UNITED STATES COAST GUARD

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NATIONAL OFFSHORE SAFETY ADVISORY COMMITTEE

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MEETING

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Omni Riverfront Hotel
701 Convention Center Blvd
New Orleans, Louisiana

Wednesday,
March 30, 2016

8:30 a.m.

COMMITTEE MEMBERS:

PATRICE DELATTE, Chair
MICHAEL BROWN
NORMAN CUSTARD
JERRY DARDAR
CHAD FUHRMANN
DAVE HEDGEPETH
GRANT JOHNSON
KRIS KALLAWAY
KELLY McCLELLAND
PHIL MILLER
CHRIS MUZZY
KIM PARKER
MARSHALL PEREZ
KENNETH WAHL
WARREN WEAVER

CDR JOSE PEREZ, Designated Federal Officer
ATTENDEES:
CDR GRETCHE BAILEY
HARLEY BATES
STEVE BE
BRIAN BUBAR
RADM DAVID CALLAHAN
KYLE CARTER
CASEY CAVANAUGH
CHUCK CENTORE
PAT CLARK
FALLON DOMINIQUE
GREG DOSS
CHARLES DUDEK
BEN GATES
FERNANDO HERNANDEZ
HOLLY HOPKINS
TOM HORAN
LESLIE HUNT
CDR STEVE KEEL
CAPT SCOTT KELLY
BILL KREWSKY
DON McCLELLAND
DAVID McKay
SCOTT NICHOLS
CAPT KEVIN ODITT
JOHN PERGINE
JIM PETTIGREW
DARIN QUALKENBUSH
CAPT JOSHUA REYNOLDS
MARK SALES
KEVIN STAHL
GENE SYKES
JOSHUA WEIDMAN
RICHARD WELLS
CHRIS WHITTLE
JIM MURPHY
RDML PAUL THOMAS
JOHN CUSHING
RICHARD WELLS
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CHAIR DELATTE: Good morning, everyone. I want to thank you for joining us. My name is Patrice Delatte, I'm the Chairman of NOSAC, and we welcome you to our spring 2016 meeting. Before we get started I would like to go over a few ground rules and administrative items. First, please silence or turn off all cell phones. If you need to take a phone call, please do so outside of the meeting space.

This is a public meeting and the public will have an opportunity to speak at the end of the meeting. There are sign-in sheets in the back of the room or actually outside and the back of the room for the members of the public and attending Coast Guard members. If you have not done so, please take the opportunity during breaks to sign in on the appropriate sheet so that we have a complete record of all attendees.

Also on the outside table is the Federal Register Notice for NOSAC membership 2016 slate vacancies. If you are interested, please
pick up a copy of the Notice and be sure you send it in, I believe the deadline is May 17th. So if you're interested we really want you to do that. We would appreciate the participation.

Before we start today we have one correction to the agenda, and Mr. Patrick Clark will take care of that for us.

MR. CLARK: Good morning. I'm just going to project because I don't have a microphone. The Federal Register Notice that was published about the meeting had listed IADC as giving a presentation. That is not occurring, so there will not be an IADC presentation on the agenda.

CHAIR DELATTE: Very good. I will now ask the Committee members and those sitting at the table to introduce themselves, and we will determine if we have a quorum. For the record, please introduce yourself by stating your name, the company you work for, and the NOSAC Chapter position that you are currently filling. When speaking please hold the microphone close to your mouth to ensure we can hear you and that your
comments are accurately captured by the court reporter.

We will start at this end of the table. Mr. Murphy, would you start for us and then we'll go to the NOSAC members.

MR. MURPHY: I'm an observer rather than a Committee member. Jim Murphy, U.S. Maritime Administration.

MR. FUHRMANN: Chad Fuhrmann, I'm an independent consultant. I represent Training and Safety, and I'm co-chair on the Subcommittee for Well Intervention.

MR. WAHL: Good morning. My name is Ken Wahl, I'm a private consultant, and I represent the Offshore Operations Division.

MR. KALLAWAY: Good morning. Kris Kallaway, Conoco-Phillips, Director of Marine Assurance Integration, co-chair with Chad and Jerry on the Well Intervention Subcommittee.

MR. MUZZY: Good morning. Chris Muzzy, Marine Spill Response Corporation, Corporate Safety & Health Manager, and I
represent Environmental.

MR. WEAVER: Good morning. Warren Weaver, consultant, retired Transocean, representing Offshore Drilling.


MR. JOHNSON: Good morning. Grant Johnson, I'm the Vice-Chair of NOSAC. I work for Technip, and I represent the Producing.

RDML THOMAS: Do you want me to do this?

CHAIR DELATTE: Yes, please.

RDML THOMAS: Good morning. I'm not a NOSAC member. Paul Thomas, Assistant Commandant for Prevention Policy. Happy to be here.

CHAIR DELATTE: Patrice Delatte, I'm a HSCS consultant for Tidewater Marine, and I represent OS.

CDR JOSE PEREZ: Good morning. Jose Perez, I work for the Office of Operating and Environmental Standards at Coast Guard
Headquarters.

MS. McCLELLAND: Kelly McClelland, Offshore Inspection Group. I'm a Special Government employee for the Committee.

MR. DARDAR: Jerry Dardar, I'm a Director at Seacor. I represent the OSV Committee.

MR. CUSTARD: Hi, good morning. I'm Buddy Custard, I'm from the Alaska Maritime Prevention Response Network. I represent the Alaska outer continental shelf activities.

MR. HEDGEPETH: Good morning. Dave Hedgepeth, I represent the Subsea Operation segment, and I work for Chevron as a marine and DP advisor.

MR. MILLER: Good morning. My name is Phil Miller, I am the Construction Assets member and represent Subsea 7 as HSEQ Director for Gulf of Mexico.

MR. PARKER: Good morning. I'm Kim Parker, I'm the Quality Manager of Hercules Offshore, and I represent the Offshore
MR. CUSHING: Good morning. John Cushing with U Safety Environmental Enforcement. I'm an agency representative, not a Committee member.

CHAIR DELATTE: Very good. Thank you. First of all, I want to thank the members and our guests for being here. We do have a quorum, we'll continue with the meeting.

So now we'll go around the room to allow the audience to introduce themselves. Again I want to remind you to speak loudly, provide your name and the organization or company that you represent.

CAPT REYNOLDS: Good morning. My name is Joshua Reynolds, I'm the Outer Continental Shelf Officer in Charge, Marine Inspection for the Eighth District.

RADM CALLAHAN: Good morning. I'm Dave Callahan. I see some familiar faces in the room. I'm the Coast Guard Eighth District Manager, Gulf Coast Region.

CAPT ODITT: Good morning. Captain Kevin Oditt of Coast Guard District Eight, Chief of Engines.

MS. HOPKINS: Holly Hopkins, API.

MR. BELZ: Steve Belz, BP Marine Authority.

CDR BAILEY: Gretchen Wicker -- excuse me -- Gretchen Bailey. Wow, that was my maiden name. Gretchen Bailey, Commanding Officer, MSU Houma.

MR. WEIDMAN: Joshua Weidman, Chief of Inspections at MSU Houma.

MR. SALES: Mark Sales, Tidewater.

MR. STAHL: Kevin J. Stahl with Marine Expertise.

MS. DOMINIQUE: Fallon Dominique, Offshore Lifesaves.

MR. KREWSKY: Bill Krewsky, Hornbeck Offshore.

MR. McCLELLAND: Don McClelland,
Offshore Inspection Group.

MR. NICHOLS: Scott Nichols,

[inaudible].


MR. WHITTLE: Chris Whittle, Chevron.

MR. PETTIGREW: Howdy. Jim Pettigrew,

Ocean Energy Safety Institute.

MR. GATES: Ben Gates, Outer Continental Shelf National Center of Expertise, also known as OCS NCOE.

MR. SYKES: Gene Sykes, Outer Continental Shelf NCOE.

MR. CARTER: Kyle Carter, Outer Continental Shelf NCOE.

MR. BATES: Harley Bates, Outer Continental Shelf NCOE.

MR. DUDEK: Charles Dudek, Murphy Oil.

MR. QUALKENBUSH: Darin Qualkenbush,

Shell Regulatory Affairs.

MR. JOHN PERGINE: John Pergine IADC.

CDR KEEL: Good morning. Steve Keel,
U.S. Coast Guard Headquarters, Office of Compliance.

MR. BUBAR: Brian Bubar, International Registries.

MR. MCKAY: David McKay, DNV GL.

MR. CLARK: Pat Clark, I'm the other alternate Designated Federal Official for NOSAC.

CAPT KELLY: Good morning. I'm Scott Kelly from Coast Guard Headquarters, the Office of Operating & Environmental Standards, and our office headquarters is the office in charge of this Federal Advisory Committee.

MS. HUNT: Good morning. Leslie Hunt, Coast Guard District 8.

CHAIR DELATTE: Very good. Thank all of you once again for attending this meeting.

I would now like to introduce our designated Federal Officer for NOSAC, Commander Jose Perez.

CDR JOSE PEREZ: Thank you, Madam.

Good morning and welcome to the spring 2016 NOSAC, National Offshore Safety Advisory
Committee meeting. I would like to welcome you all to this public meeting for NOSAC and express my appreciation for the hard work of all the Committee members and the alternate Designated Federal Officers who make this possible and for all the great work they have done in the past and ongoing work.

As the Designated Federal Officer or DFO I'm responsible for ensuring all provisions of the Federal Advisory Committee Act or FACA are met regarding the operations of the Committee. Also in my role as DFO for the Committee I work with agency officials to ensure all appropriate ethics regulations are satisfied.

A brief word of conflict of interest. None of the agenda items as published in the Federal Register Notice of February 11, 2016, have been deemed to be of, quote unquote, particular matter for the purpose of criminal conflict or of interests statute.

The Committee has a full agenda today including receiving reports and updates from
three subcommittees and several presentations.

Please understand times on the agenda are approximate and we may not be able to keep to the exact time noted, but we'll progress sequentially through the agenda as written. That being said, we will strive to ensure adequate time is provided for presentations, the Committee's thorough deliberations, and public comments.

A note for the presenters and the public, the general public and members of the Committee. Please use one of the microphones each time you speak and clearly identify yourself as we have a court reporter to record the meeting and make a official transcript of all the comments.

In accordance with FACA, we will offer the public the opportunity to provide general comments before the Committee. For members of the public requesting time to make a public comment, remarks need to be limited to three minutes. For those public speakers that have not already preregistered, please notify either
myself or the alternate DFO Mr. Clark way in the back.

Lastly, in accordance with FACA requirements, the minutes of the meeting will be prepared for entry into official record. I will ensure minutes of meeting are recorded and certified by the Chairman within 90 days of this meeting. The supporting documents for this meeting and, once certified, the minutes of the meeting will be available at the NOSAC Homeport website. And if you need a copy or would like to get the address, please let us know and I will be more than happy to share it.

Again I thank the Committee and the public for your participation today, and we'll look forward to our discussion today. Madam, the National Offshore Safety Advisory Committee is hereby convened.

CHAIR DELATTE: Thank you, Commander Perez.

We'll now have our Safety briefing. Mr. Clark, would you do that for us, please?
MR. CLARK: Yes, ma'am. Good morning.

As you can see from the room, it's a fairly narrow room. We've got the emergency exits if something, if an alarm does go off, they're both indicated by the exit signs. They do not go out into the main passageway, they follow hallways out to the outside. If we do have to evacuate, I request that everybody meet out in front of the hotel so we can get a head count. Heads are, restrooms are right outside the door to your left as you walk out. And there are no scheduled drills for today.

CHAIR DELATTE: Very good. Thank you, Mr. Clark.

I will now turn the floor over to Commander Perez for introduction of our morning guest speakers.

CDR JOSE PEREZ: Thank you again. I have the pleasure to introduce two distinguished guests. They join us today. I will make the introduction, read their bio, and then respectfully ask for their remarks to address the
Committee and the general public.

So first I have the pleasure to introduce Rear Admiral David Callahan, Commander Eighth District Coast Guard. And the bio reads as Rear Admiral serves as Commander of the Eighth Coast Guard District Headquarters in New Orleans, and is responsible for the U.S. Coast Guard operations spanning 26 states, including the Gulf of Mexico coastline from Florida to Mexico and all the offshore waters and outer continental shelf as well as the inland waterways of the Mississippi, Ohio, Missouri, Illinois, and Tennessee River systems.

His previous Flag assignments include Assistant Commandant for Human Resources-Chief Human Capital Officer, Commander of the Coast Guard's Personnel Command, and Director of Reserve and Military Personnel Policy in Coast Guard Headquarters.

Rear Admiral Callahan is a Coast Guard aviator with over 30 years of military and civil fixed and rotary wing flight experience. He
commanded two Coast Guard Air Stations, to include Air Station New Orleans, and the Coast Guard Aviation Training Center in Mobile, Alabama, which in 2005 served as the aviation operations and maintenance hub for the entire Hurricane Katrina response. His command became the largest operational air station in the Coast Guard history, and played a key role in the Coast Guard rescue of over 30,000 people in Mississippi and Louisiana.

Over the span of his career he served in the Atlantic, Pacific, Great Lakes, and Gulf Coast theaters of operation including Alaska. He led Coast Guardsmen in executing all eleven of the Coast Guard's statutory missions, to include search and rescue and drug and alien migrant interdiction.

Also in addition to his operational tours of duty, Rear Admiral Callahan served as Coast Guard Liaison to NATO staff, Allied Forces of Southern Europe, Naples, Italy, during the Bosnian conflict. He also served as Chief of
Staff for the Ninth Coast Guard District,
overseeing all Coast Guard activities in the
eight state Great Lakes region, and served as
Executive Assistant to the Commandant in Coast
Guard Headquarters, Washington, DC.

A native of Littleton, Colorado, Rear
Admiral Callahan graduated from the United States
Coast Guard Academy in 1982 and holds a Bachelor
of Science degree in Management, a Masters degree
in National Security Studies, and is a 2005
distinguished graduate of the Air War College.
He also completed the Harvard National
Preparedness Leadership Initiative.

Rear Admiral Callahan's personal
awards include five Legion of Merit Medals, the
Defense Meritorious Service Medal, two
Meritorious Service Medals, four Coast Guard
Commendation Medals, and various other service
and campaign medals.

Now I have the pleasure to introduce
Admiral Callahan. Thank you, sir.

RADM CALLAHAN: Thank you, Jose. I
really think you could have skipped to the last line. You know, my sister lives in Littleton, Colorado, and I was wondering, Jose, if you could pack that up and send her a copy of that?

    CDR JOSE PEREZ: Yes, sir.

    RADM CALLAHAN: She thinks I'm a life guard. She doesn't understand. She thinks that I sit at a pool every day. But it's a very great honor to spend some time this morning, and I am, believe me, I am not the person that should be addressing this group this morning. I'm just here to really welcome you and also thank you for your service. I know that folks in NOSAC, this is work that probably isn't your primary job. I know that for a fact. And I know that it takes a lot of extra time and a lot of dedication to do what you do.

    And for the folks also here, the other members that are here with us today, you're here because you care and I'm glad that you care. Because for me the duty, the business of this group here today deals in really what constitutes
95 percent of the -- in my AOR, my area of responsibility, really includes 95 percent of the nation's offshore drilling and production.

So you're darn right I'm interested, and I should be here today to listen in and be a part of this. And certainly as I'm obviously not a member but I'm very interested and my staff is very interested, and that's why we're here today, that's why we're always here. So thank you for the opportunity to welcome you. I feel honored to be part of the group today.

We have some -- I know you have some business today that some of my staff will be getting to a little later on, and I want to thank you particularly for the lifeboat feedback that we got and I know Doc is going -- I'm not going to steal his thunder, he's going to be talking about that a little later on today. So thank you for that. I know there's some facility manning issues that we've been working with you on, and we'll talk a little bit more about that today too.
So I'm not going to -- and I certainly wouldn't want to get into the details. But mostly again we view this as a partnership, the way we work with you. I'm not afraid to use the word partnership. It is absolutely how we get things done. Quite frankly, in the Coast Guard we would not be able to do our mission without using that partner word, and y'all exemplify that with us.

So I want to thank you for being here today. I know there are other people who are with you all the time, like my counterpart at Headquarters, Paul Thomas, who would probably wax even more philosophical about things than I would, but I will be here through the break and be happy to talk to you. Looking forward to spending some time with all of you today. So thank you very much.

(Applause.)

CDR JOSE PEREZ: Thank you, sir.

Now I would like to introduce Rear Admiral Paul Thomas, Assistant Commandant for
Prevention Policy. And Rear Admiral Paul Thomas serves as the Assistant Commandant for Prevention Policy overseeing three Coast Guard directorates, which are Inspections and Compliance, Marine Transportation Systems, and Commercial Regulations and Standards.

The programs under his leadership include waterways management, navigation and boating safety, ports and facilities, merchant mariner credentials, vessel documentation, marine casualty investigation, commercial vessel inspections, and port state control.

A specialist in Marine Safety, Security and Environmental Protection he has served at the Marine Safety Center in Washington D.C.; Marine Safety Office, San Francisco Bay, California; Marine Safety Detachment, Port Canaveral, Florida; Marine Safety Office, Jacksonville, Florida.

He also served as Commanding Officer of Marine Safety Unit, Galveston, Texas; Commander Coast Guard Sector, Jacksonville,
Florida; and the Director of Inspections and Compliance at Coast Guard Headquarters.

His other tours include Fifth Coast Guard District Chief of Staff, Executive Assistant to the Assistant Commandant for Marine Safety, Security and Stewardship; Military Assistant to the Director of Net Assessment in the Office of the Secretary of Defense; Commanding Officer in U.S. Coast Guard cutter Cape Romain; and Operations Officer for the U.S. Coast Guard cutter Blackhaw.

Rear Admiral Thomas is a graduate of the Coast Guard Academy and the Massachusetts Institute of Technology. In 2005 he completed a National Security Fellowship at Harvard University's John F. Kennedy School of Government, and in 2010 he served as the Senior Fellow to the Chief of Naval Operations Strategic Study Group.

His military awards include the Legion of Merit, Meritorious Service Medal, Coast Guard Commendation Medal, Transportation 9/11 Medal,
Joint Service Commendation Medal, and the Coast Guard Achievement Medal.

Now I'd like to introduce Admiral Thomas.

Sir.

RDML THOMAS: All right, thanks, Jose. Can you send that off to Admiral Callahan?

CDR JOSE PEREZ: Yes, sir.

(General laughter.)

RDML THOMAS: All right. Good morning, everybody. It's a real pleasure for me to be in New Orleans. I particularly want to thank our District Commander Admiral Callahan for being here.

You should know that of all the District Commanders out there he's the one that's most closely joined at my hip; we are constantly talking, because when it comes to regulation and policy development that we do at Headquarters, you know, Admiral Callahan and his staff are the pointy end of the spear. So we're often prototype, we essentially share staff. So thanks
for being here today and reflecting that
partnership that we have.

Thank you to our chairman, our
chairwoman as always, and to all the members of
NOSAC for the continued great work that you do.
I also want to just point out a couple people who
are quietly in the background making this thing
work all the time. Mr. Pat Clark, of course I
think all of you know Pat. Thanks for your work.

Scott Hartley sitting over there
trying to hide in the corner, but Scott has been
a long-time, you know, moving force behind NOSAC
and its successes in the past and in the future.
So thanks, Scott, for that hard work.

Also I want to welcome John Cushing
from BSEE. We have a very strong working
relationship with BSEE as we need to for the
outer continental shelf. Director Salerno and I
will be jointly presenting again at OTC in May,
and in fact we meet on Friday. And I'm sure some
of the discussions that happen here today will be
part of our discussions on Friday as well. So
thanks for being here as always, John.

You know, we have 12 Federal Advisory Committees that work for the Coast Guard or advise the Coast Guard, all of whom fall under my purview with regard to the workload that I have, so 12 FACAs. I really try -- and we had some conversations last night -- and by the way I really appreciate the opportunity to have informal conversations with everyone last night.

So I've really tried to align the efforts of the FACAs in a way that will help me determine where are the kind of common themes. Because as valuable as the individual FACA recommendations are, they're even more valuable when you can see that they -- you know, TSAC happens to agree with NOSAC on a particular issue. Those are really, that's really powerful, particularly if the recommendations are recommendations that require regulations or legislation.

And so over the course of the last couple of years I've really been working with the
DFOs to ensure that they pass statements that we put out there are not disjointed and they are in fact related to each other across FACAs. And in fact we have FACAs, multiple FACAs working on the same tasking. So hopefully that's not a surprise that you're not the only ones working on cyber security, for example.

There are three kind of strategic challenges that we're focused on at Coast Guard Headquarters with regard to prevention that will be with this industry for decades to come and that are driving the workload at Coast Guard Headquarters but also at other FACAs. And those challenges are first we need to increase the capacity in the marine transportation system over the next three, four, five decades probably by at least 50 percent. And that's for a lot of reasons that you all understand better than I do, but it's market forces, it's global standard of living, it's how we are producing and moving energy.

The second challenge is that while we
increase the capacity of the marine transportation system we have to reduce the environmental footprint of the system. That's a very complex challenge, get larger while getting smaller. But we all understand the focus on every waste stream associated with moving stuff on the water today. You know, we used to worry just about keeping fuel and cargo where it belongs, and today we're worried about understanding real-time monitoring and managing every single waste stream.

So as we grow the capacity of the system, we have to figure out how to reduce the environmental footprint. That's a real strategic challenge. And in fact the solutions to that problem add to the third challenge, which is ever increasing complexity. So get larger while reducing footprint in the face of ever increasing complexity.

And it's really that third challenge that most of your work is focused on. And when I say ever increasing complexity I'm not talking
just about the technology that you guys employ
offshore, which obviously is ever increasing
with regard to complexity, but it's about the
regulatory schemes that are in place, the
relationships that are in place.

You know, if you just look at the work
that you did around who's an industrial worker
and who's not offshore and, you know, what
functions can be done with a credential, which
can't, you just tear just that little nugget, the
complexity of the regulatory and statutory
schemes around that question, as you all know, is
quite impressive, actually quite daunting.

But so there's complexity associated
with the regulatory schemes that is not going to
get less. There's complexity associated with how
you operate your vessels. There's complexity
associated with the safety management,
environmental management systems you have to
employ in order to operate those vessels safely.
And then there's complexity associated with how
the vessels, the OSVs for example, interact with
the drilling ships, et cetera.

So ever increasing complexity really where this group helps us out the most. That's why we asked about cyber security, and I think you're going to close the task statement today on cyber security with kind of a disclaimer that we want to keep it open. And I actually really appreciate that. Because I think cyber security is related -- two of my biggest concerns on the outer continental shelf is cyber risk management and safety management systems. And I think those two things are inextricably linked.

And so although kind of the term of the day is cyber security, I actually believe cyber is much bigger than just a security issue, it's actually a safety issue and it's really an operational risk management issue. So to the extent that you can continue to think about cyber as an operational risk management issue and continue to think about how do you manage that operational risk in the cyber domain similarly to how you manage operational risk in the physical
domain, that would be very useful.

So I like to tell people when we moved from sailing vessels to steam-powered vessels we had to for the first time put a new type of person on a ship, we called them an engineer. Right? We didn't have -- we just had boatswain mates before we had steam-powered vessels. So we had to figure out what a new sailor looked out. We also had to figure out what are the design construction and operation standards for boilers.

Well, we have moved to operating in cyber, so we have to think about what is the new cyber sailor look like and what are the design construction and operation standards for cyber systems. So to the extent that your safety management systems today have a procedure for how to tag out, tear down, rebuild, and restart a pump, we should think about the procedure for the software that runs that pump.

So, Madam Chair, I'm happy to hear you say we think we're finished with the tasking but we want to kind of keep our eyes on this.
Because as we do roll out we're going to roll out in NVIC with voluntary guidelines first. But as we do roll things out we're definitely going to need your input. And I really want you to think about it for me in terms of operational risks and operational risk management.

I know that there was some interest last night in two topics that I'll bring up and then I'll just take questions. The first is the status of the El Faro investigation. So this investigation is an interesting one because, as you know, we don't as a matter of routine lose deep draft U.S. flag ships and 33 souls. In fact, the last time that happened was more than 30 years ago. And a lot of has changed. So this is probably, it is, without question, the most transparent marine board of investigation in history. And as you know, we've been streaming it live, and quite astonishingly we've been getting feedback from around the world.

There's a couple already lessons learned from that investigation. It's still an
open investigation so I can't talk about a lot of it, but what is public, what has been streamed we can talk about. And one of the key lessons learned and the vast amount of email that we're getting from around the world is about safety management systems. That vessel had a safety management system but it's apparent from a lot of the testimony that it really wasn't well-deployed. It was audited, there was oversight, but it wasn't really effective.

And that is a concern that I have. So the two concerns that I have on the OCS are cyber risk management and safety management systems. Because the operations that we undertake -- and the El Faro was a fairly simple ship and fairly simple operation compared to what you guys do. Right? And it was quite clear that the safety management system, the safety net failed that vessel and that crew at every single level on a board a ship at the company, at the class society, and the Coast Guard.

And if it can fail a ship that is
relatively unsophisticated and not complex, it can fail the very complex operations that you have on the outer continental shelf. So I think I would encourage you to continue to monitor as you have been the hearings and testimony from El Faro, learn the lessons that we need to learn, to go back and look hard at your systems, and to ask the questions, hey, could what happened there happen in my operation. Because no one expected us to lose a U.S. flag deep draft ship and 33 souls, and we did. So we all failed.

The other issue I know that you're wanting to ask me to address is the status of this Committee with regard to discretionary over statutory committees. We have drafted legislation that would harmonize all 12 of our FACAs. Because right now some of them are in legislation, some are not, some have certain membership requirements, some have ability to reimburse, some don't. So we have one piece of legislation that's been drafted that will make all 12 FACAs statutory committees with very
similar structure and very similar administrative requirements.

That piece of legislation we thought was going to make it into our last authorization act, it didn't. It is currently on the Hill to make it into our next authorization act. Quite honestly, I don't think we'll have one during election season. But I'm confident that the next auth act will have that piece of legislation in it.

It doesn't matter in terms of how we operate with NOSAC. This is obviously probably --well, this is without a doubt one of the most relevant FACAs that we have given the operating environment. If you ask me what keeps me up at night, it's you guys. So we are continuing to work on the statutory status of this committee. But I don't want to overpromise. I don't think that will happen this year just because of the, you know, election politics.

So that was a quick rundown. I'd be happy to take questions and have a discussion if
you'd like.

CHAIR DELATTE: Very good. Can we start with the Committee members and the table, do you have any questions, any other questions for Admiral Thomas?

Mr. Fuhrmann?

MR. FUHRMANN: Thank you, Admiral. Appreciate your time and your comments. Obviously the industry is pretty bleak right now. But trying to look at the light at the end of the tunnel here, there will be an uptick, and when it happens one of my concerns is the reactivation of all the assets that are currently cold stacked in the industry. Is what's going on within the Coast Guard right now to assist with the influx of vessels that are currently cold stacked that will be activated, when that time comes in the industry how will that be handled by Coast Guard inspection teams and the industry in general?

RDML THOMAS: So that, you know, a great question. Obviously it concerns something that we talk with OMSA about all the time,
because we're going to absolutely need help from
the industry managing that process. And you guys
are going to know kind of the warnings and
indicators of the uptick before we will, you
know.

So what we hope for is a coordinated
approach that doesn't wait till the last second,
doesn't wait until a contract is signed before we
try to reactivate vessels. This is going to be a
real challenge for Admiral Callahan and his
staff. And I know that Captain Reynolds and
Captain Oditt are thinking things over, and I
think Commander Bailey is as well.

So tactically I would say that's going
to be an operational commander challenge but I
think kind of, you know, operationally groups
like NOSAC, groups like OMSA are going to be key
to helping us manage that in a way that the
industry needs.

And it's not just getting the vessels
back, it's going to be getting the mariners back
as well. You know, it's going to be getting
mariners back who are totally trained up and ready to operate, and that's going to be a real challenge. And I know MARAD's focused on that issue as well. Because we're not really sure where those guys are going, and we don't know how many are going to come back.

So I'm glad that you're thinking about that. I can tell you that we're -- in blue suits, we're all open ears if there's suggestions. Obviously part of this solution is third parties, but it's not the full solution.

I don't know, Josh, did you want to -- oh, Commander Bailey.

CDR BAILEY: One of the things that we've been -- Gretchen Bailey. One of the things we've been debating how to do that as well is a surge off, and I know that I've talked to Admiral Callahan's team, Captain Oditt and Captain Reynolds. One of the things that we're going to do is combine several of the units, New Orleans, Morgan City, and Houma to try to get that surge off and then also reach out to other qualified
OSV people within the Coast Guard and get them down for that to get everybody reactivated. But as the Admiral says, we're hoping that we do get some staging where everybody wanted to come back. We definitely have a game plan. Hopefully it will work.

CHAIR DELATTE: Any other questions from the audience? Oh, we have -- just a minute.

From the table from Mr. Weaver.

MR. WEAVER: Sorry.

CHAIR DELATTE: That's all right.

MR. WEAVER: Thank you. Warren Weaver. I'd also like to point out since it was OSV, there's a lot of sophistication in the deep water, ultra deep water MODUs. And I don't know of too many U.S. flag MODUs out there, so if you're looking towards reactivation, it would probably have to tie hands with the flag of the vessel and also class societies who are developing pretty robust reactivation plans already. Thank you.

CHAIR DELATTE: Did you have a
comment, Captain Reynolds?

        CAPT REYNOLDS: I do. Captain Joshua

        Reynolds, outer continental shelf, OCMI. A

        little bit better today than yesterday. We're

        coordinated; everything Gretchen mentioned, or

        Commander Bailey, is true. I'd just like to add

        that there's a structural backdrop that's

        occurring. We are structurally moving resources

        within the District from Morgan City to Houma to

        help in when that surge comes.

        Also we're coming up with

        prioritization of our inspections and

        examinations. So that's where we could use the

        help, just to echo Admiral Thomas's comments. We

        do this sort of thing all the time. We have a

        marine transportation recovery unit that gets

        into place after an incident. We have a

        waterways action plan that helps during high

        water and low water.

        This is similar to that. We need your

        input on what your priorities are, and I'll be

        looking for help from the IADC and when it
comes to reactivation of stacked drilling ships and mobile offshore drilling units. And OMSA obviously can help with the offshore supply vessels.

RDML THOMAS: So, Warren, let me just take the opportunity, because you make a point that many of the most complex vessels are foreign flag. I just want to be clear the efforts that we have around cyber risk management are not directed strictly at U.S. flag vessels. We're working hard at the International Maritime Organization to get standards out there, because we recognize that probably the greatest risk is not on U.S. flag vessels.

And so I lead a delegation to the IMO in June. We will be working hard. We presented a paper on suggested cyber risk management standards for the international fleet. In June we'll be working hard to get those guidelines finalized.

Initially they'll be voluntary guidelines, but I think ultimately we will have
international requirements probably as part of the ISM to manage cyber risk management because of the exact point that you make on our outer continental shelf with the greatest cyber risk is probably on foreign flag vessels.

MR. WEAVER: Just one point -- just one more point there. I believe, if I'm not mistaken, the current requirement is a two-week notification for a foreign flag MODU returning to the OCS, for the Coast Guard.

CAPT REYNOLDS: It might be three. My memory's foggy about that.

MR. WEAVER: So should that be extended further if it's a previously cold stacked or stacked unit?

CAPT REYNOLDS: I'm a little fuzzy on the actual notification requirement. I can get back to the Committee on that. I will say it's important to have priorities. And it's important to take BSEE input and operator input on those priorities. Some of the operations that need to occur off shore may be more critical than others.
The Admiral mentioned earlier contract status, knowing who has contracts when is important so that we can make the inspection and the examination occurred. And the best way is associate commerce when we break out.

RMDL THOMAS: Yeah, I would invite the Committee to make recommendations if you have them on how we should manage that surge. Whether it be through tactical operations here at the District or some changes in regulations might help.

CHAIR DELATTE: Okay, we have more questions for the table. Mr. Dardar?

MR. DARDAR: Jerry Dardar, Seacor. I think what you said, Captain Reynolds, is spot on if we have a hurricane this year getting vessels back to work. We eliminate pollution risk and things like that, so spot on.

CHAIR DELATTE: Ms. McClelland, you had a question?

MS. MCCLELLAND: I have a question, sorry, and a comment. First a comment. I want
to reiterate what Madam Chairman had said about
we want to keep Cyber Security Subcommittee fluid
to be able to provide comments back to the Coast
Guard on the upcoming NVIC. But we also -- my
question is, with the profiles that NIST is
currently working on for our industry, is it
possible that NOSAC can stay involved with
getting comments back on those profiles? --
because those profiles that they're working on
now are for adding liquids, and not one profile
meets all situations. How do you see us
interacting with that?

RDML THOMAS: Well, I think we'll
welcome NOSAC's input. As I mentioned, I have a
number of FACAs that we're going to rely on to do
this. Because it is such a diverse industry and
there's no one size fits all solution. You know,
procedurally I'll leave it to Commander Perez to
figure out what's the right procedure, but
certainly conceptually we're happy to have NOSAC
continue to look at that.

What I would tell you about the NIST
profiles really is focused on bulk liquid terminals. Because that's where we see our highest -- well, we know from our risk assessment that's where you can do the most damage. And so we've asked NIST to focus on that, and particularly on the SCADA systems at those terminals. That doesn't -- that probably though will result in cyber risk management or mitigation measures that are applicable on vessels as well. And so you'll find that what comes out in the NVIC is -- at this point we're planning on a requirement for bulk liquid terminals will be part of the guidelines for vessels.

MS. McCLELLAND: A follow-up question is on LNG tankers and cyber security. This is one area that we did not address -- and also with LNG and SIMOPS, we did not address that in our subcommittee. And we do know that it's a deep concern and we would like to in the future revisit that area.

RDML THOMAS: Yeah. And as I said, I
think on vessels in particular the right answer
is an international standard and it's probably an
integration of cyber risk management into the
highest -- into the safety management system. So
to the extent that you can think about and work
on what that would look like, I think that's
useful.

MS. McCLELLAND: Thank you.

CHAIR DELATTE: Any more questions
from the table? Mr. Kallaway?

MR. KALLAWAY: Thank you, Admiral, for
that clarity, and I thank you both for coming
today. I usually hit Captain Reynolds with this
question, but I'm going to give him a pass today
and give you the hard questions.

RDML THOMAS: See if I get the same
answer.

MR. KALLAWAY: Well, I generally
know -- the topic is the DP NPRM from last year,
and I generally like to have a view on feedback.
Now, I know you're ex parte, so without going
into details, can you give us a view on how you
guys have received it and sort of where you think it's going? Because there's still some hand wringing in the industry regarding what's going to happen, because enough time has progressed, and I've been asked about it a couple times.

RDML THOMAS: Well, so as you know, we're open rulemaking and I can't discuss the details. I can tell you that we've got a number, I don't remember the exact number -- you know, Josh -- but it was a big number of -- because Josh is working this before he left Headquarters. But it was a good number of comments, and very good comments as well the team is working hard to adjudicate and incorporate into the standard.

And as you know a lot of the comments were about which particular standard what should be pointing to and which accreditating body. And I think what you'll see in the revised regulation is greater flexibility, because that's what most of the comments pointed to.

MR. KALLAWAY: Thank you.

CHAIR DELATTE: Are there any
questions from the public?

Ms. Hopkins?

MS. HOPKINS: Yes. Holly Hopkins of API. Sorry I have comments and that's --

RDML THOMAS: You're going to ask me about Subchapter M, aren't you?

MS. HOPKINS: No.

(General laughter.)

RDML THOMAS: All right. No container weight questions here.

MS. HOPKINS: I definitely don't want to get on your bad side. You may not appreciate these comments, but I have to make them anyway.

API is not supportive of the Cyber Security Committee continuing their work. We feel that the task statement today has been given, has been conceded, and that the phase one and phase two work has been completed and done. And that the existing channels and existing scenarios and relationships that are ongoing that have been working on this issue are adequate and a better way to address the cyber security
concerns and issues.

In no way should you interpret my comments to think that this is not a priority for API or our members. It's just we think there's a better way for it to be handled.

RDM Thomas: Well, I absolutely understand API's very interested and been a great partner with us working on cyber security, particular profiles that we mentioned for the bulk liquid terminals. You know, I would just say noted, but I'm going to access every possible source of advice on this particularly complex and important issue, and NOSAC is one of those.

Ms. Hopkins: Understood.

Chair Delatte: Anyone else have a question for Admiral Thomas?

RADM Callahan: I have some questions and comments. I'm not going to ask Paul a question.

RDM Thomas: No. We just spoke for three hours yesterday.

RADM Callahan: I wanted to add an
exclamation point actually to one of Admiral
Thomas's comments and also to assure everybody in
the room in regards to the downturn and then the
eventual upturn that we're going to see, and I
know the concerns that we in the Coast Guard will
be ready to respond. And you need to hear it
from the District Commander that that is
absolutely a concern and a priority for us.

You've heard from several staff
members here, and they're all on it. I wanted
you to hear it from me that we are leaning into
it, we're watching it. We do need your
partnership on it, we do need you to give us the
indicators. We don't always see them as well as
you do. The dollars and the incentives to know
when things are turning around, that's all in
your court. But those indicators need to be
passed to us as early as possible.

The other thing I would mention to you
is that the human capital piece of this concerns
me a little bit. The question is are you losing
that extra piece of experience and knowledge with
this downturn, and is it coming back? And as somebody who watches these things and as the District Commander, I would ask that you pay particular attention to that aspect of the eventual upturn. Because you have the experience and the expertise there as we start to crank up again.

I've been told that a lot of it goes away when we have these downturns. People walk away and they don't come back. So the question I have for you and it's more of a rhetorical question, but just how are you going to deal with that gap if it does occur, and we want to be with you on that and we want to be ready to assist you on that.

Certainly as the person who watches these things, it's one of those -- you ask what keeps me up at night, that's part of what keeps me up at night. When it come back it will come back with a vengeance, which is a good thing. It always does come back very fast. But we'll be ready on the human capital side. I'll just
finish with that comment.

CHAIR DELATTE: Very good. I think we have one more comment from the table. Ms. McClelland.

MS. MCCLELLAND: We saw this in the '80s, where we lost a lot of people. They didn't come back to the industry. We're seeing it today. We have -- a lot of the more mature, seasoned people are not coming back. They're retiring, they said we're done with this. It is very sad to see that experience go.

We do not have an avenue of an apprenticeship like we used to have in the old days where the folks that are leaving the industry have a conduit to actually transfer the information over to the younger generation and the history and why we do what we do. So it's a huge concern in the industry.

A few months ago before the downturn happened, I sat at a conference where they were saying we're trying to figure out how to get new people into the industry. Well, guess what, we
had a downturn; we've lost seasoned people.

What's going to happen? Let's hope some of our
good folks stay long enough to transfer their
information across.

CHAIR DELATTE: Very good. Okay, Mr.

Perez has a question.


I want to reiterate part of what Kelly mentioned.
It wasn't that long ago, three years ago, two,
three years ago when things were booming. We
were having a hard time finding people, qualified
people just to do entry level.

So I think this time and in this
slowdown it's probably going to be a little more
complex on a restart, because the inexperience we
were getting into the industry three years ago,
two years ago is going to be our experienced
people who come out of it, to an extent. So it's
something we definitely have to manage from a
competency and training and awareness.

CHAIR DELATTE: Ms. McClelland.

MS. McCLELLAND: One thing I actually
would like to see our industry work on with the Coast Guard and the regulatory bodies is bringing back that apprenticeship program where the students coming out of college are mentored out with somebody seasoned in the industry and sponsored by the industry. Take their knowledge, their theory that they learned out of school, bring it into a classroom setting where the experienced people share and transfer information, and have that support of the industry behind them. If we have that tie, we'll be able to transfer knowledge across sectors.

CHAIR DELATTE: Thank you.

Any additional comments? Mr. Sales?

MR. SALES: Thank you. Mark Sales, Tidewater. Just to follow up, we have had issues in the past with significant inspections. That might be something that you might want to look at, something to help deal with the problem.

That may change --

RDML THOMAS: Mark, could you speak up, please.
MR. SALES: Sorry. I was just saying that significant inspections have had in the past some issues with getting, you know, COI to carry additional personnel -- with the allowance to carry additional personnel.

I just wanted to add something else though if I could, Patrice, on the integration of cyber with safety management systems and IMO.

Normally the process before an IMO meeting -- I know this comes under state, but the public meetings for U.S. delegation leads, how open can it be for input from industry at that late date when the Coast Guard kind of has its ducks more or less rigged so that -- so last-minute comments, you know, input from our side could be taken into account?

Because I know I've always had a certain pushback on reliance on SMS. They seem to see some issues as performing mandatory restrictive regulations and SMS or the safety management code doesn't really lend itself to that, you know, amending that part of the code.
So their focus of course is on deep sea shipping, and the real resistance of seeing other industry's inputs, of course. Warren I'm sure agrees.

So I mean that sort of dialogue would be extremely helpful, if possible, under the way that the delegation briefing system works. I mean I know you do the three-part notebooks prior -- I mean issue prior to going to IMO, and obviously input from industry probably isn't available until you actually have those public meetings. Just a question about how that input could be achieved. Thank you.

RDML THOMAS: So we're pretty transparent in our workings at IMO. Our papers are public as they're submitted, so you can go read the papers that we submitted to IMO today. We will have a public meeting at which point we'll publish it in the Federal Register, and we'll talk about what the agenda is, and we'll talk about what our position is on each agenda item.
I'll agree with you that the timing of those meetings is, you know, pretty close to the IMO session. But what I -- you know, I envision in the future cyber will be part of safety management systems.

Our paper to IMO does not make that leap yet, because you need to move slowly at IMO, otherwise people just, you know, reject even taking on the issue because it's too big of a change.

So our paper basically says this is an operational risk management issue. We need guidelines, and here's a suggested template for those guidelines. They are not proscriptive because they can't be. Cyber is too dynamic of a topic to be -- you know, change your password every 10 days. Well, you can't do that on cyber.

And so they are more along the lines of, hey, you should have a company policy that addresses how you manage this risk. You know, you should have a process that says how we -- who can update software, who can patch it, et cetera.
And then it leaves it to you to determine what
that process is and who has those -- that's
really the approach that we're taking.

In terms of industry input, you know,
there is a bunch of industry input on this topic.
Some of it's coming for this. We don't ask our
FACAs to give us input and then not consider that
in our work at IMO. So via a number of FACAs we
have input on the cyber issue. There's also
international industry cyber risk management
standards that are out there that are also the
subject of another paper at IMO.

And I imagine there'll be four or five
papers there, all of which could be bundled into
one working group, and they're going to go into a
room and come out with a recommendation, at which
point we may ask NOSAC to look at those IMO
guidelines and give us your feedback. I think
there'll be plenty of room for input.

CHAIR DELATTE: Very good. All right.
If that's all the questions, I'm going to thank
Admiral Callahan, Admiral Thomas. We really are
honored to have you here with us today, and
appreciate the time you took to answer our
questions.

    RDML THOMAS: Thank you.

    CHAIR DELATTE: All right. Now,

Commander Perez, we're going to ask you to cover
administrative items for the benefit of the
public.

    CDR JOSE PEREZ: Thank you, Madam. I
said it earlier, I would like to remind everyone
in the room that it's requested that you keep
your cell phones to either vibrating or off. And
also there's any sidebar chats or discussion that
surface during the meeting, please step outside
and then conduct those discussions.

    Also I would like to notify that the
2016 membership has been approved, and then from
this slate the following members are being
reappointed to the Committee. And they are Mr.
Michael Brown, Diving; Mr. David Hedgepeth,
Subsea; Ms. Kelly McClelland, General Public.
And lastly from this slate we have a new
appointment to the Committee, and I would like to introduce Mr. Kim Parker, which he's going to be joining us and representing the Offshore Operation. Welcome.

I would like to ask all four members to please stand and join us here at the front table.

CHAIR DELATTE: Mr. Brown sends his regrets, he cannot be here today. Still traveling overseas.

CDR JOSE PEREZ: Also I would like to ask Admiral Thomas at this time if he can swear in the new Committee members and reappointed Committee members this morning.

RDML THOMAS: All right. Well, you guys ready for this?

MS. McCLELLAND: Of course.

RDML THOMAS: All right. Raise your right hand and repeat after me.

(David Hedgepeth, Kelly McClelland, and Kim Parker were administered the oath.)

RDML THOMAS: Congratulations.
CDR JOSE PEREZ: Welcome. Thank you very much. Welcome back.

(Applause.)

CDR JOSE PEREZ: Also I am also pleased to announce that Mr. Grant Johnson has been selected for reappointment as the Vice-Chair for NOSAC. At this time I would like to ask Mr. Johnson to join Admiral Thomas at the front so he can be sworn in.

RDML THOMAS: All right. Thanks for doing this again. Will you raise your right hand and repeat after me?

(Grant Johnson was administered the oath.)

RDML THOMAS: Congratulations and thanks.

(Applause.)

CDR JOSE PEREZ: Thank you, Mr. Johnson. Thank you, Admiral. And that completes this administrative part of the meeting. Madam.

CHAIR DELATTE: Thank you, Commander Perez.
We'll now go to the approval of prior meeting minutes. Our last meeting was November 19, 2015, in Katy, Texas, our fall NOSAC meeting. The minutes, the NOSAC members have been provided with a preread copy of those minutes. And we are ready to ask the Committee if there are any comments on those minutes that they reviewed.

(No response.)

CHAIR DELATTE: Hearing none, at this time I will entertain a motion to approve the minutes and accept them into the record.

MS. McCLELLAND: Madam Chairman, I motion that we approve the minutes.

CHAIR DELATTE: Can I have a second?

MR. DARDAR: Second.

CHAIR DELATTE: All right. We will now vote to approve by majority. All in favor say aye.

(A chorus of ayes.)

CHAIR DELATTE: Any opposition, no.

(No response.)

CHAIR DELATTE: Very good. The
previous meeting minutes are approved. Please note that these minutes are available on the NOSAC Homeport web site for public viewing.

The next item on the agenda is the adoption of today's meeting agenda. Before we adopt that, there is one correction I'm going to ask Mr. Clark to make again.

MR. CLARK: Good morning. As was said earlier, there was an error on the agenda, IADC is not making a presentation so that will be stricken. And I would ask, Madam Chair, when we get the motions and seconds, if you will please state who is making the motion and the second for the record?

CHAIR DELATTE: Very good, very good. Okay. All Committees were provided a read-ahead copy of the full agenda. Other than the correction made by Mr. Clark, are there any other comments about the agenda today?

(No response.)

CHAIR DELATTE: Hearing none, at this time I entertain a motion to adopt today's
meeting agenda as amended. Motion?

MR. WEAVER: Warren Weaver.

CHAIR DELATTE: Second, do I have a second?


CHAIR DELATTE: Thank you. We'll now vote to adopt the agenda. All in favor say aye.

(A chorus of ayes.)

CHAIR DELATTE: Any opposition, no.

(No response.)

CHAIR DELATTE: Okay, hearing none, we have adopted today's agenda, and we will proceed with the meeting.

Okay, it's 9:30, we're going to go through the next, the first subcommittee, and that is the -- we will now hear from the subcommittees on their status and progress. The subcommittees are the Cyber Security Subcommittee, the Towing of MODUs Subcommittee, and the Well Intervention Subcommittee.

We will hear from Cyber Security first before we take a break. Kelly McClelland is the
Co-Chair, along with myself, and we'll be making
that presentation now.

MS. McCLELLAND: I'm going to stand.

CHAIR DELATTE: All right. Very good.

We've been deliberating for one year. The
subcommittee was stood up a year ago at the
spring meeting 2015. And I just want to say that
we had excellent participation, a lot of people
that regularly participate in our subcommittees,
but also many that are their cyber security
personnel and experts inside their companies that
are developing their programs and systems. So we
therefore really had some expertise that helped
us get through this.

MS. McCLELLAND: The NOSAC

subcommittee was stood up in April of 2015. As
Patrice said, I shared the co-chairmanship with
her. There were nine different meetings in
person and then we two dates to break out into
focus groups. Of the focus groups there were 73
members working from the maritime oil and gas,
legal, insurance, regulatory, OEMs, oil
companies, rig companies, and we cannot thank them enough for their participation. Also API, IADC, and other trade organizations, OMSA, and we again thank you.

The guidance from the U.S. Coast Guard, NIST and MITRE, NNCOE, ONG-ISAC, and the insurance industry as well as the legal industry were a big part of our overall process recommendations and making sure we understood all aspects of the topic that we were dealing with.

CHAIR DELATTE: Okay. So our first phase was we turned in our interim report in the fall of 2014, and in that report we identified cyber-related systems in the maritime oil and gas industry. In phase two we did deliberate again on that list and we have revised it, so you will see the revised list today.

We also provided tables on impact and risk. The first table is the potential impact levels. That is directly from FIPS 199, the Federal Information Processing Standard. We did add a notation to that table.
Then we input our own second table, Table 2 is our own. It is a suggestion for evaluating potential impact levels of the vessel systems that we identified. Then we provided cyber security guidance and standards used by the industry to shape cyber programs in our final draft. You can look and see a whole page full of different sources that the industry is using to get advice and guidance and develop their systems.

We identified the need for cyber security training for system users, supervisors, and senior management. We recommended that companies in our industry have policies and procedures that ensure the integrity of their business and process network. We recommended that a cyber security program include a risk-based assessment process that identifies cyber risks, provides risk mitigation, includes a response and recovery plan, trains employees on the process, and implements an audit system. We want to see that system in our company improve,
continuous improvement.

Okay, this is Table 1. It is divided into three slides so you can see it a little better. I know people hate it when we put a whole lot of stuff on the slide, but unfortunately sometimes we have to. The FIPS 199, again the subcommittee recommends this as a way of evaluating the impact of your system. Low, moderate or high are the risk impacts. And it's based on the potential of the loss of confidentiality, integrity or availability, whether that has to be your -- the effects would be on your organization's operations, assets or personnel.

The addition that we made is we specifically didn't see the environment mentioned in there. We realize it is an organization's operation, but we wanted to bring that to everyone's attention. And also the loss of reputation. That is one of the reasons we had trouble getting people to tell us a lot of specifics in the subcommittee because they don't
want to tell us what happened to them. So we
added that on the table notation.

Okay. Now, we deliberated on our
system at several of our meetings in phase one.
We had more comments at this meeting in the fall.
We had more people come into our subcommittee
because of this table. So we redeliberated on
the systems, and as yesterday here in our
subcommittee we -- there were comments about
things that were left out that were in
originally. And we actually went in and just
gave a high level list of systems, and this is
the way the majority of the group wanted it to
be. So we listed our marine navigation systems
and our process systems, and you see that in the
center column.

And then potential impact on industry.

In our interim report we actually listed what we
thought as low, medium or high for the systems
that we named, and we got a lot of negative
feedback on that. Because it's felt that a
company looks at their system and has to
determine for themselves what that impact is.

So you see that column over there says "based on individual company facility, vessel, geographical region, level of automation of vessels, and other parameters affecting cyber security risk impact evaluation." So you look at the impact that it would have on the industry, you put in your mitigation, you think about what you've got to do to prevent, and then you would have your residual risk, again based on that risk assessment.

I also want to add that in our interim report we mentioned third party system as a system. In this one we decided just to make a comment, to add the comment at the bottom of the table, that the equipment of a third party should have strict access identification and authorization controls, and should mimic that of the operator facility, their system and equipment.

MS. McCLELLAND: We as a committee did not feel that anyone should say or dictate how a
company runs their business. They know best what makes their business work. And so in other deliberation, in the second, in phase two our tasks are really largely to determine how we're going to tackle it, so we broke into four focus groups. The four focus groups ended up being three at the end.

The centralized information and data sharing, that's really important. If we don't share lessons learned we're not going to learn from them. Identify necessary processes required in developing a cyber security/cyber risk program, that's Focus Group 2. Focus Group 3 was best practices cyber security risk and cyber risk management. Those two focus groups were combined at the end and they're combined in our final report because they work hand in hand. And then industry definitions.

CHAIR DELATTE: Okay. The first focus group was centralized information and data sharing, and I spent a lot of time with this focus group in phase two. And the focus group
and then eventually the entire subcommittee, our recommendations are that there be a voluntary data sharing system so that we can learn, we can gather cyber data from other events or threats or vulnerabilities that maybe others are seeing that we haven't seen yet. Or they could -- the whole point is continuous improvement, we want to improve our system. And if we have that data sharing system where we would receive updates, we feel that that would help us.

Then we looked at the forms to use if we had this data sharing system. And the first form was the Coast Guard 2016- that we looked at. And we thought that that might be a good way, but in the end the threshold for reporting is too high. We want to see things that maybe don't cause any damage but that we could learn from, vulnerability, updates on software, similar to what the US-CERT does.

So the we looked at the US-CERT form, and the US-CERT is the U.S. Computer Emergency Readiness Team and they have this form out there.
It is not industry-specific, which we would need to have an industry-specific form, but the form has some fields that we wanted to use and we added some fields. So we've actually modified the form as a suggestion in our final report, and we put in drop-down boxes to make it easier.

And the fields added are [redacted] the industry. We added a question. Are you a critical infrastructure owner or operator? Are your organization's critical operations affected? Was the event triggered locally or remotely? Was the incident real -- excuse me -- was the incident or threat malicious or unintentional? Then we asked how the incident was initiated, where did the event occur, did the threat disrupt operations, and which operations or controls were disrupted.

And we know there's a fine line -- we had talked about this yesterday in our subcommittee meeting -- of keeping the industry informed versus letting threatening people that would commit threats know all of these vulnerabilities too.
But we really feel like some of our systems -- in the subcommittee some people had very mature systems. Others were working on their systems and working to put together a good system. So we feel that the information would be very helpful getting that back, and that would be more beneficial.

There just be a mechanism for anonymous reporting. In the US-CERT we're told that the method for anonymous reporting is using the telephone and not giving your name and information, and that is a method of anonymous reporting. But we discussed in the subcommittee anonymization, where you would take the identifiable information and delete that and just have the report.

We also discussed where the identifiable information would be decoupled and kept in two separate databases. And I'm not the most technical people, but that was the summary of our discussions.

In the end we did not recommend one or
the other. We'd like the Coast Guard to look at anonymous reporting based on what can be done under U.S. privacy standards.

And then we feel again that it should communicate feedback and trend analysis to the industry. The US-CERT form already generates software updates, vulnerabilities, and threats that come out in regular emails. If you sign up for it, you get regular emails with these items.

The problem is it's not specific to industry, and what we'd like to see is that specific to industry. They also provide a weekly vulnerability summary. So all the reasons we chose the US-CERT form as not reinventing the wheel.

And then the reporting should be encouraged and publicized by the Coast Guard. We feel like we'd like to see NOSAC used to spread that information. Also we had excellent participation from API, IADC and OMSA, and we feel like they would be able to make sure that the site is publicized if it was brought to
fruition. Next slide.

MS. McCLELLAND: Well, the main purpose of trying to make this a user friendly on-line form to complete, and even a telephone call nowadays is not anonymous because you do have caller ID. So the transparency there is we need to start sharing information and make a form that is easy for everybody to fill out and complete that does not hurt the company, their shareholders or -- because we have to protect the shareholder bodies of the company, and a negative response or an incident could affect their reputation. So we have to be conscious of that.

But in the next slide we're going to talk about why we put processes and best practices. As we said, the largest companies have something in place. The smaller companies, the mom and pops, the midsize companies are not real sure where to start in some cases. So we wanted to give them a road map, something to get them started. And it will evolve as they learn more, their groups be adding more information to
their program that lot of companies didn't even know where to start.

So we talked through this, the recommendations and best practices. This is high level. We don't want to give the hackers a road map to how to get into our systems. As our recommendation we asked for a voluntary risk-based approach to managing cyber security.

We feel it's the best thing for the industry to submit this is what we can live with, this is what we're comfortable with, this is what we're doing, with the SEMS it was pushed down to us as this is what you will do, and we struggled with it. So as an industry we want to offer up this is what we can live with.

The use of NIST framework -- and I'll give you some statistics on a survey that API and other trade organizations did that was really eye opening of how many people use the NIST framework. All offshore industry companies should have a cyber security/cyber risk management program which is based specifically on
their offshore and other assets.

Again we don't know everybody's business. We do not know how they run their companies. They're the best ones to determine what their risk is and the mitigation and what they can live with, what's not going to keep them up at night.

When API and other trade organizations did a survey last year they -- this is in third quarter 2015 -- got 53 oil and gas industry companies responded to this survey. And out of that, 77 percent of the respondents use framework to evaluate cyber security capabilities and programs; 69 percent use the framework to prioritize their cyber security program, 48 percent use the framework to facilitate cyber security communication via a common language, 32 percent use the framework for benchmarking cyber security versus performance of their external peers, 25 percent use framework to evaluate external suppliers and contractors.

Now, we also found out in working with
NIST and MITRE and OCCOE, which were very much involved with the subcommittee, that other countries were actually looking at implementing NIST framework and some have actually said they are going to NIST framework. So they're looking at what we're doing over here in the States.

So we got into steps for developing a cyber security program. It's comprised of a set of elements that cover all five of the framework, the NIST framework functions that are tailored to the specific set of assets and potential threats at given companies face. They are digital control of critical systems -- Patrice.

CHAIR DELATTE: You want me to read them?

MS. McCLELLAND: Please.

CHAIR DELATTE: Assessment of vulnerability management and software development, patching and anti-virus protection for a process control network, PCN, segmentation of process control networks, set-up of a specialized process control network, restricted
access to paramable logic controller,
restrictions and monitoring for vendor access to
original equipment manufacturing, OEM systems,
and redundancy of systems based on criticality of
systems and risk assessment, and periodic on-site
cyber drills.

MS. McCLELLAND: These cyber drills,
we -- think of what you do for your BCP, your
business continuity plan, when you have
hurricanes and everything, you're running your
drills, you let -- everybody knows what they're
doing. Cyber security is no different. You can
run this type drill, you can run spill drills,
you can run drills out on sites.

The five functions are to identify,
protect, detect, respond, and recover. Let's
just say the previous 10 elements that my co-
chair just listed off for us are listed against
one of these different functions.

We also -- this is a bit controversial
as well. We identified all the systems, and
they're not shown here, because again we didn't
want to give hackers a road map as to what systems have control systems involved. This spells out multiple, multiple layers.

But this is a general idea, this is not all-inclusive systems where some vulnerabilities are. So we need to figure out how we're going to shore those up. Also cyber security processes, the configuration, control monitoring, cyber hygiene, incident response and management inventories, security testing and vulnerabilities, this again is not all-inclusive but these are areas that we need to work on.

You can't have a system in place without being able to test it. Why develop something at desktop if you're not going to test it and report it and improve it. It's continuous improvement. So we also recommended besides them having a program in place that they actually have a test, an assessment system in place to make sure that what they're putting, what they're saying they're going to do actually works. And if it doesn't change it. Make it reflect the way
the operation truly works to help mitigate the risk. Patrice.

CHAIR DELATTE: Okay. We chose some specific definitions to provide that are specific to our industry the way we're making our program, our cyber security system. And those three -- the first one is cyber breaches to security. And we actually chose, we went to the CFRs, 33 CFR 101.105 and we took the definition of a breach of security.

And therefore we identified the best definition for industry of cyber breach of security being an incident that has not resulted in a transportation security incident in which security measures have been circumvented, eluded or violated. And a transportation security incident -- and this is in no way verbatim but it is the definition of that is security -- an incident where security measures have been circumvented, eluded or violated and there is a significant loss of life, environment damage involved, a transportation disruption, or a
disruption in some other particular area.

So what we're saying is a cyber breach of security is an incident in the cyber realm that did not reach those significant losses, loss of life, damage to the environment, or disruption in transportation or other areas. Next slide.

The next definition was of cyber suspicious attack. And we got this definition from the Cyber Security Information Sharing Act. It's actually the definition of cyber security threat but we removed the reference to the First Amendment. And if you look where I have underlined "has resulted" in the Cyber Security Act definition of cyber security threat, it has "may result."

So our definition of a cyber suspicious attack is an action on or through an information system that has resulted in an unauthorized effort to adversely impact the security, availability, confidentiality or integrity of an information system or information that is stored on, processed by or transiting an
information system.

And then the last term we focused on was vulnerability or vulnerabilities. And we decided on a definition from the Open Group's Risk Taxonomy, which is something that a lot of us weren't familiar with before we worked on this subcommittee. But the Open Group is a UK consortium, and they deal with the technical specifications and standards, and the Risk Taxonomy is about a 50-page document that looks at definitions and classifications of information security risks.

MS. McCLELLAND: And yesterday we added one more that we're circulating around to the subcommittee to get their consensus on cyber hygiene.

CHAIR DELATTE: Right.

MS. McCLELLAND: And we found one -- Janet Napolitano, Department of Homeland Security, that she said. This is cyber paging on October 28, 2009, install and update our -- and it says our practice of good online habits by not
visiting suspected sites, downloading suspicious documents, attachments or emails that you believe you do not know, back up files regularly, use strong and secure passwords.

This is common in that we still are human, we're going to click on a link or we're going to access something we shouldn't. But we thought this would give us the general definition of what cyber hygiene is.

CHAIR DELATTE: Right. And we said, we'd come up yesterday's subcommittee meeting and we are circulating that before we put it in our final report. We had a lot of members participate in this, and we just want them to see it before we turn in the report.

Next slide. Okay. We're getting to the end of our presentation. We've already said it but we've been honored to work on this task but we don't feel it's quite complete even though we are turning in our final report today. The NVIC comes out in approximately 30 days, I believe some time at the end of April.
MS. McCLELLAND:  Yeah.

CHAIR DELATTE:  And we'd like to be kept updated on that and we'd like to bring the subcommittee together. Because we had some really good experts and a lot of willingness to look at that NVIC before it's -- when it's published but before it's implemented.

We also were very fortunate to have a look at the cyber security framework profile for the bulk liquid transport facility in Bethel. We had a lot of comments, we spent about four hours, three to four hours discussing with NIST and Coast Guard members that particular framework profile. Just mostly they were good comments about the content. It was the user friendliness of it that we provided a lot of suggestions. So I was really pleased with the subcommittee members for that.

And we understand, and I don't know when or have any details but we understand that there could possibly be a cyber security framework profile for offshore rigs coming next.
And I'm sure that this group would want to
comment on that also.

MS. McCLELLAND: That's right.

They're trying to work on this heavy liquid bulk
transfer first and then they're using that as a
model to roll out to the rest of the industry
their intent they expressed, they said they're
going to do it.

We want to say thank you again.

Because a lot of these companies, there were 73
participants, whether they were on the phone or
in person, and a lot of people were in person,
their companies gave them up for the time that
they were there and we were talking in-person
session eight hours a day. And we give special
thanks to the participants, the companies, API,
IADC, OMSA, U.S. Coast Guard, NIST, MITRE, NCCOE,
ONG-ISAC.

But we also ask to give special thanks
to two companies that provided us facilities to
actually have these in-person meetings. And
that's to Bernie, Maynard, and Parsons, which
also gave us each meeting a new regulatory update on the cyber security bills that were either in the House or the Senate and how that actually could affect us in the oil and gas industry.

And Diamond Offshore as well: They opened their doors to us, they saw the importance of us meeting, and they wanted to make sure we had a place to meet.

And I'm through speaking.

CHAIR DELATTE: That's the end of the presentation. I'm going to get back to my seat. I want to thank Kelly for her assistance as co-chair, the subcommittee participants. Then I want to go around the table and see if we have any questions on the presentation or the report that you had a chance to preread.

RDML THOMAS: So just a couple comments. I haven't had a chance to read the report. I look forward to reading it in detail. It's obviously a lot of really good work, so my thanks to the co-chairs and the committee.

We have made a couple priorities to
get done this year with regard to cyber, and one of them is around the reporting. And so I guess overall it looks to me like your recommendations are really tightly aligned with the direction that we were heading anyway, which is not surprising but good.

I will tell you that we expect to announce very shortly that the cyber reporting process for the maritime will be through the NVIC, which is where everyone else is going. So they have finally took some time, they have finally agreed to take not only those reports of security breaches that are required by NVIC but everything. And in a way that will allow us to sanitize the data and actually report back out on trends.

So I think we're aligned there and the NVIC is really the right place to do that. Because as you guys know, you have cyber backbones that trend vendor business and you don't always know whether it's a maritime-related incident or not, so there's no reason for you to
have to determine that. So you'll see that soon.

I'm not sure about the NVIC by the end of April. One of the reasons is that we have to go back and look at the NVIC now in light of your report and, you know. So I think that's going to take some time. But we do have a goal of getting the NVIC out there, which really is going to be focused on vulnerability assessment and that kind of thing.

I would point out to you though that the House passed a bill in December requiring the Coast Guard with a number of actions in the cyber domain. And although I don't think that bill has a chance in the Senate it definitely -- that combined with the two hearings now that they've held on this topic will -- it sends a signal that they are looking to the Coast Guard to do something about this in the maritime.

My concern is that we don't do something unilaterally in the maritime that doesn't make sense. You know, that's why I'm really happy to have API involved, because, you
know, maritime's not a silo, you have to work with everyone else. So I'm a little bit concerned that the House committee is pushing too hard right now to move maritime ahead of everyone else, and we're really focused, working with DHS and everyone else to ensure we do that jointly.

And then the last point that I'll make with regard to the international nature of the NIST standards. The four papers that I'm aware of at IMO right now, all of them refer to a NIST standard. Our paper has co-sponsorship from Canada, Denmark, Japan, Singapore, Marshall Islands, Liberia, and it relies on the NIST standards.

So it truly is an internationally recognized framework. There are nations that have taken it and tweaked it and renamed it, but it's still the NIST standard. So I think it's, you know, reliable to say that whatever does come out in terms of voluntary guidelines or eventual requirements are going to be based on that standard.
MS. McCLELLAND: Thank you.

CHAIR DELATTE: That's really good.

Any other questions from the table?

MR. MURPHY: Madam Chair?

CHAIR DELATTE: Mr. Murphy.

MR. MURPHY: That was a very impressive presentation, and thank you. I noticed there was a mention of the insurance industry being represented. Thank you. And I just wondered if the representatives of the underwriters had anything startling or valuable to say.

MS. McCLELLAND: I actually spoke with one of the major underwriters of cyber security policies, and they point blank said we're having trouble trying to figure out how to underwrite it. They have shared their forms with us and questionnaires, but they're struggling with, number one, they don't know the details of our business. So if you don't know the details, how do you know -- they aren't going to be able to determine how to underwrite it.
So they're struggling with it as well. They're staying involved with it. They're very interested and they actively participated --

CHAIR DELATTE: In the subcommittee and they're talking to their clients right now about it, so there's dialogue there. And I think that the more their clients are having systems, the better off they'll be.

MS. McCLELLAND: The one thing we have to achieve out of the cyber security is when you first ask the question about cyber security, oh, that's IT department or that's OT. So we finally got IT, OT and everybody, legal, insurance, regulatory, everybody together in the same room. And when you start asking questions if something happens could you handle this, and then the dialogue that actually came out of those questions and people really started to think, that made our group better. Because it's no longer siloed, it's everybody working together. And that's the way we have to keep going.

MR. MURPHY: Thank you.
CHAIR DELATTE: Any other questions here?

(No response.)

CHAIR DELATTE: Okay, we're going to ask the public --

MS. McCLELLAND: Warren.

CHAIR DELATTE: Oh, I'm sorry, Warren.

Mr. Weaver.

MR. WEAVER: Thank you. Very good work on this, and I just wanted to highlight the comments made by API today and ask if API when it goes to the public, if they had more elaboration on what the next phase could be as far as the membership goes if it is continued further. And the concerns of it going further, if it can be explained a little bit more. Thank you.

CHAIR DELATTE: Holly, do you have any answers for Warren?

MS. HOPKINS: Kind of. Hi, Holly Hopkins, API. I guess the general comment was basically that we weren't supportive of I guess a third phase, and that we felt like the task
statement as written has been completed. So I
guess I would encourage if further work is being
done that there's an extremely clear task be in
place to define what that work is.

Ultimately I think the concern is that
there are existing ways that these issues have
been worked in the past and are still being
worked and currently being worked, and that
they're adequate to address the main concerns, an
example being the NVIC and those are usually
published in the Federal Register and given time
for public comment. So we feel that that process
is adequate to address that and that the
subcommittee isn't necessary to do that. That's
one example.

So whatever works. If there is going
to be a third phase, it needs to be clearly
defined on what it is that the subcommittee is
being tasked to do and then to define that. I
can't give you an answer on what we would suggest
that would be, because we don't suggest there is
one. So I mean I guess that's a -- does that
answer your question sort of?

CHAIR DELATTE: Thank you, Ms. Hopkins.

Any other questions? Okay. In the back.

MR. HORAN: Yeah, Tom Horan with Rowan. Again I wanted to thank the subcommittee and the members for their hard work. There's a lot of time and effort put into that. I'm glad to hear that there will be further opportunity to comment.

As we mentioned yesterday, we still have some comments, but we'll wait to see what the NVIC produces before we go ahead and do that. But we're happy to see that that will be remaining open to discussion.

But the question that I had is basically on the encouragement of voluntary reporting. Does the Coast Guard have an idea yet on what they plan to do? Is that going to be something similar like what we see with incidents? That's the question I have. Thank
You.

RDML Thomas: So I'm not exactly sure I understand that question. I mean so as I said we're working through the end kick to get a centralized reporting process in place. We have reporting requirements where breaches of systems that are associated with the physical security requirements in NTSAC.

And beyond that any additional reporting, I think I'm going to look to this report with concerns of what it is that we should do to encourage. Obviously we can't require voluntary reporting so we have to be -- we have to walk a fine line there for all sorts of reasons around federal regulations about information collecting. So sometimes even if we just suggest that maybe you should provide this information, it trips the line with regard to the Paperwork Reduction Act and all sorts of things.

So I have to really -- it's much better coming from the industry than it is coming from the Coast Guard when it comes to voluntary
reporting.

CHAIR DELATTE: Any other questions?

MR. PERGINE: John Pergine IADC. Admiral, to assist also in talking about
resources, IADC has looked ahead, and we've
published guidelines for assessing and managing
cyber security risks to drilling assets. It's
also available, too, as a useable resource if you
like.

RDML THOMAS: John, I'm familiar with
that work and it's actually also in the mix at
IMO. So thanks for that.

MS. McCLELLAND: And John was good
enough to give us some -- if anybody needs some
information on IADC, who to contact, John was
good enough to give us some cards. I'll leave
them up here on the top of the table so you can
pick one up if you need to.

CHAIR DELATTE: Any further questions?

Captain Reynolds?

CAPT REYNOLDS: Thank you. Not so
much a question as a comment, and I'll put it in
context of the introduction. It certainly does
seem complex to me and certainly there's a new
challenge in operational risk management. So in
that we had everyone say it was really important,
I'm a little intimidated but also looking forward
to the challenge.

I'll say that in the past the industry
has offered training to Coast Guard personnel
that's the same training that your industry
personnel goes through. We've then taken that
training and been allowed to -- as voluntary
incidents have occurred, been able to promulgate
safety alerts, and I think that's useful to the
industry to help correct problems throughout
fleets that are similar.

So that's an approach that has worked.

And if there's any training developed on this,
certainly we are open to training in this area
and other areas that are complex that help us
reinforce your own operational risk management
and safety management.

CHAIR DELATTE: Very good. Kelly, Ms.
McClelland?

MS. McCLELLAND: Josh, there are a few groups out there that do provide training, but we also recognize that's going to be training internally for a lot of these companies and our industry as a whole. You're going to have, in cyber security, white hats, some black hats. You know, they're all out there, and, but, yeah, there is some focus on trying to pull a training together for everybody to share knowledge. But if we don't report, we're not going to get to our lessons learned.

CHAIR DELATTE: Very good. Last call for questions.

(No response.)

CHAIR DELATTE: Okay. This is a NOSAC final report from the Cyber Security/Cyber Risk Management Subcommittee on the U.S. Coast Guard outer continental shelf.

I'll now entertain a motion to accept the final report duly amended with the amendments that we talked about, the cyber hygiene
definition that will be included in the report.

Can I get a motion to accept?

MR. KALLAWAY: Kris Kallaway.

CHAIR DELATTE: Second?

MR. FUHRMANN: Chad Fuhrmann.

CHAIR DELATTE: Chad Fuhrmann? Okay.

A vote by the subcommittee to accept the NOSAC --
the final report from the subcommittee. All in
favor say aye.

(A chorus of ayes.)

CHAIR DELATTE: Any opposition, a no.

(No response.)

CHAIR DELATTE: Hearing none, we have
the final report has been accepted.

Thank you, Kelly McClelland and the
subcommittee participants, for the hard work, and
we look forward to continuing contributions to
safety in the offshore industry.

Okay, with that we will now take a
break. I think everybody needs one. It is
10:18. Let's make it come back at 10:35.

(A brief recess was taken.)
CHAIR DELATTE: Thank you. Buddy Custard and Mr. Marshall Perez, co-chairs of the Towing of MODUs Subcommittee. Mr. Custard, Mr. Perez, the floor is yours.

MR. MARSHALL PEREZ: Thank you. All right, we're assembled. Thank you. My name is Marshall Perez, I'm one of the co-chairs for the Subcommittee for Towing of MODUs, MOUs, and FOIs. Today we're presenting our final report for consideration and acceptance of the full committee.

MR. CUSTARD: Yeah, what we're going to do real quick on the agenda is give you a quick background of what our task statement was, then go over -- there was basically four questions we were asked to address. Just basic what are recommendations, looking at the guidance. Because there's current guidance out there, NVIC 1191; it's 25 years old.

The Coast Guard asked NOSAC to kind of look at that based on some lessons learned, which we'll talk about here in a few minutes, and see
does it need to be updated or what's changed in the past 25 years. So that part of the first recommendation's been towage in harsh conditions. Based on what's out there, is there anything in particular we need to look at the harsh environment, what's our reasoning for the recommendations, and then was there any other issues that we came up with. Next.

So the background, like I just mentioned, was 1191 is the NVIC. And it's just basically ocean tow objective units. So it's 25 years old, so that's what we were asked to look at. And in those 25 years, as we all know, oil and gas industry on the OCS, in the outer continental shelf, has expanded significantly with that, and the technology has changed quite a bit during that time.

The towage of MODUs, MOUs, FOIs is changing, and the type of sea units that are now towing those types of rigs is also changing, to where they're now -- it's not just a single-scoped tug anymore. Most of these platforms now
that are towing are multi-purpose vessels, like anchor handling towing supply ships that are out there now, bigger tonnage, capacity and everything else. So that's changing.

There's existing guidance, there's newer guidance. Because of all this technology changes on the platforms themselves, the hardware and everything, industry has already been moving ahead on this stuff internally, as well as the IMO. So they have put out guidance since then, since 11 Industry has been putting out guidance since 11 The safety management system, SMS, has rapidly emerged in those 25 years.

Then we've had recent incidents, the Kosky [phonetic] in '11 and then '12, the Kullu [phonetic] What were some of those lessons learned? We've had some guidance have been put out by industry, by IMO, but we still had some incidents that have taken place. So what can we glean from that. So NOSAC, the Coast Guard asked NOSAC to look at this, and then last year, a year ago we
were asked to stand up the subcommittee.

We've held numerous -- we've held
three stand-alone committee, subcommittee
meetings. But then, because the committee being
dispersed as it is, we also employed web-based
collaboration tools so that the subcommittee
members can constantly be working the problem set
using technology to our advantage on this aspect
of it.

And we have participation from, like
I said, oil and gas exploration company, MODU
owner/operators, TSAC. As Admiral Thomas
mentioned that there are several people that are
kind of working on similar task statements. So
Towing and Safety Advisory Committee, TSAC, was
also given basically a similar one, looking at
specifically the Kulluk incident, using that as a
baseline what were lessons learned. So we worked
closely with the TSAC group on this too; Marine
Consultants and OMSA, to name a few.

MR. MARSHALL PEREZ: Okay. I'll do a
summary. Basically we're looking at the NVIC is
focused, the existing NVIC is focused strictly on jack-ups, not on other marine kicks that we engage in towing on a regular basis on the OCS. We would recommend to the U.S. Coast Guard to revise, amend, supersede that current NVIC with an updated NVIC that covers the different kinds of towages.

Recently we started -- the subcommittee talked of maybe go ahead and providing a draft version. As we went into it and looked at it there's enough -- there's so much industry guidance out there now that that's what we need to be referencing and breaking that down and where does the industry guidance fulfill some of those similar topics that's in the current NVIC and what items are missing right now.

We outlined several areas, recommended, and added some new items and using IMO guidance and industry guidance documents. We also reviewed the TSAC preliminary report. One of the key features in our final report is
Exhibit A, which has a breakdown of, hey, this is what -- this is the NVIC --

Should I hold it up?

RDML THOMAS: Yeah. Thank you.

MR. MARSHALL PEREZ: This is the current NVIC, these are the topics, here are the gaps that we identified. Here's the preliminary TSAC report as far as this is where they fulfill it. And then, hey, here's the IMO and here's the industry guidance, not just which document to go to but, hey, this document here covers that topic well. This is what we need to look at.

MR. CUSTARD: So the recommendation -- these are kind of -- Marshall just went over the big high-level executive summary. This is breaking down a little further some of the more specific recommendations.

But then Exhibit A, which is posted on the Homeport, it also gets into really the details, and that's the side-by-side comparison that Marshall just explained, that there's 60 some items that are on the current TSAC list.
Obviously TSAC, what was our recommendations to that, what's industry standards that's already promulgated to that.

But looking at this, as Marshall just said, 1191 is outdated, and it's just focused on jack-up MODUs, so it needs to be superseded and it needs to do all types of MODUs, MOUs, FOIs. And then we need to base it on IMO and industry guidance that are presently in place and is being used offshore. The guidance is out there in various forms.

So it also needs to be applied to both U.S. and foreign flag tow units that are subject to U.S. jurisdiction on the outer continental shelf. The tow masters should be clearly identified and designated with roles and responsibilities, and that tow masters have experience and competency with respect to the towing. And the designation of the tow master should be the responsibility of the party with the primary enterprise risk.

This came in, that last part came into
some discussion yesterday. But it was clearly identified that -- and it gets into the next one too about clear, concise chain of command is developed and understood by all involved in the towing operation through its completion. However, the designated tow vessel master will be responsible for the safe navigation of the tow and further co-regs and everything else.

When you look at the recent investigation of the Koskay and the Kulluk, one of the big things that we're seeing is that technology is a wonderful thing, the technology is also getting to where into in the past, 25 years ago when the tow master of the tow left the beach they were there, there wasn't a whole lot of connectivity between them and the main branch of the operation center or the corporate offices.

Well, now, the corporate office has clear communications with all their assets that are out there. So it's starting to get more obliged, who's in charge of the towing evolution, people back in the office on the beach or is it
the people on the water. This needs to be
clearly spelled out: Who's in charge; who's
going to designate who's in charge.

It gets also the master and the crew
of the towing vessel have experience and
competency on the towing operation and associated
towing systems. So they understand the
operations, and they also understand the
equipment that they have and how to use it all.
And they're also experienced in the weather and
sea conditions that they're going to encounter.

And one of the things that came up in
that recent discussion with all that, also due
consideration has to go into fatigue management
when you're looking at these things, addressing,
putting together your crews out there and
managing their experience and competency and
putting together your plan.

And the riding crew, basic same thing:
experience, competency in the towing operation
under the environment that they're going to be
placed in and encounter, with consideration for
fatigue management.

And both of these too we also put in the group -- the subcommittee about procedural discipline in the execution of the towing operations. Admiral Thomas kind of mentioned about the El Faro, the systems management system -- I mean the safety management system, SMS.

It was in place but it seemed to fail in many parts of the procedures and everything else. We saw this even with the Kulluk and Kosky. There were a lot of systems in place, but we got to exercise discipline so that everybody has to understand what is their clear roles and responsibilities and who owns what.

And then the riding crew to be towed is minimized to the extent possible and practical given the nature and the duration. Now, once again fatigue management also has to be a consideration for that.

MR. MARSHALL PEREZ: Yeah, we went into fatigue, you know, for MODUs and MOUs and
such, but where fatigue management really comes into play is initiation and arrival at the new location.

In some realms it's outside the scope of the committee to talk about how we actually position a rig and come off and look at that scope. It wasn't part of the task. But fatigue management needs to be planned for in that part of the evolution of the whole entire process.

Next slide.

So the other items that we looked at is the company's SMS. So the safety management system should talk about in general tows and towage risks. We have some general towing procedures defined that you need to have a tow plan. Okay? Most of the MODUs that come under the MODU code, they have an operation manual. There's a towing section in there about your outfit.

Now, obviously in the operations manual you can't get too specific on all towages, because each one is very specific to what you're
trying to do and accomplish. Okay?

And those things need to be considered
and it needs to look at, hey, in building that
tow plan you need to do -- you know, your risk
assessment, do your hazard ID, look at your
pieces of kit you're going to be using, where
you're going, what your environment is, what kind
of tow speed. You also have to consider
contingency plans. All right?

Also when you look at -- you know,
because the towing company isn't the same as the
vessel being towed, the same company, and then
you may have an operator involved. So you have
to look at what the three different processes are
as far as bridging. You don't need to bridge,
you might not need to bridge your entire SMS but
at least what's applicable to that operation.
And if you don't have a existing bridging
document in place, the tow plan may be a good
spot to have captured some of those differences
to take into consideration.

The tow plan should be in line with
the referenced industry guidance. So if you look through the recommendations in that Exhibit A, it'll talk about, hey, manning. You know, this industry guidance addresses it a little bit better, you need to look at that. You know, not all the guidance is highlighted for each subject or a certain section is.

Also some of this guidance is developed by marine warranty survey firms, so you need to understand where they are putting the manning requirements there may be a requirement from a marine warranty surveyor, but as far as the industry goes your company's going to make that decision, because that's really driven by your underwriters, whether or not you have the marine warranty survey, or through your risk assessment you feel you need that extra comfort outside of your underwriter's requirement. That's where that requirement needs to be stipulated.

Now, if your underwriters require a certain marine warranty surveyor, some of that
approval may be required. We think the marine warranty surveyor is more of a commercial aspect. It can add some safety, but if you have the right people, the right tow master, the right designations, we feel that can be addressed.

So at a minimum the tow class should be reviewed and endorsed by the tow master of the towing vessel and the tug masters, the riding crew, the leadership. And they all need to be familiar with it and what we're doing and understand that there's deviations, we need to stop and have a conversation and re-risk assess any new hazards involved and such.

Also in the tow plan you just need to be identifying the different safety factors required for the tow. When you look at the towing assembly, it isn't just the tow wire off the boat and your bridle. It's also, as Buddy talked about, the vessels are much more powerful now. So your tow brackets, are they structurally handled. So it goes from end to end when you look at it. And a lot of these details are
covered and talked about in those guidance
documents. And then the last one's a reference
to Exhibit A, and that's it. Next.

    MR. CUSTARD: The second question,
getting into the towage of the harsh
environments. We thought that all the guidance
is pretty well out there between industry and
IMO, scattered out there with those aspects of
it. But particular attention really needs to
pay, as Marshall just talked about, just towards
the last bullet there on the last slide, the
equipment.

    When you're going into the harsh
environments, you really got to be sure about
what that equipment is and is it designed for
that environment if you're knowingly going to go
into it.

    And it's looking at the safety factors
of the tow line strengths related to the bollard
pull. As Marshall just talked about, the new
towing vessels out there have strong -- they have
a lot of horsepower, a lot of pull, and now you
have to start looking at is that point that
they're going to be hooked up to on the rig able
to withstand that anymore, as well as the rest of
components within that system.

              Shock lines. How is the shock lines
going to be done, how are you going to manage
your catenary. If you're knowing you're going to
go into a high wave situation, what's that
oscillation going to look like from the vessel
that's being towed, and is your entire system
ready to manage that. Requirements, like I said,
it gets to the catenary of the tow wire.

              And then the tow masters, okay, are
they experienced for that weather, for the North
Atlantic, for the Alaska environment. Are they
experienced if they know that you're in the
hurricane season and you've got a lot of tropical
storms that are going to be bearing down that
might turn into hurricanes. What does that look
like? Do they know what to do?

              So those are specific things that we
really wanted to highlight in addition to all the
other things that were already identified as gaps or silent on the issues.

MR. MARSHALL PEREZ: Here's our reasons for recommendations. When you look back, the industry -- we highlighted the industry already has that -- whether it's IMO guidance, the primary documents that we were referencing. DME consultant branch has some good guidance that's used, as well as Matthews Daniels. You know, this committee's been stood up for a year now and we had a draft version originally from Matthews Daniel, but you see how fresh it is. October 2015 is when this document was published, right at the time of our fall meeting.

So there's some good guidance right here, and to us this is how the rest of the industry is, our industry is already operating. Now, granted some of these guidance documents provide more detail and better support in certain areas, but we feel the majority of the areas are covered very handsomely.

MR. CUSTARD: Then were there any
other towing issues that the site group
subcommittee identified. And actually looking at
all the guidance that's out there, the
subcommittee felt that it's already being
addressed. One issue that was asked early on at
our last, during our status report during the
November meeting was about weather.

IMO covers weather, so do some of
these other industry documents cover weather,
things that you have to consider in the
environment. What are the factors you need to be
looking at as you're developing your tow plan for
the master, for the tow master, for the vessel
masters to look at. And that was one of the
silent areas that we found.

As we went through the Coast Guard's
NVIC, we did the side-by-side comparison, we did
notice that there were some areas that were
silent, completely silent on. One of them was
weather. But then when we looked at what's
existing guidance in the past 25 years we found
that it is being addressed quite well in those
documents as well as some other items.

One of the other items that was not so much silent but it was not very robust in the NVIC is about tow plans specifically. The NVIC gets into various items that you should kind of consider and look at, but it doesn't really specifically talk about what should be in a tow plan and how you should manage that tow plan. But industry guidance is already talking about that, what should go in a tow plan. Also one of the gaps was ice-infested waters, towing in ice-infested waters. Industry is already addressing that in their guidance. And those are things that we put out in this document.

MR. MARSHALL PEREZ: And with the tow plan one of the highlights as well is that, you know, this industry guidance says what should be in a tow plan. But in one of our recommendations you'll note we say you need to look at what you're actually doing.

If you're doing a 10-mile tow location, I mean do you need to be as robust with
all those -- I mean you're not going to consider piracy unless you already got a major concern wherever you're doing that work. And this is focused for U.S., and hopefully the Coast Guard people keep us clear from pirates locally.

But so that's what you need to consider. So let's do your risk assessment process, and in your hazard identification build in what you need to manage your risk you have to use your best judgment to mitigate that risk, including the items that are practical for the operation.

I want to go into acknowledgments. Appreciate the full subcommittee and the individuals that participated. We got lots of good feedback, pushback, voiced their concerns. It did go a long way to help develop this, especially when it come time to start looking through the actual Exhibit A and the side-by-side comparison. There were several times where we go to address something that's not missed and they say, what are you trying to say, and getting that
feedback and that pushback really helped to make
sure we got the right words to give the right
guidance.

But in particular we wanted to
highlight two individuals, recognize for their
efforts, who did a lot of the heavy lifting for
us. Mr. Mark Dial helped initiate -- who
couldn't be here today -- initiate putting
together the table and getting this going and
organized on that event. And Mr. Gene Fasey, for
his insight and efforts and leadership in the
industry and helping us out in moving the right
way.

MR. CUSTARD: Madam Chair, that's our
report, and we're ready to take questions.

CHAIR DELATTE: Very good. Thank you,
Mr. Custard and Mr. Perez.

We'll open now to the table here for
questions. Mr. Weaver.

MR. WEAVER: Guys, thanks a lot.

That's been a very good working group and very
valuable to the industry.
RDML THOMAS: Warren, could you speak up just a little bit?

MR. WEAVER: Yeah, I'd like to thank your subcommittee for the valuable work that they performed. Also when it gets time for public comments, if I -- I was looking for Kris but I see Steve out there.

I was wondering if I could put him on the spot in regards to the work OOC has been doing for a number of seasons on their offshore marine practices document. I think it's getting final publication and probably could incorporate some of these items also. Thanks.

CHAIR DELATTE: Did you have a response, Mr. Custard?

MR. MARSHALL PEREZ: We still have people on the committee.

CHAIR DELATTE: Okay, he was answering the question of Warren.

MR. MARSHALL PEREZ: Oh.

MR. BELZ: Steve Bel of BP. In response to Warren Weaver's question, the Marine
Safety and Security Subcommittee for OOC, the
Morehead document, the guidelines that you talked
about, they are presently being reviewed by a
technical writer and will be published shortly on
the OOC website. So we're waiting for the final
revisions through the technical writer.

CHAIR DELATTE: Thank you.

Okay, back to the table. Mr.

Fuhrmann.

MR. FUHRMANN: Thanks, guys.

Appreciate it. I'm going to ask a question and I
may be exhibiting my own ignorance here, but, you
know, please give me some leeway, I'm just an
engineer. You had mentioned the experience of
the tow masters in the weather that they're going
to experience, and then you mentioned something
about the North Atlantic.

Are there region-specific towing
endorsements for tow masters, or is it just a tow
master endorsement and then you have to go by
their experience on their resume or whatever to
find out what weather and what regions they're
familiar with?

MR. CUSTARD: Well, that's up to, like I said, the person that's designating the tow master is the party that has the enterprise risk. And they have to come up with their criteria and standards on what they feel that they're good with based on here are the items that that tow master is going to potentially encounter. And based on that, does this tow master have the requisites, the skill set, the experience and competencies to do that.

And that's a discussion that the enterprise, the party with the enterprise risk is going to have to have with their experts, their subject matter experts, their underwriters, whoever they work with in developing who's going to be in charge in the various roles and responsibilities.

MR. FUHRMANN: So I understand that.

So getting back to the first part of it then, is there anything region-specific with towing endorsements? And is that something that --
CHAIR DELATTE: No, there is not.

MR. FUHRMANN: -- would be a

recommendation perhaps or?

CHAIR DELATTE: There is not.

MR. FUHRMANN: Would we consider

making that recommendation or is that going above

and beyond what we would be looking for in our

scope here?

MR. MARSHALL PEREZ: I think it's

going beyond what we're looking for. I mean this

is based -- the endorsement, some endorsements

are your base policies, understanding what you're

doing. I mean now you're starting to get into

more mission-specific type items, and I don't

think we need to go there.

MR. FUHRMANN: Okay.

MR. MARSHALL PEREZ: I think we need

to do that in the industry as you're managing

your own personal vessels, do I have the right

people to do the job.

MR. CUSTARD: I'd like to say that in

our guidance and everything it talks about here's
the issues or here's the things that need to be
considered when you're looking at who your team
should be at that point.

MR. FUHRMANN: Right.

CHAIR DELATTE: Okay. Any other
question? Kelly?

MS. McCLELLAND: Actually I'd just
like to make a comment and direct everybody to
Homeport. Because this Exhibit A is very
detailed and it contains a lot of information,
and I've tried to get it put it up on the screen
there.

CHAIR DELATTE: Okay.

MR. MARSHALL PEREZ: No, it's --

CHAIR DELATTE: No.

MS. McCLELLAND: But if they prefer,
just go out to Homeport and look at this Exhibit
A.

CHAIR DELATTE: Any other questions
from the table?

MR. MURPHY: Madam Chair.

CHAIR DELATTE: Okay, Mr. Murphy?
MR. MURPHY: Thank you. Appreciate the professionalism involved in producing the report, gentlemen. This is not a sea story. Once upon a time I was a rig mover representing underwriters. And so therefore my question is what, if anything, did you hear startling or valuable from representatives of underwriters while you were doing your work as a subcommittee?

MR. MARSHALL PEREZ: That's an interesting question because a lot of the people that were underwriters or they have worked in marine support services have also worked as rig movers, so they had that. And most of their input was really right in line with where we're going in understanding where we need to be. Obviously I got -- I mentioned earlier some of the necessary guidance documents that they have produced do lead them past people that need to be present that maybe you need to rethink for your individual application.

But as far as startling, the big thing, a lot of it we already knew, is really
that kick in understanding that the towing arrangement and looking at it all the way to not just tow brackets but the substructure of the tow bracket.

    MR. MURPHY: Thank you.

    CHAIR DELATTE: Anyone else at the table?

    Mr. Parker.

    MR. PARKER: In your review of this -- and Warren could speak better to this too, that on a jack-up it depends on the licensing of the OIM regarding whether they stay in charge of the rig or whether the tow master rig mover takes over. Does the information in your guidance documents address the change of command type of thing?

    MR. CUSTARD: Well, the guidance, as we talked about, specifically talks about identifying what is that chain of command.

    MR. PARKER: Okay.

    MR. CUSTARD: We specifically highlight that is an area that definitely needs
to be looked at and clearly identified and
defined --

MR. PARKER: Okay.

MR. CUSTARD: -- who has what role and
when.

MR. PARKER: All right.

MR. CUSTARD: If there's a handoff,
when is that handoff done.

MR. PARKER: Okay. Thanks.

CHAIR DELATTE: Okay. Very good.

Anyone else at the table? Certainly.

CAPT KELLY: This is Captain Kelly
from the Coast Guard. I just want to make a
quick comment in response to Chad's concern.
And, Chad, I'm also an engineer, so I may be
showing my ignorance here. But I do have some
credentialing people that work for me, and
although the towing license that's issued
obviously is based on the size of the vessel and
then the route is either coastal or ocean.
So when they do their -- I believe
it's 90 days of experience you need to get
recorded in ocean, the assumption would be in the ocean route they would encounter on an open ocean route those waters. So the only geographic-specific endorsement that I know would be like a rivers route or, say, the Great Lakes.

So I guess the assumption would be out of the Coast Guard requirements there's a NVIC out on this, you can go to the National Maritime Center website and if you search there's a litany of information about the requirements for a towing master that anybody in the contract for a towing arrangement can look at as they verify and make their selection on who's going to be the master of that particular rig.

And that master and his license would have it's called a TOW-R -- I forget what the acronym stands for, but it basically is their record of the work that they have. So they can share that in the precontract, and you can establish that they have experience in that particular area. So I don't know if that addresses your concern, I just wanted to follow
it up.

MR. FUHRMANN: Okay. Thank you.

CHAIR DELATTE: Very good. Thank you, Capt. Kelly. I think we have one more comment from the table, Mr. Weaver.

MR. WEAVER: Yes, thank you. In furthering Kim’s response on the -- where regards to like jack-up rig movers and such, a lot of times you will have a third party rig mover, so he's not even -- he's a third party and basically doesn't have -- only his third party skin in the game versus the rig component. So you still have an overall OIM that is over -- that the tow master is basically taking commands from too. So you have that type of structure going on currently. Thank you.

CHAIR DELATTE: Okay. All right, I believe that takes care of the table. Do we have any public comment? Mr. Belz.

MR. BELZ: Steve Belz from BP. Great presentation, really liked it. One question, one of the taskings mentioned was emergency towage as
well. Could the subcommittee, could they elaborate a little bit more on what exactly is emergency towage? You're referring to after post-storm in a breakaway situation? Could you elaborate a little bit more on that?

MR. CUSTARD: Well, the emergency towage, there's -- IMO has a specific statement circular all about emergency towage. And the emergency towage is basically, the way I was looking at it, what it is breakaway, if there is a breakaway how to you recover the rig. But also as you're seeing things starting to deteriorate before you have a breakaway what are you trying to do to safeguard it or reduce that pending -- potential portending risk. If you know that you're starting to see a lot more strain on the resources, on your towing hardware and everything else, what are you doing in preparation that there might be an unexpected breakaway, separation or things like that. But it is mainly targeted towards if there's a separation, how you recover.
But the guidance is also talking about looking at all your risk and how you’re managing that all the way up to -- hopefully you never experience that, but how are you managing so that you can detect, what are your indicators to detect that you might be approaching a point to where you might have an unexpected separation.

CHAIR DELATTE: Anyone else from the public?

(No response.)

CHAIR DELATTE: Okay, very good.

Again thank you, Mr. Custard, Mr. Perez, and all of your subcommittee participants for that dedicated work.

This is the final report, so at this time I will entertain a motion to accept the final report on Towage of Mobile Offshore-Driven Units, Mobile Offshore Units, and Floating Offshore Installations on the U.S. outer continental shelf.

MR. DARDAR: Madam Chair, I move that we accept the report. Jerry Dardar.
CHAIR DELATTE: Can I get a second, please?

MR. MILLER: Second. Phil Miller.

CHAIR DELATTE: And now we'll vote to accept the final report. All in favor say aye.

(A chorus of ayes.)

CHAIR DELATTE: Any opposition, no.

(No response.)

CHAIR DELATTE: Okay, hearing none, we have a motion to accept and the final report is now accepted. And we thank you very much and hope you continue with your contribution to the safety of the offshore industry.

Okay. Looking at the time now, we don't quite have time for our Well Intervention Subcommittee because I think there's going to be a little bit of discussion there. Scott, would you be able to give us the update?

MR. HARTLEY: Sure.

CHAIR DELATTE: Mr. Hartley is going to give us an update on Coast Guard actions on previous reports from the NOSAC Committee.
MR. HARTLEY: Good morning. Can everybody hear?

VOICES: No.

MR. HARTLEY: Okay. So, yeah, now I'm going to struggle with the mike. So to give everybody an update here, and for some people this is review, for others update, the Coast Guard used to give a five-year update to NOSAC on what the Coast Guard was doing with final reports that NOSAC was producing.

At the request of NOSAC they wanted to hear back a little more often than five years. So to accommodate them we're now giving an annual update on what the Coast Guard is doing with the final reports that NOSAC provides. So this is the second annual report on what the Coast Guard is doing with NOSAC final reports.

So as a carryover from last year at this time -- and I'm not going to read all of these but I will go into these, each of these final reports. There's nine that are carried over from last year. If you can give me the next
slide please. And then we have two additional
ones this year, the Commercial Diving final
report, that was provided a year ago, and then in
November the Lifeboat Launching, Recovery and
Maintenance final report. So, and I'm going to
go through each one of those of course and I'm
going to recommend that we close out several that
have, the Coast Guard has taken action on.

The first one -- wow, it's been a long
time, a long time coming on this one. So I
wanted to start off with a win. So to bring
everybody up-to-date that may not be familiar
with this lift boat mariner credentialing issue,
this actually started back in the early 2000s.
2002 the Coast Guard gave NOSAC a task statement
on operational issues. That was Lift Boat 1.

And then in 2004 they had another task
statement on OMSA lift boat training, and during
that time the issue of marine credentialing on
lift boats came up. Well, instead of adding that
to that particular task statement, the Coast
Guard recommended that NOSAC finish that report
and then they would issue them a new task statement on licensing, and that was in April of 2005.

So fast forward through a lot of pain and agony 10 years, and on April 21st of 2015, which was after NOSAC, unfortunately, but still a good thing, the Director for Prevention Compliance signed a new policy letter that was in line with the recommendations that the NOSAC committee provided in their final report. Which in essence gives a lift boat merchant mariner a path to increase their --

Help me out here, Jerry.

MR. DARDAR: Their tonnage, their licensing.

MR. HARTLEY: Yeah, to increase their licensing. And so if anybody has any questions while we're going through these individuals reports, please stop me and raise your hands and let me know. Okay. So if everybody is in agreement, we'll close that one out.

The next one is the review of Coast
Guard marine casualty reporting, and we got that final report from NOSAC on November 14th, 2013. And the reason I suggest we close that one out is the Admiral signed the Navigation Vessel Inspection Circular on 21 July that really is an update on marine casualty reporting, that the recommendations that NOSAC made were incorporated in this NVIC. So -- oh, okay.

So, yeah, two successes. And if you'll notice, we got two additional ones from last year and we're closing two this year, so we're, again we're doing pretty well. Okay. Now, the -- I'll just go through these next few pretty quickly unless somebody has any questions about it.

The use of foreign workers on the outer continental shelf and the next one, which is offshore purposes -- OSV purpose and offshore workers, those dovetail together. And right now there is regulatory and policy change currently under consideration in our Commercial Vessel Compliance Section of Prevention, and all these
people work for Admiral Thomas.

The next one is the Mississippi Canyon incident report, and I'm still leaving this one open because of Subchapter N. I would love to tell you that it's coming out tomorrow but it's currently -- it's under way. So and I'll use this opportunity to tell you about what's going to happen in the current election climate with the current administration.

So regardless of who wins the election, there will be a complete change in the administration, because everybody's going to -- or whoever gets elected is going to bring in their own Secretaries, and they will decide on what is important to them, and we will be beholden to a new group and have to sell them on what's important to the Coast Guard.

And leading up to that, there's not a lot going on from a regulatory standpoint above us because of the uncertainty with the upcoming election in November. Does anybody have any questions about that? Fair statement?
(No response.)

MR. HARTLEY: Okay. So, yeah, we'll
move on to the next one. This is another open
one, additional life saving and fire fighting.
And the reason I'm leaving this one open is
because this is going to be another update that's
going to be included in September. Okay?

Okay. I'm going to also mention along
with this one the DP final reports that NOSAC
provided, which we closed out last year at this
time, and I'll give you an update on that one
also.

So this one, the Safety Management
System final report was put on hold actually by
Congress, and they -- and so, yeah, the offshore
industry had some good sway on the Hill.
Congress told us to put this on hold for a year,
and they asked us to provide a report in
December, and we did. And they asked in the
report for analysis of what exactly is going on
in the offshore industry with respect to safety
management systems, so we provided that.
Well, Congress said, oh, by the way, we don't want you to publish anything for six months, to give us a chance to look at that report. So that's where we're at right now. But the regulatory project is still under way. They are considering the comments that they received after the publication of the Notice of Proposed Rulemaking.

So along the same lines, the dynamic positioning reg project is pretty much in the same boat, and we closed it out because the Notice of Proposed Rulemaking took into account recommendations that NOSAC made. But it's currently -- the comments are being addressed and changes are being considered as a result of those comments. So the final rule is being worked on right now.

MR. KALLAWAY: Scott, thank you for that update. I guess I'm going to ask you the hard question that I usually ask Captain Reynolds. Do we expect at all as an option -- I know it's a possibility but rare one -- that it
would come back to another advance Notice of Proposed Rulemaking before it goes to final edit just so that we can have another swipe at this thing? I'm talking about the DP NPRM.

MR. HARTLEY: Okay. So it won't come back as a ANPRM because we already --

AUDIENCE: (Inaudible comment.)

MR. KALLAWAY: I'm sorry. What?

AUDIENCE: Repropose.

MR. HARTLEY: So --

MR. KALLAWAY: Well, I'm suggesting based on the volume of comments that you received that perhaps the public would like to have one more comment period around the Notice of Proposed Rulemaking so we can discuss it.

MR. HARTLEY: Okay. So this is not specifically related to that project, but generically if a regulatory project after it's been published in the Federal Register as a Notice of Proposed Rulemaking and as a result of the comments received if there are major changes in what the NPRM had in it, and there's a
threshold that a lot of different people look at
to decide whether those changes would require a
supplemental Notice of Proposed Rulemaking. So
that's always an option.

MR. KALLAWAY: I haven't seen a
supplemental in a long time so I'm sure that
mechanism is there in the regulatory process.
But, anyway, the supplemental would include the
entire rulemaking rewrite and not just a piece of
it. So they'd republish the new proposed rule --

MR. HARTLEY: Yeah, but it would be --

MR. KALLAWAY: -- for a full comment
period.

MR. KALLAWAY: -- it would be focused,
it would be mainly focused on the changes that
were made in the, from the original NPRM and
discuss the comments and the changes made in that
supplemental notice. And then there would be
another opportunity for the public to comment
before a final rule was published.

MR. KALLAWAY: Okay, fair enough. So
we expect that next year.
MR. HARTLEY: Sure. So now I feel --

MR. KALLAWAY: You just said that it's

going to take a year --

MR. HARTLEY: So --

MR. KALLAWAY: -- until the next

administration rolls around so --

MR. HARTLEY: -- now I go back to what

I said about the administration and, yeah,

regulatory projects not being what I'm -- not

being pushed through in any fashion. Does that

answer your question?

MR. KALLAWAY: Yes.

MR. HARTLEY: Okay.

CDR JOSE PEREZ: I would like to

comment real quick. The -- as far as having

another go at the number of comments, the concern

of an industry that were raised during that

review period, I think there was enough -- and

the nervousness the industry has about what's

going to come out I think should be enough to

grant it another go at it for the industry after

the rewrite before it goes to a final rule.
That's my opinion, but take what you will.
There's a lot of people in the industry a little nervous about this document.

    CAPT KELLY: Since you're looking at me, I will say no. I've only been in DC for six months now, I'm learning the language. I do not disagree but I don't know what that means. I hear it all the time too, so I'll just say no to you.

    MR. HARTLEY: Thanks. Okay, the next -- again can we move to the next slide? Okay. Coast Guard retasking and reporting on the OCS, and this is still under way. And that belongs to us and, yes, I can tell you that, yes, it is under way.

    CDR JOSE PEREZ: It's moving forward, so.

    MS. McCLELLAND: It's to begin May of 2016?

    MR. HARTLEY: Pardon?

    MS. McCLELLAND: It says it's to begin May of 2016.
CDR JOSE PEREZ: Well, I'm anticipating right around that time frame.

MS. McCLELLAND: To begin.

CDR JOSE PEREZ: Begin.

MR. HARTLEY: Well, no, that means that all of the changes and legal has bought off on it as a -- so that's usually the biggest challenge, that our legal folks are satisfied with our regulatory project and the language that we use and in the clearance process --

MS. McCLELLAND: Okay. So I guess the word "begins" is really kind of --

MR. MARSHALL PEREZ: They couldn't hear you.

MS. McCLELLAND: Oh, sorry.

MR. HARTLEY: Okay. The next one, training and manning on the MOUs and OSVs on the OCS. This was a final report provided a year and a half ago. And for the people that were on the committee back then, Jared Young was the driving force behind this, and he's since retired.

They were -- actually another person
in that same division retired, so they've been
a -- BP Offshore, they have those people or new
people in those chairs and Davis Bryer is the new
champion for this particular reg project, and he
is actively working on it right now.

MS. McCLELLAND: Scott, Kelly
McClelland. This is going to be interesting
because we've got a moving target on manning
right now with what's going on in the industry.
And so, you know, when they started this and now
we have the current environmental people leaving
the industry and trying to get the credentials,
and how can they make a rule --

MR. HARTLEY: Well, that's -- so your
concern is with manning. It is not just a
problem with the offshore industry, it's a
problem all over for marine transportation in
general. For whatever reason, yeah, it's a
challenge to get new people to come into the
marine industry and go through that process. So
I recognize that in the marine credentialing
area.
MS. McCLELLAND: A moving target.

MR. HARTLEY: Okay, the next one is commercial diving. We got that report a year ago. And, Kris, this is something, this is similar to what you were asking about. The Notice of Proposed Ruling Making, the comment period closed May 16th.

Well, because there was some interest in the industry to provide additional comments, the Coast Guard reopened that comment period for about two months to receive additional comments.

Right now they're working on -- well, 102 submitters provided 472 comments. The reason I know that is because that guy sits right next to me at Headquarters, so I get to quiz him every day about what's going on.

So there are a couple of different ways that we get public input. One of them that we do not have to get during a comment period is a NOSAC report. We can take a NOSAC report anytime during a regulatory project and use that in the regulatory project.
MR. KALLAWAY: I thank you for that. I think that's a good answer, and I just think the volume of comments were so broad and deep that it probably requires another review by the public, because I'm sure that more than 50 percent of it was dissension around terminology and language. So I'm encouraged to hear that, and I look forward to that when it comes out. I think the industry would like that.

MR. HARTLEY: Warren?

MR. WEAVER: Yeah, Warren Weaver.

Scott, I'd like to also point out and regardless of what you just mentioned that the DP electrical and number of others were extended at the industry's request for further time to review and comment upon. And I'm certain that's very appreciable and taken into consideration.

Thanks.

MR. HARTLEY: Okay. The next one --

MS. McCLELLAND: Scott?

MR. HARTLEY: Yes.

MS. McCLELLAND: Kelly McClelland.
There is, on this commercial diving there was a report issued, I believe it was in 2012 prior to the Commercial Diving report that we issued last year, the final report, and under --

MR. HARTLEY: Can I ask you --

MS. McCLELLAND: Pardon?

MR. HARTLEY: I think that's our evaluation of tender divers on the OCS.

MS. McCLELLAND: Right.

MR. HARTLEY: And there was one before that also that had to do with the number and use of medical facilities for divers on the OCS that was about a year before that. So now I'm going to say that that was before my time.

MS. McCLELLAND: Well, the point is the diving regulations haven't been changed in 45 years, and we're just still waiting on something to be done.

MR. HARTLEY: And that's what that reg project team is working on, to make it happen and update those regulations.

Okay, next one. So I'm going to defer
this one to this afternoon and not steal Captain Reynolds' thunder. We just got this one six months ago in Houston in November. And so that's the end of the NOSAC update.

CHAIR DELATTE: Thank you, Mr. Hartley. Any questions from the table, from the Committee or our guests?

(No response.)

CHAIR DELATTE: Okay. I'll open it up to the public, any questions for Mr. Hartley about his presentation? Oh, okay. Back to Warren.

MR. WEAVER: I was just --

CHAIR DELATTE: Can we --

MR. WEAVER: -- going to just make a comment and thanks for the expedient work that the Coast Guard did on the electrical and hazardous area. That one, it was a very difficult task, it went straight on through, and the Coast Guard did hear industry comments and they did an excellent job on it. Thank you.

CHAIR DELATTE: Very good.
MR. WEAVER: Another plus for you.

MR. HARTLEY: We try every day.

CAPT KELLY: Yeah, this is Captain Kelly. I'd like to just add thank you, Warren, for that comment, and the man responsible for that is right there in the back of the room, Captain Josh Reynolds. So you can thank him for helping to push that through.

I just wanted to make a general comment here, and I may be Captain Obvious here for many of you, but I just want to call out, and I'm going to try to choose my words wisely here, but for those of you who don't know how our regulatory process works I want you to know that at least that when you have a NOSAC report submitted and if you don't see Coast Guard regulations come out, please understand that, number one, we do mean it when we thank you and understand and appreciate the hard work that you put together in a report. Those reports inform not just our regulations but our policy and frankly the decisions that operational commanders
make every day.

But also I do want to point out to you that the nature of the regulatory process, the way the Coast Guard works is we have to put it through the Coast Guard loop and then it has to go through our own agency, which is DHS. And then it goes out through interagency review, and then it goes out to the public for public comment.

And those stages run, you know, from an advanced Notice of Proposed Rulemaking, which normally the next step in reference to the DP rule, would usually be a Notice of Proposed Rulemaking and then of course the final rulemaking. Right now for us to take something and go straight to a final rulemaking is very unlikely given the requirements under the Administrative Procedures Act and other requirements.

So in that light, and I apologize if you already know that, but I just want to make sure, some people don't recognize that that I
want to thank you all in the public and NOSAC for your patience when you work on these projects and you work with us and give us comments on a regulatory project in particular.

I can tell you that there is work under way on a number of projects at Coast Guard Headquarters, but then we have to feed that through the loop as well. And I'm not saying that to be critical of anybody involved in that process. It's just a very real aspect of the process, which includes not only a legal review but economic impact analysis, especially when the rule is perceived as discretionary.

So I just wanted to call that out. And I think you heard Admiral Thomas talk about some of his initiatives and his priorities, and we work on all those priorities on all fronts, not just in terms of developing regulations. I come from an Office of Standards right now, but all of the Coast Guard offices, particularly the operations commanders, are then powered by Admiral Thomas's direction to focus on those
priorities.

And I would loop that back to what Admiral Callahan said as well earlier about those partnership efforts that we have with you and the various organizations and how we can push out our efforts to work on those together with or without regulations. So I just wanted to add that piece here.

CHAIR DELATTE: Very good.

MR. WEAVER: Can I add --

CHAIR DELATTE: Sure, Warren, go ahead.

MR. WEAVER: I'm sorry, I'm in a talking mode. But I just want to share with everybody in the room a Coast Guard proceedings publication about three or four years ago has a rulemaking 101. The whole issue is devoted to it. I encourage everybody to read through it. It's a very informative document.

CHAIR DELATTE: Thank you.

Okay. Scott, we want to thank you. Where did Scott go? There he is over there.
I do have something to say before we break for lunch on behalf of the NOSAC Committee. We would like to recognize and extend our heartfelt thanks to Mr. Scott Hartley, our Assistant Designated Federal Officer, for his dedicated service to this Committee since 2012.

Scott has worked tirelessly to support this Committee, including keeping our committees and subcommittees on track, handling all the arrangements for our meetings, and especially his friendship and support. The Committee wishes him much happiness and success in his future endeavors.

(Applause.)

CHAIR DELATTE: And now it's lunchtime. We're going to break for lunch, and come back here at 1:15 p.m. Thank you.

(Lunch recess.)

CHAIR DELATTE: Welcome back from lunch. We will now continue with our subcommittee updates, and the next update is from the Well Intervention Subcommittee, and we'll
start with Mr. Jerry Dardar. Jerry?

MR. DARDAR: Good afternoon. Well

intervention is a good topic to come back to
after lunch. It's a large undertaking, we've got
passionate opinionated people who are all
striving for one thing, that's incident-free
operations.

Well intervention is diverse and the
risks associated with these activities are not
necessarily based on the equipment package but
also on operation and location parameters.
Consider this, an 800 horsepower engine in a
tractor, a farm tractor, not many of us is going
to get a speeding ticket. You put it in a
Corvette, maybe we do. You have trees, dry
trees, a jack-up alongside a platform board on
DP, just to mention a few of them.

To give you a quick history in
activity of what we've done. At the fall of 2015
meeting NOSAC stood up a subcommittee on well
intervention with three co-chairs. Mr.
Fuhrmann, Mr. Kallaway and myself were the co-
chairs. The task statement for this subcommittee has over 30 deliverable elements, which we will address some of those in this interim report.

The subcommittee has full intention to submit a final report during the fall of 2016 meeting if allowed to continue its work.

Prior to the first meeting we sent the deliverables out to the subcommittee members and return answers were compiled and placed in file storage for all the subcommittee members to review. This kind of framed up the deliberation where we had a framework of what people's opinions were. So I think it helped in that manner. We also had several members that in conversation they had some highly technical papers that they'd like to provide for the subcommittee, and those were put on a cloud for review also.

We would like to thank all the many subcommittee members for their active participation. We tended to have 40 to 55 participants in the four, five meetings we've
had, and we encourage everyone to stay aboard as we move forward to provide the recommendations in the final report. Others that would like to join should indicate on either the sign-in sheet or leave your business card with one of us.

And with that said I'd like to turn it over to Kris for our presentation of the subcommittee's interim report.

MR. KALLAWAY: Thank you, Gary. Thank you, NOSAC members and Coast Guard leadership here today. Thank you to the public for being involved and for coming today. It's an important task that we have in front of us, it's very -- it's detailed.

I do want to point out that the interesting thing with this task statement is that what we are presenting to you today the subcommittee was in unanimous agreement around the recommendations that we propose. So it's not always typical. When we looked at the volume of questions that we had to answer we decided to focus on ones we could all agree on, easy because
of the time compression involved.

So there's 30 elements, so you can do the math. If you do a meeting every other week or three weeks, it's two hours, it takes about four to six hours of support behind that, it winds up being a couple days a month if not more time to meet the needs of doing it properly. So we have 30 and we had three months, four months to do it, because I don't think we really started until January, and then the holidays. It was difficult to get this out. But we're happy to get this far and in the next six months I think we actually have a bigger task to go through the majority more of the questions.

One of the questions we did finally look at was what should we do for this. The choices in the NOSAC governance says you can do a status update, which may be very brief, you can do an interim report, or you can do a final report. Well, we're definitely not ready for the final report, so we settled on the interim report. And I think one of the key takeaways --
I know it's very hard to read this in the back, so I'm going to come up here and talk. And if you want to ask a question, please raise your hand.

But the reasons for the interim report, the key one I would tell you is that the regulatory effort between BSEE and the Coast Guard is very important to us. And so we wanted to make sure we communicate that early on in the task statement so the Coast Guard has the ability to back that up with BSEE's rulemaking processes.

So we were asked to be very clear around our recommendations to this task statement. In the body of the PowerPoint you'll see that there is discussion, and the paper will have more detailed discussion. But the benefit for regulators to have clear recommendations that doesn't leave any questions on the table, so we want it explicit when we gave it to them. These recommendations are exactly what's in the rest of the PowerPoint but we'll give the high level here. And I'll read it to you since you can't
read them in the back.

One other thing. We don't reprint all of the questions from the task statement in the PowerPoint because it would become triple the length and tedious. So we assume that you have access to that, which you do, and have read it. If you don't, you can get it on the Homeport website.

Number one, no additional regulations are required from the U.S. Coast Guard for vessels engaged in well intervention. And we'll talk more about that.

No existing regulations shall be interpreted by the U.S. Coast Guard to redefine well intervention activities that differ from BSEE or BOEM regulations.

Number three, no single risk assessment process shall be endorsed by the U.S. Coast Guard.

Number four, all well intervention activities shall have a document or a process and leaseholders shall be able to demonstrate to be
actively using their RA processing to mitigate risks. But the method and the form of that RA process shall be up to each individual company as outlined in their SEMS program.

Number five, the notion of fit for purpose appears in 46 CFR as a fit for service intended. Therefore the concept of fit for purpose is not new. Just because a vessel has undergone a modification to become more fit for purpose, so long as the vessel and operation have been risk assessed or risk mitigated, the vessel operates within its documented capabilities including adherence to inspections, then nothing should prevent a given vessel from being used in well intervention activities.

And number six, foreign regulations, standards and rules shall not be codified to apply in U.S. waters.

I think the point is very clear the way we wrote them. In particular we were challenged around Number 5, the notion of -- or the definition of fit for purpose. So I actually
took that on board. I think it was Mr. Clark -- somebody asked me, I don't know if it was Captain Reynolds or it was yourself, but they challenged me on what's the term fit for purpose. So I took it on board -- Captain Reynolds?

CAPT REYNOLDS: I'll wait.

MR. KALLAWAY: Okay. And that was a good question. Even though we use it interchangeably in the industry, I don't think we know the background on it, so you're going to see that. It's an important question. I'm glad we were challenged. We like challenges like that.

So before I go on though are there any questions around this page? I'll take public questions now. Because it's easier just to go through it at this point. It's going to lead to the next slide and just talk about each one individually.

(No response.)

MR. KALLAWAY: Okay. So task statement, recommendation No. 1 addresses questions 1A, 1B, 1F, and 1H. As we stated, no
existing regulation shall be interpreted by the
U.S. Coast Guard to define well intervention
activities that differ from BSEE and BOEM. And
the punch line here, there's some references
there, the links work, I encourage you to go read
BSEE's regulations.

It is the opinion of the committee
that any deviation from the BSEE definition could
result in a regulatory gap that is problematic
for compliance. We think that's a pretty simple
statement. We hope that works for everybody.

Task statement recommendation Number
2. No single risk assessment process shall be
endorsed by the Coast Guard. But we do state
that all well intervention activities shall have
a document or RA process and the leaseholder
shall be able to demonstrate that they're
actively using that process and covered under the
SEMS program.

Clearly we think that you need to have
risk assessment process. I don't think anyone
can look in the mirror and say we don't need to
risk assess for things that we do in the offshore
continental shelf. No one says that. So that's
a pretty simple statement to defend.

And in terms of not specifying a
specific risk assessment format, because there
are variances they should be well specific, type
specific, vessel specific, company specific.

It's not that different from the cyber
security discussion that we had. If you make
things too specific, you get restrictive, and if
you get restrictive you can't -- you might miss
something. So you if you put regulations down in
a very narrow silo, as things change, it doesn't
keep up. So rather we set up a framework; we
recommend a framework around having a risk
assessment process in an industry that
demonstrates that they're using it, each company
individually.

In this graph, this -- yeah, so 1E.
1E also kind of mirrors that same answer. But
you can go to the next slide. The purpose of
this slide here is that -- by the way, anyone can
use this. We made this up in the committee.

It's not intended to be proscriptive. It's actually trying to show that there are buckets of questions that should be asked and answered during a risk assessment process. It's generic, and basically it's very simple.

Identify the activity and the risk potential. Conduct a risk assessment, so the likelihood of an incident or something happening, failing and its impact. And then around that determine what the vulnerability is as to the well intervention activity. So you might have a high consequence but such a low probability that your impact is negligible. That thinking follows a risk assessment process. And then once you've identified what is acceptable to the organization or the enterprise risk people involved, the companies, then you can put a risk mitigation in place that then lowers that impact down to an acceptable level.

And finally in the last box there we're basically saying at that point you can make
a decision around what vessels are fit for purpose or modified fit for purpose, which includes in big brackets well intervention asset, which is vessel and equipment combination.

(Pause.)

MR. KALLAWAY: Okay, we've got a technical issue here.

CHAIR DELATTE: It will just be a moment.

(Pause.)

CHAIR DELATTE: Okay, we're going to take a quick five-minute break.

MR. CLARK: Apparently there's a new presentation that was emailed this morning that hasn't been uploaded yet, because I haven't checked email this morning. So give me five minutes, please.

CHAIR DELATTE: We have a five-minute break here if you want to get up and stretch your legs.

(A brief recess was taken.)

MR. KALLAWAY: On this slide it's a
generic concept. Right? We could use any one of the companies' pictorial, so we basically made our own. So you guys can use this, it's open to the public. You can copy this all you want. That's part of the thing about being inside here, it's publicly totally accessible, nobody owns it.

So when we say here at the very bottom, we go into this discussion on fit for purpose. So I talk about that, this example is a little bit more right now. The fit for purpose discussion, like I said we were challenged by the Coast Guard to define it. So if you'd go to the next slide? We did have this researched, and it turns out the concept, the notion of fit for purpose goes back to SOLIS. Now, I didn't know that. I knew it was in CFRs but I couldn't quote them. And you have to ask lawyers for this stuff, they're really good at this. But the notion of fit for purpose appears in 46 CFR as fit for the intended service.

So the concept of fit for purpose or fit for the service intended comes from SOLIS.
Convention 74, and it's ratified, and then in the 1978 protocol amended the 1974 convention, establishes a mandatory annual survey of equipment to evaluate whether a ship is maintained in accordance with the regulations, and that the ship and its equipment remain satisfactory for the service intended. So this is we feel a great fit in the conversation.

And to the point that was brought up from fellow committee members was that a modified fit for purpose is just saying you're making a vessel that -- in any vessel, if you modify it, you modify it to make it more fit for purpose. So it's a positive direction when we talk about a modified fit for purpose vessel. So in our view in the committee is that this is a great fit and it's a great definition for the concept of fit for purpose.

Okay. This is a long one here. Task statement recommendation No. 3. Oh, right. Historical marine casualty data. We completed this a little in the subcommittee yesterday in
our meeting number five. I forget what we agreed
to. We're not -- we've answered this, but
perhaps we haven't answered it to the full extent
that the Coast Guard would like. What I can say
is that we don't have the resources to properly
expand on this kind of data research.

I don't know if that answers the
question, but we don't think we have the
resources to dig for this. Nor do we want to
pick out just a couple pieces of data over the
last three years and make that representative of
what could be a large volume of data which might
misrepresent statistics. So we're in this
quandary for a question that is very difficult to
answer. You either have all the data or you have
some piece of data that might be interpreted as
representing industry data.

So in the short time allotted we
couldn't answer that clearly, and we decided
therefore not to answer it. And we recommended
that the Coast Guard rethink through the question
if they've got to have the data. However, we
think we solved the problem by saying, you know what, the data is whatever the data is and if you can't get it let's rather just focus on process safety and that's a risk assessment process, and we pushed very hard.

So it may not matter. If you take the concept that a risk assessment process is a positive thing and companies and vessels adhere to it and they adhere to their SMS and their SEMS, and that all is captured and they work it under the COI and all that stuff, you have a robust process. So maybe the data's not important if you can accept that recommendation.

We do, however -- and IADC submitted to us because we don't, you know, scroll the BSEE website looking for data. But IADC was kind enough to give us a link to a virtual -- what we call a virtual port, which came out -- I forget the year, 2004? -- 2014 for BOEM that has some very interesting data around loss of well control.

It's not necessarily relevant to
vessels because it's a broad category. But if you want to look at data this is a good thing to look at. I'd recommend that you read it. I did read it over Christmas. It's got a lot of potential data in it. And it might give you an indication of just how difficult it is to tie this kind of data or apply this kind of data and then make a recommendation on marine vessels to it. Because that's really a stretch. Right? It's been tough, this is a tough one.

Okay. That gets us to, right, questions 1B and 1C. Our headline statement here is that this is around what types of vessels conduct well intervention activities and what standards should apply. This is a little more simpler than it probably seems on the surface. We more or less state the obvious. In our consensus answer we list them.

The vessels that are currently conducting well intervention activities are more or less this following group. MODUs, jack-up anchored, semi-submersibles, drill ship and DP
vessels, DP 1, 2 and 3, OSVs, lift boats, offshore supply vessels, yeah, 1, 2, 3, and MOUs, both built for purpose and modified to a different purpose, IMR vessels, and in that bucket of vessels the following apply. I mean they're what we deal with every day in this vessel arena.

Applicable port state regulations, applicable flag state regulations and standards, applicable appropriate class schools of IX members, so IX class societies, and applicable industry best practices. We don't recommend that foreign rules, standards or regulations be codified in the U.S. waters. Very clear-cut recommendation. Which is consistent with everything else that we've done basically under NOSAC.

Okay, the next questions are more or less -- they seem similar, and it is with regard to the SEMS. Now, what I will say about these two recommendations or these task statements were that we're going to deal more with some of the
SEMS questions in the second half of this, which we're going to be calling phase two of the task statement. We're going to get to that again.

But what we'll say here is that because there is a SEMS program, lease operators are expected to incorporate all the activities in their leases and make sure it's being done safely. That includes contractor audits, owners using their SMS and safety culture, and identify deficiencies and correct the bridge flow so that there is no gaps. Very simple recommendation there.

And I think 1J is very similar. What we talk about here for well intervention activities is nonmarine contractors. So there's leaseholders, there's vessel operators, and then there's other contractors that perform work in the well intervention space, and they're also required to have an SEMS. So even though they don't have an ISM code they're still required to be compliant under SEMS, and that's our recommendation more or less there.
And we do talk about bridging documents. We think -- and this -- I mean we don't say it there but we probably think bridging documents are probably an important connection between the vessel being used and the lease operators and the contractors. So that's a very key, you know, solution for gaps to have that proper bridging. And if there is something that just isn't going to fit, to utilize the management of change process, which I think everybody understands that now.

Okay. So that's a brief passthrough on a very complex topic. I guess we could open for questions first and then move forward on the next path.

CHAIR DELATTE: If you're finished with your report, yes, we'll --

MR. KALLAWAY: I'm open for questions.

CHAIR DELATTE: -- we'll let the questions from the Committee from this table go first. Anyone have a question for Mr. Kallaway, Mr. Dardar or Mr. Fuhrmann about the
presentation? Mr. Perez?

MR. MARSHALL PEREZ: Thank you.

Marshall Perez. I just want to -- I just had one comment and one question, Kris. I just want to reiterate on the risk assessment that vessel type needs to be a part of the risk assessment in or some kind of high-low guidance to make sure the vessel type is -- the outcome doesn't always just define what fit for purpose is. Sometimes we need to look at the bigger picture. Because as we know, sometimes in the risk assessments we've done is looked at the activity in a tunnel. Maybe part of that would be maybe some high-low guidance on what things need to be included in the risk assessment, not how you do it but what items are included.

MR. KALLAWAY: Well, I definitely agree that scope of work is important, and I think that's what you're speaking to a little bit.

MR. MARSHALL PEREZ: Yes.

MR. KALLAWAY: And we didn't get down
to lease. This is one of those buckets if you get too far you get too proscriptive. But I totally agree with your point.

MR. MARSHALL PEREZ: Understand. And then the second was more of a question. Do you see the work of the subcommittee defining certain well intervention activities requiring a certain type of vessel as an outcome eventually potentially?

MR. KALLAWAY: That's a good question. I'm glad you asked that. We will not specify that one industry segment can do the job better than another. That's not our goal. I would tell you and I will tell the group in front of us today that our goal here is that the vessel chosen should be risk assessed and processed, and it becomes fit for purpose if the stakeholders and enterprise risk holders agree to it. Because if we're proscriptive, it would become asymmetrical in the writing.

Basically what you're asking is should regulations fall around the conversation of what
vessels could do what work, and we think that it's asymmetrical, if I interpret the question right we think that's an asymmetrical answer that doesn't properly benefit the industry. Because it can go the wrong way as well. So I would say no, we don't see recommending that statement.

MR. MARSHALL PEREZ: All right. I understand where you're going there, but there is some testament as far as what is DP2 or more in the Gulf of Mexico.

MR. KALLAWAY: Well, that's an opinion. Right? There's no regulation or guideline around that that you can cite.

MR. MARSHALL PEREZ: Being worked that way.

MR. KALLAWAY: So let's explore that though, Marshall. That's a good question. I'll take it one more step further. You know, I don't, we don't want to be proscriptive. When I look at the activities I'm not an expert in it and neither is the Coast Guard for some of that, but what I would say to the Coast Guard is that
the Coast Guard owns the certificate of inspection that gives the vessel's activities. So if they want to, you know, look at the given vessel, that's their prerogative. The COI has been out there forever.

I'll give you an example. Not allowed to carry methanol on a passenger vessel, I don't think, TSO in any major quantity. You can catch me if I'm wrong. So I don't see how one activity is in the COI process and another one is not. I'm not suggesting they have to do that, and that's not the committee's point. But they own that process already, so that's not exactly a secret. I mean I've seen a conversation around COIs and they're very detailed. And I will tell you that those start getting in the way. So that's all I can suggest to you on that one. That's fair.

CHAIR DELATTE: Mr. Weaver, you have a question?

MR. WEAVER: Thank you. Kris, I know y'all hammered away at this. It's quite a
interesting task group. And unfortunately I haven't been involved with it other than reading some of the reports, not all, and I've been tied up with other stuff.

Has the subcommittee taken a look at all the OCS facilities and units or MOUs that are out there that currently have proscriptive regulations in regards to hazardous area, fire protection, protection of individuals versus a fit for purpose type review on well intervention?

MR. KALLAWAY: What's that, Gary, you want to answer that one?

MR. DARDAR: We kind of made a comment to that earlier about foreign flag vessels and foreign flag regulations on the OCS.

MR. KALLAWAY: But we did not do an in-depth study on MOUs and FOIs and all of that. So the question's in there. I just don't -- again the depth of that, you know -- I mean you're asking us to dissect the market segments basically; equipment types. Right? I mean to understand. And I don't know that we can do
that. I don't know that we really have that
ability to, you know, judge every individual
segment, vessel segment. I just don't see it. I
don't think -- it's asymmetrical, and I don't
think it would be fair either.

MR. WEAVER: Yeah, okay. Maybe the
class societies cover that area when they're
doing the vessels for well intervention. I'm not
into that depth yet, but I was just curious,
because we've got some of the same processes
going along with some very proscriptive safety
requirements out and above of SOLIS, and I just
wanted to make sure that fit for purpose would
also cover those thought processes.

MR. KALLAWAY: I think it should in
part of the risk assessment process, and I would
agree with your point also on class societies
having a key role on that risk assessment process
in the design and operations of the vessels as
long as it's publicly available and transparent
for the basis of the U.S. Coast Guard federal
regulation, you know. So yeah, include the
public, and then you can have a conversation.

CHAIR DELATTE: Anyone else at the table have any questions? Okay.

MR. CUSHING: This is John Cushing with BSEE. Yeah, we talked a little bit yesterday afternoon about the definition of well intervention and the fact that BSEE doesn't have a definition for well intervention. We certainly address drilling, we address workovers, we address completions. And so -- and then the more you kind of think about it, I almost think that we're not going to have a nice neat bin to put like well intervention activities, that kind of falls into a nice neat bin for BSEE.

So we almost have to have like a flowchart or a matrix that says if it's a well intervention activity but it involves, you know, certain activity inside the well bore versus certain activities that may go outside the well bore, then, you know, it's going to put you in different paths, different -- you're going to arrive at different answers and different risk
levels anyway, so

    And we certainly, as we talk we're
going to have to work and help provide the
committee, the subcommittee with some
recommendations on how to address this, how to
define it or at least have a flowchart that shows
where it fits in our regulatory structure.

    So I guess my comment is in the report
it looks like -- I know you want to kind of
submit it in stages. Is there a way to put a
placeholder or something like that into the
report saying this has not really been resolved
yet but, you know, it's something that we will
continue to work on?

    CHAIR DELATTE: Yes, absolutely. On
an interim report, as we did for the cyber
security, we did state our recommendations. We
put -- we accept it into the record but we do not
finalize it. So the deliberations can cover the
new items and go back to the older items if
necessary.

    MR. KALLAWAY: So we did talk about
that extensively, and I glazed over it a little faster than maybe I should have. We made the statement that the U.S. Coast Guard shall align their view on well intervention activities -- this is under definitions -- backing up against BSEE regulations. Because if we do anything else there are going to be gaps. Okay? So that's all agreed.

Down in the next bullet where we for simplicity say is that if what the subcommittee recommends that any activity requiring an application for permit to modify be defined as a well intervention activity. We could add to that if BSEE is willing to provide us with additional detail around that, we would love to get that. And BSEE has been very helpful on the subcommittee, so we appreciate that and thank you for the involvement.

If we could get -- if there's more things like routine activities in the well that aren't permitted, we'd be happy to consider that. But we want -- we don't want to deviate in our
language in the writing of this that would cause
a problem later for the Coast Guard or for our
industry. So whatever you can do to help us,
yes, we'll leave this as a hanging action item to
get more input from BSEE for the final. And then
we have everybody's agreeing with that. We want
to be -- we want to get it right.

MR. CUSHING: Okay. Yeah, sounds
good. Thank you.

MR. KALLAWAY: Appreciate that.

CHAIR DELATTE: Okay. Go ahead,
Scott.

CAPT KELLY: Yeah, I don't have a --
I just want to jump in now with some larger
comments to offer later on. But to build on that
thought here I will just offer that for those
activities that are not deemed required to have a
permit or an APD I would be interested in what
the risk of those activities are and what's being
done.

Because again we kind of talked a
little bit about this before, but the point was
what are you doing, what are the risks, and
what's being mitigated. I'd be very careful
about, you know, wherever you -- and you have to
delineate, but once you draw a box I'm concerned
about once again getting to kind of where we are
now. There's stuff going on we don't know what
it is, and the threshold is blurry as to when you
have to apply for a permit or not, when you have
to modify the permit or not. And we're trying to
clarify that.

So I would just offer -- I would look
to the committee's analysis and we would, you
know, obviously work with BSEE with you on making
sure that that threshold, we're all comfortable
with the risks associated with whatever there
are. And I'm sure there's a number that
everybody could say, yeah, that is not what we
need to be concerned about in terms of risk. But
maybe there's a few in there, I don't know.

MR. KALLAWAY: Well, that's a very
good question. So we get fuzzy when we get to
definitions, believe it or not, and we being 22
regulatory bodies. Okay? So we agree with that. That's why we set a shall on the risk assessment, we shall do it. Definition of well intervention? You know, we can expand the routine activities defined under BSEE's regulations, of which they have a list. We didn't go that far. We didn't get to the point where we could say that these all fit the definition.

But we did get to the point where everyone doing work on the outer continental shelf should do a risk assessment, and we think that's a firm recommendation. So due diligence there suggests that we get done and it would be weeded out in the process. That's why we stand behind the risk assessment recommendation. I think that was one of the few "shall"s we made.

So you want something? We want to see all do it. I mean there may be a couple that do it less than others but, okay, focus on the risk assessment process. That would be a good thing.

CAPT KELLY: Did you say should do risk assessment or must?
MR. KALLAWAY: Must, shall.

CAPT KELLY: Okay.

MR. KALLAWAY: It was a "shall." And we have consensus on that too. Industry -- I mean I don't know anybody or anything doing anything out there that shouldn't have a risk assessment process.

CHAIR DELATTE: Okay, members of the public.

Mr. Pergine.

MR. PERGINE: John Pergine, IADC. Let me see if I get this right, Kris. The definition of well intervention wasn't provided to you by the Coast Guard for your task statement and you haven't defined it, yet you've done all of the recommendations based on what as far as the meaning of well intervention?

MR. KALLAWAY: Well, we back it up against BSEE. What we debated --

MR. PERGINE: They just said they didn't have it.

MR. KALLAWAY: No, they have it. They
I don't want to be quoted on it so they have an internal discussion around things that require permits and things that don't. So right now what we're suggesting is anything that's not, does not, anything that does not require a permit to drill should be considered well intervention. That's it. That's a very simple statement, if you ask me, which is everything else.

In fact, we don't get down in the weeds either, but we are asked for clarity from BSEE on the topic, because we're not experts in the definition of what's routine and what's not down in the hole. And we need a little more time to get that bill from BSEE.

CHAIR DELATTE: Mr. Clark?

MR. CLARK: Kris, I just got a real quick clarification. You said that, if I heard you right, that anything that does not require an application for a permit to drill, you're considering well intervention, not an application for permit to modify. Correct?

MR. DARDAR: Application for permit to
modify.

MR. KALLAWAY: I mean modify. Excuse me; I stand corrected. The subcommittee recommends that any activity requiring an application for permit to modify be defined as well intervention activity. Yes.

And we say behind that any activity requiring an application for permit to drill should not be defined as a well intervention activity.

MR. CLARK: I just wanted to make sure.

MR. KALLAWAY: No, you're right.

CHAIR DELATTE: It's easy to do.

MR. KALLAWAY: But we'd be willing to add on to that -- I guess this is more for BSEE -- groups in well activities that have no permit required. It's a fair point. We should have that conversation.

CHAIR DELATTE: Anyone else have questions?

CAPT REYNOLDS: Sure.
MR. KALLAWAY: I guess I'm due for a hard question.

CAPT REYNOLDS: Maybe it's a discussion. Captain Josh Reynolds, outer continental shelf, OCMI for the Eighth District. So what I gathered from the presentation is the consensus of the committee is that industry does a pretty good job managing this risk, and that the recommendation is to continue to allow industry to do risk-based inspection and manage the risk and try and standardize the risk assessment. I think I heard that. Did I hear that correctly?

MR. KALLAWAY: Yeah, we don't think the Coast Guard should codify a single process. We just don't think that one size fits all.

CAPT REYNOLDS: So I've asked in many venues if there is an industry standard in this area, and every answer I've ever gotten is no. Are you aware as a committee of any industry standard that addresses the appropriate vessel to conduct a well intervention operation or -- let's
just make it easy -- workover operations that require an application for permit to modify from BSEE -- from the leaseholder to be submitted to BSEE, any vessel that's conducting, used to conduct those operations?

MR. KALLAWAY: I'm unaware of any standard. Okay. And as close as I can get to that answer is the vessel's classification.

CAPT REYNOLDS: Okay.

MR. KALLAWAY: That's the best I can do for you or we can as a committee. That's as close as we've come.

CAPT REYNOLDS: So I get a little melodramatic and use some hyperbole to make a point. What I'm hearing is for managing the risk in this area well, obviously in my role now as the operational realm, I'm concerned about managing risk. I would say that maybe an unspoken risk is if there is a high consequence/low probability incident, one of the risks you have is then the Government reacting with a large set of proscriptive regulations.
And so I've always been a proponent that an industry can propose a solution in the form of an industry standard that addresses the risk. That's much better. And that's my own opinion, and I think that's the spirit of OMB Circular 119 and other guidance.

MR. KALLAWAY: We would agree with you. We don't think that standardization is a bad thing, but at the moment we don't see one that's better than the other, and it's not going to happen inside this subcommittee. Is that fair?

CAPT REYNOLDS: So just as I'm viewing your recommendation though, I'm looking at it very -- let's say the exact same operation conducted by two big rig leaseholders, conducted by different contracted vessels conducting that particular operation that falls under an application permit to modify to do whatever.

So under what I think the committee is recommending or at least the interim recommendation two different risk assessments by
two different leaseholders and perhaps two
different contracted vessels contracted by those
two different leaseholders could result in two
very different outcomes and two different vessels
to be selected. And there's no industry standard
or best practice to define why one is perhaps --
why one was selected and one was not.

MR. KALLAWAY: That's what we're
saying.

CAPT REYNOLDS: And, you know, just to
highlight the point that if -- I think it's a
little bit of peril to ignore high consequence
and low probability incidents. I'm thinking and
I just confirmed that the Macondo well itself was
an application for permit to modify, that it was
not drilling and was not under an ATP, and that
was a high consequence/low probability incident.
And right now the entire industry is dealing with
the new well control rule from the Government,
from BSEE.

MR. KALLAWAY: Okay, I don't disagree.
I understand that. But understand also that
wasn't a marine failure, that was a cement failure or whatever it was down the hole. It wasn't even the equipment that the Coast Guard normally regulates. That was a BSEE conversation, if you ask me personally, you know.

CAPT REYNOLDS: Well, yes, but --

MR. KALLAWAY: Is that fair? I mean --

CAPT REYNOLDS: -- it's easy to say that it was a good thing that we had the required right side of the boat tie safety equipment on that vessel that was selected by, in that case, BP, you know. Because that equipment, it was for the abandonment of the rig, which was required, did help some of the mariners live.

MR. KALLAWAY: So it was riser connected, open hole drilling.

CAPT REYNOLDS: It was not drilling.

MR. KALLAWAY: Well.

CAPT REYNOLDS: It was not drilling.

MR. KALLAWAY: I don't know that --

CAPT REYNOLDS: With the definition
you just said.

MS. McCLELLAND: It was not drilling.

MR. KALLAWAY: Okay. So risers --

CAPT REYNOLDS: It was under an

application for permit to --

MR. KALLAWAY: Well, I don't want this
to be -- this is not -- we're not -- I don't want
to -- this is not -- I don't want to --

CAPT REYNOLDS: At least that's my --

MR. KALLAWAY: -- debate that

incident. What I would suggest is I understand
your concern around that, but I don't think that
that answers our position. I mean the diligence
goes with the piece of the film in that incident
aren't what we're debating here inside this task
statement. I don't know if that's a perfect
poster child for what we're trying to do here.

I'll take the one that you started
with a few years ago, which was the well tree
sheer on a DP1 vessel. That was the one that you
had put up in front of us for about a year, and I
thought a lot about that. But I think I asked,
and I guess we can put it on the table, that was there a risk assessment process done properly in that incident and the answer was no. I don't know the details. So I'm going to tell you if the risk assessment process was done it might have been looked at differently. That's my real answer to you on that one joint BSEE alert, Coast Guard alert. Is that fair?

CAPT REYNOLDS: Yes. But to bring it back into the context of the recommendation and the original attempt for highlighting the issue with the draft policy, which I think helped kick start this effort and the effort by the offshore operators committee. I'm just concerned that there is risk that may be leaseholders and contracted vessels that are working with those leaseholders may not be aware of that they're assuming.

I think that there's -- well, and I learned a lot, by the way, as part of this journey -- that there is such a wide variety of well operations or even workover operations under
an application for permit to modify that have
different levels of risk to the environment and
the associated vessel that not all things are the
same. But at least the idea that there was some
sort of standardization of the process to
determine the risk and some guidance to have
appropriate vessel selection, I'm still not
convinced that that's not a worthwhile effort.

MR. KALLAWAY: Well, okay. So that's
all very fair to say but I understand your
concern there. What I would say is that I think
that the best sense program that leaseholders
have to follow is pretty robust and should vet
all those risks. So if that happens under a
SEMS-regulated incident the next time it happens,
then we'll look at that real hard and see what's
not happening. That's my only answer to you.

Because I think it's pretty full and
it's quite extensive, the SEMS program is very
extensive. The little bit I've peeked into that
world, it's not a checklist. It's a holistic
culture review on how things are handling in
management.

So I agree with your concern but I think we're trying to alleviate your concern a little bit and say we have the tools, we have the risk assessment process, risk mitigation, the vessels are fit for purpose, their scope of work has been identified, the COIs are operating at their capabilities and the COIs are up-to-date and they're not doing anything outside of what they were designed for or capable of doing. And that, and in a sense, umbrella covers all that.

That is a pretty robust system. It's still a little new to the industry, so maybe that takes a little while to work that into culture. That's a fair statement too. But I think -- I don't think anything -- we debated this, we debate this every time. I don't think another regulation right now will get you any closer to the goal line. I don't think we need another tick box necessarily, but we do need as much Coast Guard personnel involved to oversee and understand what we're doing so that there's less
of a gap to understand that.

And I would actually throw that as a perfect segue to the Committee and members of the public to invite those current members out to the risk assessment processes that you conduct and including on around with all the mentioned activities so they can give it to you. Because I think that a really important piece here. So that's my challenge to the room and the industry. I think it's a big question.

CAPT REYNOLDS: Here's my last and then I'll give it to someone else.

MR. HEDGEPETH: Kris -- oh, I'm sorry, go ahead.

CAPT REYNOLDS: Just the last time to follow up. I got the impression that risk assessments are important and that the consensus of the committee is they should be done as opposed to not being done, and you highlighted the DP vessel. So just to follow under that. Do you see any role of the regulator reinforcing the need to do risk assessment? And if so, when a
company's own risk assessment turns out not to be followed, in other words they scoped it out but the bumper sticker doesn't match the car, is there a role for the regulator there?

MR. KALLAWAY: Well, that's almost a BSEE question. Because I believe that that's the role of BSEE, to verify an audit of the SEMS program adherence in the industry. So regulators, yes. Coast Guard, I mean for the purpose of the risk that the well represents, it's a BSEE question, I believe. I mean that's my interpretation. Who else wants to weigh in on that?

MS. CAVANAUGH: I'm Casey with BSEE. I have a question involved in the risk assessment being attached to the SEMS plan. I'm not an expert, you know.

MR. KALLAWAY: So which plan, the --

MS. CAVANAUGH: The SEMS plan.

MR. KALLAWAY: Oh, okay. Go ahead.

MS. CAVANAUGH: Currently I don't know if BSEE requires that be attached to a SEMS plan.
I'm not a SEMS expert, I would have to go back and bring our SEMS expert into this discussion, but that would be if we do not require a risk assessment. And when I say risk assessment, SEMS isn't in individual well risk assessment, it doesn't go into individual activity. So like an operator could go in one well and have a different risk than if they went on another well, and I don't know if the SEMS plan would catch that risk.

MR. KALLAWAY: I can't answer that, that's a BSEE question. I mean I don't know. I'd have to think that we definitely think the risk assessment process is key. How two regulators look at that individually, you know, that's something we have to work together and that's a new conversation about how two regulating bodies work together to get the right answer. I'm really not the expert on SEMS.

MS. CAVANAUGH: Me neither. But I --

MR. KALLAWAY: Bill, you want to say something on that for me because --
MR. KREWSKY: No, I was speaking to something else.

MR. KALLAWAY: Okay.

MR. MILLER: Phil Miller. I just wanted to say that the fact that under the SEMS regulation risk assessment process is a defined regulatory act. You must have a risk assessment in place to conduct activities. So it doesn't proscribe which activity, it doesn't say well control or this or that or the other. It means all of your activities have to be risk assessed.

The concern that I might have in this whole matter of the risk assessment is are the marine crews involved in the risk assessment activities. There's your key. You got to tie it all together to make sure everybody's on board before you conduct the activity. So in that respect one organization's risk assessment activity may not be the same as another one's. It has to be all tied together with the marine personnel so everybody understands what the risk is.
MR. KALLAWAY: Agreed.

MR. MARSHALL PEREZ: Patrice?


MR. MARSHALL PEREZ: So and that reinforces part of my scope of defining what's going to be reassessed, risk assessed, who's going to be involved in it. That definitely is in line with that.

Also I just want to note that something was in the back of my head when we were talking about is there industry standard or guidance on risk assessments, and so I went and looked. Because I had a feeling it did have something, and they do. So IMCA SEL-01A is threat risk assessment general guidance procedure for doing risk assessments. So there is something out there in the industry.

MR. KALLAWAY: Well, I was also thinking API has something too, don't they?

MR. MARSHALL PEREZ: No.

MR. KALLAWAY: Remember, risk assessment I think has to be covering all
aspects: industrial aspects, vessel aspects, lease aspects. So it's a little broader than just, I think, a guideline.

MR. MARSHALL PEREZ: But there is something in the --

MR. KALLAWAY: Yeah --

MR. MARSHALL PEREZ: -- framework --

MR. KALLAWAY: -- there is.

MR. MARSHALL PEREZ: -- you could look at and consider.

MR. KALLAWAY: Yeah, and we encourage that. I mean we did not make a reference list on the topic, and I don't know that that INCA is the only answer that should be given. That's the other problem, is that while there is a standardization across industry, it can be part of the conversation --

MR. MARSHALL PEREZ: That's all I'm --

MR. KALLAWAY: -- and that's something that should be done.

MR. MARSHALL PEREZ: That's all I'm highlighting, because I couldn't recall, but
something told me there was one, so I went back
and looked at it.

MR. KALLAWAY: Well, I can tell you
that it's not a BSEE reference document either
because of the marine vessel. So it has to look
at the industrial mission as well as the marine
side. That's why we didn't --

MR. MARSHALL PEREZ: Absolutely,
marine and industrial mission need to be risk
assessed together.

MR. KALLAWAY: Yeah, absolutely, so.

Dave?

CHAIR DELATTE: Okay, Holly?

MS. HOPKINS: Holly Hopkins of API.

So your comments around SEMS, you're all correct
in your explanation of SEMS. It does not -- it
says you have to have a risk assessment or hazard
identification, but it doesn't -- it's not going
to get into an activity by activity enforceable
level.

Obviously it can say you're in
violation of your SEMS if you don't -- if you
can't show that. Basically your SEMS is a plan, it's the plan. It says that you have it and you have to show that you have the system in place to make it occur.

Back to Josh's question about risk assessment. To me that -- if I understand what he wants or what he's asking for, to get to what he's asking for, it's going to have to be a Coast Guard requirement to have a risk assessment for the vessel. You obviously -- we all want it to be completely with the operators. Goes back to bridging documents between the operators and your contractors. So, okay, all of that.

And regarding risk assessment specifically, API, as I said yesterday, doesn't have a specific document on risk assessment. A number of our documents include a sample of a risk assessment where they talk about what should be included in a risk assessment, elements of a risk assessment but not -- but it's mostly related to rig activity. Standard 53 has a risk assessment for -- to risk assess out of blind
shearing.

There's also ISO 27001, it talks about risk assessment. API 17(n) or -- I'm sorry. Well, both source -- and then we also talk about ISO 17776 for drilling and the natural gas industry's offshore production and installation guideline.

So all of these things talk about risk assessment, risk management, which is a little bit different than assessment, but there's a number of interesting possibilities out there. I think your point is you don't them -- you don't want it to be proscribed.

MR. KALLAWAY: I think it's very difficult to have a one size fits all. If that's the desire, it's tough, it's going to be a very tough thing to do in this space. Thank you for your comments.

Dave?

CHAIR DELATTE: Dave Hedgepeth?

MR. HEDGEPETH: Well, I just want to get back to vessel recommendations. There are
actually two industry best practices that recommend that DP2 vessels be used for well intervention operations. MTS DP operational guidelines and the DMV recommended practice. I don't recall the number right offhand, I want to say 307E, and I'll be really disgusted with myself if that's right. But they both pretty well state there's two categories for well intervention process. But that's the only mention is the DP2.

MR. KALLAWAY: Right. So just to put that in the right context, though, it should be fit the purpose based on the scope of work. In those discussions it still --

MR. HEDGEPETH: Well, they say these operations should be done with DP2 vessels.

MR. KALLAWAY: Okay. But it's a blanket statement around some stuff where there's no risk, so I think -- yeah, I know those documents exist and we'll submit them to the record for online. As far as requiring -- but to make a blanket statement that DP2 shall only be
used, what about lift boats? I mean, you know, this is a broad industry category --

MR. HEDGEPETH: Well, these are DP operational guidelines. We obviously wouldn't be discussing lift boats.

MR. KALLAWAY: Right. So but the point is what we're recommending here is across the whole industry. So it's difficult to start --

MR. HEDGEPETH: The statement that I heard was that there are no industry best practices saying anything about vessels. And I'm saying that there are two that are -- that do state that will use DP2 vessels if you're using a DP vessel. Obviously if you're not using a DP vessel or you're using a moored vessel, that wouldn't be part of it. But there are two recommended practices that has been discussed.

MR. KALLAWAY: Right, okay. Thank you.

MR. HEDGEPETH: And should be included.
CHAIR DELATTE: Thank you.

MR. PARKER: Kris, this is a really interesting topic, and as an offshore drilling contractor, what we look at through the SEMS, the API RP-75, and that whole regulation under BSEE is that I think the BSEE and the Coast Guard want the operator and the contractors to work as a partnership to come to a consensus or agreement on what is the best way to go forward.

When BSEE first came out with their SEMS regulation, we incorporated it pretty much lock step in our existing system so that we could have a one-to-one mapping with all of our operators, because some of them came across with some SEMS plans that were pretty much in line with the way the regulation was written.

And so when you do the gap analysis between their SEMS program and ours we would sometimes determine that the risk assessment process, which was call a JSA, is -- and once again that's a different brand of risk assessment. But they would determine okay, we
will do the contractor's JSA risk assess process
or we would use the other one or in some
combination or we would do them both at the same
time.

So that partnership is what drives
doing the proper risk assessment, and we do an
awful lot of incident investigation of our own
when we have property damages or anything comes
in we look at that risk assessment, what did you
forget to do, what did you forget to do. And we
require our rig personnel to upgrade their JSAs
all along. Just as a comment.

MR. KALLAWAY: Thank you.

CHAIR DELATTE: Anymore questions?

CAPT KELLY: My turn now?

CHAIR DELATTE: It is your turn, Mr. Kelly.

CAPT KELLY: I've got a bit to say,
and I'll try and truncate it down because I've
got a lot to say. First of all, I apologize, I
had garlic fries for lunch. They were absolutely
delicious, but I apologize to anyone out here.
I have a question that I need to learn a little bit more about fit for purpose. As I'm looking at the tag statement in the beginning: Does fit for purpose address the training and qualification requirements on the vessel's crew, Kris?

MR. KALAWAY: I'm sorry; say the question again.

CAPT KELLY: Fit for purpose.

MR. KALAWAY: Yeah.

CAPT KELLY: Does a fit for purpose definition, when you're looking at a vessel, let's say, for example, an OSV to do coiled tubing rigless, for example, or wireless, would fit for purpose assessments include looking at the training and qualifications of the vessel's crew; would it look at the endorsement of who's in charge of the crew, and the manager's responsibilities of the vessel versus those that are working on the back of the deck doing the coiled tubing? Does fit for purpose include all of that?
MR. KALLAWAY: So I would say yes, and let me explain it. You're going to look if the vessel is capable of doing the job, operating within its COI. Okay. So probably crew, probably staff, and then they're all trained in the pieces that they do. That falls under the SMS and training programs of the vessel operator. But all that wraps, rolls up to the SEMS and SMS programs. So I would say yes, it should be looked at. You wouldn't put a DP vessel out there with a brand new crew, zero -- you know, there's things that you wouldn't do and -- or without licenses. So all that is looked at.

CAPT KELLY: Okay.

MR. KALLAWAY: So the people pieces is part of the risk assessment.

CAPT KELLY: Okay. Well, I was --

MR. KALLAWAY: And we do see it done in industry.

CAPT KELLY: Okay. So, first of all, you know, thank you for volunteering just to lead
this particular subcommittee because it's obviously a challenge. You can tell by the way that we wrote the task statement there's a lot to think about here, and I recognize the nature of the task. I would just encourage, you know, the subcommittee when they continue their work to look very specifically at what we've asked for and try to answer those specific questions as best as you can. Because we obviously need the information.

Quickly to talk about where we agree.

We agree in the alignment that's needed between the Coast Guard and BSEE. That's why John is here. We agree with that entirely. The Admiral talked about that this morning, you know, actually at great length and, you know, again in his, you know, transparent comments he said, you know, on Friday, you know, John and I and Captain Reynolds, we're going to be on the phone with Director Salerno and Admiral Thomas, and this topic is on the agenda. So it is a high priority.
So within that spirit I would just ask, you know, the subcommittee to continue to do the work that you're doing and really look at the specific questions and try to answer them in as much detail as possible. Because we need those answers so that we can continue to do, as you want us to do, to align with BSEE to mitigate the risks that are addressed in the best manner possible, which, you know, may or may not be regulations. It may likely be regulations but it may not be.

But to echo what Captain Reynolds said, the approach here is to invite industry to give us their recommendations so that we can, you know, either seek agreement or alignment or no, we don't align, and then take action based on that baseline. So there's a lot of good happening here and I would encourage you to continue to do that work.

Just an observation about risk. I think everybody's in agreement there needs to be some sort of risk assessment, and I think of the
comments from Captain Reynolds earlier. But I think there's also agreement that there is no one standard for how to do that risk assessment. In any kind of dealing with risk there are relative perspectives, relative views. There's ways to view the data, collect the data, and make your decisions in a risk assessment.

And so that needs to be taken into account and looked at when we as a regulating agency working with BSEE, you're going to have quite a wide spectrum of how that is viewed and how risk assessment is do. We -- I agree with you entirely, we need to learn more about how you're doing that.

To give you a good example, earlier today the subcommittee talked about LNG and in particular in simultaneous operations in LNG. The requirement is that a proper risk assessment be conducted and presented to the captain of port so the captain of port can look at the risks. I can tell you right now, I'm dealing with it right now, the captain of the ports are going what is
an acceptable risk assessment. And the industry is saying the same exact thing for LNG in the area of simultaneous operations. 

So I'm just offering that thought. Because I don't want to end up at the end of this at that same point when it comes to this category, what we call well intervention is we need your help in identifying more specific -- and that's why I asked please take a close look at these questions and answer them as detailed as you can. 

I recognize that's a challenge because we need detailed answers on what you all recommend. You may not have to pick one but you need to give us what you recommend in terms of what a risk assessment, a proper risk assessment is. Because we have such a wide spectrum to address. And I have more but I'll stop for now. 

MR. KALLAWAY: Well, so I completely sympathize with your position. Because we go through it every day. Right? We, the marine groups and other groups in the room, we deal with
the risk assessment, and it is a very robust
conversation around what's risk enough and what's
not enough, what's too much risk.

We also have a hard time coming up
with a one regulation or something. If I put
myself in your shoes what would that regulation
look like around this conversation, and I could
tell you we can't find that answer. Not yet.
That's why we need another six months to think
about this.

But I go back to this Attachment A
with the blue arrow. We think this is a good
point and how far you go in the silo is a
difficult question for regulators to do.
Therefore, think very carefully about it before
you do it. Because it will drive, your
regulation will drive in a direction that may or
may not capture all the risk.

CAPT KELLY: That's right.

MR. KALLAWAY: So you either set a
high level goal or you be **proscriptive**, and we
decided that it's difficult in this space to be
proscriptive because there's four or 500 iterations of boats and equipments and well interventions and I don't know what the number is. That's going to take a long time for anybody to do. We couldn't do it right now. So you need to think about it very carefully. Totally agree with your point.

MR. DARDAR: Captain Kelly, Jerry Dardar. One of the things in our discussion yesterday is that we said we would reach out to industry and solicit examples of the risk assessment so that we could have that as examples in the final report. So it's our full intent to try and do that.

CAPT KELLY: Okay. Thank you. I just want to close with if you look at the beginning of the task statement, the specific concerns of the Coast Guard stated are right here in terms of well intervention conducted by an OSV. And there's six or seven of them. You know, we're concerned about the training and qualifications of the vessel's crew, who's in charge, the
ability to control a kick, the ability to effectively perform an emergency disconnect, the lack of either structural fire, explosion or blast protection measures, and the lack of fire and gas protection.

Those are the specific things that we could list that we address. I would ask that you at least look at some of those when you build your framework to respond to our question. And I'll end this with again thank you for the work that you're doing. I know this is hard and you have a lot more to do.

But as I said in Houston and I'm saying again, this is a big deal to the Coast Guard, and we all have to recognize that, you know, we know a little, I know a little bit about the industry. You all certainly know much more. But I want to go back to Captain Reynolds' comments about those who are not informed view what's happening as the same exact activity as the Macondo well incident.

And I'm not going to argue with you on
whether it is or isn't. I'm just telling you
those who are not informed look at us doing or
look at folks doing the same risks off of vessels
that have less capability than Deep Water Horizon
had.

MR. KALLAWAY: Thank you for your
comments.

CHAIR DELATTE: Okay. Very good.

Kris, I want to thank you, Mr. Kallaway, Mr.
Fuhrmann, Mr. Dardar for your subcommittee
guidance thus far. This is an interim report
with deliberations that will continue from this
subcommittee. So at this time the NOSAC
Committee accepts the interim report, meaning
it's a public record, and we look forward to the
upcoming deliberations and final report.

Oh, I didn't realize I had another
question. Sorry. Go ahead.

MR. HERNANDEZ: I'll just stand up.

Fernando Hernandez with SECC. To add to what the
Captain was saying, we need to look at rigless
intervention very differently than what we do
with regular interventions. To touch on the
topic of DP, it's very important. Because if
we're doing an intervention off a DP2 vessel it
greatly diverge from that of a MODU.

Furthermore, the training that rigless
intervention crews go under is very different
than that of a DPO. What I mean by that since
this technology is very new and since we did
discuss signoffs, the Captain brought it up
earlier, the DPOs need to know what this means,
acknowledging at what point do we disconnect,
when do we not disconnect, and what are the
telltale signs for disconnecting.

So I'm just asking that you look at
with a different view and vantage point when it
comes to DP, the training. And I say that
because there's only one fit for purpose vessel
in the Gulf of Mexico to do a rigless
intervention. The other vessels are pretty much
sourced on a as-needed basis, and that brings a
lot of questions in my mind.

CHAIR DELATTE: Thank you, Mr.
Hernandez. I'd ask you to get with the subcommittee co-chairs. I'm sure they could use your help on the -- with the deliberations further this six months.

Mr. Wells.

MR. WELLS: Richard Wells of OMSA. Not to belabor this any further, but I feel I'm pressed to attempt to clarify some things that were said that I don't think are either correct or, from the nature of the questions, I'm not sure there's a full understanding of a couple of areas. So I'll be very brief.

As I appreciate it, and anybody who's more involved please feel free to speak up, as part of the application for a permit to modify one of the things the leaseholder provides to BSEE for their permit review is the risk assessment. That happens very, very early in the process. So I mean that happens and, you know, assuming that BSEE reviews and they're not satisfied with that risk assessment, it goes back to the leaseholder and they reengineer the
project to make the risk at an acceptable level to both BSEE and the lease operator.

And on the OSV crew capability question you asked, Captain, I would just remind you that whether we're talking a MODU or an OSV or a lift boat, the people actually doing the well intervention are not those marine crew members. There is a third party independently provided group of workers and the very specialized equipment that is doing that well intervention.

And again as part of BSEE's comment process there's some level of vetting of their equipment and the competency of those personnel both by the leaseholder under their SEMS and by the regulator. So I don't know if that was the intent but the way your question was phrased it made it sound like you thought the OSV crews performed the well intervention. I just wanted to clarify that that in fact is not the case.

CHAIR DELATTE: Okay, we have another question? You have a microphone? Okay.
MR. MARTENS: So my name is Christopher Martens, I'm with the SECC. I just want to clarify during the permitting process the risk assessment, which is determined during when you're looking over an operator's procedure, effectively what we do at the district level is review the procedure and make sure what they're doing is in line with the regulations and that the well's configuration he had is also in line with the what is in the CFR.

So it isn't a formal risk assessment, there's not a risk assessment that's associated with the permit. So I get an understanding why some might feel there's an implied risk assessment because it's done with -- you know, via the regulations. I just wanted to clarify.

CHAIR DELATTE: Okay. Mr. Clark?

MR. CLARK: If I may? When you do that do you -- how closely do you look at the, to use the term the subcommittee used, the fit for purpose of the vessel?

MR. MARTENS: It's -- other than
drilling operations requesting a MODU cert, BSEE really doesn't have at this time any sort of qualification of a vessel.

CAPT KELLY: Can I ask Richard a question real quick? So I did know about that. So I would ask you who's in charge on that OSV setup that you just described? Who makes the decision --

MR. WELLS: Under U.S. Coast Guard rules and regulations the vessel master's always in ultimate charge and ultimately accountable for things that happen on that vessel. Now, the difficulty of course is that those people on the back deck are not exactly in that vessel master chain of command. They're working for the leaseholder directly. They're not working directly for the vessel crew member. Now, could that process be changed or improved to enhance safety or your ability to sleep at night? Possibly so.

CAPT KELLY: I would say not possibly, it must. And that's why we wrote the task
statement.

MR. DARDAR: Captain Kelly, if I may.

Captains on these type of vessels are very involved in what's going on. They may not be doing the work but they are very involved in what's going on and know the hazards that are coming, that are to their ship. Many times that captain has to shut down work, they use stop-work authority and shut down work because of weather, they have to lower their vessels, because they don't have proper personnel on board and things like that.

So I don't want the Coast Guard to come away with the idea that it's a disengagement, because all of the JSAs and activities that happen are throughout the whole ship. Everybody that's on tower, whether you're the master or whether you're the guy that's doing the call tubing is involved in that same JSA or the same risk assessment that's happening at that time. And those roles are set out of who's going to be doing what, who's going to be responsible
for what, and everybody's on board and on the
page of what's happening at the time.

MR. HEDGEPETH: Also I've been on many
vessels with a lot of different operators and
third-party people. You have an ongoing process
of JSAs, morning meetings, signoffs meetings, and
it is at the very beginning when you're doing
your drilling, we call SPUD, pre-SPUD meeting
it's reiterated that the master of the vessel
regardless of who's being paid, has ultimate
authority of safety and operations for the
vessel. So the master is in charge. I've said
that more than once.

CAPT KELLY: So have I.

MR. HEDGEPETH: And Marshall has too.

But there is a definite -- there's -- I mean
maybe 20 years ago, 15 years ago there might have
been a discussion. But anymore it's a pretty
well-accepted situation.

CHAIR DELATTE: Okay, we have two more
members of the public that have raised their
hand. Fallon was -- I thought I saw your hand
MS. DOMINIQUE: Yes. Fallon Dominique. I wanted to point out that the captain does have the ultimate authority. But with SEMS too it also comes back to the ultimate authority when our captains are working very closely with those project managers to maintain a constant flow of communication and understanding of what's going on, and renegotiating what hazards to not only the vessel crew but those third-party crew members that are there.

And that is something that's through tailgate meetings and morning meetings and constant JSAs that are constantly changing and being shut down either -- and not just by the captains; the vessel crew members can say, that's not safe and we're -- that all goes back to the all stop, that that's where the changes from the Macondo with the SEMS plan come in, that's being put into place that is helping, with all of this process as well. And we need to make sure that that's accounted for.
CHAIR DELATTE: Thank you. Yes, sir, Mr. Hernandez.

MR. HERNANDEZ: Fernando Hernandez, SECC. To drive the point further, with vessel-based interventions, which are commonly defined as rigless light well intervention, the captains and the DPOs are much more involved than they would in MODUs. The reason for that is typically when you're doing a rigless abandonment per se you have two down lines and your water line coming down.

What that means is during bad weather the DPO and the captain will have to work in synchronicity with the vessel to back their crew to ensure that the heading changes at the right degrees. Also when you have a gas buster on the back of the vessel and if you decide to vent to the flare you also have to change your heading to ensure you're venting at the right direction.

So here again lies the issue of we need to properly address MODU-based interventions and vessel-based interventions and do our
assessments adequately for each respective
intervention.

CHAIR DELATTE: Yes, sir. Thank you
very much. Okay, we have one more.

CDR BAILEY: Gretchen Bailey, MSU

Houma. Just one question, and I guess it was
kind of going off Mr. Hernandez, who had a good
point. And maybe I missed a conversation with
the secondary piece, but I know that he's
mentioned that MODU and vessel intervention are
different.

Has anybody done a gap analysis with
the subcommittee saying these are the
requirements that are MODU, these are the ones
that an OSV has to do, and these are the
different ones, pieces that aren't the same
between a MODU and a vessel? And then basically
kind of break those down within the risk
assessment to kind of give the equivalencies of
what those vessels can do as far as what the MODU
does.

MR. KALLAWAY: Okay. So a gap
analysis that you're asking -- Kris Kallaway.

The gap analysis that you ask for, we didn't really do that. MODU in general terms refers to the design of the vessel and not the well activity. Now, a caveat I'd say there are -- there's so many different types of well intervention that MODU connected riser, you know, activities is just one of I don't know how many. Dozens if not hundreds. But various kinds, wire line, coiled tubing, the whole nine yards.

So that's a pretty extensive question.
Right? All I can say is that in terms of the well piece, to go back, to fall back to the regulatory approach right now and encourage that BSEE work closely with the Coast Guard to look at that, understand where the risk of the vessel starts, and that BSEE address the risk of the well. Because we're not experts in wells. Okay?

So if you did the gap analysis what would that prove to you, that a MODU is different than a non-MODU vessel?

CDR BAILEY: It would identify to me
the different regulatory gaps that put the safety
measures in place that show the difference
between a rig and OSV. And then with that you
would be able to work them down to show where you
were going to maybe do something to bridge that
gap of safety.

MR. KALLAWAY: Well, so along that
line you're talking about trying to map a OSV
design to the MODU and what are those gaps. And
they're pretty big gaps, if you ask me. So I'm
not sure that you're ever going to get that risk
down. You can identify it, but I'm not sure that
gap, what the end result is there. And I'm not
sure that you're going to get a regulation around
it that makes any sense. I mean I don't know
whether that's something we can do on a part-time
basis on a subcommittee. That's a pretty
detailed question. It might go back to class.

CHAIR DELATTE: Mr. Hernandez, and
then I have something to say.

MR. HERNANDEZ: It's my first last
question here or a restatement.
MR. KALLAWAY: Is that a fair response? Did I answer your question? I mean, I know -- I see why you want it but do you understand that they're so different vessel types I don't know what --

CDR BAILEY: Well, and I think that our point being the Coast Guard with the vessel site and for Houma being the vessel site, we deal with this and we see the gaps and the issues.

And so I think it's something that has to be addressed, because every time we get it we have to push it to MSC and Headquarters CG because it's a new application every time. So it's one of those where if the subcommittee is working on it, maybe they could address then to help reduce some of the workload on Coast Guard side, the unit side, and then sea side.

MR. KALLAWAY: So I do -- we just briefly talked about it, but the Coast Guard owns the COI process of the vessel. That might be the leveraging mechanism if you really have, you know, if you really are losing sleep around the
vessel's activity, because Coast Guard highly
regulates the COI process. That's not a
accidental process, if you ask me.

      CDR BAILEY: Well, what I'm saying is
we don't lose sleep, just it takes a while for
review to get your plans in to get them reviewed
and get them back. So I know that a lot of times
these contracts are time sensitive. So it's one
of those where it would maybe reduce your wait
time.

      MR. KALLAWAY: That's a fair point.

      MR. HERNANDEZ: So then my last
statement here is there is a guide. How far the
committee gets into it is neither here nor there,
we can discuss it as a point.

      What I'm getting at is the
intervention equipment to be used in a rigless
fashion or open water method is highly different
than the way you would use a marine-based riser
on a MODU. Therefore, the equipment must be
looked at very, very closely.

      I'll give -- demonstrate an example.
When we think of coiled tubing going inside the marine riser we have a DOP attached to it. Right? When we use it in an open water fashion off of the back of a vessel, if you use a DOP on there you're going to cut the coiled tubing. Therefore you cannot apply what applies to a marine riser attached to a MODU to a vessel. Because it's going to cost a lot of risk, pollution and damage, and it's absolutely not fit for purpose.

So there is some gaps there in identifying the right equipment for a vessel-based intervention that doesn't have the marine riser versus a vessel-based intervention that is in open water identifying, selecting and analyzing the equipment that are required.

That's all I'm going to say there.

MR. KALLAWAY: Agree.

CAPT KELLY: Yeah, this is Captain Kelly. I'm going to try help move this along a little bit for the Chairman. In response to the question or statement about gap analysis, we did
do that. If you look at the first page of the
task statement, those areas that I called out,
the focus areas, are what we identified when we
did a gap analysis on what an OSV does that a
MODU does. That's where those areas were that I
read earlier came from. That's where the gap
analysis that we had, you're welcome to add more
but that's what that was on.

So I would just redirect the
conversation in connection to again the task
statement is very thorough. If you answer the
questions in the task statement, we'd be very
happy. That's what we need to focus on, and
that's what we need to get done.

CHAIR DELATTE: Very good. And I
think that wraps well intervention up. As I said
before our second round of questions, we have
accepted the interim report into the public
record. This concludes our current business.

I'd like to take a moment to once
again thank the subcommittee co-chairs and all of
those volunteers or all of those who were
volunteers to participate for their contributions. Thank you very much.


MR. WEAVER: I'd also like to extend the appreciation for the patience in all that this subcommittee's working on. I know it's a very daunting task. So I suggest the next venue is at the Arena in Houston.

CHAIR DELATTE: Very good, Warren.

All right. Our next segment of the meeting is new business. This is the time that we discuss any new business items that any of the Committee members want to bring to the floor. Are there any items that you would want to discuss?

MR. MILLER: Phil Miller. I just wanted to further play out this -- a potential -- that we bring in a potential speaker at our next meeting so that they can show us how they collect data and how it's anonymized around the world and then now they push that information back out as how they work with it on their ships.
CHAIR DELATTE: Okay. Very good.

Anyone else have any suggestions for new business? Ideas for task statements, ideas for presentations?

Mr. Fuhrmann.

MR. FUHRMANN: Chad Fuhrmann. I'm wondering -- and I haven't gotten a coherent statement out per se but something along the lines of again the reactivation of assets. I think that there's definitely some material there that we can work with. Again I have to think of what I've written more as far as what such a task statement would look like and what it would all entail. It could be enormous or it could be very specific. It would still be a good amount of work regardless. But I guess I could throw that out there. Maybe somebody else has some other ideas on that.

CHAIR DELATTE: Mr. Parker?

MR. PARKER: One of the things we talked about at lunch today was what the state and state schools, maritime schools in Kings
Point are putting forth to provide the people
that would be competent in this area. They have
a lot of -- the program is primarily for the
engineers and the deckies for shipping, but as
far as I know, and it's been a long time since
I've looked at it, they don't have a lot dealing
with the offshore industry except perhaps a
little bit about DP.

One of the previous companies I worked
for that had drill ships, the master was required
to have an OIM license. So maybe that's where we
need to consider asking what are the schools
doing to provide the competence for the personnel
going forward.


MR. MARSHALL PEREZ: Kim, as my work
with the different academies that I've been
involved in is one state academy has one class
for offshore indoctrination.

MR. PARKER: Okay.

MR. MARSHALL PEREZ: And that's the
limit of it.
MR. PARKER: Awareness.

MR. MARSHALL PEREZ: Awareness.

MR. PARKER: Yeah. Thanks.

CHAIR DELATTE: Okay, we've got that down. Anyone else have anything?

CAPT KELLY: I do.

CHAIR DELATTE: Okay.

CAPT KELLY: I just want to build on a comment the Admiral made, and that's the subcommittee to consider his comments about areas where this FACA could align with others and offer that my office is in charge of three FACAs, MERPAC, TSAC, and NOSAC. And just offer, just a thought here in general, that there's commonality in the world of cyber and there's commonality in mariner training.

And I'm just picking up on Chad's thought here about maybe one avenue we could explore as a possibility of the thought that is working on something together, all three, in the event of a uptick, the term that was used this morning, what could the FACAs -- and this is not
tasking but the idea would be what could the
three FACAs work on collectively to prepare for
an uptick in preparing mariners by way of, the
Admiral mentioned, recruiting, things like that.

It's just a thought to offer. I could
use your comments, you know, email me later on.
I do run all three FACAs, and we need to try and
find alignment about how we could do it, but it's
just a thought.

CHAIR DELATTE: Warren?

MR. WEAVER: Listening to the
subcommittee meeting yesterday, a comment was
made regarding the licensing of the FOIs. And
maybe a collaboration between NOSAC and MERPAC in
regards to the requirements for certain positions
that are required on each boat's passive and
active ballast systems. Thank you.

CHAIR DELATTE: Anyone else have any
comments? Any suggestions?

(No response.)

CHAIR DELATTE: Okay. Also it was
discussed I think more around the meeting than in
the meeting but LNG SIMOPS. And there -- we may
have a member who is familiar with someone who
can give us a presentation. So I'm going to add
that to the list for consideration by the
Committee.

All right. Anything else?

MR. WEAVER: Are you asking for
presentations?

CHAIR DELATTE: We always ask for
presentations and ideas, Warren, for future
meetings.

MR. WEAVER: Okay, future meeting
presentation, ballast water on the OCS.

CHAIR DELATTE: I have to tell you,
Warren, we ask for that every time. We have not
stopped asking.

MR. WEAVER: The Captain knew that I
was going to ask today.

CHAIR DELATTE: Thank you. Okay. Now
we will -- let's see, what if we take a ten
minute quick break and come back and we have Mr.
Chuck Centore, we'll get your presentation ready
to go. Ten minutes.

(A brief recess was taken.)

CHAIR DELATTE: Captain Reynolds.

CAPT REYNOLDS: Yes?

CHAIR DELATTE: Could we ask you a favor? We have some subcommittee members that have flights to catch and we're running long today. Can we bring you up?

CAPT REYNOLDS: Instead of Gates?

CHAIR DELATTE: Before.

CAPT REYNOLDS: Before Gates.

CHAIR DELATTE: Before, yes. Right now.

CAPT REYNOLDS: I can't fill in for Gates but.

CHAIR DELATTE: Right now.

CAPT REYNOLDS: And I can be brief.

CHAIR DELATTE: Okay. Do you have a presentation?

CAPT REYNOLDS: I do not.

CHAIR DELATTE: Okay. Very good. All right. Our next presentation is going to be
Captain Josh Reynolds, Officer in Charge of marine inspection for the OCS. Captain Reynolds.

CAPT REYNOLDS: Thank you very much and thanks to NOSAC for giving me the opportunity to present today. I'm going to make it very brief and take a cue from you, Patrice.

And I'll just say my presentation I preloaded yesterday. We an industry day in conjunction with the NOSAC, and for who wasn't able to make it. So at her request, and I was going to do this anyway, we'll have that presentation on my web site so's that those that couldn't make it yesterday can review it. And I will say that we will commit to having an industry day in conjunction with the NOSAC, and I got the nod at least from the executive sponsor that that's a possibility for the future.

In that I'll just quickly overview the concepts. This is a update from yesterday on what's going on on the OCS regulatory-wise and inspection compliance-wise. We went through a process where we introduced a concept of trying
to put resources where the highest risk is. And
I am committed to eventually communicating how
we're going to prioritize our inspections so's
that we can spend more time on those units that
have a more challenged history with marine
casualties and serious deficiencies.

The discussion then went on to what is
the difference between levels of deficiencies,
and we had several folks come and talk about how
the Coast Guard categorizes something as a
serious or less than serious. We had three
levels. We talked about those types of
noncompliance that rose to the level of an
operational control, which we talked about what
that was. Those that needed to be fixed prior to
some operation but didn't rise to the level of an
operational control, which is important. And
those that are less than either two of those
categories.

So the question I think was asked from
a member who attended, well, what if we don't
like the Coast Guard's categorization of that,
and I pointed to the existing appeals process which is the first level obviously is a discussion with the inspector. The second level is if you're not satisfied with that discussion you ask the OCMI for reconsideration. And then it goes on to appeal to the District. And ultimately the final appeal authority if all three of those levels don't satisfy, the Commandant. So that's pretty standard and hasn't changed.

We had several inspectors kind of tease out the concepts that were overlaid with examples, and those examples talked about what rose to the level of an operational control, what didn't. They were in the context of inspections that occurred on offshore supply vessels and MODUs and floating production units over the past year. No names, no companies but just generic examples to kind of help frame it.

There was an opportunity for the industry to come up and give examples where they had self-corrected or examples of areas maybe
where the Coast Guard hadn't focused. And I
should back up. The Coast Guard did talk about
the different areas deficiencies were
located in and that was an indicator of focus. I
think life saving, fire fighting, electrical were
the top three.

The industry, one in particular
member, who's working on the triple crown and is
in the back, talked about some different areas
such as, I believe, compliance for demonstrating
that the personnel assigned to a lifeboat can fit
into that lifeboat. Navigation safety was
brought up, a specific example of a near miss by
a tanker with a floating production unit and how
that led to the identification of a gap and how
it was corrected. And one other that I have in
my notes but I can't remember right here.

So we finished the discussion with
several policies that have been released. There
are two that we identified that were recently
done. The continued service policy, the industry
came to the Coast Guard with a need for guidance
on light extensions for floating outer
continental shelf facilities. We published a
policy on that. And also we initiated sort of a
sister policy on structural integrity management
as an alternative to in-service inspection plans
or programs, and that's available on my web site
as well. So that's kind of an overview of
yesterday. I wanted to give that for anyone who
is here today but wasn't there to know that.

The other two items that I'd like to
quickly go over just to address what you
specifically asked me about or you asked the
Coast Guard about but I took a personal interest
in was your report on life saving safety. So you
issued several recommendations to the Coast Guard
about improvements, and two of them I kind of
picked out of your report. They were -- one's
near the bottom -- was a recommendation to revise
a policy that the Eighth District has currently,
03-2000, which is manning and training of
floating production facilities.

In that, if I could briefly summarize,
and correct me if I get my brief summary wrong, please, I believe the gist of the recommendation was there's a misalignment between the current policy and an update that was done to the regulations in 2013 for standards training on watch people. And I've looked at it and it appears you could very well be correct.

So it's a good thing that the Office of -- OES, Environmental and -- Operating Environmental Standards. Thank you. Having a senior moment. It is the process owner through the NOSAC, because they also have a division that's dedicated to licensing and manning. And I've sent the policy up for their review and they're taking a look at it, and it looks like there will be some changes to the policy that could be in the interim at least to help clarify what the existing rules will be in application to floating production facilities.

So I don't have it yet, but we have identified there probably needs to be a revision, the revision will be in conjunction with
Headquarters, and the same group that published the STW rule. So we'll try and seek some alignment there and make sure that they are aligned and give that position. So I won't go into the details of what that's going to be, but just to say as soon as we have a draft I'd like to at least share that draft with the NOSAC since you asked me to take a look at it and get your feel before I finalize it.

The other area that NOSAC keyed in on was an inconsistency of the practice of compliance for primary life saving offshore. I think you issued a report that mentioned that over the course of several years or perhaps a decade, depending on where the inspection occurred or which particular unit conducted the inspection, there were some variants in the method of compliance.

And I think you keyed in on three areas. One was the operational drill requirement for survival craft or lifeboats. And I'm just going to use the international regulations since
I think the recommendations were to adopt international methods. There are also domestic regulations. Roughly for the drilling units the international regulations are largely applicable because most drilling units in operation are foreign. And for the production units there's a set of domestic regulations that largely mirrored them but there's some slight differences.

So a lifeboat or a survival craft has an operational requirement in general or roughly every three months it needs to be exercised by the assigned crew. And I think the Committee talked about, well, that may be difficult or challenging in the offshore environment because of weather conditions, adverse weather conditions.

Another related requirement that I'd like to bring up that I don't think was quite in the NOSAC report but it's definitely relevant is there's also a monthly requirement for any rescue boat. And the reason I'm bringing that is because sometimes we have survival craft that's
dual as rescue boats. And so sometimes we have a quarterly requirement, sometimes we have a monthly requirement. I think there's a little bit variation between the MODU rule and the floater rule for that. But the idea is that we have a dual purpose, we've got an abandoned, but we also have a rescue or recover someone from the water. So I think that's relevant.

And the last piece is a rule that talks about the equipment, it's in the equipment section, so the first one I cited is in the MODU Code Chapter 14, operations. The next one is in the MODU Code Chapter 10, which is life saving equipment. And in general, if I could categorize the requirement, it's that equipment you need to be able to prove that you can abandon the unit using that equipment.

And that gets into a little bit of making sure that the lifeboats have the appropriate capacity for the people. Because at the end of the day there was going go be the capsule that allows a crew to abandon the
blowout. And it's important to make sure that
they're purposed, to use a term from earlier
today, that whoever the assigned crew is will in
fact be able to use them to get off the rig.

The NOSAC pointed out -- let me start
on the last and move back, way back to the
first -- that in some cases inspectors offshore
will have lifeboats loaded on the rig, and some
companies think that's a unsafe practice. I
think the report mentioned that there's some
safety concerns with the loading of lifeboats
offshore. In fact, to bring it to yesterday's
industry day, one of the examples was the
alternate method of compliance that DP has to use
for determining if the assigned crew could fit
that involved weighing people at the heliport and
then keeping track of those weights somehow and
making sure that all the mass added up.

I think that actually one of our
inspectors who gave the presentation during the
course of events mentioned that, well, it's not
only important to do that but to operationalize
that so that when you do an actual abandon-ship
drill, the actual assigned crew for that lifeboat
can be accounted for. Because we've had some
cases where unfortunately when we've had lifeboat
drills that hasn't occurred where we've taken
people out and simulated their injury or death.
And when the check came from the person in charge
of the survival craft, everyone's here, nothing
to see, and of course that's not a good thing.

So, you know, I've got to say that one
sure fire way to know that a survival craft is
going to be able to fit everyone is to put
everyone in it. So that may be why some of the
inspectors have used that practice and that
method of compliance. And I would call that the
gold standard. Now, there were some safety
cconcerns around that, and I'm aware of some
company policies which I can speak to in a minute
that prohibit that.

But any alternative you're asking to
look at that ought to be equivalent to the gold
standard. Because it's a big change management
process. You know, you don't know -- people tend
to gain weight, I certainly have gained weight
over time. People shift out, they rotate around,
they go from the A crew to the B crew, they maybe
switch ball teams and they're on another
company's facility or rig.

So we found in our offshore
inspections that perhaps all that change
management hadn't been done perfectly, and it's
definitely an area of concern that if there's a
blowout, which there have been many, or
explosions, which they have been many on
platforms -- oh, and I should say that I
mentioned MODUs and FOIs, but the NOSAC also
expanded the task taken to platforms that utilize
Whitakers or life capsules. So there have been
several exploding platforms that have required
abandonment. That's a very big concern.

So when I look to develop a practice
and standardize how the units do life saving
inspections offshore I'm going to look at that
concern, that whatever the method of compliance
is definitely meets an equivalent level of safety
to loading the boat, because I can see why a
marine inspector would do that. I think there
was a reference to a safety -- something about
six times the weight of the boat or something
that would be in addition to or above the normal
suspension gear, the hooks.

MR. MARSHALL PEREZ: Secondary
restraint.

CAPT REYNOLDS: Secondary restraint?
Certainly if a company were to have such a device
and was willing to load the boat then, that would
be great. We could look to that. Now, a little
bit of the wording in the report was should that
be required or the Coast Guard should require
that to be the case. Did I get that wrong?

MR. MARSHALL PEREZ: No, I don't think
so because our, a lot of our occupation -- a lot
of our standards -- this is Marshall Perez --
personnel lifting and transfers have a redundant
means of supporting the personnel. And the
maintenance hangup has systems on the majority of
davits and boats that are only rated for the
weight of the boat fully equipped plus five
people.

CAPT REYNOLDS: Well, I don't mean
to -- I left my report in the back of the room.
But the only reason I brought it up is it's going
to be a requirement that's the subject of a
rulemaking, as you well know, and the Coast Guard
adds the requirement to anything that has to go
through the rulemaking process.

But if it's going to be a way that
industry offers to demonstrate compliance with an
existing requirement, which is my world, I'll say
right now if you have a secondary device just for
the purpose of showing that your people fit in a
boat, I think that will be acceptable. You know,
we can go through the actual written process
before I would promulgate a policy, but it sounds
like a good idea to me.

There are several other areas I think
that need to be addressed, but I want to key in
on one specific, the idea that we are unable to
do our quarterly operational drills due to
weather. So I promised at the last meeting and
we're in the process of doing to focusing on that
while offshore, and in fact we've done several
focused life saving exams offshore. And we've
also sent out a questionnaire at least to the
floating production facilities offshore.

So many of you may be aware that your
OIMs have gotten the questionnaire, and they're
about -- well, I learned a lesson actually doing
it. First of all, at the top of the
questionnaire say why you're sending the
questionnaire, and then, second of all, don't
just send it to the field people, send it to
corporate too. Because that apparently is a good
practice. So we'll try to do that in the future.

But the questions were designed to
help me understand the current status so that I
could better answer -- or be better informed to
act on your recommendations, basically. We got
seven floating -- the interim results are seven
floating production facilities and two mobile
offshore drilling units came back. And along the lines of whether the quarterly drills were conducted, we had some noes. I have the statistics back there but how bout I just give you a promise to give you the full set when we get all the answers back.

We got a lot of "sometimes," meaning, well, sometimes we manage to make our quarterly drill, sometimes it's pushed due to weather. Some folks answered honestly and said, well, we usually don't make our drills on the FOI section, but on the MODU section honestly enough the two, the small sample we had, said that they made them every time, which was interesting. When it came to lifeboat that dualed as a rescue boat, everybody said we don't make it as much, at least where the requirement is did you have conflicts.

So we're finding various levels of compliance offshore. So one of the big areas I have is I don't know that they're -- and I do this a lot, I used to work in standards quite a bit so I'm big on having an industry standard.
And missing from the IMO resolution that you recommended was, well, is there any guidance on to the IMO's of when to make that decision.

You know, at what loop current level, at what wind, wave, sea -- what environmental conditions is the industry agreed that the offshore installation manager or the master should be looking for not conduct drills. And it's just my ignorance and I'm just not aware that it's there, it'd be great if you could help educate me.

But I think it's important to agree that there is some guidance, because at the end of the day I'm already detecting from the interim results that when we go to a node, I'll call it, where you have several floaters and multiple drill ships in the same general block or maybe adjacent block, we've seen different levels of compliance. And I'm assuming that they saw the same weather condition, so that's kind of like a judgment call that maybe needs some guidance out to our folks that are making decisions.
And I'll just leave it at that because it looks like I'm getting ready to be informed.

MR. MARSHALL PEREZ: Josh, with regards to the levels of sea state and what have you, the problem is there's only one manufacturer, which is the free fall system, that has come out with a safe retrieval sea state, and that was less than a meter. And the rest of the lifeboat manufacturers for offshore environment have not come out and given us the restrictions for the safe retrieval. That's where the problem lies.

Jack-ups versus column stabilized versus drill ships. Drill ships can offer you a lead. You could have a semi or a jack-up -- well, a semi close by and he will not be able to launch his lifeboat due to the sea passage through the columns. The jack-up of course has battled with that same incident and usually forward by the bow leg. So they don't want to cramp up on their bow legs with that fiberglass. So you have -- the worst part is getting back.
It's not a problem of launching, it's more so returning.

CAPT REYNOLDS: Yes, I did understand that the issue is that the weather hindered their retrieval and maybe some folks have been injured trying to effect a retrieval.

And you're right, I maybe knew a little bit. Actually the drill ships mentioned that because they could move and because they could change their heading they're more capable of conducting the -- adjusting for the environmental conditions and conducting a launch.

So I was aware of the concept, maybe not some of the nuances. But still this is an enormously talented industry. You're tackling some really complex problem, you're pulling oil out of the ground, you know, in conditions like the moon. I think that the idea that you an come up with guidance for decisions your OAs are forced to make, obviously they are making if they're waiving themselves from an existing regulatory requirement, that you could put your
heads together and come up with some guidance that takes in those nuances what your platform is, what your life saving gear type is.

And I would look to that to sort of help me inform what my direction is for compliance. Because I think a common theme I've heard is if the Government comes in uninformed by the industry partners and tries to impose a solution, we get it wrong sometimes. So I'm asking for your help in responding to the problem posed to me.

MR. WEAVER: Just one point. In the code when we worked on the 2009, if you notice the caveat about when conditions allow is for -- that conditions allow, we didn't restrict it to weather but also to take in consideration the well operations at hand.

CAPT REYNOLDS: That's true. Yes, that's a good point. And I will confess that the reason I found out my MODU code was out of date is because when I looked in the report there was a new regulation that my code didn't have, and
I'm like, well, when did they put this in there?
So I went and I got myself a fresh copy. So I
thank you for that.

That's the current status. So in
summary I'd say I commit to revising the policy
letter you asked me to revise. I think that it's
correct that obviously the Coast Guard publishes
a regulation that addresses the matter and a
policy that was previously done is out of synch
with that regulation, it should get in synch. So
we're going to get the folks that worked on that
regulation to help me do that.

When it comes to the life saving kind
of standardizing the compliance, yes, there's
absolutely a need to standardize the compliance.
And I fully admit that in the past decade or two
there have been inconsistent inspections
offshore. So I acknowledge that and commit to
standardizing it to the best I can.

But I kind of threw back the monkey a
little bit and said help me help you with a
couple specific areas, and one is the idea of
some guidance to an OIM or a master of a vessel
about when it is acceptable to waive or when it's
unsafe to retrieve the boat. Because I'm
concerned about trying to top drive that from
just the Government on a form by the industry.

Then the other -- I forget what the
other area was. Oh. Not the operation --
simulators, that was it. Simulators as in the
report. We had several inspectors and some
members of the outer continental shelf NCOE go
through and check out the simulators. I think
they are a good supplemental way and it kind of
falls into the, well, you do the drill, just the
whole concept is you do it when it's really calm
and there's no emergency conditions. But when it
actually happens it may be at night, it may be
during critical operations, it may be during
adverse conditions.

So I personally got a little bit of
look at a simulator. I didn't go through the
whole prototype course like some of the
inspectors did. We do see value in the
simulators, so I will look at that as part of the recommendations. And that's it for me.

CHAIR DELATTE: Very good. Thank you, Captain Reynolds. Do we have any questions from the Committee members?

(No response.)

CHAIR DELATTE: Okay, hearing none, do we have any from the members of the public? Mr. Hartley?

MR. HARTLEY: I would just add one comment to Captain Reynolds' statement about the simulators. Schools now, while the Coast Guard does not certify simulation use in courses, they are seeing more, the Coast Guard certifying people at the National Maritime Center and are seeing more lifeboatmen courses utilizing simulators. And they are, the Coast Guard is certifying those courses. Not specifically the use of the simulators but they are seeing additional use of simulators for lifeboatman certification.

CHAIR DELATTE: Thank you, Mr.
Hartley. Anyone else?

(No response.)

CHAIR DELATTE: All right. Very good. We'll move on to our next since we're running a little behind schedule, Mr. Chuck Centore. And Chuck, I want to thank you up front for allowing us to push your presentation back a few minutes. Chuck is going to give us a presentation on dynamic positioning assurance aspects of vessels conducting CAMO and well intervention activities.

Chuck has a BE in marine engineering and third assistant engineer's license from New York Maritime College. He has postgraduate engineering management and nuclear engineering at Old Dominion University. Chuck has 16 years of international experience in the maritime defense, energy, and upstream oil and gas industry.

His career began in the year 2000 as a U.S. submarine officer. As a submarine officer he was trained in nuclear power plant operations and subsequently earned the designation as a qualified Navy nuclear engineer. Chuck has over
7,000 hours of operational experience operating
and maintaining a live nuclear power plant.

From 2005 to 2007 Chuck served as an
attache at the National Security Agency in the
Counterterrorism, Narcotics and Organized Crime
Intelligence Division, and was a key participant
in various nation building programs. For his
effort he was awarded the high honor of the
Defense Meritorious Service Medal.

Following his military career Chuck
commenced a five year career working for Shell as
an upstream offshore deep water project manager.
While at Shell he successfully planned and
executed highly complex and multifaceted
projects. Chuck is currently the VP of Marine
Services and Marine Construction for GATE, Inc.,
a mid-size oil and gas engineering firm located
in Houston.

Chuck, thank you for being here and
giving us this presentation. I turn it over to
you.

MR. CENTORE: Thank you, Patrice. I
know a lot of people probably got to catch flights or, you know, they got something more to do. I know it's late in the afternoon. You're not going to hurt my feelings if you have to step out. If I can even entertain just one person, it's worth it for me. So certainly appreciate that.

So, yes, good afternoon. My name is Chuck Centore. It's my pleasure to be here with you this afternoon. I'd like to thank the NOSAC Committee for providing me with the opportunity and the forum to actually speak today on DP assurance.

It's my understanding it's actually been two years since the last conversation or presentation on DP assurance. And so from what I heard from the well intervention discussion and some other discussions, I think this is a very timely refresher and some time to gain some realignment on what DP assurance is and also what it isn't. So today I hope to articulate that, and the DP assurance should and could be a value-
delivering process.

So slide number 2. So at its essence DP assurance is both a risk management philosophy and a process. And more to the point, it's actually a risk management methodology focused on mitigating the risks of a very complex and dynamic system.

It's a system comprised of subsystems and microsystems, of hardware and software, static components and dynamic components, digital bits and analog pieces all working together seamlessly like an orchestra to deliver the vehicle symphony that is dynamic positioning.

And if we want to be effective in our implementation of DP assurance activities we must first start with the end in mind. We must know our definition of success and of failure. I offer today a simple definition of success. Success is the attainment of incident-free operations or, if you prefer, the attainment of a predictable outcome. And that journey to success requires that we minimize the potential of a loss
of position leading to an unacceptable impact and consequence.

On the screen I offer two real-world examples in which an effective DP assurance risk assessment was conducted and the impacts and consequences of lost position were ascertained. And yet the manifestation of a lost position still yielded a successful result: no harm to people, no harm to the environment, and incident-free operations with a predictable outcome.

I'm not sure if folks can actually see the text on the real-world examples, but the first one was actually a coring vessel, and there was a high probability of a lost position using this coring vessel. But the coring vessel was actually operating in open water by itself, and it lost position. But we knew that going into it that it had a high probability of losing position.

And you know what the consequence was? $35,000, and that was acceptable. There was no harm to people, there was no harm to environment,
and the consequences were acceptable. Right? So mitigating risk is not around preventing lost position. I mean that could be part of it. But it's around achieving incident-free operations. And sometimes there is a high probability of a lost position but you still go ahead and you do the activity.

The second one I had out there is around a PSV that actually had cross-connections. It was actually operating in close proximity to a production platform. Those cross-connections were not able to be mitigated against. So what did we do? We put it in a drift-off condition mitigation. That vessel lost position. Consequence, made a pest of themselves. But it was a success because we still had incident-free DP operations. Next slide.

DP assurance is but just one element of an objective-based integrated risk management approach. Other elements of the integrated risk management approach could include vessel integrity and loss of containment. But those are
conversations for another day.

When done effectively, the DP assurance process integrates risks, mitigations, and consequences so that value can be extracted when the appropriate mitigations and barriers are developed and implemented and our objective is achieved. No harm to people, no harm to the environment, and predictable outcomes and incident-free operations. Next slide.

When discussing what DP assurance is, it is equally important to emphasize what it is not. DP assurance should not be viewed as a blind space approach, an approach that often results in the achievement of suboptimal outcomes. Or a prescriptive standard whereby one's capacity to critically think about problems and solutions is significantly diminished. Or a one-size-fits-all process that's categorical in its implementation. Because not every situation vessel or industrial mission will possess the same risk profile, impacts and consequences. Next slide.
And the other good thing is that I speak fast. And the road map for achieving incident-free DP operations mirrors other tried and true problem-solving approaches like PDCA, which is plan-do-check-act; A3, and Demand.

In the road map we will discuss today there are four distinct activities in the process. The first activity is conducting the risk assessment whereby a full appreciation of the risks and associated impacts and consequences are understood, which in turn allows us to focus our mitigation efforts in Steps 2 and 3. And we ought not be remiss in implementing feedback mechanisms for the DP assurance process so that we may continuously learn about what works and what does not. Next slide.

The risk assessment process begins with developing a risk profile, and it starts with asking ourselves two fundamental questions. What are the impacts and consequences if I lose position during a particular phase of an operation or an activity? And, two, are all
those consequences acceptable if they manifest?

If the consequences are acceptable, then proceed with carrying out the activity. If not, more will need to be done to develop and implement risk mitigation until we achieve an acceptable risk profile. It is absolutely critical that we have a true understanding of the impact and consequences resulting from a loss of position, as these will focus our mitigation efforts. Next slide.

When developing a risk profile, there are several key elements to consider. Working from the inside out and interrogating each element, the complete risk profile picture begins to emerge. And what we hopefully end up with is a holistic understanding of the risks, impacts and consequences that further enable the development and implementation of effective mitigations and ultimately the achievement of our objectives.

And again I'm not sure how many folks can actually see this, but when I say work from
the inside out, I'm talking start with the industrial mission and build on the industrial mission. There's well-specific information. Is it shallow, deep; hydrocarbon, nonhydrocarbon bearing. There are situational specifics. Is it open water, is it close proximity. There's the category of the vessel, which -- I mean you just talked about during well intervention. There's, you know, a long list of them.

And when you fully have all of these elements defined and well-understood you'll be pretty close to achieving your objectives. No harm to people, no harm to the environment, incident-free operations. Next slide.

And when the risks, impacts, and consequences are defined and understood, we turn our attention towards developing mitigations. On this slide you'll see the total representation of barrier philosophy. Some of you know it as a more affectionate name, the bow tie.

Barrier philosophy is a proven methodology for visualizing the threats that have
a potential to escalate in the top event and
further manifest into undesired outcomes and
consequences. It is a useful methodology for
developing effective barriers and recovery
measures that, when implemented, will mitigate
the impacts of threats that have manifested.
Next slide.

In the interest of time and simplicity
we will only discuss barrier development on the
left-hand side of the bow tie. So you start by
defining your top event. And of course you now
have your threats. And I put up there loss of
vessel integrity, just so it looked like a actual
bow tie, and loss of position.

And then we start -- when you actually
start to list out what the barriers are they
generally fall into four themes. There's design,
next there's operational barriers, next there's
process barriers, next and last but not least
there is the people barrier. Next slide.

And what could be done and should be
done in each barrier? It's highly dependent on
your role in the DP assurance process. There will be some barriers where various stakeholders have more or less influence. So who has a role? You'll see that there's not a common stakeholder within all the roles. You've got class, you've got regulatory, you've got vessel owners, vessel operators, shipyards. You've got industry groups like NOSAC, you've got best industry practice that come from MTS and MFA.

So knowing where you are as a stakeholder is going to help you know where you have control and influence to effect change within one of those potential barriers. Next slide.

So here are a few considerations for each barrier. A robust DP system design provides the requisite foundation of predictability in which incident-free operations are delivered. The design philosophy for a DP system is to have a strong focus on the redundancy concept of the vessel and particular emphasis on the seven pillars of DP design. We should also be careful
not to ignore reliability in designing for
integrity in all configurations, as they are
crucial elements of system resiliency.

Vessels should be designed for
testing, not just for testing that is routine and
scheduled such as those defined by statutory
requirements, but also designed for testing that
can be done to establish a basis of confidence
for system performance. A systems engineering
approach to DP design would be an effective means
to achieve the greatest positional failure
capability.

And lastly we should endeavor to align
all systems to the redundancy concept. Common in
recent examples of vessel vulnerabilities include
two power supplies in a triple redundant system
or a three-way split compromised by a two-way
split auxiliary system. And I'm sure folks in
here have seen the three engine rooms/two fuel
systems, and the worst case failure was the time
it lost one engine room and associated loss, so
it defeats the purpose of the redundancy concept.
Next slide.

And now on to people. People are our greatest asset, and investing in their competency development is of paramount importance for achieving incident-free DP operations.

Competency development should and can be focused on key areas critical to station keeping, and our DP assurance processes should seek to enable the delivery capability by use of quality decision support tools like the ASOG and WSOG.

For those of you interested in industry best practice on focused competency development of personnel engaged in station keeping, I would recommend checking out the MTS DP committees and that guidance document, and it's free to download from their website. Next slide.

There may be complementary processes to the DP assurance process. One is implementing the appropriate level of robustness. These complementary processes reinforce objectives of DP assurance and the attainment of incident-free
DP operations. Particular focus should be placed on hazards that affect management processes, permit to work, management of change, positioning standby, and executable contingency plans.

And for those of you who don't know what positioning standby is, it's where people, equipment, and process are brought to a state where immediate response is facilitated to prevent escalation. It's a kind of preemptive high level of awareness state when you know you're going to be going into a high risk exposure activity. Next slide.

And finally operational considerations that focus on mitigating risks associated with the industrial mission of the vessel. If you remember from a few slides back when we discussed developing our risk profile it started with ensuring that we understood the industrial mission of the vessel. An industrial mission is a specific activity that the vessel will execute. And it supports the DP assurance risk management process.
It is within this barrier that decisions should be made on the criticality of the activities to be undertaken and the applicability of the critical activity mode and task appropriate mode during execution. We will come back to CAM and TAM in the next two slides.

Here we establish operational criteria such as thruster and generator limits so that the vessel sustains positional capability following the worst-case failure. Other operational considerations include special attention to vessel mode and features that might be needed to deliver incident-free operations such as heavy lift mode, external force compensation, and track following.

And of course we don't want to forget SIMOPS planning, especially when execution of the industrial mission is required in close proximity and high traffic areas. Potential SIMOPS considerations include knowing the status of other vessels in the area. Are they green? Did they just now become blue, yellow, or, worse,
red? Other considerations include development of a robust communications plan and consideration for escape routes. Next slide.

So back to CAM, or critical activity mode. What is it and why is it important? CAM is a specific vessel configuration that provides the highest degree of station-keeping integrity. And every vessel has a CAM configuration.

And the CAM configuration goes beyond open or closed bus size although bus size configurations are a significant of CAM. It also includes controls in place during inspection, repair and maintenance, and subsequent reinstatement of DP critical equipment. And it defines the requirements for position reference sensors. The CAM configuration that gets implemented also establishes post worst-case failure capability.

So when is operating in CAM appropriate? It may be appropriate if you have a low tolerance for unintended position change, such as maybe the case when you're doing a heavy
lift on an offshore platform, or a long
termination time for the activity or operation,
or maybe the operation is within 500 meters of
another asset.

If you are interested, there is free
industry guidance available on the selection
criteria for activities requiring CAM. It can be
downloaded from the MTS DP website. The
reference is actually tech op ODP-Gulf. See me
afterwards and I can get you that stuff. Next
slide.

However, continuous operations in CAM
are not without its challenges and drawbacks.
And it may require the use of task appropriate
mode configuration known as TAM. TAM was
developed to address issues brought about by
continuously operating in CAM, such as increased
equipment run time, increased fuel consumption
and associated interventions, and a inability to
conduct maintenance on DP systems.

TAM is a risk-based mode. And while
TAM doesn't offer the highest levels of station-
keeping integrity as CAM does, it still strives
to offer an appropriate level of DP system
integrity and tolerance to deliver incident-free
operations. Next slide.

So we've come full circle. We started
by defining what success is. We discussed our
goals and objectives. We discussed
considerations, the tools and methodologies
available to us so that we can achieve no harm to
people, no harm to the environment, and incident-
free DP operations. Thank you for your
attention, and I guess I'll take questions.

CHAIR DELATTE: We'll start with the
Committee. Do you have any questions for Mr.
Centore?

MR. KALLAWAY: Chuck, thank you for
that discussion on DP assurance. I believe
that's a great presentation. Would you say,
generally speaking, from you being an expert in
the industry, that based on your knowledge that
the tools that already exist in industry we have
efficient tools that are properly utilized to
maintain safety of the operations that wouldn't
therefore require any further regulations.

MR. CENTORE: Yeah, so in the context
of financial positioning risk management, I do
believe there is. If you look, there's really
three components to managing risk with, well,
with anything around DP. It's people, equipment,
and processes. And I do believe that out there
in the industry we do have tools to be able to
manage that risk. I'm not so sure about
additional regulation unless they can stipulate
what people should be using versus coming up with
something that's new.

So do I think we need additional
regulations? No, I think that there's stuff out
there in the industry already. If the industry
does get bent up like the NPRM for DP, I think
that points to industry guidance like the WSOGs
and ASOGs and how to develop those. That would
probably be guided by regulation.

CHAIR DELATTE: Any other questions
from the table from the Committee?

(No response.)

CHAIR DELATTE: How about the public?

Any questions for Mr. Centore from the public?

Mr. Centore, thank you very much for your time. We appreciate the presentation.

(Applause.)

CHAIR DELATTE: Okay, next up is Mr. John Cushing with our Bureau of Safety and Environmental Enforcement update. Mr. Cushing is the senior technical advisor and structural engineer for the U.S. Department of the Interior Bureau of Safety and Environmental Enforcement, BSEE. He has been with the agency since 2008, and he is currently the chief of the Safety Inspection and Renewable Energy Section at the BSEE headquarters in Sterling, Virginia.

Mr. Cushing, I'll turn it over to you.

MR. CUSHING: Great. Thanks a lot, and good afternoon, everyone. I'll try to keep this pretty quick, I know we're getting close to the end here. I was asked to provide a quick
BSEE update, so I have a few slides to go over here. If you can go to the next slide, please.

These are the topics I want to cover.

Just BSEE -- they talk about reorganization, it's really not anything major but I just want to talk briefly about it or really our organization. We signed -- recently had a signing for a MOA so I wanted to highlight that event. Risk-based inspections. I had mentioned that in the fall meeting that we were starting a pilot project on risk-based inspections, so I just want to provide a quick update on that.

Oil spill research, mention some of the facilities that we have and some of the work we're doing there. Offshore technology challenge was an event we held recently, so I just wanted to mention that. And then just want to close with a few comments about renewable energy, some updates on that too. So if you'd go to the next slide, please.

Most of you folks are familiar with BSEE. You know, we started out as MMS, and this
is kind of a forensic diagram I guess, an
analysis of what happened to the dead body of
MMS. This is what happened to it. And these are
the pieces that came out of it. So yeah, so we
have BOEM, which is the leasing, offshore leasing
primarily and, you know, the management of the
offshore lands. BSEE doing safety regulation and
enforcement. And then we have BOEMR which is the
revenue collection, the revenue part of BSEE,
what MMS used to do. The next slide, please.

So this is our organization. Yeah, I
said reorganization. There's a few -- there's
been some press about how we were tasked with
creating an environmental compliance division and
doing safety enforcement, some of these things.
So there are some -- these are functions that
we've had all along but we elevated them to
national level divisions. So actually when we
talk -- if you hear anything about
reorganization, that's what was happening is that
we've had some of these things that we have been
doing all along but we've elevated them to a
national level divisions.

And so if you look across the bottom there we have a director and deputy director, then look across the bottom, there's an Office of Offshore Regulatory Programs, Oil Spill Preparedness, those are existing divisions, but the new one, Environmental Compliance Division, we're really highlighting that as a national level program. Safety and Incident Investigation Division, that's being highlighted as a national level division now. And also Safety Enforcement. Again those have been broken out, you know, into subunits and given high approval I guess is the best way to put it.

So and then of course the district operations, the regionals, the regions and the districts all fall underneath there too. So really not a lot of big changes, but I just want to highlight that you may hear some stuff, there's some interesting views about how we're tasked with being more aggressive with our environmental portion, for instance, and we need
to hire more people to staff that. So, anyway, it's all falling into place but the hiring process is slow and, you know, we're working towards that.

Next slide, please. Okay, as we mentioned, we just signed MOA OCS 04. This is a MOA that was in existence, so this is just an update from the existing MOA.

We wanted to update it because now we do have FPSOs in the Gulf of Mexico, and when we first signed it there weren't FPSOs so we had to add some systems and some details about FPSOs. And there's some other things that we updated too.

So there's an annex that goes in there and it's the matrix that shows, you know, the Coast Guard rules and responsibilities and BSEE's rules and responsibilities, and also where there's overlap. And so if there's questions, you know, it's hard to figure out because we had to go through each agency's regulations and what, exactly what did each agency regulate, what
systems, what subsystems. And then, you know, if we referenced, like for instance, API standards we had to, you know, address those system and subsystems that address the API standards that are incorporated by reference.

So the matrix is very detailed, a lot of information. It took us a long time to go through it all. What I will say though is if there's any confusion, if anyone reads something and thinks it's -- you know, if they have a question or it seems inaccurate or whatever, the first thing I say is go to the regulation. And you'll see that in the MOA, there's a disclaimer in there that says, you know, anything confusion or disagreement or whatever, go to the regulations. This is just supposed to reflect what is in the regulations, what agencies have specific requirements for specific systems and subsystems.

And this was signed, we just signed in January, so I'm real happy to get that off the plate. And it's posted on our website and on the
Coast Guard's website too, so easy to access it.
If people need the link, I can get that to you.
The next slide, please.

So risk-based inspections. Yeah,
we've been doing a lot of work since Deepwater
Horizon to look at risk-based inspections, how
to, you know, do more with our limited resources.
And so we contracted with Argonne National
Laboratories to assist us in developing a risk-
based inspection methodology. We've got, you
know, our inspection data, our casualty data, try
to make links and correlations there, see what
pinks correlate to certain casualties and what
sets of pinks, maybe not just one pink but a
whole certain combination of pinks. You know,
violations of certain requirements may lead to a
casualty, try and make those connections.

So we've worked with Argonne National
Laboratories to develop this risk-based
inspection methodology. We also just signed a
five-year agreement with NASA for there
assistance. In the aerospace industry there's a
lot of risk management that takes place there,
and so we just signed a big agreement with NASA
to work with them and collaborate with them on
risk-based management.

So at the fall NOSAC meeting I
mentioned we started a risk-based inspection
pilot project. We've only done one inspection so
far, so we're still kind of sorting through the
results of that and seeing how we can fine-tune
it. So I was hoping to give more of an update on
that but there really isn't a whole lot to report
yet, it's still a work in progress. But I'll
certainly keep people posted as time goes on and
we have more findings.

And also the Coast Guard, you should have
heard about this in the OCS yesterday and today
at the NOSAC meeting, that the Coast Guard and
BSEE are collaborating very closely on risk-based
inspection and looking at safety and risk
parameters and how to better use our resources.
At least, you know, the best -- it's best for our
agencies but it's also good for the industry too
to focus on higher risk things and not be bothered with the lower things as much. The next slide, please.

This is a slide presented in the fall meeting so I won't spend a lot of time on it. But if you look at the -- this is kind of a concept for a national inspection program. We have, you know, traditional annual inspections, we're mandated to do annual inspections at each platform, so at the top block there. And then of course we have the SEMS requirements now, the SEMS audits, so that's part of the national inspection program, it all fits in there.

And so the new piece there is on the right, bottom right, it's the risk-based inspection. The focused inspections, looking at, you know, higher risk facilities and also we're on those facilities looking at higher risk systems and subsystems. Next slide, please.

And again this is a slide from the fall, but the whole idea is 80 percent of the reportable incidents happen on about 20 percent
of the facilities, so I think it makes sense both for our use of resources but also for the industry, I think it makes sense too. Next slide, please.

Yeah, and so as we develop this risk-based inspection program we certainly want to take all the risk data that we can to make a useful and effective program. So we certainly want to incorporate SEMS audit results, you know, investigations, incident investigations, permitting activities, industry knowledge from other agencies. You know, from the Coast Guard, their risk-type data is incorporated. And certainly research and emerging technology. So we're trying to take all these inputs and try to refine our risk R&D system, risk inspection system. The next slide, please.

And then finally -- this is my last slide -- so this is kind of -- yeah, so this is kind of a diagram here that kind of hopefully pulls it all together. So we have our -- it shows that kind of a diagram at the bottom. A,
there's the inherent risk. That's kind of use
Argonne's results and kind of what we get from
our data and statistics, looking at it
historically.

Then we certainly track company
performance, that's item D there is company
performance that leads into it. And then other
risk-related intelligence. That's working with
the Coast Guard and other agencies to get risk
information that they're seeing too. So it all
kind of feeds into our facility prioritization
scoring system. Okay, next slide, please.

Okay, now shifting gears, I'm just
going to talk real briefly about -- I'm not sure
if many folks know, but we have, BSEE has an
Ohmsett facility, it's up in New Jersey. It's
about a hour south of New York City. In fact you
can see New York City from the facility. But
it's quite a facility. The Navy originally built
it, and then the Navy was no longer using it, so
BSEE took it over.

And so we maintain and operate the
facility to ensure contractor -- it's, again it's
located in New Jersey, the length of two football
fields, so it's really a very impressive
facility, 65 feet wide and eight feet deep, and
they can generate, they have a wave generators,
they can generate waves up to three feet. So for
oil, you know, oil spill training and for testing
equipment. So for oil spill training and testing
equipment it's a very useful facility for doing
those kind of things. Many oil spill clean-up
products have been tested here.

And also, we're also expanding the
mission of this facility to do, conduct research
and testing for renewable energy devices,
specifically wave energy conversion devices. So
with our generator wave training and have a
device out there we'll prototype and see how it
functions. So very interesting stuff is being
done there.

Next slide, please.

And this is actually a different
facility. We've been, BSEE's been collaborating
with the Coast Guard R&D Center

and also the Naval Research Laboratory, and

so this is a facility being run by the Coast

Guard R&D Center and the Navy Research Laboratory
down in Mobile, Alabama, where actually they have

a burn station and they can in situ do burn
testing.

So it's a really interesting facility.

It's in the Mobile, Alabama area, it's on a

little sand island right off the coast there.

But they can do training of personnel, testing of
equipment, and so it's a great place for, you

know, getting better in situ burning. So that's

another kind of exciting development right there.

Next slide, please.

So this is a offshore technology

challenge. This was a -- BSEE, there's quite a

bit of recruiting with the colleges and we go
to -- you know, this was at the high school level

but we also go to colleges and try to recruit

people for the agency, for the offshore industry.

So we had some discussion this morning about with
the oil prices dropping and losing qualified
mariners, it's very important to train the next
generation. So this is part of that effort to
train the next generation.

So this is an event that was actually
hosted by BSEE and the Offshore Energy and Safety
Institute. Jim Pettigrew was there too. And
this was hosted for high school kids. It was
held at the University of Houston. And we had 15
teams participate, I think over 100 kids were
there. And it goes to promote STEM education but
also to get people interested in the offshore oil
and gas industry. And, you know, it had a grand
prize of $2500 plus $1500 for a teaching grant
for the school. And the winners will get
recognized at OTC this year.

So, Jim, do you want to add anything
to that or? You can see Jim on the right-hand
side of the picture there.

MR. PETTIGREW: Yeah, never complain
about football players get hot on the football
field, it was pretty hot down there that day.
And I want to thank the Houston Coast Guard Air Station. They did a fly-by for us at lunchtime, and the students really loved it. We had about 120 students from four of the high schools down there, some of them related to the energy academies down there.

The neat thing was this wasn't just high-end elite high school students with parents that could afford to send them to special schools. This was across the socioeconomic spectrum of Houston, and so that was a great piece to start out with. What we did was this was sort of crawl/walk/run approach, our first effort from the Director, and what we had them do is, like I said, we had 15 teams, 120 kids, four different schools taking a look at basic safety procedures and PBE teamwork, coaching communications, planning.

Then we gave them components for a piece of electric circuits to charge the batteries, took these battery packs, put them in remote controlled helicopters, and took them out
on the field and teams flew them between simulated -- and for the record that's air quotes -- simulated offshore platforms, big square cardboard squares, on the field, and flew them back and forth with this alternative energy generation. But the safety piece from our perspective is sort of that initial introduction to safety processes.

We're already working with our partners BSEE and IPA to start work for next year. Our plan is to include the New Orleans area high schools as well as some other high school areas within the state of Texas. And future plans are to include different BSEE districts as an alternate program. And I'd be happy to answer any questions. There's some YouTube videos on the University of Houston Energy YouTube page if you're interested. Thanks.

MR. CUSHING: Thanks, Jim. Yeah, we were really happy with how that turned out, and we are going to have future events along that
So my last topic is renewable energy. I've been pretty heavily involved in renewable energy. I'm pleased to report we actually have the first offshore wind farm in the U.S. It's actually in state water so we, as a federal agency we don't actually have regulatory authority over this project here. And you can see on the map that's New England and that's Rhode Island you're seeing there. And Block Island is about 20 miles south of the coast of Rhode Island right there. And the wind farm is just beyond the southern part of Block Island. And it's actually in state waters because there's a three mile circle around Block Island, which is in state waters, and it's just inside that three mile circle. However, there is some, a transmission cable that connects Block Island from the mainland, and so the transmission cable does actually pass through federal waters when it gets beyond that three mile limit. It does actually
go out into federal waters for eight miles. So we actually have a role, and it's kind of interesting because we're taking baby steps.

We get to actually practice our plan review or kind of test our plan review procedure and our like safety management system. We do have some authority over that cable lane process, so we're actually getting to test our renewable energy program to some degree because we do have some limited authority over this subsea cable.

So it's kind of exciting to see this take place. It's just good to see one offshore renewable energy project succeed finally, so it's been a long time coming. And hopefully this kind of opens the door to other projects. So we'll see. So this -- actually go back for a second, please.

Yeah, so it's going to be five 6 megawatt service, which is -- 6 megawatts is a big one. These are the ones you see on land, they're of probably 2 to 3 megawatts typically. So 6 megawatts, these are big turbines. And
there's going to be five of them off of, just off the coast of Block Island there.

The foundations were installed last summer, so the foundations are in there now. It's actually -- the ones you see in Europe are typically monopile wind turbines. These actually have a four-legged jacket structure, and they're going to put the monopile on top of the jacket structures. So the foundations have been installed.

So this summer they're going to install the wind turbines themselves, the towers and the cells and the whole assemblies, and they're also going to be installing subsea transmission cables this summer. So again we're really excited to see this finally move forward.

Next slide.

And this is my last slide here. But this is interesting because we talked about the downturn in the oil industry. You can see there's a jack-up vessel that was brought around from the Gulf of Mexico and used for the
construction of this wind project here. So, you know, hopefully some of these projects for wind may be helped by the downturn in the oil industry.

They did have some safety issues. You can see they used -- there was a local barge and crane derrick there. They did have some problems with the barge swinging up and damaging the foundation structure, so they had to do some repair work. So, yeah, there's definitely a learning curve, and I think the more we use like lift boats and stuff like that probably the better off they're going to be, because they have had some problems with the barges already.

Currently with the Jones Act there are some purpose-built vessels in Europe that are -- you know, these big huge jack-ups that are specifically designed to install monopile wind turbines. Because of the Jones Act, they could come over here as long as they stay on the construction site, but if they start transporting any components to and from the shore, then they
have to file with the Jones Act. So kind of interesting. I think we'll see more oil and gas type vessels brought into the use of these projects.

And, yeah, that concludes my last slide. So that's concludes my presentation unless there are any questions.

CHAIR DELATTE: Mr. Cushing, thank you.

Any questions from the Committee?

Chad, Mr. Furhmann?

MR. FUHRMANN: Thank you very much for that, appreciate it. One question that I've got, and this may be a little from left field, if you will. But regarding renewable energy, and I guess kind of tying in the DP conversation too, one thing that came to my attention with -- and not to bring in all different subjects here with the DP NPRM, which we shall not speak about here, one of the definitions that was included in that particular document and maybe elsewhere, please correct me, but was critical offshore activities
on the outer continental shelf.

And the way it was written, or at least the way I interpreted it, was that those critical activities included the extraction of mineral deposits basically. And it didn't really touch on renewable energies. And I'm wondering if you can speak a little bit to that. I mean is that considered a critical offshore activity? Because obviously that would affect a lot of member activities here.

MR. CUSHING: And this would be in the context of using a DP type vessel to perform these activities?

MR. FUHRMANN: Well, potentially, depending on what comes out of the DP NPRM.

MR. CUSHING: Okay, yeah. Then --

MR. FUHRMANN: Because it's just saying that there's certain vessels that can be used for critical activities and certain vessels that cannot be potentially, depending on how it comes out.

MR. CUSHING: I would say in that
case, not to kick the can down the road, but I mean I think I would look to how the oil and gas industry uses DP vessels for construction activities and see if there are any limitations or, you know, what the requirements are for DP vessel for construction of an offshore oil and gas platform, because it would be a very similar, you know, construction a wind energy project would be about the same thing for risk, I would think.

MR. FUHRMANN: Uh-huh.

MR. CUSHING: So that would be my answer is to look at what the oil and -- what they do for the oil and gas industry first and apply that to the wind construction activities.

MR. FUHRMANN: So you're not aware of any change in the definition then of a critical activity?

MR. CUSHING: Not in terms of -- not in the context of offshore renewable energy, I haven't seen any talk about that.

MR. FUHRMANN: Okay.
MR. HARTLEY: So maybe give you a little more insight into that. Right now the Coast Guard doesn't have any authority over these wind towers operations other than for navigational lighting purposes.

MS. HOPKINS: They do regulate the vessel.

MR. CUSHING: And the vessels are regulated, they're inspected vessels that come under Coast Guard regulation.

MS. HOPKINS: I mean, during installation and construction all of the vessels that we are looking at are covered by the Coast Guard.

MR. HARTLEY: Yes.

MS. HOPKINS: Just making sure.

CHAIR DELATTE: Mr. Murphy has a question.

MR. MURPHY: John, where's the support base for the offshore wind facility off of Block Island?

MR. CUSHING: The safety unit for that
one I believe is -- I don't know if you can go
back to the chart, but I think it's in our
states.

MR. MURPHY: It'd be somewhere in
Rhode Island as opposed --

MR. CUSHING: Yes, I think there's --

MALE VOICE: Quonset?

MR. CUSHING: I believe it's at
Quonset. I think that's what they were talking
about.

MALE VOICE: That was an offshore oil
base seven or eight years ago.

MR. MURPHY: Yeah, Quonset, okay.

MR. CUSHING: I believe it's the
Quonset facility.

MR. MURPHY: Thank you.

CHAIR DELATTE: Okay, any comments
from the public?

MR. SALES: Thank you, this is not a
truly serious question, but I mean what other
agencies have a piece of this? Do Fish and
Feathers have a piece of it or is there any sort
of bird sanctuaries in the area? I know they
don't have the turbines up to killing birds yet.

MR. CUSHING: Are you asking --
there's a huge amount of involvement from --
yeah, the environmental study they do for these
projects, it's tremendous. And, yeah, certainly,
yeah, the -- I mean all I -- when they do the
NEPA analysis for these projects, they reach out
to all the different agencies and they get input
and, yeah, it's a huge project -- huge process, I
should say.

MR. SALES: NEPA, what is that state
or is that federal involvement? I'm not --

MR. CUSHING: Yeah, that's true. For
permitting that -- because that would have been
statewide, so that wouldn't have -- I mean I
assume they would have had to comply with a lot
of things, NEPA laws, that we would have had to
comply with in the federal waters.

CHAIR DELATTE: And did I see one more
hand?

MR. PETTIGREW: Just a comment real
quick. If you have further interest in
discussion of talking to John about the risk-
based inspection pilot program and their new
agreement with NASA, BSEE will be discussing that
at a forum dialogue in Houston on May 18th that
OSI will be holding as part of a barriers, risk
maintaining barriers forum. Thanks.

CHAIR DELATTE: Thank you very much.

Anyone else?

(No response.)

CHAIR DELATTE: Okay. At this time
I'm going to move on. The next item is NOSAC
Committee discussion but I think we kind of had
that when we had our committee business. So if
everybody's good we'll keep moving.

Mr. Clark, have we received any
written comments for entry into the record?

MR. CLARK: No, ma'am.

CHAIR DELATTE: Very good. So we'll
now open it up for public comment. If you have
comments, we're going to ask you to raise your
hand. Each speaker is requested to limit their
speaking period to three minutes or less in order to ensure that all members wishing to speak are afforded time to do so. Please introduce yourself by providing your name, the organization you represent before you speak. Please speak clearly holding the microphone close to your mouth to ensure your comments are accurately captured by the court reporter. As a reminder, this is your opportunity to address NOSAC with your ideas or concerns to be included in the official record. This is not an opportunity to engage NOSAC in a debate or to discuss matters not relevant to the offshore oil and gas industry. Any public comments? (No response.)

CHAIR DELATTE: Okay. Seeing none, I do want to thank you all for being here. And we'll move on to the next item, which is any action items that we have. I don't have any specific. I think we have a few things the Committee needs to discuss for future meetings and future presentations. Our next regularly
scheduled meeting will be in November 2016, our fall meeting in Houston, Texas. We're finalizing the dates and we're finalizing the venues, so all of that will be published in the Federal Register once that's done. Okay, it's now time to adjourn. I'll entertain a motion from membership to adjourn the NOSAC's spring 2016 meeting.

MR. MILLER: Bill Miller, motion to adjourn.

CHAIR DELATTE: Second, please.

MR. MARSHALL PEREZ: Marshall Perez, second.

CHAIR DELATTE: A vote to adjourn the meeting, all in favor?

(A chorus of ayes.)

CHAIR DELATTE: Any opposition.

(No response.)

CHAIR DELATTE: Okay. The NOSAC spring 2016 meeting is hereby adjourned. Thank you very much.

(Whereupon, at 4:13 p.m., the meeting was adjourned.)
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In the matter of: National Offshore Safety
Advisory Committee Meeting

Before: USCG

Date: 03-03-16

Place: New Orleans, LA

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

______________________________
Court Reporter