios from OSRPs where appropriate; identification and prioritization of environmentally sensitive and economically important areas; near-shore containment strategies; offshore control and removal strategies; the identification of equipment, trained personnel, and response resources to implement the tactics and strategies for a WCD.
ISPR	The Coast Guard should request that the National Response Team review and revise the NCP as necessary to incorporate advances in response management and planning, including Incident Command System doctrine and prescribe mission assignments for a Spill of National Significance event.
ISPR	The Coast Guard should develop a program to ensure that the equipment, trained personnel, and other response resources to implement protection strategies are available and contained in ACPs
ISPR	The Coast Guard should emphasize the importance of lessons learned in all initial as well as advanced Coast Guard spill response training courses and exercises.
ISPR	The Coast Guard should review statutory basis for reserve activation to ensure that it is adequate for sustaining operational requirements during long-duration incidents.
ISPR	The Coast Guard should become familiar with the EMAC process and develop a process for identifying and contracting for qualified State personnel and equipment that is suitable for oil spill responses.
ISPR	The Coast Guard should renew their efforts to promote NIMS/ICS training to a variety of organizations that could potentially be involved in a large response, including non-governmental organizations.
ISPR	The Coast Guard should formally establish an NIMS/ICS technical advisor position into its NIMS/ICS doctrine and IMH.

ISPR	The Coast Guard should review NIMS/ICS doctrine and determine appropriate protocol for Federal Agencies to provide input and advice at the UC level. The Coast Guard should consider having other Federal Agency representatives, as needed; function as advisors rather than as members of the UC (similar to the NOAA Scientific Support Coordinator).
ISPR	The Coast Guard should consider the use of alternative formats or reducing overall size to improve functionality and tactical application of large incident IAPs.
ISPR	The Coast Guard should develop more comprehensive guidance for location, function, and effectiveness of Branches during a major incident. Branch locations should be carefully selected based on geographic, jurisdictional, and/or political considerations.
ISPR	During future incidents, the Coast Guard should carefully select the location of ICPs based on proximity to the spill, but also consider geographic, jurisdictional, and/or political ramifications.
ISPR	The Coast Guard should capture the best practices from the Deepwater Horizon LNO Program and use them to update LNO policy guidance. Mid-level and senior officers should receive LNO training on how to implement an effective LNO program.
ISPR	The Coast Guard should consider including the RFI Unit as a component of the Situation Unit at appropriate levels within the response organization as part of its NIMS/ICS doctrine and IMH.
ISPR	The Coast Guard should ensure that its personnel mobilization, management, and tracking system allow the identification of individuals' ICS qualifications. This information should specify incident management skills, including incident experience, to allow sustainability of operations during a significant oil spill.
ISPR	The Coast Guard should ensure that unit operational plans contain pre-established and complementary rotation schedules and encourage other response partners to follow suit.
ISPR	The Coast Guard should engage with the Emergency Support Function Leaders Group (ESFLG) at the senior level to ensure visibility of NCP processes with that coordinating body.
ISPR	The Coast Guard should determine ways that it may fully utilize organizational components created by the NRF in oil spill response plans, including State and county Emergency Operations Centers.
ISPR	The Coast Guard should coordinate with FEMA and the EPA on a review of the NCP and NRF structures and propose methods to revise as necessary to ensure clarity during a catastrophic event; e.g., is an Operations section needed in the UAC; how would a UAC and JFO interact if a major hurricane/earthquake affected a SONS scenario.
ISPR	The Coast Guard should engage EPA and NRT to validate and/or update the NCP in light of Deepwater Horizon incident, including SONS, the National Incident Commander, and its relationship to HSPD-5 and the PFO role of DHS Secretary. The roles of the White House, PFO, National Incident Commander, NIC organization, NRT, and UAC should be clarified and roles for the elected State and local elected officials established.
ISPR	The Coast Guard should work with FEMA to promote NIMS/ICS training for all Federal, State, and local officials who may be involved in oil spill response.
ISPR	Although NIMS/ICS generally worked well for this incident, SONS doctrine should be adapted to ensure more effective inclusion of State/local and tribal governments in the response organization
ISPR	The Coast Guard should conduct education and outreach programs with State and local governments, familiarizing officials on the NCP preparedness and response construct.
ISPR	The Coast Guard should review the UAC organizational structure necessary for a large-scale incident. The Coast Guard should review UAC doctrine and clearly define UAC positions, roles, and responsibilities, as well as recommended staffing standards.
ISPR	The Coast Guard should clearly define the requisite training and experience necessary for

	the UAC and ICP organizations and ensure that it has sufficient numbers of trained personnel available to staff those positions during a large-scale incident.
ISPR	The Coast Guard should ensure that select personnel are trained to fulfill the role of the National Incident Commander, Deputy, and other key NIC organization positions in a SONS event. These personnel need to be pre-identified and trained in future SONS exercises, and billeted to a notional NIC organization that could be activated immediately.
ISPR	The Coast Guard should identify the personal and leadership traits of a National Incident Commander.
ISPR	The Coast Guard should ensure that a system is in place during an incident to gather feedback from ICPs and the FOSC as to the effectiveness of the NIC, areas of assistance, and areas of interference. There should be push-pull communications between NIC and FOSC.
ISPR	The Coast Guard should ensure that NIC doctrine prohibits or discourages the NIC from making tactical decisions. While some decisions are necessarily politically driven (see the chapter on Political Demands), the NIC should strive to assist the UAC and ICPs in dealing with and minimizing the political influence on operational decision making.
ISPR	The Coast Guard should work with the NRT to ensure that NIC doctrine addresses the role of the NRT during a SONS event, even if an IASG is established.
ISPR	If the NIC is required to handle national media or ensure unity of messaging, the Coast Guard should ensure that NIC doctrine provides for an information center within the NIC organization.
ISPR	The Coast Guard should reevaluate the ICS structure to ensure that State and local representatives are appropriately incorporated in this organization. This structure should be scalable to allow representation according to the geopolitical subdivisions of a particular region.
ISPR	The Coast Guard should institutionalize the LNO Program into NIMS/ICS doctrine and revise the Incident Management Handbook to reflect the roles, responsibilities, and reporting chain for the LNOs.
ISPR	The Coast Guard should revise the IMH and other spill response doctrine to define the role of the National Incident Commander and the NIC organization.
ISPR	The Coast Guard should leverage existing relationships with SOSCs, Local Emergency Preparedness Committees, and State and Local emergency management agencies as a way to facilitate communications between the Federal Government and elected officials at the State, parish, and county level. Encouraging active participation by Governors, parish, and county representatives in the Area Committee planning process is an excellent avenue to establish these lines of communication.
ISPR	The Coast Guard should ensure that guidance to Area Committees requires regular Area Committee meetings and that ACPs are reviewed at least annually or more frequently as determined by the Area Committee.
ISPR	The Coast Guard should maintain minutes of Area Committee meetings and ensure that they are archived on Coast Guard's Homeport Web site.
ISPR	The Coast Guard should ensure oversight of Area Committees by conducting standardization visits by Districts or other program managers
ISPR	The Coast Guard should identify innovative ways (such as grants, delegation of certain planning functions, State participation as co-chair, or alignment of State jurisdictional boundaries with ACP boundaries to increase their participation in Area Committees) to include local government officials.
ISPR	The Coast Guard should ensure that ACP policy provides for improved State and local participation in ACP development, including participation by industry and OSROs, and that it provides for familiarization of ACPs with senior officials in State and local governments.

ISPR	The Coast Guard and each respective RRT should conduct a comprehensive review of all Gulf region ACPs to ensure that they include a fully developed Fish and Wildlife and Sensitive Environments Plan. This review should also include a process to ensure consistency among Gulf ACPs in the identification and protection of ESAs.
ISPR	The Coast Guard should develop procedures to ensure stakeholder participation in the identification and prioritization of ESAs. This may include funding.
ISPR	The Coast Guard should look to ACPs that adequately address the identification, prioritization, and protection strategies for ESAs, and adopt the best practices as a benchmark for other planning areas. ACPs in Texas or California may be appropriate models for this purpose. An enhanced version of the Consensus Ecological Risk Assessment may also help in developing minimum standards for all ACPs covering coastal areas.
ISPR	Once ESA protection strategies are developed, the Coast Guard should ensure that these strategies are periodically exercised in full deployment exercises.
ISPR	The Coast Guard should work with the Environmental Protection Agency (EPA) to amend the NCP so as to enhance the concept of RCPs and ensure that planning for coastal spills can encompass areas larger than standard Federal regions.
ISPR	The Coast Guard should work with the EPA to amend the NCP in order to provide more detailed guidance on the development of RCPs.
ISPR	To supplement suggested changes to the NCP, the Coast Guard should provide enhanced guidance for RCP development such as implementation guidance for the VOO program, economic/commercial priority protection strategies, and volunteer coordination, among others.
ISPR	The Coast Guard should request that BOEMRE, as appropriate, require that OSRPs include plans for spill abatement including the drilling of relief wells.
ISPR	The Coast Guard should request that BOEMRE, through regulatory or other means, require response planning sufficient to address offshore, near-shore, and in-shore oil containment and recovery to address operations for the duration of relief well drilling or until other spill abatement efforts are successful.
ISPR	The Coast Guard should ensure that publicly released flow rate estimates contain the potential WCD spill volume associated with the event.
ISPR	The Coast Guard should ensure that public affairs policy dictates that information provided to the media on flow rate is based only on fact and not conjecture. In the absence of factual information, public affairs policy should ensure that information providers acknowledge the uncertainty and efforts to obtain reliable information.
ISPR	Initial response to future uncontrolled spill events should be based on the predetermined WCD estimate used in the oil spill response plan until an accurate and verifiable flow rate is determined.
ISPR	The Coast Guard should request that the National Academy of Sciences update their 2005 study "Oil Spill Dispersants: Efficacy and Effects" on the application of dispersants in light of lessons learned from the Deepwater Horizon incident, including a determination of the effectiveness and net environmental benefits of subsea dispersant application.
ISPR	The Coast Guard should request that the National Response Team (NRT) provide national guidance on pre-authorizations for dispersant use, including the potential for subsea dispersant use, application methods, volume limitations, and an expedited approval process within the Incident Command System.
ISPR	The Coast Guard and EPA should clarify NCP provisions regarding Federal Agency roles and responsibilities in using dispersants as a response option.
ISPR	In areas where dispersants are pre-authorized, the Coast Guard should require plan holders to include use of dispersants as a response option, and include the necessary resources to detect oil and conduct dispersant operations using personnel trained and qualified in the

	application of dispersants.
ISPR	The Coast Guard should engage EPA and the National Oceanic and Atmospheric Administration (NOAA) to continue to enhance SMART monitoring technologies and protocols in offshore environments.
ISPR	The Coast Guard should engage EPA and NOAA to undertake more research and development to better determine oil slick thickness.
ISPR	The Coast Guard should seek ways to encourage additional investments in dispersant application equipment and training by industry.
ISPR	The Coast Guard should engage NOAA, and other agencies as appropriate, to develop programs to monitor and track large dispersed oil plumes.
ISPR	The Coast Guard should fully fund and use the CERA process to inform RRTs of the environmental and economic tradeoffs of dispersant use.
ISPR	The Coast Guard should request that the NRT develop a comprehensive system for educating the public and senior officials on dispersants as a response tool, and act as a clearinghouse for new or updated dispersant science and technology.
ISPR	The Coast Guard should ensure that response training course curricula include the use of dispersants as a response tool, including the potential net environmental benefits and the current state of science regarding dispersants.
ISPR	The Coast Guard should request that the NRT perform an intensive analysis of all aspects of dispersant use during the Deepwater Horizon incident. This analysis would be used to develop national standards and guidelines that can be used by RRTs to update the dispersant guidelines in their AOR.
ISPR	Through the National Response Team, the Coast Guard should provide guidance to all RRTs indicating that they review and update ISB Guidelines in their AOR consistent with the lessons learned from the Deepwater Horizon incident. These guidelines should specify areas in which ISB cannot be used, where it can be used without further consultations (such as incidents occurring farther than a predetermined distance from the nearest land or other ESAs), and provide for expedited review and approval processes in other areas.
ISPR	The Coast Guard should engage EPA and Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to consider additional incentives to encourage the stockpiling of ISB equipment where ISB can be used and would be effective.
ISPR	The Coast Guard should ensure that ISB equipment is regularly checked as part of the National Strike Force Coordination Center's Preparedness Assessment Visit or other inspection procedure or protocol.
ISPR	The Coast Guard should ensure that deployment drills and exercises of ISB equipment are conducted as part of an OSRO drill and exercise program in areas where ISB is considered a significant tool for response.
ISPR	The Coast Guard should adopt the final report by the Research and Development Center regarding ISB as an ISB Operations Manual and further develop a program to capture operational information and key lessons learned from the Deepwater Horizon incident and other tests and incidents involving ISB.
ISPR	The Coast Guard should work to enhance research and development programs on ISB to develop more robust booming systems with greater oil encounter rates as well as to expand the weather/sea state of opportunity in which ISB can effectively be used and investigate the potential for enhancing burn operations with the use of herding agents and demulsifiers.
ISPR	The Coast Guard should evaluate the performance of various fire boom designs capable of being used for ISB and look to improve technologies for water-cooled and reusable boom types.
ISPR	The Coast Guard should support a research and development program to enhance aerial

	detection sensor capability to locate concentrations of oil necessary for ISB operations.
ISPR	The Coast Guard should develop a report template that captures the oil spill response essential elements of information and other key metrics (based on best practices identified from the Response at a Glance, COP, and ICS 209 forms used during the Deepwater Horizon incident) to meet the information needs of key stakeholders during future responses.
ISPR	The Coast Guard should revise its Incident Management Handbook to include appropriately sized information management and knowledge management structures (similar to the RFI Unit used during the Deepwater Horizon incident) that would be implemented for a significant oil spill.
ISPR	The Coast Guard should work to resolve compatibility problems between software programs and information technology systems that are used by the public and private sectors during oil spill response operations. The Coast Guard should require developers of these tools to ensure that their products are compatible.
ISPR	The Coast Guard should determine how the knowledge management systems used during the Deepwater Horizon incident (e.g., HSIN) can be improved to better meet the needs of an oil spill response organization during a future significant oil spill.
ISPR	The Coast Guard should document and track crisis management training and experience for officers at all levels.
ISPR	The Coast Guard should ensure that prospective Sector Commanders are required to attend the OSC Crisis Management Course at Training Center Yorktown prior to assignment.
ISPR	The Coast Guard should establish a comprehensive crisis communications training program for all personnel who could be involved in future incidents.
ISPR	During large incidents, the National Incident Commander should be employed early on as the primary spokesperson for the Federal Government.
ISPR	The Coast Guard should work with DHS and re-evaluate the application of standard Coast Guard public affairs policy guidance for large-scale incidents that generate national public and media interest.
ISPR	The Coast Guard should develop pre-approved briefing materials on a wide range of topics (e.g., dispersants, SONS declaration, and so forth) for press conferences, media interviews, and press releases to release in a timely manner.
ISPR	The Coast Guard should fully implement its policy on connectivity with the NRF, including an expansive outreach program to State and local emergency managers through Sector participation with Local Emergency Planning Committees (LEPCs) and District participation with Regional Interagency Steering Committees (RISCs).
ISPR	The Coast Guard should engage national associations of State and local governments in order to socialize the NCP and find commonalities for working with the other levels of government.
ISPR	The Coast Guard should ensure that it has the ability to respond to a significant oil event that is beyond the ability of the RP or OSLTF to fund and/or that extends beyond national boundaries into international jurisdictions (i.e., the Caribbean basin), and/or impacts multiple States.
ISPR	For the next SONS exercise, the Coast Guard should inject a significant natural disaster, such as a Category 4 hurricane, to the exercise scenario to examine the interplay of the National Incident Commander /FOSC with a Stafford Act FCO.
ISPR	The Coast Guard should actively seek participation and provide adequate funding for State and local political and emergency management officials in NCP training and exercise programs.
ISPR	The Coast Guard should fully support the existing State oil spill response programs and engage in outreach to ensure that State governors understand the role of the SOSC during an

	oil spill.
ISPR	The Coast Guard should encourage all States to serve as a co-chair on their respective Area Committees.
ISPR	The Coast Guard should model the NIC Situation Unit for information management on the basis of the information management implemented at the peak of the Deepwater Horizon incident, and provide for it to be scaled back as appropriate.
ISPR	The Coast Guard should provide for systems and processes to ensure that the NIC can immediately attain "information dominance" and maintain it throughout the response.
ISPR	The Coast Guard should undertake a program to educate senior Government officials at the Federal, State, and local levels on the role of the NIC and oil spill response under the NCP.
ISPR	The Coast Guard and EPA should direct the NRT and RRTs to improve their outreach and educational efforts to better explain the NRS and the NCP to senior policymakers, Congress, State and local government officials, and other stakeholders. These efforts should be ongoing to ensure that people new to oil spill preparedness and response are familiar with the roles and responsibilities of both Response Teams.
ISPR	The Coast Guard and EPA should ensure that the NRT and the RRTs have representation from participating agencies of the appropriate type and at the appropriate level to perform their respective functions.
ISPR	The Coast Guard and EPA should work together to explore regulatory reforms and/or policy guidance to refine and enhance NCP authorities and the NRT's and RRTs' role during a response to a SONS event.
ISPR	Prior to establishing an IASG, the Coast Guard and EPA should look to the NRT first to determine if there is a need for two separate entities, or if the NRT can serve the NIC functionally as an IASG.
ISPR	The Coast Guard and EPA should review the authorities of both the NRT and RRT with regard to their respective roles in alternative response technologies and ensure that guidance and doctrine pertaining to their use is current.
ISPR	The Coast Guard should request that the NRT convene an appropriate panel of experts to advise the NRT in developing national level guidance on alternative response technologies to ensure that such guidance represents the best and most current scientific knowledge available.
ISPR	The Coast Guard should review the NIMS/ICS training and competency requirements necessary for effective crisis management, pre-identify a core cadre of individuals throughout the organization who can be activated during an event of this magnitude, and ensure they are given adequate and specialized NIMS/ICS training.
ISPR	The Coast Guard should encourage all participating agencies and organizations involved in an oil spill response to maintain a commitment to NIMS/ICS training and competency.
ISPR	The Coast Guard should establish, or have access to, a standardized, deployable JIT training program as part of its oil spill preparedness program.
ISPR	The Coast Guard should consider developing a standardized set of oil spill reporting metrics and a streamlined reporting process that are NIMS/ICS compliant and that accommodate the anticipated information requests from stakeholders and agency officials during major oil spills.
ISPR	The Coast Guard should ensure that Area Contingency Plans (ACPs) contain sufficient direction related to appropriate sizing of spill response organizations.
ISPR	The Coast Guard should consider providing guidance on the need to use local temporary clean-up personnel and to ensure that ACPs address this issue.
ISPR	The Coast Guard should ensure that ACPs, Vessel Response Plans and Facility Response Plans address conducting response operations in extreme weather conditions or work environments.

ISPR	The Coast Guard should re-invest in preparedness and response programs and cultivate oil spill response experience as an important function for assignment and promotions.
ISPR	The Coast Guard should request that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) investigate the potential for the modification and standardization of exploration and production equipment; e.g., blowout preventers, risers, well heads, to incorporate a variety of options for emergency disconnects and installation of subsea containment devices.
ISPR	The Coast Guard should request that the BOEMRE require operators to include plans for subsea containment in their OSRPs.
ISPR	The Coast Guard should seek to increase the level of funding for the Interagency Coordinating Committee on Oil Pollution Research from the Oil Spill Liability Trust Fund to develop national oil spill response research priorities.
ISPR	The Coast Guard should work with BOEMRE to require increased stockpiles of burn boom and dispersants sufficient to address a worst case oil well blowout.
ISPR	The Coast Guard should support research to develop standards and processes for the expedited collection, processing, correlation, analysis, and distribution of satellite imagery and oil thickness sensors to provide for real-time direction of spill response operations.
ISPR	The Coast Guard should monitor and enforce the participation and timely maintenance of the RRI database by the OSRO community as part of the classification program.
ISPR	The Coast Guard should evaluate and revise guidance regarding acceptable resource movements outside a Sector during a major incident.
ISPR	Through the Area Contingency Plan planning process, the Coast Guard should educate responders at all levels regarding the proper use and effectiveness of near-shore skimming devices and their limitations when applied to other operating environments.
ISPR	The Coast Guard should consider establishing national policy guidelines and protocol for Vessel and Facility Plan holders and OSROs for cascading response equipment to and from areas impacted by major spills. These protocols should include creation of an accurate, up-to-date equipment inventory, realistic arrival times, and alternatives for response plan holders in the event of another significant oil spill.
ISPR	The Coast Guard should work with the OSRO community to determine types of response equipment that are more easily transported by aircraft.
ISPR	The Coast Guard should request that the International Maritime Organization establish an international inventory (similar to the Response Resources Inventory [RRI]) with locations and owners/operators of OSRE and technology that could potentially be available during a major event. The Coast Guard should consider entering into agreements with countries and/or international firms to facilitate a quick response time for resource requests.
ISPR	The Coast Guard should modernize the RRI so it contains accurate, up-to-date response equipment data, including location, type, application, and operating environment. It should be kept current to account for equipment movement or relocation.
ISPR	The Coast Guard should develop a graduate program for crisis management utilizing existing programs, such as the National Preparedness Leadership Initiative at Harvard University and the Institute for Crisis, Disaster and Risk Management at The George Washington University, to enhance knowledge of all facets of crisis management at the junior officer level and create a new cadre of crisis management experts.
ISPR	The Coast Guard should fully and aggressively adopt the application of the "Area Command" concept, articulated in NIMS, for all major incidents that pose a substantial threat to public health and welfare, not just oil spills.
ISPR	The Coast Guard should select and train qualified crisis managers to act as Area Command or Area OSCs as needed due to an incident's size, complexity, or scope
ISPR	The Coast Guard should institutionalize the National Incident Commander concept through

	the pre-identification and selection of prospective National Incident Commanders based on their potential to perform the functions of a National Incident Commander during a national-level oil spill or other significant domestic incident.
ISPR	The Coast Guard should undertake an aggressive outreach program to engage State Governors, parish, county, and city officials, tribes, and emergency managers and local NGOs in the ACP planning process. This should be an ongoing process that recognizes changes in administrations and personnel turnover.
ISPR	The Coast Guard should review and evaluate ACPs and Area Committees around the country to determine best practices, including the establishment of subcommittees, executive steering committees, and State co-chairs. Based upon this review, the Coast Guard should develop guidelines and minimum standards for the scope, conduct, and composition of Area Committees nationwide.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to include clear requirements for the long term labeling and control of all electrical equipment in hazardous areas. In addition, requirements should be established for the continued inspection, repair and maintenance of electrical equipment in hazardous areas in the unit's safety management system.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to provide more detailed guidance for establishing fire and explosion strategies on board units using dynamic positioning systems for station keeping. The guidelines should provide a hierarchy of recommend automatic and manual emergency shutdown actions following gas detection in vital areas. The guidelines should also provide accepted approaches for the design and arrangement of the emergency power source necessary for station keeping in the event of a flammable gas release.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require specific minimum values for explosion design loads to be used in calculating the required blast resistance of structures. In addition, unified guidelines for performing the required blast resistance calculations should be developed.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require an explosion risk analysis of the design and layout of each facility. The analysis should use accidental blast loads defined by the Organization, to determine whether the levels of protection for accommodation areas, escape paths and embarkation stations provided by the prescriptive requirements in the Code are adequate.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require ventilation inlets for machinery spaces containing primary and emergency sources of power to be located as far as practicable from hazardous locations.
JIT	It is recommended that Commandant pursue the regulatory changes for dynamic positioned vessels recommended in Appendix I, including clear designation of the person in charge under both operating and emergency conditions for all MODUs operating on the U.S. OCS.
JIT	It is recommended that Commandant work with the IMO to evaluate the need to create a requirement for flag states to audit classification societies acting on their behalf as a recognized organization.
JIT	It is recommended that Commandant evaluate the need to establish unannounced regulatory inspections.
JIT	It is recommended that Commandant evaluate the need for improving inspection guidance documents and case work entry standards to ensure the proper documentation of Certificate of Compliance examinations.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require H-60 fire separations between the drilling area and adjacent accommodation spaces as well as any spaces housing vital safety equipment.

JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to develop uniform guidelines that can be used as a basis for performing engineering evaluations to ensure that the level of fire protection of the bulkheads and decks separating hazardous areas from adjacent structures and escape routes is adequate for likely drill floor fire scenarios.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require a fixed deluge system or multiple high capacity water monitors for the protection of the drill floor and adjacent areas. Consideration should be given to requiring automatic operation upon gas detection.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to require a fire risk analysis to supplement the prescriptive requirements in the MODU Code. The risk analysis should be a performance-based engineering evaluation that utilizes defined heat flux loads to calculate the necessary levels of protection for structures, equipment and vital systems that could be affected by fires on the drill floor, considering the unique design, arrangement and operation of each MODU.
JIT	It is recommended that Commandant work with the IMO to amend the IMO MODU Code to establish performance standards concerning the maximum allowable radiant heat exposure for personnel at the muster stations and lifesaving appliance lowering stations, along with guidelines for calculating the expected radiant heat exposure for drill floor fire events for each MODU hull type.
JIT	It is recommended that Commandant remove or specifically define the term "when practicable" in Title 46 Code of Federal Regulations (CFR) § 109.213(d)(1)(vii). It is further recommended that Commandant work with the IMO to amend the IMO MODU Code, Section 14.11.2.7.
JIT	It is recommended that Commandant work with the IMO to amend the International Convention on Standards for Training, Certification and Watchstanding (STCW) to establish MODUs as a "Special Ship" within Chapter V and develop specialized training standards and competencies for masters, officers, particular ratings and special personnel assigned to MODUs to include training for crowd control and crisis management.
JIT	It is recommended that Commandant work with the IMO to develop a symbol for "knife" and require the placement of a label to identify its location in all lifesaving appliances requiring the tool.
JIT	It is recommended that Commandant work with the IMO to amend the IMO MODU Code to prohibit the dual purpose acceptance of life boats as rescue boats, and adopt the "widely separated location" philosophy applied to the quantity and location of rescue boats on board MODUs.
JIT	It is recommended that Commandant revise the 33 CFR, Subchapter N regulations, to establish designated standby vessels for MODUs engaging in oil and gas drilling activities on the U.S. Outer Continental Shelf (OCS).
JIT	It is recommended that Commandant amend 46 CFR § 109.213 and work with the IMO to amend the IMO MODU Code to require the performance of a man overboard drill on at least a quarterly basis.
JIT	It is recommended that Commandant revise the 33 CFR, Subchapter N regulations, to require the owner/operator of a MODU operating on the U.S. OCS, instead of the leaseholder, to develop and submit an emergency evacuation plan (EEP).
JIT	It is recommended that Commandant revise the 33 CFR, Subchapter N regulations, to establish performance and evaluation criteria and require the annual exercise of the EEPs, including all identified emergency resources, equipment and agencies necessary to perform a mass evacuation.
JIT	It is recommended that Commandant revise the current policy with respect to response plan

	requirements for vessels engaging in oil and gas drilling activities on the U.S. OCS. Operator's response plans should specifically address responses to vessel fires in addition to well fires.
JIT	It is recommended that Commandant evaluate regulatory requirements for operators of vessels engaging in oil and gas drilling activities on the U.S. OCS to maintain a continuously manned shore based operations center for monitoring operations and maintaining primary and emergency communications for responding to casualties.
JIT	It is recommended that Commandant require that MODUs and floating production, storage and offloading vessels engaging in oil and gas drilling activities on the U.S. OCS be subject to the salvage and marine firefighting requirements of 33 CFR § 155, Subpart I.
JIT	It is recommended that area committees evaluate the adequacy of their area contingency plans for responding to incidents involving vessels engaging in oil and gas drilling activities on the U.S. OCS.
JIT	It is recommended that Commandant evaluate the current policy regarding the implementation of an incident commander to perform both the search and rescue mission coordinator and federal on scene coordinator duties during an event consisting of a mass rescue operation and a major marine casualty.
JIT	It is recommended that Commandant review all organization policy on marine firefighting to ensure consistency.
JIT	It is recommended that Commandant update the regulations to include the requirement to conduct a deadweight survey every five years for all (U.S. and foreign-flagged) column stabilized MODUs to be consistent with the current IMO MODU Code.
JIT	It is recommended that Commandant develop a risk-based Port State Control targeting program to provide additional oversight for foreign-flagged MODUs working on the OCS based on predetermined evaluation criteria, including the identity of the flag state.
JIT	It is recommended that Commandant develop more comprehensive inspection standards for foreign-flagged MODUs operating on the OCS.
JIT	It is recommended that Commandant work with the IMO to develop a code of conduct for Recognized Organizations to ensure that verification of all flag state requirements are being conducted properly.
JIT	It is recommended that Commandant work with International Association of Classification Societies to improve implementation of its Procedural Requirement 17.
JIT	It is recommended that Commandant revise the current marine casualty reporting requirements and drug testing requirements for foreign-flagged MODUs operating on the OCS and make them consistent with the requirements for U.S.-flagged MODUs.
JIT	It is recommended that Commandant evaluate the benefit of combining current OCS inspection responsibilities assigned to multiple OCMI zones into one inspection office responsible for covering all OCS inspection activities.
JIT	It is recommended that Commandant determine how to continue to maintain a properly trained and educated Coast Guard work force for MODU and OCS inspections.
JIT	It is recommended that Commandant investigate the role of Safety Management System failures in recent marine casualties and based upon those investigation findings, determine if a change in the current inspection and enforcement methods is required to increase compliance with the ISM Code. The investigation should include a request to the National 127 Research Council, Commission on Engineering and Technical Systems, Marine Board to perform a comprehensive investigatory assessment of the effectiveness of the ISM Code as used in the marine environment.
JIT	It is recommended that Commandant work with BOEMRE to evaluate the benefits of shifting to a "Safety Case" approach similar to that used in the North Sea, a method in which there is a more holistic approach to safety.

JIT	It is recommended that Commandant require and coordinate expanded International Safety Management (ISM) Code examinations of all Transocean vessels that are subject to the ISM Code and engaging in oil and gas drilling activities on the U.S. OCS.
JIT	It is recommended that Commandant work with the Republic of the Marshall Islands to require an immediate annual verification of the safety management system of Transocean offices (Main and North America). Because this investigation has questioned DNV's performance as the recognized organization for the RMI, another approved recognized organization should perform the verification.
NIC	Provide means of enhancing SONS visibility.
NIC	Coast Guard should continue to press for a claims funding provision. SONS conditional.
NIC	Executive level NCP and crisis communication seminars.
NIC	Seek venues and forums to better inform state and local officials of their roles and responsibilities during a major oil spill response.
NIC	NRT needs to partner with the FEMA led Emergency Support Function Leaders Group (ESFLG) and together they should de-conflict OSLTF and Stafford Act funding issues for all incidents.
NIC	NRT needs to partner with the FEMA led Emergency Support Function Leaders Group (ESFLG) and together they should reconcile the NCP approach of a federal led, RP supported, Unified Command versus the state led, federally supported NRF approach.
NIC	NRT needs to partner with the FEMA led Emergency Support Function Leaders Group (ESFLG) and together they should align and coordinate activities of the NCP mandated RRT's and NRT mandated Regional International Steering Committee at the regional level by requiring them to coordinate regularly through joint meetings and exercises.
NIC	For future SONS, the role of the NIC and PFO need to be harmonized in both regulation and policy to provide clarity regarding a national level representative.
NIC	Should develop a preparedness and leadership program to prepare and pre-designate a core cadre of individuals that could be called upon to serve as a NIC and lead any major domestic response contingency.
NIC	Since the NIC is responsible for coordinating the whole of government response to include the Cabinet, the President should designate a NIC if required for a SONS.
NIC	Increase flexibility with certain response plan requirements to free up national resources that will allow the NIC and the FOSEC to rapidly acquire critical resources for response efforts. Area Committees should consider the potential of supporting a SONS outside their geographic area and incorporate contingencies into ACPs.
NIC	NIC roles and authorities need to be revised and clearly defined.
NIC	Develop processes and procedures to solicit, evaluate, recommend, and formally accept international offers of assistance for a major oil spill response.
NIC	Develop and maintain a domestic and eventually an international response resource inventory data base that can support resource management during major oil spills.
NIC	Review and improve the consensus ecological risk assessment tools.
NIC	Institutionalize in doctrine a local elected official liaison program for use in a major oil spill response.
NIC	Coast Guard assume greater role in OCS/ MODU regulation.
NIC	Enhance OSRO Classification and Mandatory RRI.
NIC	Develop International version of RRI in accordance with IMO.
NIC	USCG Oil Spill Comm., in conjunction with their Area Committees, should engage with BOEMRE to closely review the OSRPs for all OCS facilities in U.S. and state waters that reside within their AOR to gain visibility, familiarity, and ensure alignment with their ACPs.
NIC	Area Committee must ensure all appropriate federal, state, local, & tribal government

	authorities & response structures are written into the ACP, & elected officials are invited to participate in oil spill response exercises. ACPs should incorporate county/parish or other local authority specific annexes.
NC	The Coast Guard should revise its EDRC regulations to encourage the development and use of more efficient oil recovery equipment.

Coast Guard Is Evaluating or Intends To Take Action

Source Report	Report Recommendation
FOSC	Response and Restoration, Removal and Damage Assessment: Explaining the differences and distinctions between oil spill response, performed under the FOSC's supervision, and Natural Resource Damage Assessment (NRDA), performed separately under the oversight of natural resource trustees agencies, is difficult. Particularly in large spills, the National Incident Commander or FOSC acts as a single spokesperson for government involvement with the response. NRDA, while it frequently begins before response activity stops, stretches on for years. The FOSC does not participate in NRDA, but this lack of participation is confusing to officials and the public. A process is needed to pre-identify a lead spokesman for NRDA activities for major spills to work alongside the FOSC to explain the full scope of activities.
FOSC	OSLTF Caps: The structure for funding responses set out in Oil Pollution Act of 1990 (OPA 90), and limitations on per response costs were outdated and needed a legislative change in mid-response to address. In addition, without a solvent RP who was willing to undertake not only real time funding of response costs, both directly but also in terms of payments to National Pollution Funds Center (NPFC), as well as setting aside vast sums for claims, the Oil Spill Liability Trust Fund (OSLTF) Emergency and Principal Funds could have been overwhelmed. Until the arrangements with the RP to fund provide reimbursement to the OSLTF as the response progressed were established, the existing caps limited the funding for participation of other agencies through PRFAs and RFAs.
FOSC	Aviation Coordination Center: Initial aviation control efforts worked well, but as the number of sorties of widely varying types directly affiliated with the response, and not, grew, more formal means of control with sophisticated tracking and traffic management capability became necessary. Tyndall performed well. FAA assistance with Temporary Flight Restriction, combined with Tyndall ability to fuse information to help enforce did a lot to bring the airspace above response activities under control and make sure all operations were safe.
ISPR	The Coast Guard should consider establishing linkages between Facility Response Plan (FRP) approval and OSRO classification (certification) with industry participation in Area Committees. Area Committee membership should include a representative of the plan holder and OSROs for each FRP in the ACP's area of responsibility.
ISPR	The Coast Guard should consider establishing linkages between Facility Response Plan (FRP) approval and OSRO classification (certification) with industry participation in Area Committees. Area Committee membership should include a representative of the plan holder and OSROs for each FRP in the ACP's area of responsibility.
ISPR	The Coast Guard should ensure that training and exercise programs include key potential participants (e.g., OSROs, industry, Coast Guard, EPA, and Department of Defense components) in dispersant operations including monitoring in the offshore environment to improve performance of spotters, pilots, aircraft spray systems, logistics, communication, and coordination.
ISPR	The Coast Guard should develop standardized applications for ISB used by plan holders and ensure that these applications are incorporated in Vessel or Facility Response Plans. In

	addition, check lists for FOSC approval of ISB applications should be developed and made available to RRTs and FOSCs for incorporation into Regional Contingency Plans and ACPs.
ISPR	The Coast Guard should require that all ACPs include ISB guidelines and plan for the utilization of ISB procedures when and where appropriate.
ISPR	The Coast Guard should engage EPA regarding the air-monitoring protocols for ISB. As necessary, these protocols should be re-evaluated based on the empirical evidence from the Deepwater Horizon incident and additional air quality studies conducted to ensure the level of monitoring is consistent with the risk posed by ISB, particularly in offshore areas.
ISPR	The Coast Guard should work with the RRTs to ensure that their ISB decision-making process is based on current standards for particulate matter and that monitoring protocols accommodate predictive modeling and are based on current standards.
ISPR	The Coast Guard should increase the size and capability (including adding more senior Coast Guard staff) of its PIAT, and more depth to its Public Affairs Program for the purposes of implementing a unified, proactive, and aggressive crisis communications and messaging program during future incidents.
ISPR	In major incidents having national attention, the Coast Guard should establish a national level JIC. For planning purposes, the Coast Guard should develop policy guidance that defines staffing needs, roles, and responsibilities for personnel operating at the national level JIC.
ISPR	The Coast Guard should consider the need for a comprehensive database that includes response resources nationwide from all entities. This database must be considered a “real-time” tool for maximum effectiveness.
ISPR	The Coast Guard’s CAP should be reviewed to ensure that it captures lessons learned from all incidents and exercises and communicates them throughout the Coast Guard and the response community.
ISPR	The Coast Guard should ensure that the lessons learned process and CAP facilitates a regular and frequent review by all involved in spill management and oil spill response.
ISPR	The Coast Guard should recommend to DHS that SONS exercises be made part of the program.
ISPR	The Coast Guard should consider the means to document lessons learned during a response, including development of a specific Incident Command System form that allows for adjustment in the response organization as the incident evolves.
ISPR	The Coast Guard should create a system whereby exercise planners are challenged to create more realistic exercise scenarios, particularly at the senior level, to accurately reflect the demands and pressures placed upon the spill response organization.
NIC	Strongly support the efforts by the Council of Governors to reconcile these competing interests over command and control funding of NG troops to better bring their capabilities to a major oil spill or other national level disaster in the future.

No Coast Guard Action

Source Report	Report Recommendation
FOSC	Responsible Party Solvency: The outcome of the response to this spill could have been very different had the Responsible Party (RP) not been able to fund the extraordinary expenses involved. In the planning process, and during drills, participation of the RP is presumed. If a RP proved unable to pay for a major spill, the ability of the government to organize a response of this nature and complexity—including securing the sub-sea source, contracting resources, and funding removal actions—would be severely strained. All levels of government had difficulty sustaining their involvement the Deepwater Horizon response. If the government had to organize every aspect of the response, the strains may have become

	overwhelming. Current planning and drills do not address the potential for government having to manage a major response due to the unavailability of the RP.
FOSC	Vessels of Opportunity Protocols: Much was learned in how to, and how not to, employ Vessels of Opportunity (VOO). Pre-scripted requirements for safe operating VOO platforms should be outlined in Area Contingency Plans to inform a FOSC, who can then more knowledgeably assess VOO operators and platforms. A pre-scripted format or set of requirements for VOOs is important to safety and effectiveness. A minimum prerequisite needs to be a current Coast Guard courtesy vessel exam and sticker.
ISPR	The Coast Guard should require that all Vessel Response Plans and Facility Response Plans identify ISB equipment, using the RRI, as well as personnel and resources needed to conduct ISB operations. These resources should include aviation assets for oil spotting and direction, wildlife control and monitoring, safety, air monitoring, and so forth. Plans should also include location and deployment times to deliver ISB equipment, removal capability of the identified ISB equipment, and the means to scale up the resources required to be able to quantify the contribution of this tool to meet a worst case scenario.
ISPR	The Coast Guard should place more emphasis on contingency planning. It should be valued as a core component of successful crisis management and a means for maintaining a high level of preparedness.
ISPR	The Coast Guard should ensure that NIC and UAC doctrine includes standard protocol for receiving, processing, and responding to information requests and streamlining reporting requirements during a major incident.
ISPR	The Coast Guard should ensure, as part of its NIMS/ICS doctrine, that communications from ICPs to Branches (or field responders) include clear guidance, direction, and objectives as well as any specific requests for information.
ISPR	The Coast Guard should review its procedures for effective communications during a major incident and ensure that responders continually review outgoing messages and reports for clarity, accuracy, brevity, specificity, and mission appropriateness.
ISPR	The Coast Guard should develop information management systems that ensure that information requests are triaged so that frivolous or unnecessary RFIs do not get in the way of important information requests. Information chains need to be observed as diligently as reporting chains, and tactical units need to be allowed to carry out tactical operations without direct requests from the NIC.
ISPR	The Coast Guard should request that BOEMRE establish guidelines and ensure that OSRPs and EPs contain sufficient reservoir and well design data to allow independent verification of the estimated flow rate. Part of the guidelines should be a requirement for two versions of the OSRP—one containing all confidential and proprietary data for Government use only, and one redacted copy that excludes confidential, proprietary, and personal identification data for public access.
ISPR	The Coast Guard should request that the EPA update Subpart J of the NCP to address chronic testing, testing of indigenous species, and testing of specific oil types in combination with specific dispersant types with specific water bodies and set appropriate temporal, spatial, and volumetric standards.
ISPR	The Coast Guard should engage BOEMRE to initiate a study to determine an appropriate level of ISB equipment for responding to worst case spills and to determine the means of enhancing equipment stockpiles of ISB equipment.
ISPR	The Coast Guard should actively seek to execute cooperative agreements on oil spill planning and response with all Gulf States. Formal agreements have proven successful in Texas, California, Washington, and elsewhere.
ISPR	The Coast Guard, through the NRT, should amend the NCP to incorporate the NIC as providing connectivity between elements within the NRF and the roles and responsibilities

	of the NIC.
ISPR	The Coast Guard should consider developing national policy guidelines for incorporating VOO policy and procedures into Regional Contingency Plans and/or ACPs.
ISPR	Potential VOO Program participants should be pre-identified and pre-trained whenever possible.
ISPR	The Coast Guard should evaluate similar VOO Program models (e.g., Alaska) for compatibility and pertinence during development of national VOO policy and implementation of VOO programs. The proper application and effectiveness of VOOs (i.e., skimming, logistics, and local knowledge), the cost of implementation, and sustainability during a long-term response are all critical components of an evaluation.
ISPR	The Coast Guard should perform a financial analysis of the Deepwater Horizon VOO Program. This analysis would be helpful in understanding future compensation structures that most closely align clean-up objectives and levels of participation.
JIT	It is recommended that Commandant work with the IMO to amend the MODU Code to provide more detailed guidance for the design and arrangement of fixed automatic gas detection and alarm systems as specified in paragraph 9.8 of the MODU Code (paragraph 9.11). The guidelines should include as a minimum, the recommended type and number of gas detectors, their arrangement, alarm set points, response times, wiring protocols and survivability requirements.
JIT	It is recommended that Commandant work with the IMO to harmonize the IMO MODU Code with International Convention for the Safety of Life at Sea (SOLAS) regulation III/16.7 to require adequate emergency lighting of Muster Areas, Lifeboat and Liferaft Lowering Stations and the corresponding waters into which the lifeboats/liferafts will be launched.
JIT	It is recommended that Commandant work with the IMO to amend the Lifesaving Appliances (LSA) Code and its testing recommendations to ensure the adequacy of lifesaving appliance standards.

Recommendations for Other Agencies/Entities

Source Report	Report Recommendation
ISPR	The Coast Guard should empanel an outside scientific group (such as the National Science Foundation) to develop protocols and identify necessary technology to aid quantification during an oil spill response. These protocols must be able to address improved subsea detection capability, and express the response quantification capability and limitations.
ISPR	The Coast Guard should develop a working team to review and propose recommendations to revise existing laws, regulations, and policies that effectively prevent the discharge of crude oil in U.S. offshore waters for the purpose of testing oil spill response technologies, and severely limit offshore decanting capabilities.
NIC	Validate the NCP's National Product Schedule of chemical countermeasures.
NIC	Amend the oil pollution R&D program described in 33 USC 2761 to reinvest funds in the ICCOPR. The ICCOPR should be required to conduct and sponsor research into oil fate and effects.
NIC	Amend the oil pollution R&D program described in 33 USC 2761 to reinvest funds in the ICCOPR. The ICCOPR should be required to conduct and sponsor research into enhancement of capabilities to prevent, respond, and mitigate impacts of spilled oil in the maritime environment.
NIC	Establish a program similar to the Interagency Alternative Technologies Assessment Program (IATAP) to evaluate new technologies before a spill occurs.

NIC	ICCOPR should receive permanent funding for R&D through annual distributions from the OSLTF or other recurring funding source.
NIC	Increase the authority to advance funds from the OSLTF to ensure the Emergency Fund has adequate supply of money.
NIC	There is an urgent need to enact a legislative provision to allow for surge claims funding out of the OSLTF and the current \$1 billion per incident limit on expenditures is inadequate for a SONS and should be significantly raised.
NIC	Increase the OSLTF per incident limit to \$1.5B. SONS conditional.
NIC	DHS should coordinate with DOD to ensure that this capability is formally memorialized and made available as a matter of course for any national level response.
NIC	A NIC, by designation, should have 311(c) and (e) authorities organic to the position. This should be explicitly articulated in the NCP and Executive Order.
NIC	Expand NRT membership to include all federal agencies with authority, expertise, and capability to respond to major oil and hazmat spills.
NIC	Expand the authorities and functions of the NRT and RRTs to adjudicate conflicting national level and regional level policy and procedural issues in support of a NIC, UACs, and IC's.
NIC	Institutionalize the DWH NIC Interagency Solutions Group (IASG) structure and membership permanently under the NRT to serve as the primary action officers for issue and policy resolution during a major response.
NIC	Require the NRT to lead the I/A lessons learned effort following a major oil spill or hazmat release.
NIC	The Law of the Sea Treaty provides a governance framework for international spill response and should be ratified.
NIC	The NOC is better positioned to provide national level situational awareness to the NIC and DHS leadership. Existing processes already support the NOC's role as the lead information manager for DHS and should include direct support to the NIC.
NC	DOI should require offshore operators to demonstrate that wells are designed to mitigate risks to well integrity during post-blowout containment efforts.
NIC	Designation of SONS as Tier 1 national level exercises.
NIC	Hold a SONS Cabinet level TTX in 2011 with federal, state, local, and tribal officials.
NC	Congress and DOI should create an independent agency within DOI with enforcement authority to oversee all aspects of offshore drilling safety.
NC	Congress and the Administration should encourage private investment in response technology more broadly, including through public-private partnerships and a tax credit for R&D in this area.
NC	Congress, federal agencies, and "responsible parties" should take steps to restore consumer confidence in the aftermath of a SONS.
NC	Congress should dedicate 80 percent of the CWA penalties to long term restoration of the GOM.
NC	To coordinate Gulf restoration and administer restoration funds, Congress should establish a joint state-federal Gulf Coast Ecosystem Restoration Council. The Council should be given authority to set priorities to govern the expenditure of funds and resolve any conflicts regarding eligibility of projects. Congress should ensure that the priorities and decisions of the Council are informed by input from a Citizens Advisory Council, which represents diverse stakeholders.
NC	Congress should establish and fund a Gulf Coast Restoration Science and Technology Program to support the design of scientifically sound restoration projects and evaluate individual projects for technical feasibility and consistency with the region-wide strategy.
NC	Industry should establish a private organization to develop, adopt, and enforce standards of

	excellence to ensure continuous improvement in safety and operational integrity offshore.
NC	Industry should install additional physical barriers during temporary abandonment procedures.
NC	Industry should consider more cement centralizers of preferred design and should run a cement evaluation log.
NC	Industry should perform further well integrity diagnostics when receive troubling and unexplained negative pressure test results.
NC	Industry should limit simultaneous operations during displacement.
NC	Industry should wait for foam stability test results and redesign slurry based on results.
NC	None yet - BOP examination and testing has not been completed.
NC	EPA should update and periodically review its dispersant testing protocols for product listing or pre-approval, and modify the pre-approval process to include temporal duration, spatial reach, and volume of the spill.
NC	Congress and DOI should create a Leasing and Environmental Science Office within the Dept charged with fostering environmentally responsible and efficient development of the OCS. To ensure that environmental concerns receive full consideration, the environmental division of this office should be led by a Chief Scientist, who would conduct all environmental reviews for offshore energy development.
NC	The new Environmental Science Office within DOI along with NOAA should develop environmental monitoring protocols to be implemented by oil and gas companies at lease sites once exploration, development and production activities begin.
NC	Congress should amend the OCSLA to extend the 30 day deadline for approving exploration plans to 60 days. DOI should not consider such plans officially "submitted" until all of the required content, necessary environmental reviews, and other analyses are complete and adequate to provide a sound basis for decision making.
NC	The offshore energy industry should pay the costs associated with its regulatory oversight, just like other regulated industries do. This includes the costs of agencies such as BOEMRE and also incremental costs of other agencies responsible for overseeing offshore operations
NC	DOI's Office of Dispute Resolution should conduct an evaluation of the GCCF once all claims have been paid out in order to inform claims processes in future SONS.
NC	DOI should enhance auditing and evaluation of offshore drilling activities by individual participants (operators, drillers, other service companies) when determining their financial responsibility levels.
NC	The Coast Guard should issue guidance that offshore barrier berms and similar dredged barriers will not generally be authorized as an oil spill response in the NCP or ACP.
NC	EPA should amend the NCP to define and institutionalize the role of federal agencies and the national laboratories that possess relevant scientific expertise in source control.
NC	EPA should amend the NCP to create a protocol for the government to obtain accurate estimates of flow rate or spill volume from the outset of a spill. The protocol should require the RP to provide the government with all data necessary to estimate flow rate or spill volume.
NC	EPA, by amending the NCP, should develop distinct plans and procedures to address and monitor human health impacts during a SONS.
NC	The NRT should create an interagency group, including representation from DOI, the Coast Guard, DOE and its national laboratories to develop and maintain expertise in source control.
NC	The NRT should create an interagency group, including representation from DOI, the Coast Guard, the national laboratories and NOAA to develop and maintain expertise in estimating flow rates and spill volumes.
NC	DOI should reduce the size of lease sales so their geographic scope allows for meaningful

	analysis of potential impacts and identification of areas of ecological significance.
NC	Congress should amend the OCSLA to provide NOAA with a formal consultative role during the development of 5 year lease plans and lease sales. DOI should be required to adopt NOAA's recommendations unless the Dept determines that doing so would be inconsistent with important national policy interests.
NC	Congress should increase and maintain its awareness of the risks of offshore drilling by designating specific subcommittees to oversee offshore safety and environmental risks, by requiring DOI and its IG to submit annual reports to Congress, and by requiring appropriate congressional committees to hold annual oversight hearings on the state of technology and safety.
NC	DOI should lead a rigorous, transparent, and meaningful oil spill risk analysis and planning process for the review of industry spill response plans. The process should ensure that operators can deliver the capabilities indicated in their response plans, including well containment. The process will require more thorough review within DOI and additional review and approval by USCG, EPA and NOAA.
NC	DOI should require offshore operators to provide detailed plans for immediately deployable and effective source control as part of their OSRPs and applications for permits to drill (APD). At the permitting stage, operators must demonstrate that their source control technology is compatible with the well to be drilled.
NC	CEQ and DOI should revise and strengthen NEPA policies, practices, and procedures to improve the level of environmental analysis, transparency, and consistency at all stages of OCS planning.
NC	Agencies, including EPA, DOI, NOAA and Trustees for Natural Resources should better balance the myriad economic and environmental interests concentrated in the Gulf region and present in other areas of the OCS. The agencies should undertake improved monitoring and increase use of sophisticated tools like coastal and marine spatial planning.
NC	DOE, NOAA, USGS and other interested agencies should establish a joint research program to systematically collect critical scientific data, fill research gaps, and provide comprehensive, ecosystem based scientific reviews of OCS areas that are currently, or will likely be, open for energy development.
NC	The EPA should revise its oiled water discharge regulations and streamline its permitting process for open water testing.
NC	The National Science Foundation should expand its ability to provide expedited funding for scientific research during an oil spill response and for long term monitoring.
NC	The Trustees for Natural Resources should ensure that compensatory restoration under the NRDA process is transparent and appropriate.
NC	DOI should update its prescriptive safety and pollution prevention standards, ensuring they are developed and selected in consultation with international regulatory peers and that are at least as rigorous as the leasing terms and regulatory requirements in peer oil producing nations.
NC	DOI should develop a proactive, risk based performance approach specific to individual facilities, operators, and environments, similar to the "safety case" approach in the North Sea.
NC	Congress and DOI should create an independent agency within the Dept with enforcement authority to oversee all aspects of offshore drilling safety, as well as the structural and operational integrity of all offshore energy production facilities, including both oil and gas production and renewable energy production. The director of the new agency should be appointed by the President for a 5 to 6 year term and be confirmed by the Senate.
NC	Industry should establish a private organization to develop, adopt, and enforce standards of excellence to ensure continuous improvement in safety and operational integrity offshore.

NC	Industry should contribute to the development of international standards of best practices.
NC	EPA should create a mechanism for involving outside industry experts in source control design and oversight.
NC	DOI should require offshore operators seeking approval of proposed well designs to demonstrate that well components, including BOP stacks, are equipped with sensors or other tools to obtain accurate diagnostic information like the position of BOP rams and pressures.
NC	Industry should develop and maintain deployable resources for rescue, response, and containment. These resources must keep up with ever advancing exploration and production technology.
NC	DOI should require that wells be designed to mitigate risks to well integrity during post blowout containment.
NC	Congress should significantly increase the liability cap and financial responsibility requirements for offshore facilities.
NC	Congress should provide mandatory funding (not subject to the annual appropriations process) for oil spill research and development.
NC	Congress should increase the limit on per-incident payouts from the OSLTF.
NC	EPA, as the federal agency responsible for developing the NCP, should, along with the Coast Guard, amend or issue new guidance on the plan for SONS. These amendments should increase government oversight of the RP, augment existing structures to provide interagency scientific and policymaking expertise during a spill, and create a communications protocol that accounts for participation of high level officials, who may not be familiar with the NCP, during a large spill.
NC	The Coast Guard, through the FOSC, should provide scientists with timely access to the response zone so that they can conduct independent scientific research during an oil spill response and long term monitoring in the future.
NC	EPA and the Coast Guard should create protocols to include local officials from areas at high risk for oil spills in training exercises.
NC	EPA and the Coast Guard should bolster state and local involvement in oil spill contingency planning and create a mechanism for citizen involvement in planning and response.
NC	EPA and the Coast Guard should establish liaisons between the UC and affected communities at the outset of a response.
NC	EPA and the Coast Guard should add a local on scene coordinator position to the UC structure.
NC	EPA and the Coast Guard should provide additional clarification and guidance to federal, state, and local officials about the differences between emergency response under the Stafford Act and the NCP.

Admiral ZUKUNFT. Chairman, I would be delighted to provide you a brief on that. What you will find is that there is commonality across a number of the five reports. I highlighted six of those key objectives, as we talk about whether it is research and technology for response, or measures to prevent a spill of national significance, our involvement with—at the very local level, with our ACPs.

But just to walk you through each one of these very briefly, the incident-specific preparedness report provided us a third-party assessment that characterized our efforts to respond to this spill.

We have since created a national incident command spill of national significance instruction that identifies gaps that aren't addressed in the national contingency plan to better prepare us for a response. This is everything from seafood safety, behavioral health, assigning liaison officers to every parish president, county official, and Governor throughout the affected area. So, we have taken a number of those and have already put those in place so that we can then act for prevention and response.

At the same time, with the FOSC report, that is a report that I am required to provide to the national response team that provides a chronology and a summary of response actions and interventions that were taken, which is fairly expansive, but is really directed at the response itself. And that would be to better inform and better prepare our Nation, should we see a similar event transpire on the outer continental shelf.

And I say that because, as we look at where is oil and gas being exploited, it is now in more remote areas. Not only in deep water in the Gulf of Mexico, but we are also using these lessons learned, as we look at initiatives going forward, to drill in the Arctic region. So again, we are applying these best practices that were learned during this particular response.

But I can brief you on each and every one of these reports, but the—really directs, you know, what can we do to prevent these activities. The ISPR and the FOSC report are really focused on how to improve our response protocols, including research and development. And all of these are in progress. And again, I would be pleased to provide you a summary of all those activities.

Mr. LOBIONDO. We would like that, Admiral. We would like the subcommittee to have a list of the recommendations of what you have done and what you will do, and each of the five reports. And can you suggest to us when we can expect to receive that list?

Admiral ZUKUNFT. A lot of this we are working across the inter-agency, so it would be circumspect on my part to—as we work with NOAA, EPA on, you know, whether it is research and development, dispersants, we are working closely with BSEE. But I would need some time to look at that. We have some—

Mr. LOBIONDO. Well, let's—excuse me—let's put it this way. Recognizing that it is a work in progress, there is some that is already decided, and maybe we will have to do this in bites. So can we say that within a month that we will have your list up to this point in time, and then we can see what that includes, and then go from there? Is that reasonable, from your perspective?

Admiral ZUKUNFT. Yes, we would be able to provide that. Yes, Chairman.

Mr. LOBIONDO. OK. Also, the Coast Guard has requested Congress to make changes to the way the Oil Spill Liability Trust Fund functions under current law. The Service has not requested any changes to current law governing oil spill prevention and response, or in response to any of the recommendations of the various reports.

Can you tell us, will the Coast Guard be requesting any changes to current law to improve prevention and response, or to implement a recommendation? Or does the Service feel they have sufficient authority to make these changes, administratively?

Admiral ZUKUNFT. That is one area where we will seek a regulatory change. For any spill out of the Oil Spill Liability Trust Fund there is an initial \$50 million funding appropriation, followed by a \$100 million emergency response. It then requires congressional approval to get subsequent installments of \$100 million.

To put that in perspective, at the peak of this spill—and again, this was being funded by BP—we were expending upwards of \$70 million per day at the peak of this response.

Mr. LOBIONDO. Yes. Excuse me, I apologize if I was unclear. We understand about this funding scenario, but I am interested in changes to current law, as it results in response and implementation or recommendations for the Service.

Can you do this administratively, or changes to current law of how you respond? Does it have to come through legislation?

Admiral ZUKUNFT. Chairman, right now we are doing that through policy, and so we are able to invoke many of these measures through policy and not regulation.

Mr. LOBIONDO. OK. And, Admiral Z one last question for you. In the wake of the disaster that we had with this oil spill, several responders to the spill and manufacturers of dispersants and other technologies who were following the request, or the requirements the Coast Guard laid down for them to deal with the spill, have been sued for the actions they took at the direction of the Government during the response of the spill.

So, the Government tells them what to do, tells them what they need, and then, you know, in the height of all the confusion and the run-up to getting this done right. And now, because they did what they were told, they are being sued.

Has the Coast Guard heard from the responders or dispersant manufacturers regarding the issues? And has the Coast Guard taken a position on these lawsuits?

Admiral ZUKUNFT. We have not taken a position. But in the urgency of a response, there needs to be a provision for indemnification of these oil spill response organizations that are responding in accordance with our interagency action plans. So that would be a needed change if, in fact, these responsible organizations are being held liable.

Mr. LOBIONDO. Well, I would like to suggest in very strong terms that the Coast Guard consider either sending up legislation or taking a very strong position on this. I don't see how, when we have a disaster like this, we can expect people to respond and follow what we are requesting them to do, and let them swing in the wind when the dust starts to settle.

And I can only think of a future situation where there is an emergency and a disaster, and especially if it is involving some of these same groups, if it is an offshore disaster like this. If I were one of them, I think I would be pretty slow to respond. So I would urge you to figure out how the Coast Guard can minimally weigh in on this, and ideally become proactive in how we can resolve this problem.

Admiral ZUKUNFT. I agree completely.

Mr. LOBIONDO. OK. Also, I would like you to report back to us how you are making out with that.

Admiral ZUKUNFT. I have that for action.
[The information follows:]

The Coast Guard interprets this question as pertaining to conferral of responder immunity, rather than indemnity. The Coast Guard has met with certain Oil Spill Response Organizations (OSROs) to discuss their concerns with respect to litigation claims against them for personal injury and death alleged to be from the use of dispersants during the *Deepwater Horizon* spill of national significance. By statute, OSROs already enjoy immunity for response activities under the Clean Water Act as amended by OPA 90, 33 U.S.C. 1321(c)(4). The statute essentially exempts responders from liability for actions taken consistent with the NCP relating to a discharge or substantial threat of a discharge. However, this exemption does not apply with respect to personal injury or death, or if the responder is grossly negligent or engages in willful misconduct. OSROs have asked that the U.S. Government's sovereign immunity under 33 U.S.C. 1321(j)(8) be extended to them: "The United States Government is not liable for any damages arising from its actions or omissions relating to any response plan required by this section." The Coast Guard is in the process of carefully considering the various legal, policy and operational implications of addressing the OSROs' concerns through any procedural vehicle(s) that may be available. The Coast Guard will coordinate conclusions and actions with the Environmental Protection Agency and Department of Justice.

Mr. LOBIONDO. OK. Because we will revisit it if the answer is not correct.

I have some additional questions, but I am going to turn to Mr. Larsen now.

Mr. LARSEN. Thank you, Mr. Chairman, and I would like to start with Mr. Caldwell with regards to the Oil Spill Liability Trust Fund, and actually the financial risks which you just briefly mentioned in your testimony.

But it is my understanding that, as cleanup costs continue to mount, the GAO has estimated there is a reasonable chance that expenditures from the trust fund will exceed the \$1 billion total expenditure per incident cap, and that funds will no longer be available to reimburse the Federal agency costs associated with the incident. Does that—is that correct?

Mr. CALDWELL. Yes, sir. We don't have a specific time when that is going to be. But right now we are at 62 percent of the cap. So, given the uncertainty of the cost, and the long-term nature of restoration, it could certainly go over that cap.

Mr. LARSEN. And so, the influence on the timeframe is sort of getting some harder costs about the longer term cost of restoration, as an example? What other factors would be involved in getting that other—

Mr. CALDWELL. I think just the lag, in terms of when costs are incurred and when they are reimbursed, as well as the uncertainty of some of those restoration costs going forward. Restoration is more of an art than a science.

Mr. LARSEN. Sure.

Mr. CALDWELL. We know about such lags from the *Exxon Valdez*. It took 10 years to clean up some of the damage.

Mr. LARSEN. Right. Well, it has an implication, I guess, for us then, as well. Because to alleviate the strain on the trust fund, GAO has again recommended that Congress consider setting a new incident fund cap based on net expenditures, rather than total expenditures. Would that change provide an immediate improvement in the financial status of the trust fund? And is there any downside to doing that?

Mr. CALDWELL. It would have no immediate impact on the fund. What it would do is reduce the uncertainty that you have. And if you make those changes in advance, you will increase the chances that those reimbursements would continue unabated.

As I said, some of the restoration work can take years. Obviously, there is a lot of other funding options Congress does have. But having one that is directly linked to the fund is obviously useful, since the fund pays for these.

Mr. LARSEN. Yes. In terms of the downside to a change like that?

Mr. CALDWELL. I don't really see one right now. The advantage we had in this case, in this horrible incident we did have, is that the responsible party had deep pockets. BP upfront said, "We are going to pay for these costs." So we didn't have the problem of either a small player that created large damage, or a company that then went bankrupt and couldn't fund any of the cleanup.

Mr. LARSEN. Yes. Would the—but the cumulative impact, say, of several incidents—one big incident could blow the fund up. Unfortunate choice of words, I guess, sorry about that, but it still would. And you would have perhaps smaller, unrelated incidents elsewhere in the country who then potentially get squeezed out of access to the trust fund, unless there was something done with it.

Mr. CALDWELL. That is correct. If you had multiple incidents, you would be more likely to draw down the fund quickly. Perhaps you could have a natural disaster but that would be different, that would be funded under the Stafford Act.

But you could have multiple accidents within a year or two. You could have an accident like the *Deepwater Horizon*, which was now more than a year ago, but if you have another large incident, you may be still drawing down from the first one and then you have got costs from the second one, as well, which could put a large strain on the fund.

Mr. LARSEN. Right, right. Well, the GAO has expressed concern that the per-barrel tax, the primary source of revenue, is due to expire at the end of 2017. And they estimate the fund balance will likely decrease over time and raise the risk that the fund would not be adequately equipped to deal with future spills—we sort of discussed that—particularly another spill like *Deepwater Horizon*.

Based on that uncertainty of future costs associated with this incident, I know GAO isn't in the direct business of providing direct recommendations to Congress about what we should do or shouldn't do, but rather, what you see. Is it better for Congress to reauthorize the per-barrel tax sooner, or wait to see if the—wait 4 or 5 years, when the tax is scheduled to expire, to see what happens with the trust fund?

Mr. CALDWELL. You reduce the risk of uncertainty if you take these steps in advance. We do have 5 years here, but there was other periods where the tax expired. What I don't have in front of me is whether during those certain years—I think there is a 12-year hiatus where the barrel tax expired—what happened to the financial health of the fund during that period.

But if you have this established in advance, you have less uncertainty. There is a lot going on in Congress, and some things don't get reauthorized or don't get passed.

Mr. LARSEN. Yes. There is always a lot going on in Congress. And my personal view, it is never an excuse not to do something.

So, Admiral Z, the GAO has recommendations on inspections as they relate to Coast Guard. Hearing your testimony and hearing GAO's testimony—I am just trying to get my head wrapped around where they connect and where they disconnect—can you, from your point of view, discuss the recommendations, a few of the recommendations from the GAO specifically, and how the Coast Guard is addressing those?

Admiral ZUKUNFT. Yes. We recognize we do have shortcomings in our tracking of security inspections on the outer continental shelf, whether they are fixed platforms or mobile offshore drilling units, which are technically vessels. And so we are working to correct those inadequacies. But the points they make are being taken for action, so we can better track those particular events.

On the safety side, those inspections have not languished. Some of those are actually carried out on our behalf either by Department of the Interior or, in some cases, by other recognized organizations. But there is a distinction between safety and security inspections. And we do have room for improvement on our enactment of security inspections on the outer continental shelf.

Mr. LARSEN. I have got one more question for Admiral Z, and then a second round I have some questions for Admiral Rufe—I don't want you to feel ignored—actually some ones about ACP. So if you—think through that.

But just finally for Admiral Z, on this determining what is a high-risk MODU for inspection from your policy letter of 11/2006, you talk about 2 things: how to determine what is high risk; and second, the JIT said inspections were so routine that, essentially, complacency got set in. So you could still focus on high-risk MODUs, but that could still become routine, and it could still intro-

duce a measure of complacency into even those inspections of high risk.

So talk about what a high-risk MODU is, and then talk about what you would do to prevent that complacency that the JIT report found on inspections.

Admiral ZUKUNFT. Yes. For the—this really applies to foreign-flagged MODUs.

Mr. LARSEN. Yes.

Admiral ZUKUNFT. And where we depend on the flag state, and often under the auspices of a recognized organization, to follow through on IMO-accepted codes. But when we have foreign-flagged vessels operating in the U.S. EEZ, we do need to be more stringent, and ensure that these also comply with U.S. standards.

And so, it is possible to look at a MODU's history, you know, if they have had oil spills in the past, to then target that as a high-risk mobile offshore drilling unit. It does one of two things. One, it rewards the good actors, and at the same time it holds those that may not be in full compliance to not just international, but also U.S. standards. And so, that is the process that we use in assessing those high-risk MODUs.

Mr. LARSEN. And the issue of complacency, though? You could still have that level of inspection, but again, we had levels of inspection before, and things got routine, and people got complacent.

Admiral ZUKUNFT. Yes. No, I could not attest to that, you know, complacency has set in. This was an issue with foreign-flag, you know, operating in the EEZ, that we were not as strident as we would, had that been a U.S.-flagged vessel operating in the EEZ. So it is that issue of, you know, how strident were we with a foreign flag, but not an issue of complacency. But it was a dependency, if you will, on the foreign-flagged state, and a number of recognized organizations such as DNV or ABS to provide that level of oversight. But we will provide that measure, as well, for foreign flag in our EEZ.

Mr. LARSEN. All right, thank you. Thank you, Mr. Chairman.

Mr. LOBIONDO. Admiral Rufe, the incident-specific preparedness review is a third-party report that is chartered by the Coast Guard and compiled by a team of industry and oil spill experts. The ISPR noted that the Coast Guard's environmental response capabilities have atrophied. Can you share with us what your thoughts may be of why that has happened, and any suggestions that could be made to restore those capabilities?

Admiral RUFÉ. Well, I think two things, Mr. Chairman, contributed to that. One is that over time, because of the infrequency of large spills, I think the Nation became complacent—not just the Coast Guard, we all became complacent—that perhaps we had gotten past the concern about oil spills. And so the shift away from the oil spill response capability in the Coast Guard was probably a factor of that.

But it was also a factor of increasing responsibilities of the Coast Guard that caused attention to be shifted to homeland security missions and other high-priority missions. I think the Congress and the administration were equally at fault for not ensuring that the Coast Guard, as the Coast Guard overseers, made sure that they continued to be fully funded and adequately funded, and that the

emphasis did not drift away from inadequate oil spill response capability.

Mr. LOBIONDO. And also, let me thank you for your service and your willingness to return back to the public side of things to share with us your expertise. It is very much appreciated.

The incident-specific review, the review notes that the area contingency plans were ineffective, and that the national contingency plan was not well understood by State, local, and even some Federal officials. Would strengthening and improving the ACPs to make them more effective help Government officials to understand what the Coast Guard is doing, and make us more effective here? Do you have any ideas or thoughts in this area?

Admiral RUFÉ. Yes, sir. Well, I think underway already, according to Admiral Z, is more inclusion of the local officials in that contingency planning process. And we think that is vital.

But I will say that it is much easier for these State and local officials to get up on their high horse and get excited about the fact they weren't included when there is a spill underway. It is another thing to have them sit through these long, laborious, really difficult meetings, where they have to sit down and decide what are the priorities. When everything is a priority, nothing is a priority. So to sit down and say, "This marsh is more important than this beach, and when it comes to protecting them, I am willing to have oil come up on this beach, as opposed to the marsh," it is an important consideration that they be able to sit down and hammer out at the contingency planning process.

So, including them certainly is important. They have to be willing to come to the meetings, to participate, and then to be part of the team that says, "This is the way we are going to handle this when the spill occurs," and I think then you will have less of the political influence over decisions being made about response strategies during an incident. They will feel part of the process. They will understand, as you point out, the national contingency planning process, as contrasted with the NRF. And we will have a much better process.

Mr. LOBIONDO. All we have to do is figure out how to force them to do that.

Admiral RUFÉ. That is right. Some funding for—they are always looking for funding. I don't know if that is a possibility. But, it is expensive for them to participate in the process.

Mr. LOBIONDO. Right.

Admiral RUFÉ. It takes them away from other things they are doing. And that is the case at every level. You know, the Secretary of Homeland Security only has so much bandwidth. And for her to go to an exercise—or him, whoever the secretary is—to learn more about the national contingency plan takes him or her away from something else that is on their plate.

So, I don't want to be critical, but it is important that these officials become engaged when you are not in the middle of a crisis, so they can understand what the process is, they can understand how the system works and be part of it, right from the get-go, rather than being in the learning process when the spill is ongoing.

Mr. LOBIONDO. Thank you. Master Chief Coble.

Mr. COBLE. I thought you had forgotten me, Mr. Chairman. Thank you.

Mr. LOBIONDO. Never.

Mr. COBLE. Good to have you all with us, gentlemen. Admiral Z, I was going to ask you about the administrative authority, or lack of it. But I think you and the chairman pretty well detailed that, so I won't revisit it.

Admiral Rufe, good to have you back on the Hill, as the chairman said. The incident-specific preparedness review is a third-party report chartered by the Coast Guard and compiled by a team of industry and oil spill experts. The ISPR noted that the Coast Guard's environmental response capabilities have atrophied, or lapsed. What can be done to restore these capabilities if, in fact, you agree that they did lapse?

Admiral RUFÉ. Yes, sir. I certainly agree they did lapse. I think the Coast Guard is already underway in bringing their response capability up to the level that it should be, based on our report and based on the other reports, to the extent that they can do that internally.

However, it is going to require funding. And that is, I think, where the Congress comes in, where the President comes in. It is important that the President support a strong budget for the Coast Guard. Admiral Z can't say this, but I can, I am retired now, that the President support a strong budget for the Coast Guard that doesn't compromise one critical mission for another, and that the Congress support a strong funding for the Coast Guard so they can do the R&D that is necessary, and can restore the capability that it needs to respond to these spills.

And, you know, the fact that we are drilling further and further offshore in deeper and deeper water, I think we are being less than honest with the American public to say that that is a free lunch. You know, we need the oil, but it comes with great risk. And we need to minimize that risk, and be sure that we are doing it as safely as possible. But it is not a zero-risk industry. So, when these incidents occur, as infrequently as they may, we have to be prepared to respond to them adequately.

Mr. COBLE. I concur. Thank you, Admiral. Mr. Caldwell or Mr. Rusco, since the oil spill there has been much discussion about the regulatory oversight of MODU—that is, offshore drilling units—especially those that are foreign-flagged. Was the Coast Guard adequately inspecting MODUs prior to the *Deepwater Horizon* incident, in your opinion?

Mr. CALDWELL. We put a chart in our report, and we tried to get color copies to committee members, as well, to show it is really complex. This chart shows which MODUs fell under which categories. The inspections that were conducted by the Coast Guard would differ from a normal offshore facility.

Mr. LARSEN. Mr. Chairman?

Is that the chart on page 15 of your report?

Mr. CALDWELL. Correct.

Mr. LARSEN. OK, thank you.

Mr. COBLE. Well, was there a gap between the Coast Guard and BOEM inspections prior to the incident? And if so, what was being overlooked, or missed?

Mr. CALDWELL. We didn't find that Coast Guard wasn't doing inspections of MODUs. What we saw was that the kinds of inspections Coast Guard was doing on a MODU were generally different than they do on a larger offshore production unit.

Mr. COBLE. OK.

Mr. CALDWELL. Because MODUs rarely meet the production thresholds to bring in section 106 of the Maritime Transportation Security Act, which would require that they have a security plan, the Coast Guard does not do annual security inspections.

Mr. COBLE. I thank you, sir. And just for the record, Mr. Chairman, for the benefit of the uninformed, the chairman has affectionately promoted me to master chief status. I am not a master chief, and I am not qualified to be one. But I thank you for that, Mr. Chairman, and I yield back.

Mr. LOBIONDO. Well, in this committee you are a master chief, and you are qualified to be one.

Mr. COBLE. I thank you, sir. I appreciate that.

Mr. LOBIONDO. The gentleman from Minnesota.

Mr. CRAVAACK. Thank you, Mr. Chairman, and thank you for the great panel being here today. Thank you for the United States Coast Guard for doing what you do on a daily basis that so many people don't even realize what you do. So thank you for keeping us safe.

A couple of questions I did have is for Mr. Rusco, if I could, sir. Is it safer to drill in deeper water or more shallow water? Or is it the same?

Mr. RUSCO. There are different risks associated with both. So I am not sure I can answer which is safer. But what we can say is, looking at processes for managing offshore drilling, that it is clear that the regulator needs to understand more clearly what all those risks are, and build that into the planning and permitting process.

Mr. CRAVAACK. OK. If an incident such as *Deepwater Horizon* occurred in more shallow water, would it have been easier to respond to?

Mr. RUSCO. Yes. I am certain that that is correct, that Deepwater, in the specific incident that occurred, did create its own unique difficulties, in terms of response.

Mr. CRAVAACK. In your opinion, can you tell me why we were drilling in such deep water, versus in more shallow water?

Mr. RUSCO. The progress of drilling in the gulf has taken place as a result of following the resources where they are, but also taking advantage of new technologies that have allowed drilling in deeper and deeper waters.

Mr. CRAVAACK. OK. So there is—the reason why we were drilling in deeper and deeper water is only—was because of the resources that were available out there, versus, for example, drilling in more shallow water?

Mr. RUSCO. I think we started in shallow waters because that is what we could do, technologically, way back at the beginning. The technology improved, both in terms of exploration and discovery of resources. And we discovered that there were vast resources further and further offshore, and the technologies enabled the companies to go there.

Mr. CRAVAACK. Do you think we are prepared now for another *Deepwater Horizon*, if that would occur? I know there were some unique, you know, incidents that occurred. But do you think we would be able to do it again, but respond in a better manner?

Mr. RUSCO. Obviously, a lot of lessons have been learned. But I think those lessons need to be codified into regulation and rules, and that process is ongoing. At GAO we currently have ongoing work looking at response technologies, and also looking at the permitting and planning process that BOEM is using, and inspection regulations and rules that BSEE is adopting. We will be reporting out on that towards the end of the year and the beginning of the next year, and we should have a lot more to say about that.

Mr. CRAVAACK. OK. Thank you, sir. Admiral Rufe, would you agree with that, or—since you are not wearing the stripes any more, you can let her rip.

Admiral RUFÉ. Yes, yes, generally speaking. Now, we did not look at the drilling operation itself. We were strictly limited—our team was strictly limited to the response to the spill. So we didn't have any role in assessing blame or looking at the technology to—the drilling technology.

But I will say, in terms of responding to a spill, yes, I think there were a lot of lessons learned about how to cap a well that we didn't know before this came. There were things developed—to BP's credit, there were things developed on the fly that should have been in place earlier, weren't, but they developed them pretty quickly. And I think, were it to occur again we would be better prepared.

I wouldn't say we are not going to end up with oil on the beach. I think history tells us if you have oil in the water, it is going to end up on the beach, and people have to accept that is a risk. That is one of the risks of production.

Mr. CRAVAACK. Right.

Admiral RUFÉ. That is one of the costs of production, and people have to accept that.

Mr. CRAVAACK. Right. OK. Great. Thank you, sir. Appreciate it.

Mr. Caldwell, in your recent findings you noted that the former MMS was not adequately staffed for inspecting offshore facilities. Under the MOU with the Coast Guard, the MMS was responsible for ensuring the safety compliance for all offshore oil platforms. Is there a cause to believe that the safety systems for the platforms were not being inspected prior to the *Deepwater Horizon*? And I understand that there has been some—you are up to a certain percentage, but you are not quite there yet.

Can you kind of expand upon that, and what we are trying to—making sure that you have the resources that you need to make sure it occurs?

Mr. CALDWELL. I will ask Mr. Rusco to answer on those—

Mr. CRAVAACK. OK.

Mr. CALDWELL [continuing]. Issues.

Mr. RUSCO. Yes. So we have found for a number of years that Interior—and this is not just offshore, it is also onshore, but obviously this is about offshore—have not met all of their internal and regulatory requirements for inspections. And the key reason for that is that they have had trouble attracting, training, and retaining staff that are qualified to do that.

These inspectors go out and they are inspecting for a lot of things having to do with production verification. Also, in the same inspection, they will look for safety violations or environmental issues. And so these inspections are all together typically done by the same staff. They have been hard pressed to maintain a level of trained staff to meet all those needs. And Interior has requested funding for additional staff, but to my knowledge they are working on developing that. But they are not there yet.

Mr. CRAVAACK. OK. Thank you, sir. Mr. Chairman, my time has expired. I yield back.

Mr. LOBIONDO. Gentleman from the 27th District of Texas? Is that correct?

Mr. FARENTHOLD. Yes, sir.

Mr. LOBIONDO. You are now recognized.

Mr. FARENTHOLD. Thank you very much, Mr. Chairman. We—there has been a lot of talk today about inspections. And I guess we will ask—or I will ask—Admiral Z and Mr. Rusco. Had the *Deepwater Horizon* been inspected the day before the blowout, would you all have—do you think you all would have caught something that would have stopped it?

You know, my reading of the reports were there were a series of bad events that happened and bad decisions that were made and troubles associated with setting cement that deep under water. Had all the inspections in the world been conducted, do you think the result would have been different, and there wouldn't have been the blowout?

Admiral ZUKUNFT. One area of particular concern was the gas detection system had been muted, which would not have provided maybe perhaps adequate warning that there had been a release of gas to perhaps earlier attention to shut that well in. But that would have been detected during an inspection.

Some of the other—the electrical systems, the life-saving systems that we would check would not have had any impact on the outcome of this. But some of the inherent—especially these remote sensors that would detect a presence of gas, you know—

Mr. FARENTHOLD. It might have given us a little more time?

Admiral ZUKUNFT. That may have provided us a little bit more window of time.

Mr. FARENTHOLD. Mr. Rusco, do you have anything to add?

Mr. RUSCO. I think that I can't say that it could have been prevented, had there been an inspection the day before. But what I can say is that Interior recognizes that its inspection process needs to be improved, both in terms of applying risk-based standards for when and how to inspect. And they are working to change their inspection process. We are in the process of evaluating that, and we can report out on that.

Mr. FARENTHOLD. Thank you. And there is—the United States is not the only country developing oil and gas in the Gulf of Mexico. You are seeing an increase in Mexico, and now Cuba is starting to be involved in that.

How—the way the currents work in the Gulf of Mexico—I represent the gulf coast, you know, from Corpus Christi, Texas, to Brownsville—that stuff tends to—the currents tend to take it our way. And we suffered for years from a blowout in Mexico. How is

the Coast Guard prepared, if at all, to deal with a spill taking place in waters of another country, and in a completely foreign-controlled situation?

Admiral ZUKUNFT. We are working multilaterally, as we speak, to address concerns that we have with offshore drilling in Cuba and the Bahamas. Those currents, while not of concern to Texas, is of great concern to southern Florida and our eastern seaboard, and perhaps would make impact within 5 to 10 days of a catastrophic event. So we are already working on our area contingency plans.

More importantly, you know, what our response posture—there are some legal gaps, in terms of what we would call a responsible party when, in a foreign EEZ, there is a release of oil that impacts the U.S. Clearly, we have our Oil Spill Liability Trust Fund. But certainly there are constraints there.

And so, working with that other foreign country—Cuba, in particular, is—will be a challenge, but we are working very closely at the interagency level to address that particular concern, because that drilling effort will commence in January.

Mr. FARENTHOLD. Now, under existing law we have got technology that we couldn't share with a country like Cuba, is that correct?

Admiral ZUKUNFT. Again, we are working with other governmental agencies. What we did learn from *Deepwater Horizon*—the capping stack did not exist on April 20th, on the day of that blow-out. That was designed, literally, on the fly, as was the top hat and other intervention methods. Helix, a U.S. company, now has dynamically positioned vessels and that technology literally on the shelf. So what we need to—you know, our concern is we want to contain that before that oil comes ashore and causes environmental and economic damage to the United States.

So, that information, we do want to be able to share that to protect U.S. interests.

Mr. FARENTHOLD. And finally, there was a lot of talk in the media as this was going on that there were various offers of assistance from foreign governments and foreign assets that could have been brought to bear in responding, and those were either not used or turned down for a variety of reasons.

How has that been addressed? Can we, in the future, find a way to deal with the foreign companies that want to help, or are we adequately situated to do it entirely ourselves with no help?

Admiral ZUKUNFT. We address this in our instruction. Again, this was a lesson we learned on the fly, and we stood up what we called an interagency technological assistance program that assessed every foreign offer of assistance, and whether it would immediately alleviate some of the impact that we were seeing.

We actually flew equipment from the Netherlands to the Gulf of Mexico. We didn't send the vessels, because it would take them a month to get there, but we entertained over 67 foreign offers of assistance, and we did receive assistance from 22 countries across the globe.

Mr. FARENTHOLD. So you think you may have been treated unfairly with the media on that one?

Admiral ZUKUNFT. Yes. Well, I think the other part is, you know, you do not want to be doing research and development in the midst of a spill of national significance. So having that available on the shelf would have been much more helpful for us to implement—

Mr. FARENTHOLD. Well, I see my time has expired. Thank you very much for your answers, and I will yield back.

Mr. LOBIONDO. The gentleman from coastal Louisiana.

Mr. LANDRY. Thank you, Mr. Chairman. Thank you, Rear Admiral, Vice Admiral, for your service, and the panel, for being here today. This question is actually for both Admiral Z and Vice Admiral Rufe.

Do you agree with conclusion O of the JIT report which says that the proximity and operational capabilities of the offshore supply vessel *Damon B. Bankston* were critical to the successful evacuation of 115 survivors of this casualty?

Admiral ZUKUNFT. Congressman, absolutely. Although the *Damon B. Bankston* was not a standby vessel, she was in that immediate proximity. And the outcome could have been much different for those 115 survivors.

Mr. LANDRY. And she was an EEP vessel, classified vessel, though, right?

Admiral ZUKUNFT. That is correct.

Mr. LANDRY. You know, because one of my biggest concerns—certainly, you know, I always believe that the greatest natural resource we have in the Gulf of Mexico is actually the men and women who ply that dangerous trade. And I want to learn from this accident, and I want to take it as a learning experience, and make sure that we implement ways to make sure that those people get back home if we ever have another accident like that.

We heard from the panel that this action was mostly caused by human error, communication problems. Those things can happen again even under the most perfect system, any time you insert the human element in it.

And so, you know, and one of the things that I find amazing is that, by having the *Damon B. Bankston* there, the Coast Guard lowered a rescue swimmer down from the chopper that arrived at the scene about an hour-and-a-half or so later. And that swimmer conducted triage, and ensured that the most severely injured individuals were evacuated first.

Absent the presence of that vessel, of the motor vessel *Damon B. Bankston*, where would this triage have occurred on these 110 people?

Admiral ZUKUNFT. Yes. Again, had it not been for the *Damon B. Bankston*, you know, I think the outcome for some of those survivors would have been much different. She was very critical to the immediate rescue and survival of some of the more critically injured.

Mr. LANDRY. So—and so I guess you would agree with the witness statement that was found in the JIT report which says that if the *Damon B. Bankston* wouldn't have had a fast rescue craft, there may have been 10 more lives lost?

Admiral ZUKUNFT. That was a very likely outcome. Yes, sir.

Mr. LANDRY. And so, again—because it is hard for people who have never been out in the Gulf of Mexico, who can't understand

the environment that these men and women are dealing with, and how vast that gulf is, that—and the amount of people. I think it is hard for people to even understand how many people were actually on that particular rig.

That again, if you have everyone evacuating off that rig, and this rig being totally taken out of service in a manner that no one can stay on it, if we don't have a place where those people can—where we can bring everyone to a central location in an effort to allow the Coast Guard—because only the fastest manner that you all have for getting out there at that distance would be a helicopter, is that correct?

And so, again, to triage those personnel, and ensure that we provide and administer first aid and get those who are critically wounded helo'd out, we need a stable platform by which to do that. Would you not agree?

Admiral ZUKUNFT. I have been in that business for over 34 years, Congressman, and I do agree.

Mr. LANDRY. And lastly, again—I mean I hate to continue to beat this dead horse—so you would agree with the safety recommendations which state: “It is recommended that the commandant revise 33 CFR subchapter N to establish designated standby vessels for MODUs engaging in oil and gas drilling activities in the outer continental shelf”?

Admiral ZUKUNFT. Yes. We have not pursued that. We are currently working with our Federal advisory committees to first work through that process. But certainly we, in the context of *Deepwater Horizon*, fully appreciate the safety of life factor that is involved with this.

But we are going through, as we would any regulatory process, going through that outreach process first.

Mr. LANDRY. Thank you, Mr. Chairman. I yield back.

Mr. LOBIONDO. Mr. Larsen?

Mr. LARSEN. Admiral Rufe, I said I would get back to you, and then you ended up answering all the questions I had. And I had—a lot with the ACPs and what we can do about those, but there are a few more questions.

Your report generally speaks positively concerning the use of alternative response technologies, specifically the use of dispersants and in situ burning. Your report does recommend, however, that more work needs to be done to evaluate those technologies and assess their overall impact on the marine environment, and establish protocols and procedures for when they might be safely used.

Which Federal agency should lead that assessment? Should it be conducted by a nongovernmental entity? Is there a role for industry? If there is, what role would that be for industry, in order to accomplish what you have recommended?

Admiral RUFÉ. Well, first of all, yes. This was an unusual spill, and dispersants we used at a level never before seen and never before contemplated, including inserting large amounts of dispersants at the well head. So the long-term impacts on the environment are still out there. There should be studies done, and there are studies being done to see what, if any, negative long-term impacts there might have been by that extensive use of dispersants.

I think EPA should lead that, and they are qualified to do it. That is their wheelhouse for that kind of work. I think industry has a large role to play in that, because there is a lot of expertise in industry, both in the manufacturing and producing of dispersants, as well as the application of them. Certainly the Coast Guard ought to be involved in it, because the Coast Guard does have a role in the authorization in the use of dispersants, although EPA is the lead.

So, I think—EPA ought to be the lead for it, but certainly with input from a number of Federal agencies. NOAA probably has a large role in being part of that investigation, because they have the scientific capability to assess best how that impacts the environment.

Mr. LARSEN. On the ACPs, if I could—just yes or no, or you can expand a little bit—I just want to make sure I understand your point about the involvement of local communities, what a State, what this parish, what this county level, city level—

Admiral RUFÉ. Right.

Mr. LARSEN [continuing]. That your point is that if we are going to use the NCP, which you state is the appropriate framework to use in these kinds of incidents, that it is going to take much more education and training of these communities about what the NCP is, and how they fit into it, than has currently been done. And, as a result, it will take more resources to do that, resources that currently, you know, either exist in the budget, would need to be moved from some other place in the budget, or don't exist in the budget and need to be added to the budget in order to get the magnitude of the training done.

Admiral RUFÉ. Yes. I think so, because I think, up until recently, the Coast Guard has had a good relationship with the State authorities who are involved in the spill response—

Mr. LARSEN. Yes, right.

Admiral RUFÉ [continuing]. And they have been fully involved in the contingency planning process.

I think the Coast Guard relied—overly relied on the State to bring in the local folks. And that hasn't happened, either because of funding considerations, because they weren't invited, because it was too complicated. Just don't know. And that hasn't been the case everywhere. As I said, it is uneven. Some places there has been better outreach to the locals.

But they need to be included. And if there are incentives that need to be put in place to get them included, that is very important, because we can't have this confusion and discord in the middle of a spill, where the local officials are recommending that we power-wash marshes, when that has been a known inappropriate response technology for years and years, and should have been worked out in the contingency planning process well in advance, so that you know that when oil gets into the marsh you leave it alone, you don't power-wash it out of there and do more damage than just by leaving it alone.

Mr. LARSEN. Yes, right. Admiral Z, I want to talk a little—just a question about RMI. The JIT report concludes the Republic of the Marshall Islands, the flag state registry failed to meet its responsibilities to ensure the safety of *Deepwater Horizon*, and also failed

to properly monitor the two recognized organizations that it contracted with for verifying the compliance with ISM codes.

Admiral Papp, in his final action memo in response to the JIT report, however, finds that more fault lies with the IMO guidelines, rather than RMI's Government or the recognized organizations.

That being the case, what specific changes does the Coast Guard intend to pursue within the IMO's flag state implementation subcommittee to, for lack of a better term, tighten the IMO guidelines to ensure proper vigilance by the flag administrations and by recognized organizations?

Admiral ZUKUNFT. We have since met with RMI and with DNV and ABS, one the flag state and two of the recognized organizations that were cited in the JIT report.

Mr. LARSEN. Just—Det Norske Veritas and American Bureau of Shipping.

Admiral ZUKUNFT. And American Bureau of Shipping.

Mr. LARSEN. Right.

Admiral ZUKUNFT. As a follow-on, you know, that impelled us to invoke this high-risk MODU program. Now, would *Deepwater Horizon* have been identified as a high-risk MODU at the—you know, prior to this event? In all likelihood, probably not. But at least it does provide us a better targeting approach of foreign activity within our EEZ that not just meets the IMO code, but also meets U.S. standards, as well. So that was really the impetus behind us invoking that high-risk MODU program.

Mr. LARSEN. Can I ask you to clarify for me? Would this—identifying the high-risk MODUs, is that—would that be an additional set of steps, or would that be a replacement?

Admiral ZUKUNFT. That would be in addition to. And this is a policy, not a regulation.

Mr. LARSEN. Yes, good. Thank you very much. Thank you, Mr. Chairman.

Mr. LOBIONDO. Admiral Z, you stated we don't want to do research and development in the midst of a response, which I think we certainly understand your point and agree. But in the 20-year lull between the *Exxon Valdez* and this *Deepwater Horizon*, very little, I think, oil prevention research and development was done.

Now that the response phase is over to this particular disaster, do you have any idea, or can you tell us what research and development is being done, so that we don't find ourselves in the year 2030 and we're going to have to learn on the job again?

Admiral ZUKUNFT. Clearly, we need not look any further than dispersants. And what is—especially the impact of sub-sea application of dispersants on the ecosystem. I will say that that did launch a—the most expansive—the sub-sea monitoring program that I worked with NOAA to implement, to determine if there was any recoverable oil anywhere on the sea floor throughout the Gulf of Mexico, an armada of ships out there doing sampling on the sea floor and in the water columns. So—but we didn't have good technical awareness of what the impact of all of that dispersant applied at 5,000 feet would be.

There will always be challenges in mechanical removal of oil. During this oil spill we had 17 consecutive days where wind and weather prohibited us from using skimmers or doing in situ burn-

ing because of the sea state. And so when you lose that mechanical ability, what other tools do you have? And it really comes down to, you know, chemical dispersant, and to be able to mitigate that before that oil works its way into these very sensitive wetlands.

But that would be one of the key areas is, you know, one, what is the baseline within the Gulf of Mexico of the ecosystem, recognizing there are natural seepages that take place, the microbial activity, because we had an oil budget, and that at the end of that there is a certain amount of oil remaining, but we don't have a good model to predict, you know, what the degradation rate of that remaining oil would be, and at what point does it no longer cause harm to the environment.

So, those are some of the, entering into a spill, information that I could have benefitted from, as we looked at the day-to-day decisions over dispersants, and what the long-term impact of that might be.

Mr. LOBIONDO. Rick, do you have anything else?

Mr. LARSEN. No.

Mr. LOBIONDO. OK. I would like to thank the panel very much for being here today, for your work on this issue.

Admiral Z, we will look forward to your responses to those several areas we asked about.

I thank the Members for their participation, and the subcommittee stands adjourned.

[Whereupon, at 11:25 a.m., the subcommittee was adjourned.]

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House of Representatives

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DEEPWATER HORIZON

Coast Guard and Interior Could Improve Their Offshore Energy Inspection Programs

Statement of Stephen L. Caldwell, Director
Homeland Security and Justice
and
Frank Rusco, Director
Natural Resources and Environment





Highlights of GAO-12-203T, a testimony before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The April 2010 explosion of the *Deepwater Horizon*, a mobile offshore drilling unit (MODU), showed that the consequences of an incident on an offshore energy facility can be significant. A key way to ensure that offshore energy facilities are meeting applicable security, safety, and production standards is through conducting periodic inspections of the facilities. The Coast Guard and the Department of the Interior (Interior) share oversight responsibility for offshore energy facilities. The Coast Guard is to conduct security inspections of such facilities, whereas based on an agreement between the two agencies, Interior is to conduct safety compliance inspections on some offshore facilities on behalf of the Coast Guard as well as its own inspections to verify production. This testimony addresses: (1) the extent to which the Coast Guard has conducted security inspections of offshore energy facilities, and what additional actions are needed; (2) the extent to which Interior has conducted inspections of offshore energy facilities, including those on behalf of the Coast Guard, and challenges it faces in conducting such inspections; and (3) the Coast Guard's oversight authority of MODUs. This testimony is based on GAO products issued from September 2008 through October 2011.

What GAO Recommends

GAO has previously recommended that the Coast Guard develop policies and procedures to monitor and track annual security inspections for offshore energy facilities and that Interior address its human capital challenges. The Coast Guard and Interior agreed.

View GAO-12-203T. For more information, contact Stephen L. Caldwell at (202) 512-9610 or scaldwell@gao.gov and Frank Rusco at (202) 512-3641 or ruscof@gao.gov.

November 2, 2011

DEEPWATER HORIZON

Coast Guard and Interior Could Improve Their Offshore Energy Inspection Programs

What GAO Found

The Coast Guard conducted about one-third of its required annual security inspections of offshore energy facilities from 2008 through 2010 and does not have procedures in place to help ensure that its field units conduct such inspections in accordance with its guidance. The Coast Guard's guidance does not describe specific procedures for the way in which Coast Guard staff should track whether annual inspections have been conducted. For example, Coast Guard field unit supervisors and marine inspectors GAO interviewed from five of the six Coast Guard field units that are to conduct annual security inspections said that they do not maintain any tool to track whether such inspections had been conducted. GAO recommended in October 2011 that, among other things, the Coast Guard develop policies and procedures to monitor and track annual security inspections. The Coast Guard concurred and stated that it is planning to update its guidance for field units to address these issues.

Interior's inspection program has not consistently met its internal targets for production inspections, and faces human capital and reorganization challenges, but has met its limited target for compliance inspections conducted for the Coast Guard. In March 2010, GAO found that for four district offices it reviewed, Interior only met its production inspection goals once during fiscal years 2004 through 2008. Further, GAO reported that difficulties in hiring, training, and retaining key staff had contributed to challenges in meeting its inspections goals. However, in recent years, Interior reported that it met its 10 percent target to conduct compliance inspections of staffed, fixed offshore energy facilities on behalf of the Coast Guard. In fiscal year 2010, Interior reported that it exceeded its target and conducts such inspections on 169 of the 1,021 staffed, fixed offshore energy facilities and has met this target for such inspections for the previous 5 years. In May 2010, Interior reorganized its bureau responsible for overseeing offshore energy activities. In June 2011, GAO reported that while this reorganization may eventually lead to more effective operations, GAO is concerned with Interior's ability to undertake this reorganization while meeting its oversight responsibilities. Among other things, Interior plans to hire additional staff with expertise in inspections and engineering. Amidst these changes, Interior reported that it was difficult to determine how many inspections it would conduct in fiscal year 2012.

The Coast Guard has limited authority regarding the security of MODUs registered to foreign countries, such as the *Deepwater Horizon*. MODUs are subject to Coast Guard security regulations if (1) they are self-propelled or (2) they meet specific production or personnel levels. Whereas the Coast Guard may physically inspect a U.S.-flagged MODU to ensure compliance with applicable security requirements, the Coast Guard's oversight of foreign-flagged, self-propelled MODUs, such as the *Deepwater Horizon*, is more limited. The Coast Guard is conducting a study designed to help determine whether additional actions could better ensure the security of offshore energy facilities, including MODUs. Further, the Coast Guard has implemented a risk-based oversight policy for all MODUs to address safety and environmental protection issues. Although this policy does not directly address security, increased oversight resulting from this policy could help mitigate the risk of a terrorist attack to a MODU.

Chairman LoBiondo, Ranking Member Larsen, and Members of the Subcommittee:

We are pleased to be here today to discuss oversight and inspections of offshore energy facilities. The April 2010 explosion of the *Deepwater Horizon* mobile offshore drilling unit (MODU) showed that the consequences of an incident at offshore energy facilities can be significant. The explosion resulted in 11 deaths, serious injuries, and the largest oil spill in the history of the United States. Recent reports on the *Deepwater Horizon* incident, including the Incident Specific Preparedness Review, On Scene Coordinator Report, and Joint Investigation Team Report, have raised questions about the oversight of such offshore energy facilities.¹ Our recent work raises similar concerns about federal inspections and related oversight of offshore energy facilities and MODUs.²

Offshore energy facilities include facilities that operate on the outer continental shelf (OCS) and are generally described as facilities temporarily or permanently attached to the subsoil or seabed of the OCS and which engage in exploration, development, or production of oil, natural gas, or mineral resources.³ There are currently about 3,900 such facilities in the Gulf of Mexico, which include fixed and floating offshore energy facilities as

¹U.S. Coast Guard, *BP Deepwater Horizon Oil Spill: Incident Specific Preparedness Review* (Washington, D.C.: January, 2011); *On Scene Coordinator Report: Deepwater Horizon Oil Spill* (Washington, D.C.: September 2011); and *Report of Investigation into the Circumstances Surrounding the Explosion, Fire, Sinking, and Loss of Eleven Crew Members Aboard the Mobile Offshore Drilling Unit Deepwater Horizon in the Gulf of Mexico, April 20-22, 2010, Volume I* (Washington, D.C.: September 2011).

²GAO, *Maritime Security: Coast Guard Should Conduct Required Inspections of Offshore Energy Infrastructure*, GAO-12-37 (Washington, D.C.: October 28, 2011); *Oil and Gas: Interior's Restructuring Challenges in the Aftermath of the Gulf Oil Spill*, GAO-11-734T (Washington, D.C.: June 2, 2011); and *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes*, GAO-10-313 (Washington, D.C.: Mar. 15, 2010).

³See 33 C.F.R. § 101.105. The OCS is a designation for all submerged lands extending seaward from generally 3 nautical miles off the coastline to at least 200 nautical miles, and of which the subsoil and seabed appertain to the U.S. and are subject to its jurisdiction and control. See 43 U.S.C. § 1331(a); 33 C.F.R. § 140.10.

well as MODUs.⁴ The nation's economy and security are dependent, in part, on the domestic offshore exploration and production of oil and natural gas that occur at offshore energy facilities. However, if an incident occurs at one of these offshore facilities, it could be difficult for the Coast Guard and other federal or local agencies to respond quickly because such facilities are generally located many miles from shore.

A key way to ensure that offshore energy facilities are meeting applicable security, safety, and environmental standards is through conducting periodic inspections of the facilities. The Coast Guard and the Department of the Interior (Interior) share oversight responsibility for offshore energy facilities. The Coast Guard—a component of the Department of Homeland Security—is the lead federal agency responsible for maritime security, including the security of offshore energy facilities. Interior, through its component agencies, is the lead federal agency responsible for enforcing safety, environmental oversight, and conservation compliance regarding offshore resources on the OCS.⁵

Our testimony today will address three main objectives:

- the extent to which the Coast Guard has conducted security inspections of offshore energy facilities, and what additional actions are needed;
- the extent to which Interior has conducted inspections of offshore energy facilities, including those on behalf of the Coast Guard, and what challenges it faces in conducting such inspections; and

⁴A fixed offshore energy facility is a bottom-founded facility permanently attached to the seabed or subsoil of the OCS, including platforms, guyed towers, articulated gravity platforms, and other substructures. A floating offshore energy facility is a buoyant facility securely and substantially moored so that it cannot be moved without special effort. This term includes tension leg platforms, spars, semisubmersibles, and shipshape hulls. A MODU is a vessel capable of drilling operations for exploring or exploiting subsea oil, natural gas, or other minerals.

⁵On October 1, 2011, the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), reorganized into two independent entities: the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE). BOEM is responsible for managing development of the nation's offshore resources in an environmentally and economically responsible way, and its activities include oversight of leasing, environmental studies, and economic analysis. BSEE is responsible for enforcing safety and environmental regulations. More information on this reorganization is provided later in this statement.

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- the Coast Guard's oversight authority of MODUs.

This testimony is based on an October 2011 report on the Coast Guard's efforts to ensure the security of offshore energy facilities⁶ as well as our body of work on Interior's oil and natural gas leasing and royalty collection programs issued from September 2008 through June 2011.⁷ We conducted the performance audit work that supports this statement in accordance with generally accepted government auditing standards. Detailed information on the scope and methodology for our prior work can be found in those reports. Further, we reviewed memorandums of understanding or agreement between the Coast Guard and Interior regarding how the two agencies regulate offshore energy facilities as well as agency documents, such as budget justifications.

Background

Memorandum of Understanding Regarding Jurisdictions on the OCS

In 2004, the Coast Guard and the Minerals Management Service—a component of Interior that was subsequently reorganized into the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), and, most recently, the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE)—signed a memorandum of understanding (MOU) to delineate inspection responsibilities between the agencies. Per the MOU, the Coast Guard is responsible for ensuring (1) the safety of life and property on offshore energy facilities and vessels engaged in OCS activities; (2) workplace safety and health, including enforcement of requirements related to personnel, workplace activities, and conditions and equipment on the OCS; and (3) security of offshore energy facilities. The MOU assigns Interior responsibility for, among other things, managing the nation's oil, natural gas, and other mineral resources on the OCS in a safe and environmentally sound manner.

⁶GAO-12-37.

⁷GAO-11-734T; GAO-10-313; and GAO, *Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk*, GAO-08-893R (Washington, D.C.: Sept. 12, 2008).

In addition to delineating inspection responsibilities between the Coast Guard and Interior, the MOU is further divided into five memorandums of agreement, one of which addresses the agencies' responsibilities where jurisdiction overlaps. In accordance with this memorandum of agreement, the Coast Guard is the lead agency with responsibility for the inspection and testing of all marine and lifesaving equipment onboard fixed and floating offshore energy facilities and MODUs, and Interior is the lead agency with responsibility for the inspection and testing of all production and drilling equipment on these facilities. The Coast Guard, however, had authorized Interior (specifically, what was then the Minerals Management Service) to perform inspections of fixed offshore energy facilities and to enforce Coast Guard regulations applicable to such facilities. For example, the Coast Guard is to conduct an initial inspection of each new fixed offshore energy facility to determine whether it is compliant with Coast Guard safety regulations. However, after the initial inspection, the Coast Guard has authorized Interior's inspectors to conduct such safety inspections on behalf of the Coast Guard and enforce Coast Guard regulations applicable to those facilities as a means to avoid duplicating functions, reduce federal costs, and increase oversight for Coast Guard compliance without increasing the frequency of inspections. Therefore, with respect to fixed offshore energy facilities, the only inspections for which the Coast Guard is exclusively responsible beyond the initial safety inspection are the annual security inspections, to the extent that these facilities meet the applicable criteria, as described below. The Coast Guard continues to have responsibility for conducting inspections and enforcing its regulations on floating offshore energy facilities and MODUs.

**Coast Guard's Security
Inspection Responsibilities**

In accordance with federal laws, agreements between the Coast Guard and Interior described above, and Coast Guard guidance, Coast Guard is responsible for conducting annual security inspections of offshore energy facilities that meet or exceed any one of three thresholds for production or personnel—(1) producing greater than 100,000 barrels of oil a day, (2) producing more than 200 million cubic feet of natural gas per day, or (3) hosting more than 150 persons for 12 hours or more in each 24-hour

period continuously for 30 days or more.⁸ We refer to the 57 offshore energy facilities that met or exceeded these thresholds at some point from 2008 through 2010—and were therefore subject to security inspections during those years—as “OCS facilities.”⁹ Of these 57 OCS facilities, all of which are located in the Gulf of Mexico, 41 are fixed OCS facilities and 16 are floating OCS facilities.¹⁰

Staff at Coast Guard headquarters oversee and develop policies and procedures for field staff to follow when conducting security inspections of OCS facilities and to assist affected owners and operators so that they can comply with maritime security regulations. Among other things, Coast Guard marine inspectors in the field units conduct security inspections of OCS facilities by taking helicopter rides to facilities that can range up to 200 miles offshore. Once arriving, inspectors are to conduct on-site interviews with facility security officers and observe operations to verify whether required security measures are in place. As of August 2011, the

⁸See 33 C.F.R. § 106.105(a). In accordance with the Maritime Transportation Security Act (MTSA) of 2002, as amended, and its implementing security regulations, codified at parts 101 to 106 of title 33, Code of Federal Regulations, the Coast Guard undertakes efforts to ensure maritime security by, among other things, reviewing and approving security plans produced by owners and operators of regulated vessels and facilities. See Pub. L. No. 107-295, 116 Stat. 2064 (2002). An amendment by the Security and Accountability For Every (SAFE) Port Act of 2006 provides that, subject to the availability of appropriations, the Secretary of the Department of Homeland Security shall verify the effectiveness of facility security plans at least twice a year, one of which shall be an inspection of the facility conducted without notice. See Pub. L. No. 109-347, § 103, 120 Stat. 1884, 1888 (2006) (codified at 46 U.S.C. § 70103(c)(4)(D)). The Coast Guard undertakes to assess the effectiveness of such facility plans by, for example, conducting security inspections.

⁹Facilities that meet these thresholds are subject to 33 C.F.R. part 106, which include additional security related requirements. For more information on the security of facilities regulated under part 106, see GAO-12-37.

¹⁰A fixed OCS facility is a fixed offshore energy facility that meets at least one of the applicable threshold criteria to be regulated for security under 33 C.F.R. part 106. Fixed OCS facilities include (1) production platforms that produce oil and/or natural gas; and (2) transmission platforms, whose primary purpose is the pumping, maintenance, and/or inspection of transfer pipelines. A floating OCS facility is a floating offshore energy facility that meets at least one of the applicable threshold criteria to be regulated for security under 33 C.F.R. part 106. This term includes tension leg platforms and permanently moored semisubmersibles or shipshape hulls, but does not generally include MODUs or other vessels. However, for the purposes of this report, we include non-self-propelled MODUs that meet relevant production or personnel thresholds in the category of floating OCS facilities because such MODUs are also regulated for security under 33 C.F.R. part 106. From 2008 through 2010, there was one such MODU that was regulated for security under 33 C.F.R. part 106.

Coast Guard had about 12 active marine inspectors who were qualified to conduct security inspections of OCS facilities. These inspectors work out of six field units near the Gulf of Mexico—Mobile, Alabama; Morgan City, Louisiana; New Orleans, Louisiana; Corpus Christi, Texas; Galveston, Texas; and Port Arthur, Texas.

**Interior's Inspection
Responsibilities**

In line with the responsibilities set forth in the MOU discussed above and to ensure compliance with applicable laws and regulations, Interior has an offshore oil and natural gas inspection program intended to verify that the operator complies with Interior regulations and requirements at a well site. Interior's offshore oil and natural gas oversight includes inspections of production activities including drilling, regular production activities, meters, abandoned platforms, and pipelines, among other things.¹¹ Also in accordance with the MOU between the two agencies, Interior conducts both "full" and "limited" inspections of fixed offshore energy facility on behalf of the Coast Guard. During the full inspections of staffed, fixed offshore energy facilities, Interior's inspectors are to review all applicable Coast Guard requirements, which include 27 safety items. During limited inspections, which are to be conducted on all fixed offshore energy facilities in the course of conducting inspections at those facilities for Interior's purposes, Interior's inspectors are to review less than half of the safety items. During these inspections, Interior's inspectors are to, among other things, check for safety items such as the presence of equipment designed to prevent tripping, slipping, or drowning.

¹¹For the purposes of this testimony we refer to "production inspections," which are measurement-related inspections that Interior defines as "site security" inspections. These inspections are designed to verify that offshore platforms and other measurement facilities meet Interior regulations concerning the handling of oil and gas production. Site security inspections typically include a visual examination of piping to verify that oil and gas do not flow around—or bypass—measurement meters.

Coast Guard's Security Inspection Program Has Faced Challenges and Could Be Improved

Coast Guard OCS facility guidance provides that Coast Guard personnel are to conduct security inspections of OCS facilities annually, but our analysis of inspections data show that the Coast Guard has not conducted such inspections for most of these OCS facilities.¹² For example, the Coast Guard conducted about one-third of the required annual inspections of OCS facilities from 2008 through 2010 (see table 1).¹³ Specifically, our analysis of Coast Guard inspections data shows that in 2008 the Coast Guard inspected 7 of 56 OCS facilities, which was 13 percent of the required annual inspections. More recently, in 2010, the Coast Guard inspected 23 of 51 (45 percent) OCS facilities that the Coast Guard should have inspected.¹⁴

¹²We use the term OCS facility guidance to refer to the Coast Guard's NVIC 05-03, *Implementation Guidance for the Maritime Security Regulations Mandated by the Maritime Transportation Security Act of 2002 for Outer Continental Shelf Facilities* (December 15, 2003).

¹³We present security inspection data only from 2008 through 2010. We also analyzed security inspection data for 2011 (through June 24, 2011), but did not report on this information because most of the annual security inspections on OCS facilities are typically not conducted until the fall. From January through June 2011, the Coast Guard conducted four inspections of the OCS facilities.

¹⁴These data come from the Coast Guard's Maritime Information for Safety and Law Enforcement database. As discussed in GAO-12-37, we found that the database had limitations that make it difficult to determine if security inspections were conducted. To address these limitations, we worked with Coast Guard officials and took additional steps to assess the reliability of the data, which are described in that report. We recommended that the Coast Guard make improvements to the database or its guidance to better ensure that all OCS facilities are accurately and consistently identified and that the results of security inspections are consistently recorded to allow for better data analyses and management of the security inspections process. The Coast Guard concurred with this recommendation.

Table 1: Security Inspections Required and Conducted of OCS Facilities, Calendar Year 2008 through 2010

Coast Guard field unit	2008		2009		2010	
	Inspections required	Inspections conducted	Inspections required	Inspections conducted	Inspections required	Inspections conducted
Corpus Christi	2	1	2	1	2	1
Galveston	5	2	4	3	4	4
Mobile	1	0	1	0	1	0
Morgan City	31	3	32	7	31	7
New Orleans	10	1	7	2	6	5
Port Arthur	7	0	7	7	7	6
Total (%)	56	7 (13%)	53	20 (38%)	51	23 (45%)

Source: GAO analysis of Coast Guard data.

Note: The number of OCS facilities fluctuates year-to-year based on whether a facility continues to meet or exceed the threshold criteria. For example, in 2009 there were 53 OCS facilities, but in 2010, 2 of the facilities became "deregulated." Once a facility (1) is below the production thresholds for a year or below the personnel threshold for 30 days; (2) has informed the Coast Guard; and (3) provided relevant documentation supporting that the facility is below the thresholds, the Coast Guard considers it no longer subject to 33 C.F.R. part 106 requirements and the facility will no longer be subject to security inspections.

Our analysis of Coast Guard inspections data shows that the Coast Guard generally inspected a greater percentage of floating OCS facilities than fixed OCS facilities (see table 2). For example, from 2008 through 2010, the Coast Guard conducted annual security inspections of 54 percent of floating OCS facilities compared to 24 percent of fixed OCS facilities. During our interviews with Coast Guard marine inspectors and their supervisors, we learned that some field units did not know that they were responsible for conducting security inspections of these fixed facilities, approximately one-third of which are not staffed because operations are automated. For example, marine inspectors in the Coast Guard field unit that oversees more than half of the OCS facilities stated that they had only recently learned that they were responsible for conducting security inspections of fixed OCS facilities. These marine inspectors stated that they thought that security inspections of the fixed OCS facilities within their area of responsibility were carried out by another field unit and that they had only been conducting annual security inspections of the floating OCS facilities. Further, other Coast Guard officials stated that it is easier to arrange for security inspections of floating OCS facilities because marine inspectors visit those facilities more frequently for other types of inspections, such as hull or safety inspections, whereas for fixed OCS facilities, the Coast Guard is required to conduct an initial safety inspection of each new facility and then is

solely responsible for conducting annual security inspections of fixed OCS facilities once a year for annual security inspections.¹⁵

Table 2: Security Inspections Required and Conducted at OCS Facilities, by Type, Calendar Year 2008 through 2010

Type	Inspections required	Inspections conducted	Percentage
Fixed OCS facility	119	28	24%
Floating OCS facility	41	22	54%

Source: GAO analysis of Coast Guard data.

The Coast Guard does not have procedures in place to help ensure that its field units conduct annual security inspections of OCS facilities annually in accordance with its guidance. *Standards for Internal Control in the Federal Government* state that internal controls should include control activities, such as policies, procedures, and mechanisms that help ensure management directives are carried out.¹⁶ However, the Coast Guard does not have such control activities in place. For example, the Coast Guard's OCS facility guidance does not describe specific procedures for the way in which Coast Guard staff should track whether annual security inspections have been conducted. Further, Coast Guard district officials and most local field unit supervisors and marine inspectors we spoke with do not maintain any kind of tool, such as a spreadsheet or calendar, to remind them when annual security inspections of OCS facilities are due. Coast Guard officials from five of the six Coast Guard field units that conduct annual security inspections of OCS facilities told us that they do not maintain a spreadsheet or other management tool to track whether

¹⁵As noted above, per the memorandum with Interior, the Coast Guard is solely responsible for the initial safety inspection of fixed offshore energy facilities, which includes fixed OCS facilities, after which Interior is authorized to conduct annual safety inspections of and enforce Coast Guard regulations applicable to such facilities. However, for floating facilities the Coast Guard still carries out various inspections throughout the year, including hull inspections.

¹⁶GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999). These standards, issued pursuant to the requirements of the Federal Managers' Financial Integrity Act of 1982 (FMFIA), provide the overall framework for establishing and maintaining internal control in the federal government. Also pursuant to FMFIA, the Office of Management and Budget (OMB) issued Circular A-123, revised December 21, 2004, to provide the specific requirements for assessing the reporting on internal controls. Internal control standards and the definition of internal control in OMB Circular A-123 are based on GAO's *Standards for Internal Control in the Federal Government*.

annual security inspections had been conducted. For example, at three of these locations, Coast Guard officials told us they rely on owners and operators to inform them when inspections were due rather than independently tracking when annual inspections were due. As a result of no procedures or control activities to manage the offshore security inspection program, the Coast Guard is not complying with its established maritime security requirements for most of the OCS facilities. Without conducting annual inspections of OCS facilities, the Coast Guard may not be meeting one of its stated goals of reducing the risk and mitigating the potential results of an act that could threaten the security of personnel, the OCS facility, the environment, and the public.

In our October 2011 report, we made a recommendation, among others, that the Coast Guard develop policies and procedures to monitor and track annual security inspections for OCS facilities to better ensure that such inspections are consistently conducted. The Coast Guard concurred with this recommendation and stated that it is planning to update its OCS facility policy guidance for field units to monitor and track annual security inspections for OCS facilities to better ensure that such inspections are consistently conducted.

Interior's Inspection Program Has Faced Challenges in Meeting Some Inspection Targets

Interior's inspection program has not consistently met its internal targets for production inspections, as we have reported in recent years. In 2008, we reported that Interior had not met its targets for conducting production inspections—examining metering equipment used to measure oil and natural gas production. Interior officials responsible for conducting production inspections in the Gulf of Mexico told us they completed about half of the required inspections in 2007, raising uncertainty about the accuracy of oil and natural gas measurement.¹⁷ In March 2010, we found that Interior had not routinely met its oil and natural gas production inspection goals. Specifically, we reported that Interior met its inspection goals only once—in 2008—during fiscal years 2004 through 2008, for four

¹⁷GAO, *Mineral Revenues: Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk*, GAO-08-893R (Washington, D.C.: Sept. 12, 2008).

district offices we reviewed in the Gulf of Mexico and the Pacific.¹⁸ Interior inspection staff told us that, during these years, there was a shortage of inspectors and that inspections were delayed because of cleanup related to Hurricanes Katrina and Rita in 2005. We are unable to present data for these years because, according to Interior officials, district offices often did not correctly record production inspections on their inspection forms; since then, Interior instituted a policy to record inspections correctly. Also in March 2010, we reported that Interior had encountered persistent human capital challenges in its inspection programs designed to ensure accurate measurement of oil and natural gas from federal lands and waters.¹⁹ In particular, we reported that Interior was hindered by difficulties in hiring, training, and retaining key inspections staff. We reported that this difficulty in attracting and retaining key staff contributed to challenges in meeting its responsibilities to conduct inspections, thereby, reducing its oversight of oil and gas development on federal leases, potentially placing the environment at risk. In our report, we made a number of recommendations to Interior to address these issues, some of which Interior is already in the process of implementing.

Although Interior has not consistently met its internal targets for production inspections, it has exceeded its target for Coast Guard compliance inspections. For fiscal year 2010, the most recent year reported, Interior's goal was to conduct full inspections covering all applicable Coast Guard regulations on 10 percent of the estimated 1,000 staffed, fixed offshore energy facilities. For fiscal year 2010, Interior reported that it more than met this goal by conducting such inspections on 169 of the 1,021 staffed, fixed offshore energy facilities—about 17 percent.²⁰ Further, Interior reported that it has met internal targets for

¹⁸In 2008, Interior changed its goal for measurement inspections for the Gulf of Mexico, its major production area. In 2008, the goal was to inspect the 100 highest-volume measurement locations in the Gulf. From 2004 through 2007, OEMM's goals were to conduct measurement inspections on 100 percent of all measurement locations. During those years, the agency performed about half of the inspections required to meet these annual goals.

¹⁹GAO, *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes*, GAO-10-313 (Washington, D.C.: Mar. 15, 2010).

²⁰Interior officials told us that Interior has never received additional funding to cover the inspections agreed upon in the MOU, and that Interior may review the MOU in the future based on level of future funding and its own inspection mandates.

these inspections for the previous 5 years. In addition, Interior reported that in fiscal year 2010 its inspectors also conducted limited inspections for compliance with Coast Guard regulations on all other fixed offshore energy facilities in the course of inspecting these facilities for their own purposes.

Interior has recently been reorganizing its offshore inspection program, which has resulted in some uncertainty regarding its inspection capabilities. After the *Deepwater Horizon* incident in April 2010, Interior initiated a reorganization of its bureau responsible for overseeing offshore oil and natural gas activities. Specifically, in May 2010, Interior reorganized its Minerals Management Service—the bureau previously tasked with overseeing offshore oil and natural gas activities—and created the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE). On October 1, 2011, Interior was further reorganized by dividing BOEMRE into two separate bureaus, the Bureau of Ocean Energy Management (BOEM)—which oversees leasing and resource management, and the Bureau of Safety and Environmental Enforcement (BSEE)—which is responsible for issuing oil and natural gas drilling permits and conducting inspections. We have reported that Interior could face challenges during its reorganization. In June 2011, we testified that Interior's reorganization of activities previously overseen by MMS will require time and resources and may pose new challenges.²¹ We stated that while this reorganization may eventually lead to more effective operations, organizational transformations are not simple endeavors. We also expressed concern with Interior's ability to undertake this reorganization while meeting its oil and natural gas oversight responsibilities. We believe that these concerns are still valid today.

While Interior was reorganizing its oversight responsibilities, it was also reforming its inspection program and, according to Interior, these reforms have created uncertainty regarding future oversight inspections. As part of the inspections program reform, Interior plans to hire additional staff with expertise in oil and natural gas inspections and engineering and develop new training programs for inspectors and engineers involved in its safety compliance and enforcement programs. Specifically, Interior reported in February 2011 that it was seeking to hire additional inspectors for its offshore inspection program to meet its needs during fiscal years

²¹GAO-11-734T.

2011 and 2012.²² Interior reported that it had 62 inspectors—which, it reported, was not sufficient to provide the level of oversight needed for offshore oil and natural gas production. Interior has also requested additional funding to implement these changes. Further, Interior has stated that its new inspection program may involve inspectors witnessing more high-risk activities, and in-depth examination of some aspects of Gulf oil and natural gas production, and so inspections may take more time in the future and be more difficult to fold into the existing inspection schedules. As a result, Interior reported that it was difficult to determine how many inspections would be conducted in fiscal year 2012.

The Coast Guard Has Limited Authority over the Security of MODUs Registered to Foreign Countries

While the *Deepwater Horizon* incident was not the result of a breakdown in security procedures or the result of a terrorist attack, the loss of the *Deepwater Horizon*, a foreign-flagged MODU, and the resulting oil spill have raised concerns about U.S. oversight over MODUs that are registered to foreign countries.²³ In this regard, various circumstances govern the extent to which the Coast Guard oversees the security of MODUs. In general, MODUs operating on the OCS implement security measures consistent with applicable security requirements—specifically, they implement requirements in accordance with U.S. security regulations and the International Maritime Organization's International Ship and Port Facility Security (ISPS) Code.²⁴ Depending on the particular characteristics and operations of the MODU—for example, its method of propulsion or its personnel levels—it may be subject to Coast Guard security regulations governing vessels (33 C.F.R. part 104) or OCS facilities (33 C.F.R. part 106). MODUs will fall under applicable Coast

²²The United States Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, *Budget Justifications and Performance Information, Fiscal Year 2012* (Washington, D.C.: February 18, 2011), 28.

²³The *Deepwater Horizon* was registered to the Republic of the Marshall Islands.

²⁴The Coast Guard's security regulations—33 C.F.R. parts 101 through 106—are consistent with the ISPS Code. The International Maritime Organization is the international body responsible for improving maritime safety. It primarily regulates maritime safety and security through the *International Convention for the Safety of Life at Sea, 1974*. Among other things, the ISPS Code establishes an international framework, involving cooperation between contracting governments, government agencies, local administrations, and the shipping and port industries to detect and assess security threats and take preventive measures against security incidents affecting ships or port facilities in international trade, and to ensure confidence that adequate and proportionate maritime security measures are in place.

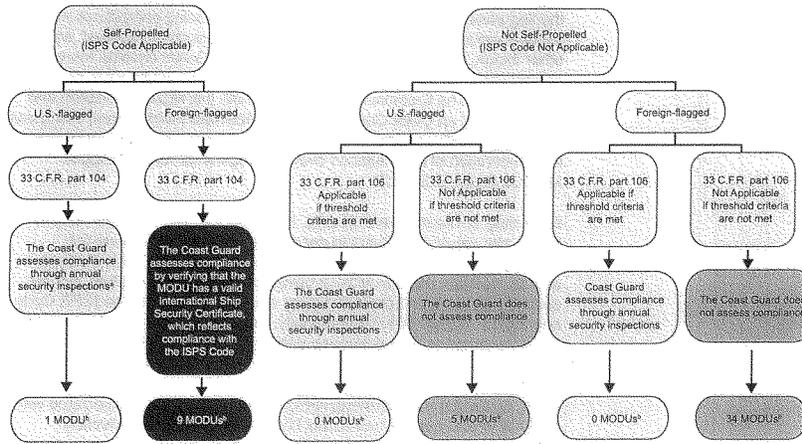
Guard regulations if (1) they are self-propelled—that is, they are capable of relocating themselves, as opposed to other types that require another vessel to tow them—in which case they are subject to the ISPS Code and 33 C.F.R. part 104, or (2) they meet production or personnel levels specified in 33 C.F.R. part 106. Whereas the Coast Guard may physically inspect a U.S.-flagged MODU to ensure compliance with applicable security requirements, the Coast Guard’s oversight of foreign-flagged, self-propelled MODUs, such as the *Deepwater Horizon*, is more limited.²⁵ In the case of self-propelled, foreign-flagged MODUs, the Coast Guard will assess compliance with part 104 by reviewing a MODU’s International Ship Security Certificate, which certifies compliance with the ISPS Code. While Coast Guard inspectors may also observe security measures and ask security related questions of personnel, absent consent from the flag state, the inspectors generally do not have authority to review a self-propelled, foreign-flagged MODU’s vessel security plan. In all other cases where MODUs are subject to Coast Guard security requirements, the Coast Guard assesses compliance with part 104 or part 106 through annual security inspections.²⁶ Figure 1 illustrates the types of MODUs, the applicable security requirements, and the means by which the Coast Guard assesses compliance.²⁷

²⁵As a self-propelled, foreign-flagged MODU, the *Deepwater Horizon* was subject to the requirements of the ISPS Code. In July 2009, Coast Guard inspectors conducted a certificate of compliance examination on the *Deepwater Horizon* in which the inspectors reviewed all applicable licenses and other compliance documents, including those related to security; the inspectors found no deficiencies during this examination.

²⁶The *Deepwater Horizon* was self-propelled and foreign-flagged.

²⁷For more detail on the applicable security requirements for MODUs, see GAO-12-37.

Figure 1: Coast Guard Security Requirements Applicable to MODUs Operating in U.S. Federal Waters



Source: GAO analysis of ISPS Code, 33 C.F.R. parts 104 and 106, and Coast Guard MISLE data, and U.S. Coast Guard.

^aA self-propelled, U.S.-flagged MODU must also comply with the ISPS Code and possess an International Ship Security Certificate if it is on an international voyage. 33 C.F.R. part 104 security regulations, which govern self-propelled, U.S.-flagged MODUs, are consistent with the ISPS Code.

^bThere are no MODUs operating in U.S. federal waters that meet the threshold criteria for being subject to 33 C.F.R. part 106. The numbers for other categories of MODUs shown above—those that are subject to 33 C.F.R. part 104 and those that do not meet the threshold criteria for being subject to 33 C.F.R. part 106—are the number of MODUs in each category that are, according to the Coast Guard, drifting in the Gulf of Mexico as of September 23, 2011.

The Coast Guard may not be fully aware of the security measures implemented by self-propelled, foreign-flagged MODUs because of its limited oversight of such MODUs. The Coast Guard and BOEMRE, BSEE's predecessor, conducted a joint investigation into the *Deepwater Horizon* incident, and the Coast Guard's report from the investigation emphasized the need to strengthen the system of Coast Guard oversight of foreign-flagged MODUs. The Coast Guard's report from the joint investigation stated that the Coast Guard's regulatory scheme for overseeing the safety of foreign-flagged MODUs is insufficient because it defers heavily to the

flag state to ensure safety. While the investigation focused on issues that were not related to security, such as safety, these findings may have implications for security oversight because the Coast Guard also relies on the flag state to carry out responsibilities for assessing compliance with security requirements. The joint investigation team recommended, among other things, that the Commandant of the Coast Guard develop more comprehensive inspection standards for foreign-flagged MODUs operating on the OCS. The Commandant concurred with this recommendation and has chartered an Outer Continental Shelf Activities Matrix Team, which has been tasked with providing recommendations on the establishment and implementation of an enhanced oversight regime for foreign-flagged MODUs on the U.S. OCS.

According to Coast Guard officials, it is likely that MODUs operating in deepwater would be subject to security requirements because the industry is increasingly using dynamically positioned MODUs that are able to maintain position without being anchored to the seabed, and as such MODUs are self-propelled, they would be subject to the ISPS Code and 33 C.F.R. part 104.²⁸ Additionally, the Coast Guard is conducting a study designed to help determine whether additional actions could better ensure the security of offshore energy infrastructure in the Gulf of Mexico, including MODUs. This study is expected to be completed in the fall of 2011. Gaining a fuller understanding of the security risks associated with MODUs could better inform Coast Guard decisions and potentially improve the security of these facilities. Further, the Coast Guard has implemented a new risk-based oversight policy for MODUs, including foreign-flagged MODUs, to address safety and environmental protection issues. This policy includes a targeting matrix to assist inspectors in determining whether a foreign-flagged MODU may require increased oversight, based on inspection history or other related factors, through more frequent examinations by the Coast Guard. Additionally, the policy calls on Coast Guard field units to conduct random, unannounced examinations of a portion of all MODUs in their areas of responsibility. Although this policy does not directly address security, increased oversight resulting from this new policy could help mitigate some of the ways in which a MODU might be at risk of a terrorist attack.

²⁸According to a 2006 report from Interior's Mineral Management Service, deepwater is traditionally defined as those water depths greater than or equal to 1000 feet. See Department of the Interior, Minerals Management Service, *Leasing Oil and Natural Gas Resources: Outer Continental Shelf* (Washington, D.C.: 2006).

Chairman LoBiondo, Ranking Member Larsen, and Members of the Subcommittee, this completes our prepared statement. We would be happy to respond to any questions you may have at this time.

**GAO Contacts and
Staff
Acknowledgments**

For questions about this statement, please contact Stephen L. Caldwell at (202) 512-9610 or caldwells@gao.gov, or Frank Rusco at (202) 512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. In addition to the contacts named above, key contributors to this testimony were Christopher Conrad, Assistant Director; Jon Ludwigson, Assistant Director; Lee Carroll and Erin O'Brien, analysts-in-charge; and Alana Finley. Thomas Lombardi provided legal support and Lara Miklozek provided assistance in testimony preparation.

Related GAO Products

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Deepwater Horizon Oil Spill: Actions Needed to Reduce Evolving but Uncertain Federal Financial Risks. GAO-12-86. Washington, D.C.: October 24, 2011.

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Testimony of Vice Admiral Roger Rufe, Jr for the Subcommittee on
Coast Guard and Marine Transportation; November 2, 2011

Good Morning, Mr. Chairman, Ranking Member Larsen and members of the committee. I appreciate the opportunity to appear before you today to discuss the Incident Specific Preparedness Review (ISPR) for the Deepwater Horizon Oil Spill. I am Vice Admiral Roger Rufe, USCG (ret). I was chair of the Deepwater Horizon ISPR team chartered by the Commandant of the Coast Guard on 14 June 2010 to assess the implementation and effectiveness of preparation and response to the Deepwater Horizon oil spill. Unlike other Deepwater Horizon investigations, our effort was focused solely on the response to the oil spill. We had no role in assessing responsibility for or the cause of the explosion and fire at the Macondo well.

This morning I will briefly describe some of our findings and recommendations, but I ask that the entire ISPR report be made a part of the record of this hearing.

Our ISPR team was composed of 14 spill response experts representing federal government agencies, state governments, the oil production and spill cleanup industries and environmental NGOs. We conducted 92 interviews; all were not for attribution. All ISPR team members signed non-disclosure/confidentiality agreements. We operated independently with no oversight from the Coast Guard or the Administration. We integrated fully with the President's National Commission and National Commission staff participated in virtually all of our interviews. Chapter 5 of the report to the President is based largely on information gleaned during the ISPR interview process.

While all of our findings and recommendations are important for improving response to future incidents, I would like to emphasize the following points:

Area Contingency Plans (ACPs) are of uneven quality and need to be improved especially with respect to identifying and prioritizing Environmentally Sensitive Areas (ESAs) and detailing strategies for protecting them. ACPs must also identify the resources needed for responding to a worst case discharge. Local officials have not been sufficiently involved in the developing of ACPs and need to be engaged throughout the planning cycle.

Confusion between the National Response Framework (NRF) and the National Contingency Plan (NCP) contributed to what Admiral Allen described as “the social and political nullification of the NCP”. Political officials at all levels are more familiar with and more comfortable with the NRF model used for natural disasters where local responders are in charge. Support and funding is provided as necessary to the state by the federal government under the Stafford Act.

Unlike the NRF, the NCP is codified in regulation and has been used successfully for oil spills for decades. It operates under the “polluter pays” principle where the responsible party, not the government, pays for response and recovery. Under the NCP, the federal government through EPA or the Coast Guard in charge of the response.

The NCP remains the right model for oil and hazardous chemical spill response but the NRF and the NCP need to be better integrated and elected officials need to be better educated on the NCP.

The incident command needs to quickly attain “information dominance” and retain it throughout the response. A single source of authoritative information is critical to public confidence but is difficult to achieve in

our 24/7 cable news cycle. Social media must be better integrated into the communications effort.

There were failures of crisis leadership at virtually every level of the response, from government to industry, from national to state and local. Our report concludes that effective crisis leadership is perhaps the critical success factor for major incidents. We describe the characteristics and qualities of effective crisis leaders and recommend these be used to pre-identify future National Incident Commanders.

The support and funding that the Coast Guard received following the Exxon Valdez spill and its commitment to the response mission has atrophied. This is due in part to the effectiveness of spill prevention programs leading to fewer large spills as well as diversion of funding to the Coast Guard's critical homeland security responsibilities. Congress needs to restore funding for the response mission and ensure that the Coast Guard is fully funded for all of the service's critical missions.

Thank you, Mr. Chairman; I would be pleased to answer your questions.



Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
Staff Symbol: CG-0921
Phone: (202) 372-3500
Fax: (202) 372-2311

**REAR ADMIRAL PAUL F. ZUKUNFT
ASSISTANT COMMANDANT FOR MARINE SAFETY, SECURITY, AND STEWARDSHIP
ON THE
DEEPWATER HORIZON OIL SPILL RESPONSE AFTER ACTION REPORTS
BEFORE THE
HOUSE TRANSPORTATION & INFRASTRUCTURE
SUBCOMMITTEE ON COAST GUARD & MARITIME TRANSPORTATION**

NOVEMBER 2, 2011

Good Morning Chairman LoBiondo, Ranking Member Larsen, and distinguished members of the subcommittee. I am honored to appear before you today to provide follow-up details on the U.S. Coast Guard's status in regard to the 2010 Macondo 252 Spill of National Significance (SONS) that resulted from the tragic explosion and sinking of the Mobile Offshore Drilling Unit (MODU) Deepwater Horizon (DWH).

Summary of Deepwater Horizon Incident Key Reports

The Coast Guard has conducted a comprehensive review of several Deepwater Horizon reports, including the Incident Specific Preparedness Review (ISPR), the Federal On-Scene Coordinator's (FOSC) Report, the National Incident Commander's (NIC) Report, and the Joint Investigation Team (JIT) Report.

- The ISPR is the process by which the Coast Guard examines the implementation and effectiveness of the preparedness for and response to a major spill or other hazardous substance release, as it relates to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Area Contingency Plans and other oil spill response plans. On June 14, 2010, the Commandant of the Coast Guard chartered an ISPR team to conduct an independent, third-party review of the DWH response. The ISPR team was comprised of Federal and state government representatives along with representatives from the oil exploration and production industry, non-governmental organizations, community groups and the professional oil spill response industry who served as technical advisors. The report represents the independent views of the ISPR team and provides its assessment of the Coast Guard's preparedness process as well as recommended corrective actions.
- In accordance with the NCP, the National Response Team (NRT) formally requested a Federal On-Scene Coordinator's (FOSC) Report following the BP Deepwater Horizon oil spill. This report, which was recently completed, describes the situation as it developed, the actions taken, the resources committed and the problems encountered during the incident. The report also covers a wide range of topics relevant to the response, including safety, state and local official involvement, common operating picture, and the Natural Resource Damage Assessment (NRDA). The DWH FOSC Report was publicly released on September 14, 2011.
- The National Incident Commander's Report, released on October 1, 2010, discussed the effectiveness of the NCP as the U.S. blueprint for responding to both oil spills and hazardous substance releases. The report reviewed the roles and responsibilities of the NIC and examined

whether existing legal authorities and doctrine were adequate. The NIC, Coast Guard Admiral (Retired) Thad Allen, provided his observations and recommendations regarding the authorities, doctrine, and policy that collectively provide the governance constructs used for oil spill response.

- In the days following the loss of the DWH, the Department of Homeland Security (DHS), through the Coast Guard, and the Department of the Interior, through the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), convened a formal investigation to examine the circumstances surrounding the tragic incident. This endeavor was classified under 46 U.S.C. 6308 and the governing rules for both agencies. The Joint Investigation Team (JIT) was comprised of and co-chaired by members from the Coast Guard and BOEMRE. The Coast Guard JIT members examined five aspects of this disaster relating to areas under Coast Guard jurisdiction: the explosions, the fire, the evacuation, the flooding and sinking of the MODU, and the safety systems of DWH and its owner-operator, Transocean. The findings, conclusions, and recommendations of the Coast Guard members of the JIT were publicly issued as Volume I on April 22, 2011. In the Final Action Memo (FAM), released on September 14, 2011, the Commandant accepted Volume I and commented on its findings, conclusion, and recommendations.

Together, all of these reports provide a valuable body of lessons learned, perspectives, and opinions, and they validate the soundness and effectiveness of the National Contingency Plan and National Response System. All of these reports pointed to the challenges in sustaining a response to a large uncontrolled spill over an extended period of time. The common themes in these reports identified the need to validate and enhance national capabilities to mechanically recover, chemically disperse, and burn oil in-situ. Incident management mechanisms and the health of our connectivity to our oil spill response community partners, especially at the state and local levels, also need to be bolstered. They also point to the need to refocus attention on oil spill research and development. In addition, they point out that a truly catastrophic oil spill requires close interaction with potential spill response providers worldwide and the need to establish more effective mechanisms for international cooperation in response to catastrophic oil spills.

Coast Guard Actions on Report Recommendations

The Coast Guard has reviewed the findings and conclusions of each report and is using these to improve upon our processes through several initiatives:

- 1) Strengthening interagency partnerships and transparency of operations between the Coast Guard and BSEE:
 - The Director of the Bureau of Safety and Environmental Enforcement (BSEE, formerly BOEMRE) and the Coast Guard Deputy Commandant for Operations meet on a quarterly basis to discuss issues of importance to the Agencies with regard to the Outer Continental Shelf (OCS) community. In addition to these quarterly meetings, the Agencies established working groups that are collaboratively engaged on a wide range of issues such as Oil Spill Response Plans (OSRP) reviews, oil spill response exercises, and joint inspections. The Agencies are also working closely on the development of new regulations, policies, and directives to address lessons learned and regulatory gaps identified in the DWH JIT Report.
 - The Coast Guard and BSEE have conducted a joint review of OSRPs in the OCS Regions of the Gulf of Mexico, the Pacific, and Alaska. This review identified the most accurate, up-to-date Worst Case Discharge (WCD) information for offshore facilities. In addition to the OSRP review, the Coast Guard and BSEE conducted a comprehensive analysis of Regional

Contingency Plans and Area Contingency Plans to identify significant WCD preparedness gaps. The Coast Guard directed field commanders to address these gaps and ensure WCD planning scenarios in all oil spill contingency plans reflect WCD information identified during the joint OSRP review.

- The Coast Guard is working jointly with BSEE to review the existing Effective Daily Recovery Capacity regulations for calculating the effectiveness of mechanical oil spill response equipment. The Work Group will determine if improvements are necessary to better align planning standards with actual performance of response equipment.

2) Current Initiatives:

Influenced by the DWH response and the findings of the various reports, the Coast Guard is currently establishing goals, objectives, and initiatives and courses of action to pursue over the next five years. By leveraging existing relationships under the National Response System and within DHS, the Coast Guard will measure the effectiveness of these program improvements.

- To heighten the Coast Guard's ability to manage and sustain an incident response, the Coast Guard is actively developing a Federal On-Scene Coordinator Representative training course, considering personnel enhancements in the pollution response field that will allow our high-performing Marine Science Technician enlisted personnel to advance into greater leadership roles, and tailoring the National Strike Force Coordination Center to better handle future incident management responses. The President's Budget requests billets in FY 2012 to establish a National Incident Management Assistance Team (IMAT) and additional billets to increase our pollution response capacity. A National IMAT will provide immediate deployable incident management surge capacity to Coast Guard Incident Commanders nationwide.
- While the NCP is sound and performed well during DWH, the Coast Guard is working with DHS, the NRT, and other agency partners to update guidance documents and protocols, the most notable of which is a new Coast Guard SONS/NIC Instruction to reflect DWH lessons learned.
- The Coast Guard, in partnership with EPA and FEMA, is engaged in a work group to develop recommendations that support improvements for whole-of-government responses under both the National Response Framework (NRF) and the NCP.
- We are working closely with the NRT and its member agencies, including EPA and the National Oceanic and Atmospheric Administration, to review and update dispersant and in-situ burn guidelines and protocols to ensure that these critical, high-volume spill response mitigation measures are readily and appropriately available to operational commanders in combating catastrophic spill events.
- The Coast Guard identified the need for Area Committees to encourage more participation from state and local officials in oil spill planning and preparedness efforts. As part of the Coast Guard's FY 2012 Strategic Planning Direction, we re-emphasized existing guidance for District and Sector Commanders to develop aggressive outreach programs with states, parish, county, and other local officials.

3) Safety and Prevention Improvements:

The Coast Guard is aggressively pursuing updates to OCS regulations. These updates will include standards for new and emerging technologies within the industry. We are also updating regulations in 46 CFR subchapter I-A, MODU Regulations. These regulatory updates will address safety gaps identified in Deepwater Horizon reviews for critical equipment such as Dynamic Positioning Systems and electrical installations in hazardous areas. The Coast Guard is also incorporating changes mandated by the Coast Guard Authorization Act of 2010.

- The Coast Guard has engaged the International Maritime Organization through its Flag State Implementation Subcommittee with regard the provisions on the Code for Recognized Organizations. This mandatory code is expected to be ready for adoption in 2012 and will include requirements and guidelines for flag state monitoring of recognized organizations acting on their behalf.
- Earlier this year, the Coast Guard published the Office of Vessel Activities Policy Letter 11-06, "Risk-Based Targeting of Foreign Flagged Mobile Offshore Drilling Units." This policy letter provides procedures for risk-based targeting of foreign flagged MODUs based on accident history, past discrepancies, flag state performance, and classification society performance. Risk-based targeting allows for efficient use of Coast Guard resources and more frequent examinations of the highest risk MODUs.

Summary/Conclusion

The BP Deepwater Horizon oil spill response was ultimately successful due to the effectiveness of the NCP, the unity of effort across all levels of government, industry, and the private sector, and perseverance of the many organizations and individuals that contributed to this unprecedented response. While the lessons learned from the BP Deepwater Horizon oil spill were framed in the midst of a SONS, our post-DWH initiatives have applicability to incidents of all sizes. We will continue to work closely with our agency partners to ensure a unified, whole-of-government approach to oil spills and domestic incident management.

Thank you for the opportunity to testify before you today and I will be pleased to answer your questions.