

Interview Summary Form

Interview Details

Interviewee Name: <u>RADM Zukunft</u>	Date: <u>8/26/10</u>	Time: <u>9:00am</u>
Interviewee Title: <u>FOSC</u>	Interviewee Job Location: <u>Robert, LA</u>	
Interviewer Name(s): <u>Team</u>	Interview Location: <u>New Orleans, LA</u>	

Interview Questions

Initial Question: What was your job/role and how did it evolve (if at all) during the DEEPWATER HORIZON Incident?

Focus Area: UAC/ICP (Jim)	Question 1: Who was the FOSC at each stage of the response?
Focus Area: UAC/ICP (David)	Question 2: <ol style="list-style-type: none"> 1. How were you appointed as the FOSC? 2. When you arrived as the FOSC did you discover things were different from what you had been told? 3. How was your in-briefing handled? 4. What did you find that was different or needed to be changed? 5. What was the status of the spill when you arrived?
Focus Area: Common Operating Picture	Question 3: What organization produced the COP used by you and most responders? How effective was it?
Focus Area: Involvement of NRT/RRT (John T)	Question 4: Did the UAC have any interaction with the NRT?
Focus Area: ESAs (Randy)	Question 5: Has the UAC had any involvement with the prioritization or protection of ESAs? What is that level of involvement? Boom removal?
Focus Area: Role of the National Incident Commander (NIC) (Jim)	Question 6: Did you find standing up the NIC and the NIC itself helpful?
Focus Area: Political Demands (John C.)	Question 7: Please describe the working relationship with the parishes and the Parish Liaison Officer Program. How can that be improved? Please tell us more about the Parish Liaison Officer Program.
Focus Area: Long Term Sustainability (John T)	Question 8: <ol style="list-style-type: none"> 1. Was the USCG Preparedness Program adequately resourced and ready for this spill? 2. In your opinion, did you have sufficient resources for long-term sustainability in relationship to personnel, equipment?
Focus Area: Long Term Sustainability (David)	Question 9: <p>Is there a transition plan?</p> <ol style="list-style-type: none"> a. What does this plan include? b. Please describe the top issues you are dealing with in the transition plan, such as demobilizing, ESAs, Parishes, and NRDA.

Final Question 1: What were the top 2 "best practice(s)" during this incident, from your perspective?

Final Question 2: What do you assess to be the top 2 "areas needing improvement" (or downright "failures") from your perspective, and do you have any related recommendations regarding these areas?

What was your job/role and how did it evolve (if at all) during the DEEPWATER HORIZON Incident?

- On April 20th he was the Director of Response Policy for CGHQ, and was working on the designation of the spill as a SONS, including standing up the NIC and initializing the ISPR process.
- Originally it looked as if it would be an incident (30 days or less). Realized it was a campaign (more than 30 days), not an incident after the first week.
- He arrived in early June (first few days), and had a large punch list, including, but not limited to:
 - Development of one Common Operating Picture that incorporated all of the dynamic information and a COP that could be shared with all levels of government and the public to allow for a transparency of effort.
 - Coordinating a fleet of over 8,000 VOOs, hundreds of aircraft, beach cleanup teams, etc. and creating a communications network so that all could communicate and coordinate.
 - Develop the severe weather contingency plan (as hurricane season started on June 1) which looked at personnel, equipment, etc. Also considered how to link the ongoing NCP response with a NRF/Stafford Act Declaration in response to a hurricane.
 - Host senior officials that came to see what was happening in the field; by serving as tour guide, RADM Z was able to see what was happening at the tactical level in the field and at the Branches.
 - Became media spokesperson on operational issues. Realized a need to plan your narrative a few days (4 days) in advance, as you are able to keep ahead.
- It seemed obvious that the response plans were not able to address the concerns of a spill of this magnitude.
- After touring the environmentally sensitive areas with senior officials he started to conduct daily calls with the Secretary of DHS to brief on what he was seeing and daily operations.
- Following the above duties, he was appointed as the FOSC for the last 7 weeks (took over mid-July). During his time as FOSC, the final cap was put on the well (4 days after taking over).

Tell us about the SONS Declaration?

- The incident was declared a SONS and the next day ADM Allen was designated as the NIC.
- The USCG was indoctrinated into the SONS, including designation of a NIC, through participation in many SONS exercises over the years, including SONS 2010 which just occurred.
- This response was under the NCP and the concepts of the NCP were developed prior to the NRF. Under the NRF and HSPD-5 framework, the Secretary of the Department of Homeland Security would be designated as the PFO.

Flow rate data released to the media indicated that it was a lot less than what the ultimate rate was, but the response effort seemed not be based on the flow rate or on what the public was told. In your opinion, why was this?

- There was not a lot of science behind the flow rate, and it kept rising as we got more information. At no point did we have that spill rate locked down. It was hard to identify what was in the reservoir and how to quantify the rate was a challenge.
- At the time, we were dealing with a very elusive flow rate – about 1,000 barrels a day and then 5,000 barrels a day.
- Recognized that it was easier to prepare for the worst case vs. finding that we did not respond to an adequate degree, so that was how the UAC proceeded.

Who was the FOSC at each stage of the response?

- RADM Landry was first FOSC at initial phase of the response (for 40 days) and she spent her time establishing the organization.

- We had a daunting battle rhythm early on – conducting senior leadership department meetings (twice a day), 2 calls/day with NRT (and SEC or DEPSEC), daily Governor's calls (facilitated by the White House) and daily press conferences/briefings.
- RADM Watson was sent to help control the flow of resources. He served as the Deputy FOSC.
- Roughly 4 weeks after the explosion, the first bit of oil came onshore.
- There was a lot of focus on the first objective - stop the flow of oil (i.e., source control). Lots of modifications/work on the BOP during those weeks, but the interventions didn't work.
- When the top kill failed, we were near the beginning of hurricane season, and had oil on shore.
- The decision was made to allow RADM Landry to return to her position as the 8th District Commander.; the 8th District is the largest geographic District with 26 states.
- RADM Watson took over around 1 June as FOSC and RADM Nash was brought in to serve as his deputy.
- This was around the time when RADM Z came in (see above for specifics about his roles).

Is there a designation letter of the FOSC as RADM Landry from the Commandant?

- Yes.

When you became the FOSC, how was your in-briefing handled? What was the focus when you became FOSC?

- RADM Z did not need a special in briefing; he had already been fully integrated in operations before taking over as FOSC.
- One large focus after he assumed the role of FOSC was to build trust and confidence with the State and locals (i.e., Parish Presidents). One of their concerns was that with the cap closed and the source secured, everyone would pack up and leave. In response to this, he developed a 5-phase transition plan to lead into recovery/restoration phase. RADM Z conveyed to stakeholders that there was still a long way to go, he conducted a lot of outreach to get people to understand what to expect and what the issues were/are.
- There were also new issues related to determining the fate of the existing oil that was floating in the Gulf.
- Prior to Hurricane Alex, he met with the Parish Presidents and explained what could happen with the storm moving through, including the temporary demob/evacuation of personnel and equipment, tar balls showing up on beaches, etc. When tar balls did show up, they were then already ahead of it.
- One key focus as the FOSC is to anticipate what the news will be in a few days, and try to be proactive in anticipating what tomorrow's news stories will be and try to get ahead. Don't get caught up in being reactive – had to be proactive in anticipating what tomorrow's news will be. External affairs became integral.
- Parish Presidents were on CNN criticizing the response operation, so it became clear to RADM Z that as the Parish Presidents represent the constituents and people living on the Gulf of Mexico, he had to build a better relationship with the State, Parish Presidents, and BP, as they were the RP – so he engaged in an effort to build a better alliance and working relationship.
- Over 70 USCG liaison officers were assigned to Governors, County leaders and Parish Presidents to form a network of communications, and to keep open communications with the local constituents. The liaison officers would report to the Assistant Secretary of DHS directly through daily conference calls and voice the concerns and ongoing actions at the local and State levels. This was not part of the NCP, but it worked to keep open communication.
- He developed a draft 5-level transition plan with trigger points and metrics. The end of the Transition Plan is when NRDA picks up. There were two versions of the transition plan, one for Louisiana and one for the other states. Why? Because Louisiana refused to sign the Transition Plan originally presented. RADM Z planned meetings to review the transition plan with the states and to clear up any confusion related to the transition, SCAT teams, NRDA, etc. When he conducted outreach, he was working to ensure they knew that the Unified Command would be around as long as they were needed.
- RADM Z also worked to establish an aggressive subsea monitoring program.

- He initiated more engagement at the local level; took steps to be more proactive.
- President Obama made a number of public addresses, including some stating that unfortunately it was expected that there would be oil coming ashore, but the responders in the field would work to keep as much oil offshore as possible. That was RADM Z's emphasis – elevate awareness and do whatever was needed to stop oil coming ashore or mitigate the impacts.
- There was an A-Whale that self launched and RADM Z was personally was part of monitoring from the air, he wanted to be very objective in that process and assess if it was helpful, but decided it was not the right collection tool for this type of spill, and he reported this directly to the President.
- During his time as FOSC, he gave all new technologies every opportunity to proceed.

What happened in the early stages with the development of a Common Operating Picture? Was the tool used something that should be recommended for future events?

- Establishing a COP was one of the items that RADM Z needed to accomplish upon his arrival (prior to becoming FOSC). He met with the Scientific Support Coordinator (SSC) from NOAA first; saw their Emergency Response Management Application database (ERMA). He asked the SSC if it could include AIS info, track oil, skimmer and aircraft locations, communication between all resources, etc. Through that dialogue, the SSC team reached back to Seattle to get assistance in incorporating the changes and then we were able to use ERMA as the COP.
- ERMA was integrated into the daily briefings; could show the current data and make decisions on moving resources.
- We were able to use it to show elected officials what equipment was where.
- ERMA was posted to a .GOV website (over 2 million hits after 2 days) and used for transparency across the response; everyone could see and have access. It was a breakthrough in how the entire response coordinated and communicated.
- NGA provided hi-resolution imagery (unclassified) that was incorporated into ERMA. It helped to show the locations of boom, see where boom was displaced after a storm, which afforded us an ability to move equipment to the correct places faster.
- If skimmers needed to move from Houma to Mobile –the decision would come from the UAC, but other than that, tactical decisions were in the hands of the ICPs.
- Using ERMA as the COP was a best practice, especially sharing it with the public domain and allowing them to see what was going on at any given time.

Did the UAC have any interaction with the NRT? As most of the NRT agencies replaced their normal representatives with agency heads or principals, was this still effective?

- Very early on, when RADM Z was in DC, he was chairing some of the NRT calls. The emerging issue right out of the box was the use of dispersants – it was one of the most critical issues that he saw during the response.
- When he was FOSC, he got full concurrence of RRT on the use of dispersants.
- Dispersants is a very methodical process – monitoring, dispersant flight at ready, then another aircraft does an assessment of the flight – challenge is that you only have a 12-24 hr window where the use of dispersants is effective.
- The oil is a very light, sweet crude oil – and not many knew the specifics on it, and fully understood the quick response need to do the dispersant application. It was not the same as the heavy crude spilled during the Exxon Valdez spill.
- Weather and waves played havoc on windows to be able to apply surface dispersants.
- We worked through the RRT and NRT to address their concerns with the unprecedented use of dispersants. Some decisions were elevated to the EPA administrator before a decision could be made. For some decisions, the RRT and NRT were bypassed and delays did occur.
- We did receive a dispersant all-stop on the application of dispersants from the EPA, and actually missed application on a part of oil that would have responded well, but we did not get approval in time to apply.

- There was a threshold set (approximately 15,000/day) for daily application of dispersants in the June timeframe, and we were working within that framework, but never exceeded that threshold. Even working below that threshold, we did still have to go through the notification process to get approval.
- Subsea dispersants were effective at dropping VOC levels at the site.
- There was a concern with subsurface dispersant application, but the underlying issue was worker safety. We had a lot of workers operating within a 1 mile radius of the well site, and it was impractical to have all of those workers in PPE with the high heat index.
- The process for subsea dispersants was not the same, but similar.
- We had to be mindful of the daily subsea flow rate of dispersants. A threshold was set, and we worked within the window. There was concern of subsea dispersants exceeding a ceiling, but we closely monitored the VOC levels to keep the balance.
- For subsea dispersants, we did not have the same weather or wind restrictions.
- We were very aggressive with dispersants and in-situ burn. Some other issues worked with the NRT included:
 - Air quality with respect to in situ burning. Air monitoring was integral and set up across the Gulf Coast – EPA has also done extensive monitoring, so we had levels for comparison.
 - Waste management usually comes later, but we ensured that there were protocols.
 - Oiled debris – is it a hazardous waste or hazardous solid – this was also worked through the NRT.
- Would recommend having the USDA as a member of the UAC, as they are closely involved on all domestic incidents.
- NRT calls were twice a day, once a day, then tapered off as the well was cut off.
- The NRT involvement became less critical as the flow stopped.
- We are now to the point of dealing with beach sand, oiled marshes, etc. We are working through SSCs to know the environment and figure out the best response technology. As we move into stage 3 SCAT (and the “how clean is clean” issue), we will likely need more consultation with the NRT.

Has the UAC had any involvement with the prioritization or protection of ESAs? What is that level of involvement? Boom removal? Do we need harmonization of NCP and NRF?

- Early on, did not go into any rookeries as that was when the brown pelicans were hatching. Doing an intrusive clean-up effort would have decimated the nesting bird population. As a result, we are now seeing more oiled bird reports coming in, because now we are getting into the areas since the hatchlings are done.
- Put out absorbent boom through the marsh areas, and recognize that it will be a long and tedious process, but we are hoping that nature will help flush the marsh, and just keep replacing the boom as needed.
- Around May 30th, a lot of streamers came into Pelican Bay, had 300 skimmers, 600 boats, thousands of people in there working to keep oil out of that area. Logistics became a problem in Louisiana as well as the barrier islands in the other states to support cleanup efforts in various locations. This area was very remote, and we had to establish “flotels” as we had people in the area working for the next 6 weeks. We had to be stringent on guidelines, as we didn’t want to do more harm than benefit.
- In our environmental unit, had DOI, and other Federal, State, local, Tribal – there are a number of Tribal lands in the response area, and are working to ensure we are providing transparency of the response process to them. Outside response personnel who don’t know the terrain and stakeholders, you needed to be clear up front on the relationships, etc.
- Also located in the Bay area were tribal interests, needed to ensure they were engaged and provide full transparency since response activities affected their lands as well. We had many out of state OSROs show up that didn’t know the local culture – so we worked to ensure that anyone working in an area knew the intricacies of the environment and interests of the local area.
- Our relationship with the parishes was tactical. When the RP set up an escrow account for parishes and states to set up their own response organization that was not integrated into the UC, things became complicated. That was not a best practice. And then when they ran out of money, they tried to get more as they liked being independent.

- The State of Louisiana declared a state of emergency, and each parish declared a parish state of emergency. If you read the LA Oil Spill Response Plan, it calls for the State to support the NCP, but the State stood up a Unified Coordination Group, similar to what you would under a Stafford Act.
- The State of LA has used the Stafford Act frequently, but this is really the first time this community/State has seen a response under the NCP, and there continues to be confusion over the fact that this is an NCP response, not Stafford Act – they didn't understand the dynamics.
- Parishes do have laws of pre-eminent domain. There have been some complications during response that our responders were threatened with being arrested (at minimum) if they removed any resources from the parish. We often had to shift resources – so this was a concern for the safety of our workers.
- RADM Z met with the local US attorney and ensured that if responders were arrested, there was not a statue to support it. He wrote letters to the Parish Presidents explaining that they were impeding the response, and the parishes took that letter as a threat, and took offense that RADM Z copied the US attorney.
- There are still some residual issues, which will be resolved when the transition plan I signed. The transition plan will become effective as of 1 September.
- The SOSOC was not empowered to sign anything – this has also hindered the response and has impeded unity of effort.
- We did not have the support of the State to broker resources with each parish, and the USCG was drawn into the middle of the relationship between the State and the parishes. However, as FOSC, per the NCP, the USCG has 51% of the vote. They understood it, but did not respect it.
- Louisiana was the only State where we had this problem.
- The One Gulf Plan disintegrated as each state wanted their own boom and each parish below that, etc.
- Boom requirements in ACPs need to at least be doubled.
- Need more knowledge of the NCP, although we exercise it, saw that ACPs became obsolete.
- Areas boomed were not in accordance with the ACP strategies.
- ACPs are the minimum requirements to respond to a SONS, but not the only ones.
- There was an assumption that once boom was placed, oil would not reach the shore, but that was not true and we had to do outreach. Boom was there to keep as much oil offshore as we could and so that we could then come in and skim, but due to weather and other conditions, even if boom is placed, it does not mean no oil will reach the beach or surface being protected.
- We tried to obtain boom from everywhere – international as well.
- Skimming recovery rates are slow, but any amount of oil that we can keep offshore helps the cause. We were in catch up mode, trying to get the skimmers to pick up more oil. We now have approximately 835 skimmers, but by the time the skimmers arrived, there was no skimmable oil left.
- The response inventory was not sufficient to handle this spill. Have set up four high-ground staging areas, and we now have more ready to handle a large spill. This was equipment we ordered, but might not have use for this response, that we will have available for any other event. It will be integral if we continue with deepwater oil restoration.

Vessel of Opportunity Program

- BP set up an escrow account to hire local VOOs. Didn't expect the response to be over 30 days.
- Early on had over 8,000 VOOs signed up.
- Per the contract, a 65ft VOO is reimbursed for approximately \$3k/day; crew \$300/day; plus fuel.
- It makes it hard for these vessels to leave the program since it is so lucrative for them.
- There was no structure to include them in a strike team that reports to a task force which in turn reports to a branch.
- The process created a disincentive for VOOs to back to the fishing industry.
- The vessels needed to have AIS transponders, communications, etc.
- Early on I took Secretary Salazar to a beach that was supposed to have approximately 30 VOOs working, but when we got there none were in sight.

- Types of boats covered entire spectrum (canoe to large boat), and we had to find a way to use them.

Did you find standing up the NIC and the NIC itself helpful?

- Found it was very helpful, due to the complexity of the spill. We would normally be using other tools, not blowout preventers and other seafloor equipment to try to proceed with well kill on a well that may contain more oil.
- First objective was to stop the leak, recover the oil, and restore the environment.
- ADM Allen helped to address concerns, including political pressure, strategic issues, and by being the national spokesperson, it allowed RADM Z a better span of control.
- He could focus on what mattered at the UAC and the spill and other effects that are not written into the NCP, but are part of an oil spill response.
- ADM Allen served as the broker with BP and put the face of the Federal government being in charge out to the public. He helped to convey to the public that the NIC/FOSC is in charge.

Was the USCG Preparedness Program adequately resourced and ready for this spill? In your opinion, did you have sufficient resources for long-term sustainability in relationship to personnel, equipment?

- We had to plan for worst case. Assume this response will continue until the end of the calendar year, and after coordinating with the COMDT, we needed to determine when and how many times to recall reservists, while still maintaining the ability to respond to a potentially active hurricane season.
- We had a very aggressive initial response, then as oil came in, an order was made to triple everything.
- We utilized our MOU with DOD to get National Guard assistance.
- Lesson learned: had they known this was going to be a campaign, looking back they would have set up a regular rotation right away to keep resiliency (and consistency).
- BP has established a regular rotation.
- USCG has also set up a rotation, and found that many that leave, come back and help to create/identify best practices along with what is working/not working.
- However, one problem is that once you build a trust with an elected official, it is hard to reestablish that.
- CG did try to expose as many people as possible to the response, including the incorporation of a cadre of retired USCG employees with oil spill response background.
- Have utilized Just-in-Time training program to get new people fully indoctrinated (1 week course) and then they are able to step in and really help in the response organization. This Just-In-Time training program only works if you come for 60 day rotation schedule. Have this "school" built into the response organization. This is for anyone, interagency – learn about deepwater drilling, etc.
- CG didn't have enough trained individuals when this started.
- We have another course to establish a group of trained FOSCs within the USCG.
- We will have to decontaminate vessels before this is over, and we recently certified some more CG personnel to help with signing off on decon as the response comes to an end. This was another JIT training.

Is there a transition plan? What does this plan include? Please describe the top issues you are dealing with in the transition plan, such as demobilizing, ESAs, Parishes, and NRDA. And guidance for future SONS for developing a transition plan.

- As stated earlier, there are 2 transition plans, one for LA, and one for other states.
- We are reworking the one for LA – it has not yet been signed.
- Throughout development of the plan, we need to make sure that everyone agrees on the trigger points – no recoverable oil offshore – no recoverable oil onshore – treatment levels/conditions.
- We are working to gain full stakeholder agreement that we have reached these trigger points. To achieve this, we have taken elected officials on overflights to see if/where they see oil so that we can get those areas taken care of and prepare to move to the next stage.

Given the fact that State will not sign anything, and Parishes are doing their own thing, what do you anticipate in relation to demob for the State of Louisiana?

- We do have a designated SOSC, Garrett Graves, he resides in Baton Rouge not the UAC.
- RADM Z will meet with him this week to try to determine an approach to move forward.
- We had to put a 7 day moratorium on moving any equipment out of a parish, this ended on 20 Aug., and so we can now start to move equipment out of the parishes.
- We need to reach agreement with each of the 11 parishes on the transition plan. We cannot work through state to get parish agreement – as it should have been set up.

To what extent, if any, did the unknown flow rate impact the scale of the response? If CG was operating under a worst case scenario discharge, why was that info not made public? Is there something that could have been done earlier in the process to consider so you had some specificity of wells or something that can be done so you have the info earlier on about the wells that exist?

- Despite what the flow rate was, we went to MMS (now BOEM) to see what their flow rate was; it was 166,000 barrels a day for complete well failure. What that showed us was that in the NCP process, we would look at 750,000 – 1 million gallons of fuel on the DWH, and the fact that it was sitting over the pipe, so we had to respond assuming this worst case scenario.
- Immediately recognized we did not have the inventory and were working to ramp up anything and everything that we had available. Had buoy tenders come from as far away as Hawaii and Alaska.
- Messaging was measured (not spontaneous).
- We made sure that press conference messages were in line with the senior policy-makers.
- Did not speak to policy issues, but focused on the operational framework.
- Utilized all of the external affairs personnel that the USCG has. Also included interagency external affairs personnel for all media related activities, including local community outreach.
- RADM Z became primary spokesperson and ensured that his messages were in direct relation to the messages put out by ADM Allen. He did not let the media drive a wedge between any members of the Unified Command or response community. Had to recognize that this was the largest spill in history, politics (election year in some states), etc.
- We established the flow rate technology group early on, and tried to make an educated estimate. We did not want to be cavalier about releasing a number, because it impacts the RP. (Response approach was always for a worst case discharge, RADM Z saw his job in that he had to prepare for the worst, but provide info on what was known at the time.
- Would have preferred to see thresholds instead of the pie chart (skim vs. burn vs. chem. Dispersed, etc.). The pie chart shows finite numbers, but there were a lot of variables involved that needed to be considered. We had to overcome the perceptions of EV type of oil (not heavy crude). Should have explained the type of oil and characteristics of it – why different than EV. We are currently trying to reconcile numbers of what oil is still out in the environment, etc. (1.5 mil barrels left).
- Per the pie chart, skimming shows 3%, but in some days we were skimming in excess of 60%, but the numbers in the chart default to the national average. We can prove that we made effective decisions else we would have had more oil onshore. Big challenge is that much of the response to a spill and what you can do to respond to it is weather and sea dependant. We had 16 days where burning and skimming couldn't be done because of weather, but subsurface dispersants could have been used (see other issues re: dispersant approval).
- Challenge was the new well (new exploration). There was interest from the entire oil/gas community and they offered up their scientists to help. This was a new well/first time it was tapped, and what data did we have or could we get to aid in planning the response.

Was CG involved in permitting of this activity? Would it help?

- It would have helped to be involved in the permitting of the rig, at least to see the contingency plans of the vessel if not the platform. Then we would know more about worst case discharge.

In relation to the SONS exercise and involvement of some senior USCG officials – would more involvement have added more value to the response from the onset? Do you have any LL from the first use of HSPD-5?

- Experience from SONS helped them to step up. We had some representatives from the SONS exercise that have been immersed in this response within the NIC staff.
- That is where the CG has really inserted itself and is providing a conduit to other senior leadership.
- SONS 2010 did have an international component, and having gone through that exercise and knowing the SONS protocols, the department came up to speed very quickly.
- We Co-Chair NRT with EPA, even though SONS not declared or HSPD-5 overlay, through the SONS exercise, we were familiar with the NRT process and their representation of the whole of government.

Qualified personnel: did you get the people you identified and needed?

- The UAC was good, we never had to argue the “who is in charge” issue.
- USCG has an internal database – MRTT (mission readiness training tool). It is not an integrated database to find qualified individuals and experts. We were impressed with the talent that did get here and develop a network of quality personnel.
- State and RRT processes allowed for those agencies that had worked a spill to get engaged and empowered in the decision making process.

Jones Act – there was some misperception on how it applied. Were any resources turned away because of the Jones Act?

- There was a misperception, but no resources were turned away because of the Jones Act.
- RADM Z presided over numerous offers of international assistance and was able to engage those resources that he thought would be beneficial to the response.
- At no time was the Jones Act an impediment to the response. There is a provision to be able to bring those resources to bear in an emergency situation.
- A lot of vessels/equipment in the response were under foreign flags.

What were the top 2 “best practice(s)” during this incident, from your perspective?

- RP was committed (currently have spent \$6.7B) and is living up to its responsibility.
- Recognized as FOSC that he signs off on plans and was able to make informed decisions leveraging the expertise they had.
- There were existing mechanisms for working together with private industry, government, etc. – good checks and balances.
- Tactically the branch concept allowed for good span of control (5:1)
- Having a COP on the fly was important, and ERMA provided that (recognizing NOAA’s model and look at it as something to use in the future)

Transparency was important – needed maximum disclosure, minimum delay.

What do you assess to be the top 2 “areas needing improvement” (or downright “failures”) from your perspective, and do you have any related recommendations regarding these areas?

- Initial approach was wrong – instantaneous discharge incident vs. campaign, one for which they were not appropriately resourced for. Forced to play catch up constantly.
 - It takes bold decisions to maintain a response of this magnitude. This is unique in deepwater vs. shallow water.
 - It was late in the spill when QWEST came up with some response vessels that could take out huge swaths of oil, just before the cap was applied.
 - Get industry to provide more resources and leverage their RP status to identify internal solutions and bring them to bear quicker.
 - Implementing new technologies while in the marathon is very difficult.
 - Need to reinvigorate the alternative technology group (funding, etc.) to see what else can work – get rid of the complacency.

- Make training and exercises more challenging. Get senior leadership involved. Dealing with resiliency – needing to broker finite resources as it impacts the public.
- Implement new technologies while in the middle of the campaign – it is very challenging to take detours – get new dispersant on EPA approval list, etc.
 - Need to reinvigorate the Technology and R&D groups.
 - Prepare for the next response.
- Immediately available containment device – ability to collect oil at 500ft. Before they shut down well, we were at a 25,000 recovery rate, and were almost at the 60,000 barrels a day.
- Do SONS exercises more frequently and make them more challenging.
- As difficult as it was to meet all state's needs for boom, think about what if it was a different type of event – need to come up with a model – what if it was a pandemic, all-hazard approach? Don't just look at it in constraints of oil spill, but what if it was any large event that impacts a large number of states.

Knowing ISPR, what else would you like to tell us?

- Policy changes are needed – revisit NCP – build in liaison program.
- Amend OPA90 especially with regard to funding.
- USCG needs to realize our biggest threat is domestic – be well aware of applying NRF.
- Need to be critical for what USCG could have done better.
- CG leadership needs to be in place for most of the branches. In some cases, they were led by BP. Critical spots should be filled by USCG.