U.S. DEPARTMENT OF COMMERCE

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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
(NOAA)

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HYDROGRAPHIC SERVICES REVIEW PANEL

PUBLIC MEETING

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TUESDAY

NOVEMBER 27, 2012

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The Panel met in Ballrooms 1 and 2 at the Astor Crowne Plaza Hotel, 739 Canal Street, New Orleans, Louisiana, at 8:30 a.m., Matt Wellslager, Chair, presiding.

PRESENT:

MATT WELLSLAGER, Chair SCOTT PERKINS, Vice Chair REAR ADMIRAL KEN BARBOR LAWSON BRIGHAM, Ph.D. JEFFREY CAROTHERS CAPT. DEBORAH DEMPSEY REAR ADMIRAL EVELYN FIELDS

WILLIAM HANSON
DAVID JAY, Ph.D.
GARY JEFFRESS, Ph.D.
FRANK KUDRNA, Ph.D.
CAROL LOCKHART
JOYCE MILLER
SUSAN SHINGLEDECKER

NON-VOTING MEMBERS PRESENT:

- ANDY ARMSTRONG, Center for Coastal and Ocean

 Mapping, University of New Hampshire
- JULIANA BLACKWELL, Director, National Geodetic
 Survey
- RICHARD EDWING, Director, Center for

 Operational Oceanographic Products and
 Services
- DAVID KENNEDY, Assistant Administrator,

 National Ocean Service

NOAA STAFF PRESENT:

- REAR ADMIRAL GERD GLANG, HSRP Designated
 Federal Official
- TIM OSBORN, Navigation Manager, Gulf of Mexico
 Region
- MARGARET SPRING, Principal Deputy Under Secretary
- CAPT. JON SWALLOW, Chief, Navigation Services

 Division, Office of Coast Survey

 KATHY WATSON, HSRP Program Coordinator

 CRAIG WOOLCOTT, NOAA/NOS/PPAD

ALSO PRESENT:

JON DASLER, David Evans & Associates

RALPH DIAZ, Boh Brothers Construction

SEAN DUFFY, Big River Coalition

MYRTIS FRANKE, Office of Senator Thad Cochran

TERRY GILBREATH, Harbormaster, Port of Mobile

KENNETH GRAHAM, NOAA/NWS Meteorologist in

Charge, Weather Forecast Office,

New Orleans-Baton Rouge

GARY P. LaGRANGE, President, Port of New Orleans

TARA LEVY, C&C Technologies

- HUNTER LIPSCOMB, Office of Congressman Steven
 Palazzo
- T. J. MORAN, Office of Congressman Steven
 Palazzo
- MIKE NITSKA, The Hydrographic Society of

 America, Louisiana Chapter

 JASON PORET, Hydroterra Technologies
- KELLY SCHULZ, Vice President, New Orleans
 Convention & Visitors Bureau
- SUZANNE VANCOOTEN, NOAA/NWS, Lower Mississippi River Forecast Center

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1 P-R-O-C-E-E-D-I-N-G-S

2 8:43 a.m.

CHAIR WELLSLAGER: Hi, I'd like to welcome everyone to New Orleans and our fall conference for the Hydrographic Services

Review Panel.

This panel, the HSRP, is a Federal Advisory Committee established to advise the NOAA Administrator on matters relating to the responsibilities and authorities set forth in Section 303 of the Hydrographic Services

Improvement Act of 1998, its amendments and other appropriate matters that the Administrator refers to the panel for review and advice.

Responsibilities and authorities include: hydrographic surveying, shoreline surveying, nautical charting, water level measurements, current measurements, geodetic, geomagnetic and geospatial measurements.

Other appropriate matters could include coastal and marine spatial planning,

coastal and fishery management, and other aspects of NOAA's mission that rely on hydrographic or geospatial information.

We are authorized to have two meetings a year. In Anchorage, while discussing past locations for HSRP conferences, thought was given to areas that have been severely impacted by major storms. sea level rise and ground subsidence, all concerns of NOAA, primarily the National Ocean Service.

The Gulf area seemed a likely choice to host a meeting. Our last meeting in the Gulf of Mexico area was almost exactly four years ago and was in Tampa, Florida.

Consideration was given to
Houston/Galveston area and the New Orleans
area, and the decision was made to have the
conference here in New Orleans.

We are very fortunate today to have with us from NOAA administration Margaret Spring, the Principal Deputy Under Secretary

for Oceans and Atmosphere, and David Kennedy,
the Assistant Administrator for the National
Ocean Service.

Margaret will provide us with
welcoming remarks from NOAA leadership and
swear in our newest HSRP member, Carol
Lockhart. You are getting to be quite good at
swearing in. I think actually I had my
swearing in too.

David will provide to us an update on the activities of the National Ocean Service.

Earlier this year the HSRP lost a valued member of our panel to cancer, Dr.

Michele Dionne. Michele's expertise involved research in estuaries and marshlands. In the spirit of a true Mainer, Michele was never lost for words, although they came a little bit slower the last time we were here, and that was upsetting.

I never had the privilege of working with her outside of the HSRP panel,

but I did, however, enjoy the times we worked together at these conferences.

And while speaking for myself, I think I can say for this panel, while she may be with us spiritually, her physical presence will be missed.

On a much lighter note, I would like to take this opportunity now to thank Capt. Swallow and the services of the navigation managers that have provided to the HSRP in coordination of speakers and topics of discussion.

Lt. Matt Forney was very helpful in Anchorage. He coordinated things, got things tied together and really stepped up to the plate quite well.

And Tim Osborn, what can I say?

He has been an orchestra maestro, getting

things coordinated here. Without your help,

things would have slowed greatly.

So, Capt. Swallow, Tim, thank you very, very much. And I would also like to

welcome Admiral Glang to his first HSRP

conference as our DFO, the Designated Federal

Official, and I believe he has some

administrative tasks that he needs to address.

Admiral Glang.

ADMIRAL GLANG: Thank you, Matt.

Welcome and good morning to everyone. The
housekeeping issues first. In the event of an
emergency, we have got stairs out that way to
my left, and there is another set of stairs
out to my right behind the doors as you exit
out to the foyer area; and more practically,
the restrooms are also located out to my left,
if you haven't discovered those yet.

The Hydrographic Services Review Panel, the HSRP, is governed by the Federal Advisory Committee Act and was established by the Hydrographic Services Improvement Act amendments of 2002.

So this is a public meeting.

Panel members and our guests are reminded to speak clearly into the microphone, start by

stating your name. That helps the court reporter. You may have noticed we have a court reporter who ensures that we produce complete minutes.

We have got 15 panel members, or

15 members who can vote on the panel, and they
are considered special government employees.

The members are appointed to four-year terms
by the NOAA Under Secretary, and we select
them based on their particular knowledge,
expertise or training related to the purposes
of the Hydrographic Services Review Panel.

Panel membership, we try to balance to get different points of view in, and I think you will gather that in the next few days by listening to them.

And so the other point to make is members of the panel don't represent organization or entities, nor do they give singular advice to NOAA or the administration or me. The way the FACA works is the panel provides collective advice.

We have got four non-voting government employee members -- Andy Armstrong, -- and we are going to go around and have everyone introduce themselves so I'll just point out Andy Armstrong and Larry Mayer, codirectors of the Joint Hydrographic Center, and Larry is not here.

We have Juliana Blackwell,
director of the National Geodetic Survey to my
left, and then to my immediate left, Rich
Edwing, director of the Center for Operational
Oceanographic Products and Services.

So we did want to go around the room and have the panel members and those folks at the table introduce themselves. So we'll start with Carol. Welcome.

MEMBER LOCKHART: Why, thank you.

My name is Carol Lockhart. I am the new

member of the panel and I am excited to be

here. My background is mainly in hydrographic

surveying, both multi-beam and LiDAR.

MEMBER CAROTHERS: Good morning.

Page 13 1 My name is Jeff Carothers. I am the offshore 2 survey division manager for Fugro Consultants. 3 MEMBER DEMPSEY: Good morning. 4 have a deep voice to begin with, but it's even worse with the cold. Capt. Deborah Dempsey, 5 Columbia River bar pilot. 6 7 MEMBER JAY: David Jay, Portland 8 State University, civil and environmental 9 engineering. 10 MEMBER MILLER: Joyce Miller, University of Hawaii. 11 12 MEMBER BRIGHAM: Lawson Brigham, University of Alaska Fairbanks. 13 14 MEMBER BARBOR: Ken Barbor, University of Southern Mississippi. 15 MS. SPRING: I'll say Tim Osborn, 16 17 because he is supposed to be here, but 18 Margaret Spring, Principal Deputy Under 19 Secretary at NOAA.

I am the Assistant Administrator for the

National Ocean Service.

MR. KENNEDY: I am David Kennedy.

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	Page 14
1	VICE CHAIR PERKINS: Good morning,
2	Scott Perkins, president of T-Kartor USA.
3	CHAIR WELLSLAGER: Good morning.
4	Matt Wellslager, chief, South Carolina
5	Geodetic Survey and Chair of the HSRP.
6	ADMIRAL GLANG: Good morning.
7	Rear Admiral Gerd Glang, director, NOAA's
8	Office of Coast Survey.
9	MR. EDWING: Good morning, Rich
10	Edwing, director of the Center for Operational
11	Oceanographic Products and Services.
12	MS. BLACKWELL: Juliana Blackwell,
13	the director of NOAA's National Geodetic
14	Survey.
15	CAPT. SWALLOW: Good morning. I
16	am Capt. Jon Swallow, chief of Navigation
17	Services Division within the NOAA Office of
18	Coast Survey.
19	MEMBER JEFFRESS: G'day, this is
20	Gary Jeffress, I am a professor at Texas A&M
21	University Corpus Christi.
22	MEMBER SHINGLEDECKER: Susan

- 1 Shingledecker, Assistant Vice President,
- 2 BoatUS, and director of environmental
- 3 programs, BoatUS Foundation.
- 4 MEMBER FIELDS: Good morning,
- 5 Evelyn Fields. My background is in
- 6 hydrographic surveying.
- 7 MEMBER KUDRNA: Frank Kudrna,
- 8 civil engineer and hydrologist, with URS
- 9 Corporation in Chicago.
- 10 MEMBER HANSON: Bill Hanson, Great
- 11 Lakes Dredge & Dock Company.
- MR. ARMSTRONG: I'm Andy
- 13 Armstrong. I'm the NOAA co-director of the
- 14 NOAA University of New Hampshire joint
- 15 hydrographics center.
- 16 | COURT REPORTER: Hi, I'm your
- 17 court reporter, Kayla Gamin.
- MS. WATSON: Kathy Watson, HSRP
- 19 Program Coordinator.
- 20 CHAIR WELLSLAGER: And we have one
- 21 other guest with us that I would like to say
- 22 hello to. He is our HSRP groupie, Jon Dasler.

(Laughter.)

2 CHAIR WELLSLAGER: Good to have
3 you here. The panel just wouldn't be the same
4 without you.

Well, I guess at this time it is time for the swearing in of our newest member and some opening remarks from the NOAA leadership.

Margaret Spring is going to do
that for us. Actually this will be her second
swearing-in session. I think our first one
that you had, I was sworn in, and that was two
years ago, was it not?

MS. SPRING: And it took.

CHAIR WELLSLAGER: Yes, exactly.

(Laughter).

CHAIR WELLSLAGER: And it was in Silver Spring. Margaret is a graduate of the Duke University School of Law and Dartmouth College. She joined the National Oceanic and Atmospheric Administration in June of 2009 as chief of staff.

In June of 2012, she moved into her current role as Principal Deputy Under Secretary, where she works across the agency to develop and drive strategic priorities for NOAA, with particular focus on external constituents, interagency initiatives and administration priorities.

Margaret works with the

administrator, NOAA senior leadership and the

Department of Commerce to help integrate

policy and budget priorities, and align

programs in support of the NOAA priorities and

budget.

We are very fortunate to have you here with us today, and welcome.

MS. SPRING: Thank you. So where do we do the swearing in? I am going to get up at the podium, but --

MS. WATSON: It could be done at the podium, or if you want to just stand right there with Carol.

MS. SPRING: All right. Okay. So

thank you, Matt for that introduction, and I
want to just say that I apologize that Dr.

Lubchenco couldn't make it here. She is
actually on the West Coast, but she asked me

to give her greetings.

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And can I do this sitting down?

MS. WATSON: Yes.

MS. SPRING: Is that possible?
Oh, fantastic. Wow.

MS. WATSON: Yes, you can sit.

MS. SPRING: I am particularly glad to be with you here in the Gulf. I am sorry I missed the Alaska meeting, but I was with you in Norfolk briefly and I know Dr. Sullivan gave you a very good overview of what we are doing back in Anchorage.

But I am particularly happy to be here because I am going to be here for a couple of days, not just a nanosecond, which is normally what happens to us. We get yanked.

So I am looking forward to

learning a lot as we go forward. And as
noted, I did swear in a number of you already.
So this should be painless.

So at this time, it is my honor to administer the oath of office to our new member, Carol Lockhart, and to make it official, Gerd Glang, our DFO, will sign the affidavit form after we have done this.

So Carol, you do have to rise.

I'll rise with you. Please raise your right hand and repeat for me.

WHEREUPON,

CAROL LOCKHART

was sworn in as a member of the Hydrographic Services Review Panel.

(Applause.)

MS. SPRING: I want to thank you for your willingness to serve, and I think that your specialties and expertise will be a very welcome addition to the panel. And you know, the whole purpose of this panel is to help NOAA do better and so look forward to

1 getting your input for that.

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So, I have a little bit of time to give you some opening remarks, which I am pleased to do. Matt, Chairman Wellslager, members of the panel and other special quests who are here today, I want to thank you for having me here to give the opening remarks on behalf of NOAA leadership, and I also look forward to meeting all of our partners, whether they are on the panel or in the audience or on our various visits, who work with NOAA in the Gulf on navigation and coastal hazards and resilience issues, all of which are clearly going to be part of the panel's discussions over the next couple of days.

I would also like to thank
everybody here for their continuing service on
the panel, and Kathy Watson, for all of her
work bringing us together, and I also want to
thank Tim Osborn, who has clearly been a force
behind the scenes, getting us all in the right

1 place doing the right thing.

And lastly, I would like to recognize Rear Admiral Gerd Glang for his dedication and hard work as director of the Office of Coast Survey.

NOAA and the NOAA Corps recognize the importance of his position in leading our hydrographic charting capabilities last year by returning it to the rank of Rear Admiral.

I look forward to seeing where he guides this panel as the new Designated Federal Official.

So let's go to the next slide. I don't know who's got the controls. Okay.

Great.

Last October in Norfolk, we discussed the enduring economic significance of the U.S. marine transportation system. No other transportation system, air, rail or road, comes close to moving as much cargo or generating as many economic benefits as America's ports and waterways.

U.S. ports are responsible for

moving nearly all of the country's overseas cargo volume, 99.4 percent by weight and 65 percent by value.

Each of our 50 states relies on at least 15 ports to handle its imports and exports, which totals some \$3.8 billion worth of goods moving in and out of the U.S. each day.

Our nation's ports also support the employment of more than 13 million people in the United States, which accounts for \$650 billion in personal income.

Additionally, according to the U.S. Chamber of Commerce, for every \$1 billion in manufactured exports shipped through ports, 15,000 U.S. jobs are created.

In today's economically challenging climate, a safe, efficient and environmentally sound U.S. marine transportation system is more important than ever, and NOAA plays a key role.

Most recently, our important role

is on display as we work with the U.S. Coast Guard to reopen ports up and down the east coast after Superstorm Sandy, and if you have any questions about any of that, Dave Kennedy was a key player and will give you a blow by blow, and we have a lot of great work the whole agency was doing up there.

2.0

So let's move to the next slide.

NOAA's missions some of which have their roots in 1807 when President Jefferson established the Survey of the Coast, includes safe navigation, weather and water observations and forecast and emergency response to environmental threats.

In all of these areas, NOAA

provides unique and essential navigation

products and services. And as I mentioned

before, the HSRP plays an important advisory

role in helping us execute these missions.

After each of their meetings, you take the time and forethought to help us to send NOAA a set of recommendations to help us

continually improve, expand and advance our navigation services.

So I thought I would take a little bit of time to go over what you told us last time in the Anchorage meeting and give you a little update on where we are.

So, the next slide. Following the Anchorage meeting, you gave us four challenges to tackle. I would like to provide an update on our progress on all four.

The first was to develop a frontier mapping strategy that includes gathering data that is fit for use, using integrated ocean and coastal mapping approach, that's IOCM for those who don't have enough acronyms in their lives, to multi-purpose data acquisition.

So in Norfolk, I mentioned that

NOAA had an Arctic vision and strategy

document which provides a high-level framework

and six strategic goals to address emerging

issues and stakeholder requirements in the

Arctic region, and as we developed our 2 implementation approach and our Arctic action plan, which covers 2012 to 2017, we are highlighting this integrated ocean and coastal 4 mapping approach and we are also advocating this approach nationwide. Next slide.

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With limited resources for new contracts, NOAA is taking steps to foster IOCM efforts in the Arctic, including work under the National Ocean Policy's Arctic implementation plan to put mapping results on a whole ocean and coastal mapping inventory.

One tool NOAA will use is the newly completed IOCM sea floor mapping standard, which outlines the minimum quidelines for sonar data collection to be used directly for charging needs.

Data that do not meet these charting standards are still considered highly valuable for modeling, reconnaissance and determining regional environmental conditions.

NOAA is also working on an IOCM

trackline survey photo call for vessels of opportunity transiting Arctic waters.

Initiated during a 2012 joint NOAA-Coast Guard Arctic survey, the protocol will guide any vessel with sufficient mapping capability on how and where useful survey data can be

acquired while under way.

Currently a draft version of this protocol is being reviewed. If the review stays on track, this protocol could be implemented before the 2013 Arctic season.

And I had this slide up where because it shows this year's month-long Fairweather -- NOAA ship Fairweather cruise to update nautical charts for safe navigation, supporting scientific research on essential fish habitat and establishing new tidal data.

This was an unusual survey. It
was really impressive -- when I was up in
Anchorage, we actually were there when this
cruise completed -- using a zigzag pattern, it
really covers as much as it could on a

reconnaissance survey, and we had a number of

-- a number of partners on the vessels with

us. So it sort of adhered to all of these

precepts that we are talking about right now.

2.0

So, the next slide. The second recommendation following the Anchorage meeting was to prioritize and support the collection of geodetic data. NOAA agreed.

NOAA's National Geodetic Survey is collecting airborne gravity data in Alaska as part of the ongoing GRAV-D initiative to redefine the vertical reference system of the United States.

NGS resumed aerogravity surveying in Alaska this fall. NGS is partnering with the Department of Interior's Bureau of Land Management to fly aboard their aircraft to survey areas northwest of Fairbanks and New Anchorage.

NGS also plans to return to Alaska in the spring of 2013 to survey a region southeast of Juneau aboard a Navy aircraft.

NGS has also continued efforts to densify the CORS network in Alaska, adding 13 new sites in 2012.

We agree that a lack of station coverage is an issue, especially in Alaska and the Arctic, and will continue efforts to increase this information network.

The third recommendation received from the panel was to work with the Coast Guard and the Corps of Engineers at both local and national levels to coordinate mapping and data collection and to share data.

NOAA agrees. NOAA's Office of
Coast Survey already has several programs in
place and will continue to increase these
efforts.

For example, in 2012, a NOAA Corps officer from OCS deployed to a U.S. Coast Guard cutter to train U.S. Coast Guard personnel in hydrographic operations.

The data from the cutter may be used to update chart products. If successful,

cross-pollination of NOAA Corps personnel
aboard U.S. Coast Guard vessels may be added

3 in future years.

Also, NOAA's CO-OPS center works closely with the US Army Corps of Engineers under their Comprehensive Evaluation of Project Datums program to ensure all coastal projects conducted by the Corps are utilizing NOAA title datums as prescribed by their engineering policies.

And let me just note that we partner with the Coast Guard in so many ways, and the Corps of Engineers, in various ways and so these are just specific examples but we can probably bore you to tears with all the ways we work together, including strategically at a very high level.

Lastly, you recommended that NOAA hire a state geodetic adviser for Alaska. We agreed it's beneficial to have key personnel that are familiar with local and regional issues. So while in the past, NOAA's NGS

supported a state geodetic advisory program, we are actually transitioning to a regional geodetic adviser program which will provide coverage for all states.

The position for a regional adviser in the Alaska region has been developed and is currently under review with the NGS.

This person, once in place, will work with state, local and federal officials to provide guidance on geodetic issues, assist with the state's geodetic and surveying programs and provide workshops and seminars and navigation products and tools.

Your advice and recommendations are critical to the development of our work and so this is just a down payment on the kinds of things that you have given to us and we have already started working on. So all of your time spent in these meetings is definitely beneficial.

So I am going to go to the next

slide, which really is to talk about rising up above NOAA to the interagency world that for the most part I live in.

Last time we met I mentioned our work on the Committee on the Marine

Transportation System and you may know that that's an interagency committee chaired by the Secretary of Transportation, established by executive order.

And I served for 18 months as the chair of the Coordinating Board, which is the policy board right under the Cabinet-level position, and I worked with over 24 different agencies on areas of mutual interest, because there is no one place you go, as you all know, for marine transportation issues in the federal government, and this is an effort to help find one-stop shopping and some direction and assistance.

The CMTS has continued to provide value to the administration, focusing on priorities such as the National Export

1 Initiative and Arctic marine transportation.

2 For example, the Coast Guard Bill of 2010

3 directed the CMTS to come up with a

4 coordinated policy for Arctic marine

5 transportation, and we are actively engaged in

6 that process, and Arctic has become, as many

7 of you know from your last meeting, has been

8 an area of activity externally and internally,

9 and so we are pretty far along in that

10 process, but it has been a very positive work

11 product and work effort, and mostly we have

partnered with the Coast Guard and MARAD on

developing our proposals.

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I would like to dive a little bit deeper into the committee's current activities and accomplishments, though. The CMTS has made marked and measurable progress over the past few years to improve the safety, efficiency and resiliency of the U.S. MTS.

Some of the other areas, other than the Arctic area, are: we have developed best practices to reduce damage to the MTS by

breakaway vessels, and that's on the website
- if you go to www.cmts.gov you can find that
document; improving the delivery and accuracy
of navigation information and data to
mariners, including integrating e-navigation
technologies and services, such as AIS, VMS
and PORTS, and by the way, the CMTS doesn't do
that, it's the individual agencies working
together who are doing it, so a lot of these
are things that you will hear from NOAA or
Coast Guard and in our partnerships.

The CMTS also has been tasked to find staff support and expertise to the White House Ports Task Force to develop a national strategy for future port and related physical information infrastructure investments to improve the U.S. supply chain and the movement of freight.

Go to the next slide. So the White House Task Force on Ports was established in the FY '13 budget proposal in the U.S. Army Corps of Engineers budget

1 proposal.

It's co-led by OMB, Office of

Management and Budget, and the National

Economic Council within the White House, and
as members from the departments of the
administration that have a significant role in
the nation's ports, waterways and intermodal
connections, and I represent the Department of
Commerce in that process.

The task force has been working since this past summer to develop a collective set of guiding principles that will help shape the future transportation infrastructure investment policy of this administration.

The task force is looking at both physical and informational infrastructure, and that is key. We pushed for that because it's not just bricks and mortar, it's a lot of the work that we are doing with the Coast Guard in the informational area that's going to be critical for our future success.

They are looking at addressing the

broad array of competitive and complementary objectives in the nation's ports, waterways and intermodal connections, including efficient movement of freight, economic development, safety, security, resiliency, community cohesion and environmental sustainability.

And they are taking into account a lot of the work of the CMTS, including the development that is under way right now under the auspices of the CMTS and the Transportation Research board, developing port metrics, MTS performance metrics, which will be probably folded in at some point into this process.

There is still much to be done in terms of developing a cogent plan for properly investing in the nation's transportation infrastructure, but the administration is moving in the right direction.

In addition, the task force has indicated its willingness to reach out to our

partners and stakeholders as it refines its port strategy, and we see you as key in that process.

And I will note that I believe in the, in the Coast Guard Bill that is being considered today, while the Ports Task Force is a creature of the White House, the CMTS itself is probably likely to be authorized formally in that, crossing fingers, and so that's a positive for the marine transportation system being recognized as an important component of national strategy.

So let's go to some initiatives at NOAA that underpin some of the concepts that we have been pushing forward in these two areas. Let's go to the next slide.

An initiative that we have been working on is increasing port resilience and, you know, the Gulf is a great place to talk about that.

These concepts are being embraced by the CMTS on the Ports Task Force, which is

good, and we are going to continue to press forward on that.

As most of you know, Port Tomorrow is an implementation strategy that supports

NOAA's positioning America for the future campaign.

It emphasizes resilience and it brings NOAA information and services together with other key resources to help constituents address marine transportation planning and operations issues related to safety, security, capacity and durability.

We are also partnering with additional federal partners, including the CMTS and its member agencies, such as the U.S. Department of Transportation and the Corps of Engineers, and in addition we are working at the federal level, partnering with the local community to obtain direct feedback from potential stakeholders, and so this is a tool in progress.

As the tool develops, we will of

course seek your input and advice and insights
to ensure it provides an effective integrated
decision support structure for envisioning,
planning and operating the resilient and
economically vibrant coastal port community
infrastructure of the future.

So, next slide. So in sum, we look forward to hearing your input in this couple of days on how we can continually improve and advance our navigation services efforts.

We certainly have opportunities at the highest levels to have input and so we will, you know, take your recommendations very seriously.

NOAA's core missions remain
essential and compelling despite budget
constraints, but we need to tap creativity and
innovation to deliver new technologies and
ways of doing business, communicating
information and being more efficient.

We also need to strengthen and

expand NOAA's partnerships, thinking beyond our traditional partners and identifying new alliances to help achieve agency goals.

For example, in the Arctic we did create an MOU with three oil companies to share data that are going to go into better forecasts and all sorts of other decision tools up there, where there's limited coverage on certain areas. I think that was a great innovation and this is the kind of thing we are open to discussing.

You are valued advisers, but you are also ambassadors for NOAA to your respected professional circles, and so we look forward to not only hearing your feedback, but also hearing what other people think and telling other people what we are doing so people are more and more aware of this really important role that the federal government and NOAA plays.

So last May in Anchorage, Dr.
Sullivan spoke to you all about how -- NOAA's

positioning America for the future so Dave 1 2 Kennedy is going to a little bit later talk more specifically about what NOS is doing 3 there. We are very excited about that effort, 4 5 and Hurricane Sandy is one example of that. 6 And so it's great that in the 7 agenda we are going to cover a lot of areas 8 that are fully in the areas that I work in and 9 in the interagency. 10 I am going to learn a lot and thanks a lot for your service and your 11 12 interest and I look forward to talking to you 13 Thanks. more. 14 CHAIR WELLSLAGER: One question. 15 MS. SPRING: Yes. 16 CHAIR WELLSLAGER: Who is swimming

in the picture?

18 MS. SPRING: Who would you say?

19 We will have to do a crowdsourcing on that.

20 MEMBER BARBOR: It turns out

21 that's Tim.

17

22 (Laughter.) 1 MEMBER BARBOR: He is everywhere.

2 So --

CHAIR WELLSLAGER: Okay, Tim,
would you mind being the MC now and doing some
introductions for us for our next speakers?

MR. OSBORN: Yes, and I'd like to welcome all of you to New Orleans and it's really a pleasure and it's an honor to help support and be a part of this HSRP.

The agenda is going to just be slightly reversed, with the fact that a good friend of ours, Gary LaGrange, will come up and address you here in just a moment, as well as Kelly Schulz.

In introducing Gary, I'd like to ask each of you, right now, in their heart of hearts and their deepest secrets, who has been a musician or has a family member that has ever been in a high school band or you have always wanted to play a musical instrument?

How many people? Raise your hands. There you go. There you go.

You are about to hear a speech about the Port of New Orleans and a welcome to New Orleans from a trombone player from the University of Louisiana Lafayette.

And trombone players and port directors share a common bond: you don't know how they do it -- I mean, look at how you play a trombone -- you don't know how it works, but you know that they love what they do, either playing their music or in being a port director.

As Gary gets ready to come and address you, I'd like to share one story and the fact that port directors also share not only their love of their jobs, but also their commitment to their community.

During Deepwater Horizon, during the early days of Deepwater Horizon, it was an environmental tragedy; certainly we saw loss of lives out there as well.

But there was this looming question: the fact that you had this massive

spill just outside Southwest Pass of the

Mississippi River, the world's largest port

complex, the busiest waterway on the planet,

and the question came up as to, you know, what

was going to become of all that commerce and

all that industry and all those jobs depending

upon that critical river and port complex.

And I got a call from Gary, saying, "Come to the port, you're going to make a speech."

"Okay. Sure. What are we going to talk about?"

"We're going to talk about how we are going to be open for business."

And Gary and the Port Commission held a special meeting in the early days of Deepwater Horizon and invited the Mississippi River pilots, the Captain of the Port and the United States Coast Guard, myself and others, to get up in front of the public meeting of the Port Board, with the press there, and essentially reassure everyone and the public

and the community and the media, that not only were we going to stay open for business, but we were going to continue to stay open for business, and that the port complex that was the largest in the world, the busiest waterway on the planet, was going to make its way through an environmental disaster and continue to support the jobs that are so dependent on keeping that waterway and keeping that port complex open across the entire United States.

That was an initiative led by Gary LaGrange, not only as a port director, but as a representative not only to this region, but to all the interests that we see expressed across the country that rely upon Gary, rely upon the port, rely upon the people that he works with, to maintain the commerce and industry that goes by this area every day.

I would like to thank you for your time and also introduce a good friend of mine, Gary LaGrange.

MR. LaGRANGE: I had no

understanding, while getting coffee this morning, Tim asked me what I played in the band back in college. Now I get it. Thanks, buddy. Appreciate that.

Actually, that paid off. That was a pretty good gig because it allowed me to work my way through graduate school by playing in a rhythm and blues band for nine more years. So no, it didn't take me nine years to finish graduate school, though.

Well, welcome to New Orleans, bienvenue one and all. We are tickled to have you all here. I remember back in 2002, not long after George W. had been elected president, he came to the Port of New Orleans for a visit, and when he got out of this limousine, out on the docks in the middle of our container terminal, I said, "Mr. President, bienvenue."

And he looked at me and he said, "Say what?"

"I said welcome. Welcome. I'm

glad to have you here."

Those were really -- oh, by the way, three months after that is when he imposed with the World Trade Organization a Section 201 embargo on imported steel, which only constituted 37 percent of our revenue here in New Orleans at the time.

So I don't know that he really was welcome. But eventually he made up for it, certainly in the post-Katrina days, in the ensuing months, I think he made 18 trips down here to New Orleans over a period of a year and a half to two years, and we truly are appreciative of his administration.

New Orleans is a city that has really made strides in coming back since what we still consider the worst natural disaster in the history of the United States, arguably along now with Sandy, according to Governor Cuomo this morning, anyway.

So, we think it's a city that has certainly come back in every aspect, not just

the port and the maritime industry. And a lot of the reasons for that has to do with the big thank you that has to go out to NOAA, and I try to mention it in every speech that I possibly can, of course along with the Coast Guard, the Army Corps of Engineers and all of the other players who come in at a critical point in time to provide the necessary surveying that we need to have done, and just recently I witnessed the Thomas Jefferson, following Sandy, immediately on the point and on the scene, allowing ship channels to be verified, certified as safe for passage, and allowing the ports and the movement of commerce to be open again.

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As Tim alluded to, the Port of New Orleans is responsible for 380,000 jobs in the United States; in the state of Louisiana,

168,000 jobs; in the greater New Orleans area,
67,500 jobs because of the Port of New Orleans alone.

In Louisiana, one in five jobs are

here because of the port and the maritime industry -- one in five jobs, in a study that was recently completed.

So people all understand the port and the maritime industry, and certainly you are going to hear from Kelly, my counterpart, here in a few moments, on what tourism does, and we try to augment that as well, by the way, with our cruise ship activities as much as we can at the port.

But what you are looking at in the 290 mile stretch on the lower Mississippi River, from Baton Rouge to the mouth of the river at Southwest Pass, constitutes the largest port system in the world, bigger than Rotterdam, Singapore, Shanghai, any of them.

The movement of 500 million tons of cargo a year, 500,000 barge movements a year, 12,000 ship calls a year, 6,000 in, 6,000 out. We think that's pretty magnanimous.

Excuse me. I have developed a

cold as well. Me and the pilot have colds.

I guess it's the water, yes.

But anyway, we like to pride ourselves, arguably, we are the number one importer of coffee in the United States.

Sometimes New York is.

And they cheated by the way, back in 1952, the coffee exchange imposed a surcharge on importations of coffee into New Orleans to maintain their number one status.

So we joke with New York all the time about it. But arguably, for the most part, two out of three years, New Orleans is the number one importer of coffee.

We are the number one certified London Metal Exchange port in the United States, and this is sort of an anomaly, because when we had the recession, the global recession, in '07, '08 and '09, we actually had an uptick in cargo volume by 12 percent.

That's only in non-ferrous metals, copper, lead, aluminum, zinc, nickel, tin and

even steel billets now. And what happens is
when the market goes belly-up, all those nonferrous metals come from every corner of the
world into New Orleans -- and Detroit is
number two -- and they are stored in our
warehouses throughout the city, our certified
London Metal Exchange, soon to be Hong Kong
Metal Exchange warehouses.

So as I said, it was an anomaly with the recession, in that by being a very diversified port, it really saved us in the sense that we had some cargo coming in, where other ports were in double digit inflationary numbers.

We are also the number one importer of plywood and wood building products, mainly from Argentina and Brazil, in the United States.

We are the number one importer of raw rubber, from Malaysia and Indonesia,
Singapore, in the United States. We are the number three importer of steel in the United

1 States.

We are the number one exporter of poultry in the United States, having just finished and cut the ribbon on the largest blast freezing facility in the northern hemisphere.

And finally, we are the fastest growing cruise port in the United States. We are now rated number six overall. We have grown exponentially at a rate of 880 percent in the last 10 years.

So we are really proud of that.

We have two cruise terminals and are about to break ground on a third cruise terminal, with an upscale restaurant to be built on top of it for a great river view of the skyline and the city at Poland Avenue, and we think that's going to be really, really a good thing.

A unique thing, cruise lines' international association just also completed a study. The average cruise passenger -- what do cruise passengers do to the economy in

terms of an economic impact, by way of the port and maritime activities?

The average cruise passenger in any port in the world will spend in direct spending out of his or her pocket \$95 a day.

The average cruise passenger in New Orleans will spend -- and I hope your follow their trail -- \$335 a day in direct spending.

Yes, and so we are tickled to death about that, the restaurants, the hotels, the museums and all of the other great accourrements that Kelly and her team does every day, day in and day out, to build and to nurture.

You probably see a lot of construction going on out in the streets. We are trying to hurry and get the city ready for the Superbowl in February, not to mention one week away from the Superbowl is Mardi Gras -- go figure -- which is a six-week process, as you all know.

But anyway, those are a few notes

I wanted to mention about the port, and I really appreciated your commentary and your PowerPoint just a little while ago.

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The White House Ports Task Force, God bless you all. God bless and thank God and finally. That points to, of course, a recent, and alludes to the recent study that the Corps of Engineers did that dealt with infrastructure, or the lack of infrastructure, or the substandard nature of infrastructure in our maritime industry in the United States, that dealing primarily with, of course, dredging issues or the lack of dredging issues. It also deals with the decrepit condition of our locks and dams on our inland waterway system, and by the way, this Mississippi River, as it passes through New Orleans right here, connects us directly, with navigable waterways, to 33 states and three Canadian provinces, 14,500 miles of maritime transportation activity.

Pittsburgh, Louisville,

Cincinnati, Chicago, Minneapolis, Sioux City,
Little Rock, St. Louis, even Tulsa, Oklahoma,
all connected to New Orleans by waterways, all
maintained at no less than nine feet, maybe
not today because of the upper Missouri crisis
and the drought, but allover a minimum of nine
feet of water draft, if not 12.

So we are really happy about that. The one thing that is disturbing, however, and I am preaching to the choir, so bear with me on that, is in the next -- by 2020, we need an investment of \$13 billion to go into this infrastructure.

As it stands right now in Washington earmarked, there is \$7 billion. Seven out of 13 isn't going to get it.

By the year 2040, the report goes on, we need a \$28 billion investment. As it stands right now, \$16 billion is in place.

That won't get it either. That's not a passing grade as I see it.

We know that in the next four

years, the ports in the United States will
invest \$18 billion in infrastructure, and that

So that's a lot of money when you add it all up. But it's sorely needed. It has to happen. The opening of the Panama Canal in early 2015, we know, is going to necessitate an influx of a lot of new incremental cargo and traffic.

our private partners will invest \$27 billion.

The projections have it, just from a container standpoint, not even the tankers or the bulkers or the cruise ships, just from a container standpoint, roughly 25 million

TEUS. That's a 20 foot equivalent unit container, 25 million TEUS by the year 2028, at a rate of about seven percent growth per year; 80 percent, 75 to 80 percent according to three studies that were recently completed, Booz Allen Hamilton, Parsons Brinckerhoff and the A.T. Kearney Group all did studies and all pretty much agree that 75 to 80 percent of that cargo will go to the East Coast, because

1 that's where the consumers live.

But we are real happy on the Gulf Coast, quite honestly, which is where the other 20 to 25 percent will go, because on the Gulf Coast we really only have four competing ports -- Houston, New Orleans, Mobile and Tampa -- for the container cargo.

On the east coast, as you all know again, there are 12 to 13 competing ports. So the pie is a lot bigger but so is the competition.

We feel good about it. I can tell you right now, in my honest opinion, there is only one port really ready if the canal were to open today with a 50-foot navigable channel, and that's Hampton Roads.

New York, New Jersey, once the Bayonne Bridge project is completed, and the bridge is heightened, then they will be completely ready.

Baltimore is ready but they are a little far up there to the north, although

they will get their fair share; and Miami has a commitment to go to 50 feet by dredging, through a public-private partnership.

We now have the legislation here in Louisiana. Since the 1980s we have had authorization to go to 55 feet on the Mississippi River, but no appropriations to go with it.

We have now, Congressman Cedric Richmond has a bill, the Dredge Act of 2012 which would appropriate, call for the appropriation, to get the river to 50 feet, and that would be really good for us.

Last year, with the high water situation, we did a study. This is a really interesting study. With the value of cargo coming into the Mississippi River on those 12,000 ships that I alluded to just a little while ago, at \$400 per ton being the value of the cargo, for every one foot of draft that we lose or gain, per ship, for every one foot, the economic consequence is \$1 million to the

1 good or to the bad, per ship call.

So when we tell Congress and we testify before the various and sundry groups in Congress, that it does take on an average year -- God knows we haven't had an average year lately -- \$110 million, \$120 million to dredge the lower Mississippi River. That's minuscule when you compare it to the economic consequences of one foot.

So last year, when we had the high water due to siltation at the mouth of the river, we actually closed the river down for about a three-month period -- we didn't close it down, but we minimized it to, what John, 44 feet I think? Forty-two feet.

Forty-two feet. So if you have got a 45-foot project draft, what the Corps is really doing a two-foot overcut under the keel, so you really have 47 feet, you, in essence, just lost \$5 million per ship call in which you are not capable of hauling.

So it's quite severe. It's a

huge issue. It's one that, you know, we can't seem to -- testifying before the Ways and

Means Committee not long ago on House Bill

104, the RAMP Act, Realizing America's

Maritime Promise, the point that was made and the point that we continue to make, is in 1986 we passed the Harbor Maintenance Trust Fund.

The Harbor Maintenance Trust Fund purpose, as Bill, you well know, and sole purpose is intended to maintain America's ports and harbors at their project depths.

Thirty percent today, ladies and gentlemen, of our ports and harbors are not maintained at their project depths in the Untied States.

That's over 300 ports and 600 small harbors in the United States that don't have their adequate draft. \$1.5 billion a year is realized in ad valorem taxes that are collected on imports from that tax.

About 700 million of it goes towards dredging our channels. That's

criminal. That's criminal. Where's the rest of it going? That's a good question.

And we have got to, we have got to get this bill passed. I think there's well over 100 co-sponsors on it now. We have got to put the full use of the Harbor Maintenance Trust Fund for its intended, and only its intended purpose.

It wasn't meant to build sea walls. It wasn't meant to buy gantry cranes. It wasn't meant to build transit sheds. It was meant to dredge our channels.

All of the money that you invest in your maritime infrastructure and your port, all of the things I just named -- railroads, intermodal railyards and terminals, all of those mean absolutely nothing if you can't get to the port, if you don't have a channel.

So the channel has got to come first. That's a problem our neighbors in Gulfport have right now -- \$570 million to invest in their port, but they can't deepen

1 their channel more than 36 feet.

If you can't get to the port, you don't really have a port at the end of the day.

One of the things that we pride ourselves here with in New Orleans also is our intermodal connectivity. The railroads followed the river system early last century. We are the only port in the United States that has deep draft port in the United States that has all six trunk line one railheads here.

We have the CSX, the Norfolk
Southern, the Canadian National, the Kansas
City Southern, the Burlington Northern, the
Union Pacific, all located here in the early
parts of last century, and that's a real plus
for us because it connects us to the three
main points.

Canadian National, as an example, is promoting Prince Rupert up on the Northwest Coast, Halifax on the Northeast Coast and New Orleans down here -- it makes all of the sense

in the world -- and across Canada.

The -- last year -- and I'll sum this up real quickly -- last year we were fortunate in that we had invested about a billion dollars in our port over the last 10 years, and that is our own money for the most part.

We don't tax anybody. There are no taxes. All of our funds that come in are made over the docks. We operate the port -- even though it is a state entity, we operate it as a private enterprise, and we like it that way. It does really, really well.

We are looking at some publicprivate partnership opportunities right now.
We need about \$500 million incrementally, 250
here and then 250 later, to expand our
container terminal to take it from its current
640,000 TEU capacity, which has doubled, by
the way, in the last three years, up to 1.5
million TEUs, which is what we are trying to
get to, and that's a footprint that we have

1 right now.

We think we can do that. We have got eight container carriers. We have got 17 bulk carriers, 75 truck lines that all call into port, and I just mentioned the six railroads, all six of the big boys are located here.

So the intermodal connectivity is really, really good, and the ability to reach our market we like, because we have got 47 million people within a 500 mile radius of New Orleans.

And we employ that in our cruise activities a lot, in fact, not only with the truckers coming to the container terminal, but we market New Orleans as two vacations in one — come and enjoy the Big Easy, spend a couple of nights, and they do; on the average our cruise passengers will spend two nights in our hotels and I told you what they spend. We like that too. And then take your cruise, so two vacations in one.

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All in all though, at the end of the day, it all evolves around a channel that we must dredge, a channel that we must maintain, a lock system throughout the inland waterway system that we have to maintain, and certainly, we certainly know that, you know, with the Harbor Maintenance Trust Fund, we believe that's adequate enough to keep the deep draft channels, if the funds were appropriated in the correct place, and we know that on the inland waterway system, with the addition of the fuel charge that is just being battered about and talked about, and certainly destined to be approved, that the industry itself, from a user fee standpoint, will provide their match for those locks and dams.

The question is, to activate

Congress, and to get them in a mindset where

they understand where our two priorities are.

Thank you and enjoy the Big Easy. Laissez le

bon temps rouler.

CHAIR WELLSLAGER: Do we have time

1 for a quick question or no?

MR. OSBORN: Yes, I was just going to say two things. One is, Gary is here if you had any questions, and also, I would like to make sure that you extend a thanks to Gary for his staff, of arranging a tour of the Port of New Orleans later after lunch today, and we really appreciate that hospitality as well.

Any questions please?

CHAIR WELLSLAGER: David.

MR. KENNEDY: So Gary, I think I was reading this about the Port of New Orleans or Mississippi, and it dealt with coal and unloading of coal and then taking it down to the river to an anchorage and then adding more.

What -- that seemed intriguing. I didn't quite follow that. Was that you?

MR. LaGRANGE: Yes. Most of it is downward at the Port of Plaquemine below us.

There are five ports on the lower Mississippi

River: Baton Rouge, South Louisiana, New

Orleans, St. Bernard and Plaquemine, each one totally different, with their own niche of activities.

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That's basically what Plaquemine does for the most part. It's a great operation, and there's a little that is done above us at the Port of South Louisiana also.

VICE CHAIR PERKINS: Gary, you mentioned that the port here is operated as a private entity.

MR. LaGRANGE: Right.

VICE CHAIR PERKINS: Can --

MR. LaGRANGE: Well, it's a public entity but we operate it in a private enterprise mode.

VICE CHAIR PERKINS: Is that unique in -- does that give you an advantage over New York and Los Angeles? Can you speak to that a little more?

MR. LaGRANGE: Well, I wouldn't say it gives us an advantage. From a capital improvement standpoint and development of the

port, I wouldn't have to go look for a publicprivate partner right now and give up an equity investment in the port, if we had the dedicated funds that some of them have.

Houston, as an example, has an ad valorem tax that is generated for the port, and generates about \$90 million a year. Well, that's a nice windfall. It would be nice if we had that \$90 million a year to call on.

But by the same token, New Orleans is not Houston, and as Kelly can tell you, it's a whole different demographic structure. To impose a tax on port operations, we frankly, because we have the Mississippi River, see that as a huge magnet and an asset that we don't want to take for granted, but we think the cargo is going to come here anyway because of the intermodal connectivity.

So some have it, some don't. I would say probably 25 percent of our ports -- public port authorities in the nation do not have a dedicated source of income from a tax;

1 75 percent do.

In the case of Mobile, they don't have a dedicated tax, another example. But the governor doled out \$300 million from their retirement program to build a container terminal.

You know, I am trying to get the Governor General's ear on that but I haven't been successful.

VICE CHAIR PERKINS: Thank you.

MR. LaGRANGE: Sure. Yes sir?

MEMBER JEFFRESS: How far inland do the exports come from that go through the ports in New Orleans? Like, what states feed the export industry? And do you get political support from those states?

MR. LaGRANGE: Yes, in fact that's a great question. The gentleman nodding his head back here is Sean Duffy. Two years ago we created something called the Big River Coalition and he is our executive director to the Big River Coalition.

That's a coalition of all of those states. Sixty two percent of all of the grain grown in the United States comes through here. So that's of course Iowa, Illinois, Indiana.

On the coal side -- you mentioned coal just a minute ago -- that's West

Virginia, certainly, you know. So we bring all of those guys together at whatever time we need to bring together for discussions on why the river needs to be maintained, why the locks and dams need to be maintained and rebuilt, because I just got off the phone a minute ago with the Commissioner of Agriculture here in Louisiana. He's taking a very active role because all of the crops that are exported out of here come from mid-America, the bread basket.

CHAIR WELLSLAGER: Gary, I've got a little question for you. In the event that Panama Canal is -- when it's reopened, how far up the Mississippi, to, say, the Port of New Orleans, would you try to -- the 50-foot depth

of the deepening projects for the channels? 1

2 MR. LaGRANGE: To Baton Rouge, 291 3 miles. Take it all the way to Baton Rouge, because we have -- between here and Baton 4 5 Rouge we have 11 refineries and 9 grain

> And those, those guys will benefit using that \$400 per ton average that I alluded to earlier. Remember, a million dollars per foot, per ship.

11 CHAIR WELLSLAGER: Carol.

> MEMBER LOCKHART: Yes, just following up on the one million dollars per foot, like, what is the typical under keel clearance right now of the ships coming into port? Two feet?

> > MR. LaGRANGE: Two feet.

MEMBER LOCKHART: Thanks.

19 CHAIR WELLSLAGER: Anybody else?

Well, thank you very much. It's been very,

21 very informative.

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elevators.

22 MR. LaGRANGE: Thank you. Please 1 enjoy yourselves. Spend money.

MR. OSBORN: Matt, if you would allow we are going to go ahead and turn over to Kelly Schulz. Kelly is a vice president with the New Orleans Convention & Visitors

Bureau. Actually, she is a lifelong native of this area and she will talk about some of her family roots here in this area.

Kelly is also uniquely suited for the job in the fact that she is a graduate of LSU in psychology and mass communications, which means that I think it's a true art when you actually have the ability to reach out to large groups of people and let them realize inside how deeply they need to come to New Orleans and actually be here and spend money.

We appreciate your coming to talk to us, and as New Orleans, as you heard, in terms of the Port of New Orleans, New Orleans is a living city of many parts and many industries and many economies, and Kelly can talk about some of the things that really are

important to this city in terms of its tourism and convention business here in the New Orleans area.

MS. SCHULZ: Good morning.

Welcome to New Orleans. It's a pleasure to have all of you here. I want to bring greetings on behalf of everyone who works in tourism in our city, which is our number one industry; 78,000 people in every neighborhood in New Orleans are employed by tourism and by meetings and conventions like the one you are having here today.

So I know there are lots of different experts in this room, and when I started talking to Tim about this meeting and coming to welcome you today, he was telling me a little bit about all of you and your expertise and he said, you know, we love what we do, but really we are a bunch of geeks.

So I want to let you know that geeks are welcome in New Orleans too, and you guys are going to have a great time while you

1 are here.

As Tim said, I am a native of New Orleans. I grew up in St. Bernard Parish. My father actually recently retired from 35 years of service with the U.S. Army Corps of Engineers.

I know that Colonel Fleming is going to be one of your guest speakers at this meeting, so I have a lot of respect for the work of that organization.

And certainly your visit here is important to our tourism economy, but your particular work, to help cities like New Orleans prepare for and respond to hurricanes and the work that you all do involving the restoration of our coastlines, is very important to us.

So we really appreciate you all being here. I want to tell you a little bit about, like Gary, the Port of New Orleans, the tourism industry and our organization are critical to the success of New Orleans.

Tourism in New Orleans is big
business. It's 78,000 people in every
neighborhood who have jobs here. Last year we
had 8.75 million visitors from all over the

Those visitors spent \$5.47 billion.

world.

So when you come to meetings like this, yes, we want you to have a good time, and we want you to have a productive meeting; but when you go home, you should feel good about the fact that you have contributed to the lifeblood of this city.

Without tourism, New Orleans would not operate. Without tourism New Orleans definitely would not have recovered from Katrina, from the BP oil spill, or any other struggle that we have had to face over the past several years.

Tourism in New Orleans brings more tax revenue than any other business sector.

One in every 12 jobs in Louisiana is related to the tourism industry.

Funding from tourism provides

critical resources for every resident of the city, so even if you don't work in the tourism industry like I do, the money from our industry provides money for public transportation, for schools, for police and fire protection, even people that are not employed in tourism and think it doesn't matter to them, it does matter to them because it is the lifeblood of our economy, and without the money generated by this industry, we would not have a Superdome, we would not have a Convention Center, we would not have public transportation and we would not have money for schools or any of the other things that make our city run.

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You guys are at a great property.

You are here at the Astor Crowne Plaza, which
is at the entrance to our crown jewel, the

French Quarter.

Right downstairs is one of the best restaurants in the city, the Bourbon House, which is part of the famous New Orleans

Brennans family of restaurants, so I hope that you all can get out and enjoy the city a little bit if you have any free time.

Certainly, if you can stay after your meeting, we would love to have you extend your trip a little bit.

But I want to show you a brief video, just to sort of give you a glimpse of what you can expect while you are here in New Orleans.

This is called: "It's New Orleans: You're Different Here." And I hope that when you all are here, you do things a little bit different.

You maybe eat a little bit more, drink a little bit more, stay out a little bit later -- do some of the things that you normally wouldn't do at home.

So, let's just take a look at this video. It's about three minutes and it will give you a glimpse into some of the different parts of our city for you to enjoy.

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(Video played)

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MS. SCHULZ: Okay, well,

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unfortunately the video is not going to work.

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I apologize for that. But I just want to

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leave you with a quote from the famous author,

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Some of you who are from this Chris Rose.

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area may know the work of Chris Rose.

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He has written several books about

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New Orleans culture. He is a columnist, or

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was a columnist for our local newspaper and he

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really can sum up New Orleans culture, I

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think, just about better than anybody.

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So this is a -- sorry about that.

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This is how Chris Rose describes to people of

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America who the people of South Louisiana are.

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"Dear America, I suppose we should

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introduce ourselves. We are South Louisiana.

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You probably already know that we talk funny

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and listen to strange music and we eat things

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that you'd probably hire an exterminator to

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get out of your yard.

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"We dance even if there's no

radio. We drink at funerals. We talk too much and laugh too loud and live too large and, frankly, we're suspicious of others who don't." 4

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So, with that, I want to let you know, thank you for coming to New Orleans, and have a great conference and a great time in our city. Thank you.

CHAIR WELLSLAGER: Kelly, I have to ask you, LSU? Why? Why not Tulane? Keep it local.

MS. SCHULZ: Well, you know, I --I went to LSU and it was a great opportunity to go away from home and kind of be on my own a little bit, and after I left there, I went to Dallas and started my career in Dallas, and I came home actually six months after Hurricane Katrina.

So some of the people in Dallas thought that I was crazy to come home to a city that had been devastated by a hurricane, but it was an opportunity, I felt, to come and

be part of the rebuilding and tourism has certainly been critical to the rebuilding of the city post-Katrina. So --

CHAIR WELLSLAGER: Well, that

follows up with my next question. Post
Katrina, has there been a linear progression

of tourism dollars and where do you see things

going? Is there still a lot of rebuilding

that needs to take place?

When I was flying in yesterday, I noticed cranes are working everywhere. What is going on in the city itself?

MS. SCHULZ: Well, it's been seven years since Katrina. It was August 29th, 2005. And what happened for us was very interesting, because you had the catastrophic damage in the outlying, suburban neighborhoods, like where my family lived, in St. Bernard, that -- those are the images that everyone saw on television, where there were people with water up to their rooftops, total catastrophic devastation.

But then you had this area of the 1 2 city, the French Quarter, the heart of the tourist area, that didn't have those flood 3 waters and didn't have the damage, but we did 4 5 have three of our most iconic tourism 6 buildings -- the Hyatt hotel, the Superdome 7 and the Convention Center -- as the site of 8 complete devastation and a lot of human 9 suffering that took place at all three of 10 those buildings.

So for us, we had to fight a pretty massive image battle and educate the public on the fact that you can still come and visit New Orleans.

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Now, there was certainly a time in the immediate aftermath of the storm that you could not come and visit New Orleans. But -- the Convention Center was closed for example from August of '05 until May of 2006.

So prior to Katrina, we would get about 8.5 million visitors every year. The year after Katrina, that number dropped down

1 to 3 million.

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And those 3 million visitors
really weren't visitors. They were people who
were in town associated with the recovery,
like FEMA workers and insurance contractors,
things like that.

So we dropped down to 3 million visitors in 2006, which was an all-time low for us, and because of the work of the Convention & Visitors Bureau, and because of the hospitality industry, and because of a federal grant that we were able to get for marketing the city, because we had to make the case that tourism doesn't just happen on its It takes marketing, especially when you are overcoming such a terrible disaster like that of Katrina, and so many misperceptions and those graphic images of destruction that have been burned into the minds of millions of travelers around the world, we needed a federal grant to get out there and market the city and overcome misperceptions and tell

people that they could come back to New Orleans.

And the part of the city that was not devastated is the part that needs them the most, and by coming back, they were actually contributing to the recovery of the city.

So I am happy to say that, between 2006 and 2007, we went up from 3 million visitors a year to 7.1 and I think that was in large part to our marketing campaign, but it was also because of the reopening of the Convention Center, the Superdome, getting some of those critical buildings back in business.

And last year, as I said, we were up to 8.75 million, and the year after the oil spill, we had a record year for tourism as well, and that was because we also received a grant, a federal grant, or actually a grant from BP, to be able to market the tourism industry post-oil spill, and let visitors know -- we actually cited the work of NOAA a lot.

When we told visitors it was safe

to come and eat the seafood, we used data from your organization to back that up, so it wasn't a tourism marketing person say you can come visit, it's okay. We used the facts from the experts like you.

So, the city is doing great. We are getting ready to host the Superbowl, as Gary said. We have had -- we have won just about every award you can win.

We were just recently named

America's favorite city by Travel and Leisure

Magazine. Conde Nast Traveler named us one of
the top 10 destinations in the country.

Those kinds of awards for us are huge, because it gives us a marketing opportunity, but it also means that the visitors who are coming are going back and rating us very highly.

So it's not just a marketing campaign. The visitors are actually coming back and saying very good things about the visitor experience.

CHAIR WELLSLAGER: Well, I can say this, as I was flying in, the five people around me were all coming into a different conference that was being held this week. So, obviously you are doing something right.

MS. SCHULZ: The conferences are very important, and again, I can't tell you enough what your group means to us, we know you had many choices of where you could have had this gathering, and so the fact that you chose New Orleans, it really does mean a lot to us, and you are going to leave a really lasting impact on our community. So thank you very much for choosing New Orleans.

CHAIR WELLSLAGER: Any other questions? Ken.

MEMBER BARBOR: Gary did a good job of putting in perspective the commercial fishing or commercial shipping traffic and passenger tourism aspect of it.

No one has addressed either recreational boating or fishing, either

charter fishing or commercial fishing. Do you have any -- obviously not so much commercial fishing, but charter or recreational boating.

MS. SCHULZ: The New Orleans

Convention & Visitors Bureau is a membership organization, and we actually have many members who are in the charter fishing business.

So it is a part of why visitors come to Louisiana and come to New Orleans, particularly the international visitors. We host many visitors from the UK, Germany, France, Australia, all over the world.

And that is something that particularly the international visitors who come and are able to stay longer periods of time, they will participate in the charter fishing.

We did a lot of work with those members who do charter fishing in the aftermath of the oil spill. Many of their businesses were just decimated, either because

	Page 86
1	of reality or because of misperception about
2	the actual state of the Gulf.
3	So it is something that is
4	important to us, and it's one of the reasons
5	why people do come to Louisiana.
6	CHAIR WELLSLAGER: Okay, well,
7	anything else? Thank you very much.
8	MS. SCHULZ: Thank you.
9	MR. OSBORN: Matt, thank you.
10	CHAIR WELLSLAGER: Okay. Thank
11	you Tim. Mr. Kennedy, would you like to join
12	us? We are running a little bit ahead of
13	schedule. But if at all possible, would you
14	mind
15	MR. KENNEDY: No, I have 53
16	slides.
17	CHAIR WELLSLAGER: Oh, okay, very
18	good.
19	(Laughter)
20	CHAIR WELLSLAGER: Well then I
21	think we found our place to get back on track.
22	David Kennedy is the Assistant Administrator

1 for NOAA's National Ocean Service.

He served in this role in an acting capacity before being named as the assistant administrator by Under Secretary of Commerce and NOAA Administrator Dr. Jane Lubchenco.

He comes to the assistant administrator's office after having served as Director of NOAA's Office of Ocean and Coastal Resource Management, the OCRM, in Silver Spring, Maryland. OCRM leads the nation's efforts to manage and conserve ocean and coastal resources.

As the director, Mr. Kennedy

oversaw OCRM's Coastal Programs Division,

Coral Conservation Division, Marine Protected

Areas Center, and the Estuarine Reserves

Division.

Included in OCRM's responsibilities are federal consistency, coordination with state and local coastal zone management programs and the National Estuarine

Research Reserves System, the new National

System of Marine Protected Areas, and the land
acquisition grant program, Coastal and

Estuarine Land Conservation Program.

I am not going to get that word right. I apologize about that but --

MR. KENNEDY: That's okay.

CHAIR WELLSLAGER: David, please.

MR. KENNEDY: Okay, those of you - I have got a booming voice but I'll turn
that on anyway -- those of you that know me,
know I don't have 53 slides.

I had a prepared speech and got to thinking about it this morning, and my speech writer isn't here so I can tell you this story, and really decided I wanted to kind of change what I wanted to talk about a bit.

But I know Dr. Sullivan in

Anchorage talked about positioning America for
the future as a topic. It's something that I
have been working on since I took over as the
Assistant Administrator for NOS.

A couple of things. One, if you don't know, we have been kind of going through a major, insightful look at what we do and how we do it.

NOS is kind of an eclectic place and a lot of things go on there, so we haven't had services. But we have sanctuaries and we have estuarine reserves and we have coastal management and we have on and on and on.

And how you tell a story about what all that NOS means has been a challenge for a long time. And so I have come up through the organization and been in on many, many of the discussions.

So one of the things I definitely wanted to do is see if one, we had a look and see if NOS is doing the right things and how we should do them better and be more efficient and effective; but two is how we message ourselves.

We have got the Weather Service in here and the Weather Service has a tag line,

Weather-Ready Nation. How great is that? I mean, Weather-Ready Nation, you kind of get it right off, what the Weather Service is all about.

You've got National Marine

Fisheries Service talking about "End

Overfishing," kind of a line that really

captures what they do.

NOS has had a little more

difficulty coming up with that. So in the

process of rethinking kind of who we were and

what we wanted to do, we also have been

working on a tag line, and that's where

Positioning America For the Future really came

from, is a discussion amongst all of our folks

to say, what is, what is the phrase that kind

of captures all of what we do.

So that's what we have adopted.

It's something that has been accepted,

obviously, at the highest levels of NOAA. In

fact for a while we thought NOAA was going to

steal the tag line for themselves.

We had to -- we got a little nervous about, oh my God, it's taken us years to come up with a tag line. Now NOAA wants it? What are we going to be?

So, but they have since said no, you take it. So what I wanted to do here is a couple of things: one, try and expand a little bit on what Dr. Sullivan talked about in Anchorage, but using an all-hands briefing that I did just recently, and part of selling this tag line is getting your organization to understand what the tag line means, and how they think they fit.

So the slides I have here are ones that were used just a few weeks ago by me and my deputy to talk our folks through, okay, this is our tag line, how do you think we fit, we want to talk to you about how you fit.

So we will go through that briefly. But what I really want to get to is, we use two examples, and one is the Arctic and Margaret actually covered a few of the issues

that we had in terms of Positioning America for the Future, NOS, Arctic.

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The second is response, preparation, response and restoration -- it's been alluded to and mentioned here -- Sandy. I think something that has been going on for a long time but is really beginning to come into its own, is the idea that NOS, but in particular -- and that's the focus here, is nav services -- but in particular, navigation services are an integral part of any kind of a significant response, whether it's a hurricane, whether it's an oil spill, whether it's whatever; yet they seem to have kind of ridden below the surface in terms of publicity and acknowledgment of the contribution.

That seems to be changing and I think Hurricane Sandy is a great example of how the suite of issues that you guys are representing here really gain some strength in terms of an understanding from the general public about the role they play.

And what I want to talk about a little bit - and I have just given my speech, by the way -- what I want to talk about a little bit is okay, we had a tragedy again, and by the way, the applicability of what I am talking about certainly is all about the Gulf.

The Gulf has had -- experienced all of these kind of disasters in spades over and over again, not so much in other places, but I think in a way that has helped focus some of the issues and yes, the Gulf had another hurricane.

Well, we had one -- in fact I was having coffee this morning, and there's a guy sitting there talking to the locals, saying, "Hey, we had a hurricane in Philadelphia."

He was so proud of himself, that he could talk about a hurricane up there. But the bottom line is, out of this tragedy, I think there is opportunity, and it is something that I am working on pretty hard, something NOAA is working on.

But it's something -- and I think,
I wrote this down earlier, Margaret said you
guys are ambassadors for NOAA. I think this
is a great opportunity for you as ambassadors
to step up and help us as we move forward,
trying to acknowledge more publicly and even
Congressionally, the roles that we have played
and how, as we invest in the future, we have
got to invest in these things.

So I'll run through these slides very quickly, but that's really the message that I have for you, is I think there's opportunity here, and maybe -- not a charge, but a suggestion from me to you guys is to be involved, and we have some activity under way that will maybe give us some better fodder to use to promote what all we have done in this and many other events.

So, next slide please. One of the things that I always do when I have an all-hands is try and do a cross-cut of metrics or issues where the whole of NOS has responded

1 and performed.

And I do this little numbers thing because I have gotten a lot of good feedback. The people like it. Again, though, part of the theme here is trying to make sure that all of NOS understands that it is contributing to this whole idea of positioning America for the future.

And so the 208 counties are the number of counties that were involved, that were working with our coastal services center, in what we call DigCoast. It's an application looking at a variety of coastal issues and data information that helps plan and adapt to all of the issues we continue to encounter on the coast. But 208 counties is pretty significant.

The 3500 square nautical miles is what coast survey was able to get surveyed this last year; 1900 people is, we opened a new sanctuary exploration center and we had 1900 people lined up the first morning to come

1 and see it. Pretty impressive.

Sixty three miles deals with the fact that there is a new coastal zone management state that has come into the fold, if you will, it's the last state that was eligible to be a coastal zone, and it's Illinois.

And so Illinois is there.

Interesting, in that Illinois has all sorts of really fascinating -- first of all, they're a bunch of go-getters. I wish we had other coastal zone management states that were as engaged as these guys.

But they are talking about developing a new port in the Chicago area.

They are talking about all sorts of invasive species issues.

Commerce and trade, they talk like Gary talked about Louisiana, about the Port of Chicago and its connections to the rest of the world. So they are very deeply engaged with us now, and we are happy to have them enter

1 the fold.

The \$35 return for every dollar invested, I don't know, Juliana, have you talked about that study here at all? NGS had a study done to kind of talk about, for every dollar that they invest in their coastal mapping program, what's the return on that investment.

So it was an external group that they funded to do the work, and basically, this study, and it was just recently completed, wasn't it?

Yes. It showed that for every dollar invested in the coastal mapping, the public got a \$35 return. So, a kind of number that really helps us in our marketing and sales.

Twenty seven million hits -- and I am going to get back to this at the end -- is the number of hits, at least the last I checked, for the website that had all of the coastal mapping work that was done from

1 Hurricane Sandy by NGS.

You know, they are called on quite routinely to go out after any kind of a disaster to do high-resolution aerial surveys that have a variety of utilities.

But one of those, as it turns out, is just public access when they couldn't get to their homes to find out what the damage was from some of these flights.

Twenty seven million hits ain't bad. And then 82 percent of the surveys, that's our nav response teams. Out there in the New York-New Jersey harbors, doing the initial surveying.

Turns out, Corps of Engineers, which would have been involved in maybe doing more of that work, got wiped out by storms and blocked from getting out, and so it's been referred to this morning but a bunch of the survey work, 82 percent of the survey work, in opening those ports, and that includes, by the way, getting the gas and the fuel back into

New York for all the people that were suffering and in the gas lines, those surveys were all done by us.

So, the kind of numbers that we throw out there are just to let everybody see the kind of the -- the uniqueness and variety of kinds of involvement that we have. Next please. No?

So again, Margaret covered a few of these things in her slide, but keeping in mind that what we are trying to do is convince our own workers that this Positioning America is something that they need to embrace, we use the Arctic as another example of the crosscutting work that NOS does that supports what is becoming a more and more and more incredibly important topic in and of itself, and that's the Arctic.

Margaret and I both spent time
this summer in the Arctic and went to a couple
of the key conferences and I like to tell this
story. I was walking down the hall between

one of the sessions on this Arctic discussion, and chatting with a guy.

And I said, "Where are you from?"

And he said, "Beijing."

"Beijing?"

"Yes, I'm an investment banker in Beijing and I am here for this conference."

I think we also learned there that China has more icebreakers than the United States currently focusing on the Arctic. So as you are all aware, with the climate change, the access to resources, the Northwest Passage, all of the issues that are potentially building.

And then there is that little thing called oil development that is going on as well. Just a tremendous focus, and one of the huge issues.

And NOS is right in the middle of all of that, and right at the center of the middle is all of the Arctic work that the TJ did, surveying, you see, the same slide that

1 Margaret had on the lower right.

You've got NGS actively involved in doing GRAV-D up there. You've got CO-OPS with the type of water level stations, and partnering with everyone else to see, in an extremely data-sparse environment, how we can build out, I guess we also have the Healy up there doing some work in the Arctic related to -- what was, what were you --

MR. ARMSTRONG: Extended continental shelf.

MR. KENNEDY: Extended continental shelf. So, but these -- and I won't go into it -- but we draw in a lot of the rest of NOS is involved too, and oil spill response.

We have a lab, a science facility up there and I have not mentioned the AOOS program, but AOOS plays a very, very important part there, did in Sandy as well.

So, again, just with the flavor of how important the Arctic is, how engaged we are, and getting more engaged by the day,

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Margaret is the lead person in NOAA for the Arctic and I am her second, and it's amazing the number of emails we trade every day, just on the Arctic. Forget everything else that's going on.

Next please. Yes. Not that but one back. So the second issue that we presented to our staff as just another example of how NOS is involved in positioning America, is preparation, response and resilience, and I am not going to go into this in any detail, but again, weaving a story of how all NOS comes to play in these issues -- and we really do -- but in particular here again today, the fact that we had CO-OPS out in front as the storm developed, with their tide and water level, their quick look information really helping communities begin to see the changes and how significant they were.

We had the coast survey development lab working on surge with the

weather service to begin predictions in advance, and we had some incredible predictions quite far in advance of the actual event that were showing just how bad it was going to be.

I was just reading an article in the New York Times about some of the local community folks. I just -- I don't know what we are going to have to do to try and convince people that when we talk, we are not just talking.

I mean, it was amazing the stories about the people that said, "Oh we knew it wasn't going to be as bad as they said, so we stayed until the wall of water washed us three blocks down the road and then we realized it was kind of bad."

But, so just a couple of examples of it in advance, and then of course, the event occurs and we have got the navigation response teams that are out there just doing incredible work. Almost immediately they are

1 staged and go on.

Then you have got the mapping that has taken place and so on and so on and so on.

And again, back to my original statements, this time, I think more than in many other of the cases, even though this same work has gone on in all sorts of places, we have begun to get incredible feedback from a lot of different entities -- private, other feds, FEMA.

FEMA, by the way, has just invited us to be part of the team that is doing the post-disaster response and recovery work.

That's a first for us. We have never been invited into that arena before.

And so all of this to say that we, NOAA, and we NOS, have said okay, because there seems to now be a dialogue, let's take advantage of this. Let's build on it. Let's try and take the programs that we have really been trying to promote, in particular nav services, and work the constituencies.

And so we are doing that in a variety of different ways. I have a variety of meetings set up on the Hill with the affected states and their congressional delegations to talk about our role.

We have put out a four-pager that talks about what NOS did in this bill -- Did

I hear that we have that around if anybody
wants to look at it, or no? You've got it
right in front of you. Yes. Okay. I did
hear that. Thank you Kathy -- which we had
out within three or four days of the event and that's already gotten to the Hill and many places.

But the last thing that I wanted to mention is we had an AOOS summit, and this is like -- AOOS has been in business 10 years. Let's review the last 10 years and see where it needs to go.

And while -- and I was at the summit, the last part, and I got approached by the Marine Technology Society, of which Rick

Spinrad, someone who used to be the AA of NOS, in NOAA a long time, now at Oregon State, the chair, past chair and the new chair, Ray Toll, came up to me and said pretty much what I've just told you, "We are hearing such great things about what you guys did, from all different sectors. Wouldn't it be a great idea if we could sit down and try and put some metrics to what we did and what that really means, like dollars saved in FEMA having to go out and do individual surveys, the fuel that got in when it got in, whether there's lives saved, whatever it might be."

And MTS has a vehicle they use,
which is like a quick strike research program,
where they get in and get out, get a story
together with the kind of metrics that I am
talking about, and then make that available in
a very short period of time.

And so what I said is -- and they approached me and said, "We would like to do that. We want money." They said they would

1 take some of their own to this table as well.

And I said, "Well, I'm interested if -- if -- one, you include all of NOS, not just the AOOS program, which was the initial thought; I want all the nav services at a minimum involved; and two, there would have to be an immediate turnaround because from my background, you are a hero and desired on every media outlet for the first couple of months, and then it's like, 'who are you?' So we have got to get this out quickly."

So they have agreed to do that and we are having a dialogue right now, getting ready to have a meeting with our folks and theirs, to put a package together, and we will come out with what I think will be some real meaningful statistics about our engagement and involvement.

The end of the story, then, is when that comes out, one of the things I'd really be interested, you as ambassadors, is with all of your different constituencies, for

you to think a little bit about how you might use that and help us.

We would be happy to work with you to coordinate, but as an outlet to get the story more broadly vetted about what we did not only here, but again, in previous events, and it's everything from tornadoes in Alabama to Katrina to all the other hurricanes and everything, we'd really appreciate that.

So that's pretty much my -- oh, I did want to show you a couple of before and after slides that we just have. They don't show up real well, but even no better than they show up, you can certainly see, and this is =- where is this? Does anybody know where that is?

It's Staten Island. This is State Island, one of the marinas there, and you can kind of see how everything is stacked up after the storm went through.

And then the next one. This is Normandy Beach, New Jersey and there is quite

a change before and after, and if you followed this, it's amazing, the amount of devastation there is from this event, and an awful lot of that from storm surge.

So, so that's what I would suggest. That's kind of where we are with our thinking here. And I think you guys fit into this thinking and we ought to figure on how you can help.

The other thing I would just mention is that AOOS just stood up a federal advisory committee, just recently. I think they just got it all confirmed in the last couple or three months.

The chair of that group is Rick

Spinrad and if you don't know Rick, Rick is

just -- one, he knows the business, he knows

the business of NOAA, he knows the business of

NOS; two, he's a hard charger connected

everywhere, and he is really going to move

out, and I think some sort of communication

between that fact and yours would be very

1 beneficial.

In terms of just comparing notes,

I think you have got overlapping issues, and

I don't mean overlapping in a negative way

here, I think in a way that -- and I don't

know if there's some, some way that you guys

could do a joint thing, but certainly

leadership to leadership, you ought to

consider chatting with them and seeing whether

they're going and seeing how we could build

some sort of coalition there.

I'm done.

CHAIR WELLSLAGER: Yes.

MEMBER MILLER: Joyce Miller. We were talking last night. I was concerned at the Alaska meeting to learn that the NRTs had been dropped from the budget, and one suggestion I was making last night, and it goes completely with what you were saying, was to look at per day -- in Norfolk we talked about this -- how much a port loses per day, and compare it to what a single NRT or all of

1 the NRTs cost a year.

I mean it's just -- it's this much versus so much more, and I just thought it was crazy to de-fund the NRTs last year.

MR. KENNEDY: Well, that's one we have thought about a little. But thank you for that suggestion and by the way, we don't have the meeting put together. When we sit down with MTS, they are going to actually take our suggestions and then turn them into this document for us.

So if there are other thoughts like this around the room, of ideas of things that we might want to try and come up with some statistic or fact about, I'd appreciate it. But that's a great one, and I think that definitely ought to be part of what we spin out there.

MS. SPRING: I'll just -- wanted to say on the NRTs, we definitely encountered some confusion about when an NRT is funded.

There was an assumption, I believe, that an

NRT could be funded by FEMA at all times. I think that we have corrected some misunderstandings and we are actively discussing in the next budget request how to deal with that misperception.

MEMBER MILLER: I was working with one of the committees on user fees, and it was one of the places where we thought there might be some -- because of this huge discrepancy in how much it saves per day for a single port, versus what it costs, that there might be some possibility of user fees associated with that.

MS. SPRING: That's probably where a group like OMB would go, which would be the idea that someone else should pay for that.

So then it wouldn't appear in our budget.

VICE CHAIR PERKINS: On the subject of the response and the timeliness of it, and the pure economics that are at stake for every hour, you know, to get those ports reopened, I guess the question, and I'll put my bias, my private sector, you know,

entrepreneur hat on, and say is there any progress being made in coming up with a mechanism to where the private sector resources, you know, can be mobilized, and those vessels and those resources can be engaged in a more timely manner, to help get those ports back open, because there is a tremendous private sector capacity to perform those fundamental surveys and collect that data.

You know, getting into the airspace, you know, your aircraft mobilize quickly and you know, at times of disaster, the playing field perhaps isn't level.

But on the water, and at least getting the vessels in and getting -- because if it's about the money, then getting more assets deployed to get the problem solved quicker should be in the government's and the citizens' best interest.

MR. KENNEDY: I would let some of the folks down the table try and respond to

that. It's certainly a discussion we have had many times and FEMA has some preferences, you might expect, and you have already kind of alluded to part of what their preference is, you know, federal agency and the confidentiality of data and what have you.

But we have discussed this and we know it's an issue.

VICE CHAIR PERKINS: The confidentiality of the data issue, when you are serving it up on the website within hours of acquisition, that one doesn't seem to hold water. No pun intended.

MS. BLACKWELL: To try to respond in some respects to, I guess, the concerns that NOAA is doing the immediate response versus having that contracted out, is that the gist of it, or --

VICE CHAIR PERKINS: Yes, I'm not sure there's a gist of it. But it's just, I know there's a greater hydrographic survey capability out there, if we could mobilize the

private sector vessels in addition to the NRTs.

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The two don't have to be mutually exclusive. You know, we are not -- it doesn't have to be taking the cheese off-of someone's plate. You know, the private sector is there, they have assets in the same geographies. We just don't seem to make any progress on a strategy. We waited for nearly five years for DHS to come up with a contracting vehicle for emergency response to put those assets to use. The contract is still not awarded, you know, it's an open, you know, question. It's not a specific.

MS. BLACKWELL: One comment I would like to make is though, while the National Geodetic Survey was out there doing some imagery collection, there were other groups that were also involved.

There was plenty of work to go around and to get this imagery done, to collect it as quickly as possible, we did have

assets in the air to do this and we are
working very closely with FEMA and other
entities to get the data out there and made
available in a georeferenced format so that
the most use could be made out of it, and
doing the comparisons before and after.

The civil air patrol was also out there and there was a very concerted effort in trying to divvy up who was collecting where and being able to provide as much coverage and information as possible not only from NOAA, but from other entities as well.

And I think that there are opportunities for improved coordination that would involve other assets to get into these response efforts, and so we can continue to work on ways to help with that coordinated effort.

But it wasn't just NOAA and NGS out there doing this as well. So --

VICE CHAIR PERKINS: Yes, I'm pretty much not -- I'm described as my glass

not being half full. It's usually described as being a fountain of optimism.

But I truly believe that, you know, if the role of this panel, David, that you have conveyed this morning, is that we have an opportunity and perhaps a responsibility to be ambassadors for nav services and for the bigger NOS mission.

The private sector can help with that role, if we can find a way to positively engage them and change that relationship, and it's these times of the country's need, in response to these natural disasters or you know, God forbid, another 9/11, you know, type situation, but that's where the private sector can mobilize and is willing to go to the Hill and be the ambassador for that bigger cause, if they feel that they have a seat at the table.

So, end of filibuster.

21 ADMIRAL GLANG: Can we, can we -22 Jon can respond on the NRTs.

Yes, I just want

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to, we do have a response, we are looking at all possible assets and we do, you know, our

CAPT. SWALLOW:

4 hydrographic surveys division uses the address

5 survey backlog, so we have contractors, you

6 know, we always, always ask who is available,

7 who is around.

So we always consider what NOAA ships are around, where the NRTs are, and what private sector assets are around and just kind of, you know, kind of -- have everything in a queue.

We found, you know, we have talked a little bit with FEMA and the Coast Guard, it looks like NOAA's best niche is in the first two to three days of a response, because we can very cheaply pre-position. We have NRTs that are working, doing the day to day. The boats are already operating, all the equipment is on board. They just put it in a trailer and move when they are working to the new spot and we put them in.

It's very inexpensive, and we look at the contracts, mobilization and demobilization cost, it seemed to be a big issue.

So what I kind of look it as, is the NRTs, NOAA comes in, we do the first couple of days, coordinate, you know, navigation managers are key to coordinating with the Corps of Engineers, the Coast Guard. We divvy up with anybody who is at the table. We even considered using Navy assets during Sandy.

And we do think about private assets. We did -- a private company did survey some private docks in New York, which is a small area.

So we do consider -- I think the private sector, where they come in on a prolonged response that lasts more than a couple of days, we look for FEMA mission assignments to come in and help fund that.

During Isaac, a big concern was

1 the Southwest Pass deeper area. 2 hydrographic survey division did have a contractor down there that -- he talked to 3 them and said, "Are you guys writing for the 4 5 deep vessel?" We just relied on the pilots. When the pilots said it was okay, that kind of 6 7 went off the table, my idea with that, and I 8 have -- I think Tim was actually the one 9 trying to seek out FEMA to say okay, if the 10 deep water channel needs to be surveyed and we don't have any other asset in the area, you 11 12 know, we need to -- it's going to have to be a FEMA mission assignment. 13 14 So it's in the queue. It's always in our background, for when it's appropriate. 15 16 CHAIR WELLSLAGER: Okay, Frank. 17 MEMBER KUDRNA: Frank Kudrna. 18 David, if I understood you correctly, you said 19 this is the first time FEMA has asked NOAA to 20 participate in a post-analysis? 21 MR. KENNEDY: In a post-analysis, 22 I mean, FEMA routinely asks us. But you yes.

know, and I'm trying to think which -- what
the EFH is. Is anybody here familiar with the
-- at any rate, there is, you know, one of the
tenets of FEMA is the after action, and it's
assigned to a federal agency and it's not
NOAA. It is Department of Interior.

And so historically, in the after action, FEMA says okay, on this one, DOI, you've got the lead, and DOI comes in.

We may get asked to help them but we don't normally. So in this particular case, they specifically asked us to come to the table. DOI is there as well, but they asked us too.

MEMBER KUDRNA: And I guess my inference, for Katrina, you were not asked?

MR. KENNEDY: I don't believe so.

Not that I'm aware of.

MEMBER KUDRNA: Well, certainly, it is appropriate. I think you should have been asked. That might be an action for our panel to certainly encourage FEMA to do that

kind of thing. I think it's great you made this progress to be involved to this degree.

But I would have assumed it would have been routine.

MR. KENNEDY: Well, it is something we have been working on with FEMA, and FEMA, this is a new EFH and -- what is that? I can't remember the acronym. But -- and so they are still kind of feeling their way along a little bit with this one.

But you know, we have been working with them on things like, okay, so you have a tsunami disaster, you are left with debris wrapped around coral that is going to destroy the coral. FEMA what are you going to do about that? And the answer is nothing.

And so you know, we are trying to work through -- but wait a minute. There's got to be more to this story than that. So we are still in a dialogue with them on some of these issues.

MS. SPRING: I'll just add, just

1 the context for this is, I think, in the 2 national disaster response strategy, I think 3 the framework, and I believe the part you are talking about, Dave, is probably environment, 4 5 fisheries and habitat or something, the environment -- because weather service 6 7 certainly does after action reports on 8 weather, and I think the structure of that 9 response strategy for a national disaster, 10 which is a declared disaster, is something that is diffused across the agencies. 11 12 certainly are involved in weather after This is a disaster after action, 13 actions. 14 which is not necessarily -- in this case it is -- it is linked to a weather event. 15 But Dave 16 is pointing out something that I think was not 17 wired perfectly when he lived through Katrina as well as other disasters, I think. 18 19 were a lot of disconnects, and this is trying 20 to reconnect the disconnects. 21 CHAIR WELLSLAGER: Bill, did you

have something to say?

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1 MEMBER HANSON: Yes, actually a

2 couple of things. Just to follow up on

3 | Scott's point about private industry being

4 available, we had eight dredges up in the

5 northeast that pulled in for the storm, and we

6 had -- three of them are stuck in New York

7 harbor until it could reopen, and we were

8 motivated to offer our survey vessels,

9 including a multi-beam, to help clear --

10 fortunately you guys did a great job, we were

able to get within a few days.

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But you do have a lot of resources to tap into in times of true emergency. So we probably should find some ways to cooperate a little bit better on that, not looking to take any business from our surveying professionals in the room, but of course we are financially motivated there to get back to work ourselves.

On the ambassadors side, David, you mentioned a couple of things there, and a couple of thoughts. We talked about this in Alaska a little bit, we've talked about this

at a couple of meetings, it's NOS and it's ambassadorship within NOAA.

And little things like having NOS on the front page of the website, you know, who is NOAA, and you have to go to several areas to find out that you guys are part of the group.

We see pictures of NGS on the front page of the -- as I looked this morning, but everything else is about the other missions of NOAA. So perhaps we could also help with some of the ambassadorship within NOAA.

On your Hill trips, Sandy provides a unique opportunity, you are exactly right and I am glad that you are taking advantage of that. It's unique because we had a Hurricane Isaac here in New Orleans. You had a Hurricane Debby earlier in Florida, and because of the fatigue in Washington about having storms in those areas, it didn't get a lot of play, not a lot of traction.

But because of the fact that it was in an entirely different area, we are seeing a lot of interest, and the fact is, is that between you guys and the Coast Guard and the Corps, you nailed it. You've done very, very well and you've got a region that has embraced you, and really likes the work that you have done.

It's not the opposition that they got down here after Katrina, and there was some reasons for some of that opposition. But you've got governors that are really, really appreciative of your efforts.

And so I have a couple of questions. One, when you go to the Hill, are you doing it in tandem with any of the other agencies?

The tendency we found, and Sean and I have worked for several years on this, Sean is in the shipping business and I am in the dredging, but we found we would go to the Hill by ourselves, our voice gets lost. We go

together, we are pretty powerful.

When Sean formed the Big River coalition, we go to the Hill now and people really listen to what we have to say.

If there's some way that you guys could combine your message with the other agencies and just show what you've done, maybe you can bring in some of the governors, governors' offices, that's some way to help make the case as well.

MR. KENNEDY: The point is well taken and we certainly have found the same thing, that going with others in fact in the navigation services community is one of the best examples of getting a diverse group together and going to the Hill.

And I have been up there and had the Hill say, "These guys are organized, and they come up here and it's not just one group, it's several groups, and that's very impressive, and we get one message from several groups.

We are trying to do that a little bit. We have problems with committees, as you know. You go up with the Corps and they've got one committee, we've got another. That doesn't stop us from going to individual offices, obviously.

And we are having meetings this week with the Corps to talk about -- as an example. So, point well taken. We need to do more and better of it, and it's a good suggestion.

CHAIR WELLSLAGER: Gary.

MEMBER JEFFRESS: Gary Jeffress.

Dave, I want to throw in another federal agency into the mix, and that's Homeland Security. You had a slide that basically had three words -- preparing, response and resilience -- which is pretty much Homeland Security's mission as well.

I have, in the last month or so, had some communication with some scientists that work at Los Alamos Labs that have spent

1 the last five years building models for 2 Homeland Security for natural disasters, 3 trying to answer questions like, we have the 4 hurricane here, what's going to happen to the 5 electric grid, what's the impact on the 6 economy going to be, all that sort of stuff, 7 these huge big models, which I think NOS has 8 a lot of input into, and I am just wondering, 9 do you communicate with these people?

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MR. KENNEDY: More often than not, we are communicating with subsets of Homeland Security. It's not like Homeland Security -- so Coast Guard, you bet you, all the time with them.

The answer is we do, but boy, I'm not coming up with a good answer to say you bet you we do and we're right in the middle of that, and I understand it.

So it's something that I should explore a little bit.

MS. SPRING: Yes, one of the things we -- we are having active

conversations with the Coast Guard about a joint Coast Guard-NOAA strategic approach.

One of the things I think we would like to put on the table with them is discuss our S&T collaborations more actively. We do act as, you know, the Coast Guard's science adviser on oil spills under the national response plan and things like that.

The question is, how are we leveraging our science advice and how are they using -- you know, who do they go to for science? We are going to ask those questions and that process, in some cases it's DHS, some cases it's us, and probably some cases it's many other agencies. So we are going to try and nail that down. I think that would be helpful. And if you have any specific places you know of that are good, bad or indifferent, we would be interested in that.

MEMBER JEFFRESS: Well, my understanding is these folks, these are really bright people who work for Los Alamos. One of

them was a statistician, one of them was a big modeler and one guy was really big in computer science.

So they are building these models, but they all work for the Department of Energy, which I think is really strange. And so they contract their services to Homeland Security and I was wondering, does NOAA do that too?

MS. SPRING: We do do reimbursable work in some cases, although most of our work is for support of forecasting and things like that, that are our own missions.

I think the answer is it depends.

But it's -- the structure of those labs are

reimbursable work, just -- and that's, and so

they have built a lot of capacity there.

We would like to share a little bit more. We work a lot with DOE on sharing modeling capacity, supercomputers, things like that. We have some arrangements.

But these are areas that I know

that the Coast Guard has, in some cases, for example in PARS studies, used some of those labs, you know, we should start evaluating what they are doing and in some cases we collaborate with them, APL and others. So it will depend on the individual issue. But any specifics you know of, capabilities that are good, happy to make sure we can follow that down.

MR. KENNEDY: And as I answer, I am not being very representative of the weather service or NESDIS for instance, and my guess is that the weather services and NESDIS both are much more direct players than we may be with --

MS. SPRING: And I would say we are working across the government on a unified earth system modeling effort, I mean there are lots of other pieces of this puzzle.

Do you want to speak to the tsunami model? Is that -- does this come up in the context of tsunami modeling? I think

1 APL is where we go.

2 MR. KENNEDY: I can't speak to it 3 very well.

MS. SPRING: Okay.

MEMBER JEFFRESS: I'd just add,
the reason we got in the discussion with them,
they came to us because of our GIS expertise.
You know, we have been teaching GIS since '95
and we have a really good undergraduate
program and a graduate program, so they were
looking at trying to mind some of our
expertise in GIS. But I know NOS has a lot of
GIS expertise too.

MR. KENNEDY: Worth us exploring, and we will. Thank you.

16 CHAIR WELLSLAGER: Anybody else?

17 Okay. Yes, Lawson?

MEMBER BRIGHAM: Yes, one more,
Lawson Brigham. I don't want to have this
issue kind of die. Maybe we could put this
issue of commercial response in -- to a
natural disaster, or just in general, maybe

should be part of one of our working groups

and further discuss what Scott and Bill were

talking about even Capt. Swallow. It's a good

issue to chew on and we get more from the

commercial world because of the members here,

so I just recommend that we keep this issue

alive and maybe embed it in one of the working

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groups.

CHAIR WELLSLAGER: That could easily be done, easily be done. Before we take a break, one thing that I just kind of come back to over and over again, with the positioning America for the future, I have got a daughter who is a senior in high school, and she is doing more stuff with Twitter and with Facebook and with webpage and social networking, and I really think that -- and this is one of our working groups, strategic effectiveness -- these would be the tools I think NOS could be able to harness or NOAA should harness, because word of mouth really doesn't do it anymore.

You know, try as it might, it
worked for a while. But more and more, a

3 Twitter feed will lead to other things.

Facebook, you like an account, people suddenly see what's going on right there.

And it could be an intern that does it. I mean, they're a helluva lot more technical savvy in doing stuff like that than I know I am.

And it's these things that we really use as tools to help project what we are doing. I mean, a perfect thing would be some kind of a Twitter feed that NOS is working with FEMA as a post-tragedy analysis, you know. That's going to hit the spotlight, and if you are liked by this, you follow Twitter, suddenly everybody is going to hear something about that.

And it's just like, "Wow," and that's instant. You know, that's right there. And little things like that kind of pop up and before you know it, you've got a good

grassroots following of things that are going on and people finding out bits and pieces of stuff that we didn't know about before.

And I'm just learning. You know,
Scott actually told me how to do a little bit
with Twitter, and it's like oh, okay, this
isn't that difficult, and I can do it from my
computer. I thought I had to have a cell
phone or something like that to work with it.

VICE CHAIR PERKINS: It's the blind leading the blind.

CHAIR WELLSLAGER: Yes. On the job training. But you know, the only point that I wanted to make was, social networking is the tool to outreach now, more so now than ever. Thank you.

MR. KENNEDY: We actually have one of the better I think social networking communications teams in NOS.

MS. SPRING: So maybe we, as a homework assignment, everybody has to join, because if you don't know about it, that's not

1 good. So let's --

MR. KENNEDY: Because we have a bunch of stuff already going on.

MS. SPRING: Yes, so let's make sure we get you all of our Twitter and other sites and if we are still not reaching people, well, but I agree, we have embraced as an agency social media. I think the question is, in an agency that is focused on doing the work and not talking about it, there is also a cultural change too. So I appreciate that comment.

MEMBER MILLER: A related comment.

I thought the blog that we were sent a link

to, the blog about the hurricane, I thought it

was very effective, and I was so glad to see

it. I mean, it just -- it was like yes, I know

what NOS is doing now, and you know, how they

are responding to it. So I thought it was

really excellent.

CHAIR WELLSLAGER: Okay. I have one public comment and then we will take a

1 break.

MR. GRAHAM: Ken Graham with the National Weather Service here in New Orleans. I just wanted to support what you said. On the drive over here, we had a squall come through and I took a picture of it in the car, tweeted it to the office, and the office tweeted that out to the public and there was all sorts of comments that we get about severe weather, and it's that much.

And the latest hire that we made,

Katy at the office, she works for Suzanne now,

when we assigned her her noaa.gov email

address, she looked at me and she goes, "Mr.

Graham, you still use email?"

So even within the agency, we are dealing with that. And one quick comment about the Department of Energy, locally we are working with the strategic petroleum reserve, we do exercises with them several times a year, and we provide climate information, historical hurricane information and tornado

information, and they are taking that, and I
think some of that is getting into those
models. So I think indirectly we are working
with them. So that was it.

MR. KENNEDY: All right, we got you back on schedule.

CHAIR WELLSLAGER: Yes we did.

Woo-hoo. All right. Let's take a 10-minute

break and meet back here at 10:45.

(Whereupon, the proceedings in the foregoing matter went off the record at 10:44 a.m. and went back on the record at 10:54 a.m.)

CHAIR WELLSLAGER: Okay, well I'm sure everybody got a chance to get up and stretch a little bit and get the blood flowing once again.

We are now fortunate enough to hear from Tim Osborn about the application and use of NOAA's Navigation Data, Products and Services for the Port of Mobile.

MR. OSBORN: In fact, actually,

rather than speak on this myself, I'd like to introduce a good friend of ours, Captain Terry Gilbreath, the harbormaster for the Alabama state port authority, Port of Mobile.

Terry actually comes to us with a tremendous amount of experience and expertise as being a former U.S. Coast Guard captain, and actually we first met when he was a captain when he was a captain in the Port of Morgan City here in Louisiana.

After his tenure at the Coast

Guard, Terry then joined the Port of Mobile,

and has been working with us for many years,

not only as harbormaster, but also in terms of

the support of some very important efforts

that we have been doing with them in terms of

the installation and operation of the PORTS

systems and other systems that Terry will talk

about.

I would like to introduce and thank Terry for his coming and joining us today.

MR. GILBREATH: Okay, well thanks for having me. I appreciate the opportunity to talk a little bit about the Port of Mobile.

I am glad that Gary LaGrange was pretty pleased with the port. We are kind of one of their competitors.

I am going to talk a little bit about the port then I am going to talk specifically about our use of the PORTS system. I am going to talk a little bit about hurricane response and I can show you some slides of what we do with it.

Here is the Port of Mobile, and it's going to be -- we talked a little bit about this new turning basin that we have right here, you'll see that.

This is the new container dock.

This is the new steel dock that we have.

We've got a lot of new work going on here.

This is a new intermodal facility and I'll talk a little bit more about that.

First off, a little bit about our

port. We have -- just, you can read some of those slides, but we do have about, I think it's 66,000 direct and indirect jobs from the Port of Mobile, \$263 million direct and indirect tax impact, and over -- almost an \$8 billion economic impact to the port.

The Port of Mobile is also a state agency, similar to the Port of New Orleans.

We have our own independent operating agency.

These are some of our normal facilities. We have the channel in Mobile.

We have a 45 foot draft channel. It goes all the way up to the McDuffie coal terminal.

We have three terminals that are serviced with 45 foot draft, then we have -- above that everything is 40 foot draft. This is just the -- in calendar year 2001 we had 25.1 million tons of cargo. We had 169,000 TEUs at our particular facility.

We do a lot of import of containers, a lot of project cargo, steel, iron, aluminum, wood pulp, plywood, paper. We

have one of the largest coal loading facilities in the nation and someone had mentioned something about our offloading.

We did this -- they have done it a couple of times in the Port of Mobile, where we took a cape-size 950-foot-long coal ship.
We loaded it to 45-foot draft at our terminal, and then they went offshore and they transported another and added I think 16 more feet of cargo onto it. So she went down to 56 feet of draft offshore. And we have done that a couple of times and we are going to continue.

This is the McDuffie coal terminal and we have done a lot of infrastructure work on the McDuffie coal terminal. As a matter of fact, right now, this is McDuffie 1, McDuffie 2, McDuffie 3. At McDuffie 1, we are just now converting that into an export coal terminal.

Our import terminal right now is here -- I'm sorry, that's the export terminal. The import terminal right now is where we are

bringing in cargo from Columbia. We are bringing in steam grade coal from Colombia.

The export stuff we are bringing out, we will load ships up to 45-foot draft. We do not have an under keel clearance in our requirements, so we are sailing ships at 45-foot draft in a 45-foot channel all the time.

And I will show you some of the impacts of that in a few minutes. I'll show you how that works. But we are converting this one also to an export coal terminal, because the export business is really improving.

Just a little bit about, this is the new container dock, the APM terminals.

I'll have a little more on that, but we are also getting ready to build and we have a new TIGER grant. We are going to be building a new intermodal facility.

This is all of the south end of the state docks, of the Mobile River. This is the new container dock that we have. It

1 opened in 2008.

We have got four major -- five major lines right now -- APM, CGM, CMA, ZIM, Mediterranean Shipping -- that are moving in and out of Mobile all the time.

Just about two weeks ago we brought in almost a 1200-foot ship with 140-foot beam with 45 feet of draft. It was an 8,000 TEU ship, one of the largest we have had coming into the Port of Mobile.

This is this new rail intermodal connection. It connects up with the container dock. This is all under construction now.

That's a future look at it.

We have been issued a TIGER grant that was just recently announced, so we are going to continue with that.

This is a little bit about the

Pinto dock. This is a new -- there's a

ThyssenKrupp plant up the river from Mobile in

Calvert, Alabama. It's the very north end of

Mobile county. It's about a 30-mile run up

1 the river.

And we will offload steel directly into barges, into this barge slip. This is one of the newest cranes in the world. It's all done magnetically. Everything is done with radio ID, all the slabs. As it comes off the ship, you will know exactly which slab it is, where it's going.

It goes directly into barge and then it gets transported up the river to the ThyssenKrupp plant. Most of this steel is coming in from Brazil.

So this is a -- it's a kind of another picture of the port. Let's see. The first picture I showed was from the south end. This is from the north side looking down, and you can see all the interconnections that we have with all the rail facilities.

We have got great access to the interstates. We have got I65, we have got I10, and we are a very good location for all that.

Okay. Now I'll talk specifically about PORTS and what we do with Physical

Oceanographic Real-Time System in the bay.

The Alabama state docks, Alabama state port authority, is the principle sponsor for the NOAA PORTS program in the Port of Mobile, and we have 14 sensors within the bay.

A lot of these are water level sensors that are part of hurricane planning and response. I am going to show you a little bit about some of the visibility sensors.

Some of the main users of our system are the tugs, the pilots. The pilots, I know every one of them has on their BlackBerry, on their handheld device, they all have access to PORTS and they are all using it every day.

Before they bring any ship in,
they are looking at what's the tide, what's
the current, what's the visibility. It's
something that they use on a real-time basis
every day when they are bringing ships in and

they are calling me all the time to confirm that.

And I think as we move further along they are getting a lot more confidence in the use of the system, as to what the current is by the Mobile container dock, or what the water level is up by the Mobile state docks.

The tugs use it all the time because they are out there working with the pilots and we are conferring back and forth over that.

The commercial fishing,
recreational users, it's all readily
available, online, it's all online that we can
use all the time.

And another one that I didn't mention were the agents, the agents are always looking at the system, because we have some of the water level issues in the port.

I'll give you an example of this.

This just happened about last week. This --

the red line is the observed water level that
we had in the port, and the blue line was the
predicted, and on November 12th, we were -because we had a big, strong, south wind -Mobile is like a big bowl and we get a big
push of water into the bay, if you get a
strong south wind coming in and kind of
holding the water up.

We were about a foot -- a little over a foot above, a foot and a half above what was predicted at the time, and then we had a front blow through and you can see what happened.

Here, in less than 48 hours, we went from plus one and half tide, to now we are down into the negative, almost negative two, we are about a foot below what our tide was.

And that impacts things like loading coal. If we have got a loaded coal ship that has got 45 foot of draft sitting at the dock, trying to leave, we are heavily

relying on watching those tides and watching how -- the impact that that has within a short period of time.

But you can see the big delta, and that's just in a real short period of time.

The front passes, as soon as the front passes through, we get a strong wind from the north and outgoing tide, it's like a big bowl. It just flushes all the water out of the bay.

The pilots are very concerned about it because bringing in a ship when you are at a negative tide, we have to work on high tide sometimes. We have to work on -- sometimes loading cargo they are concerned about how much cargo they can get on the dock.

Talk a little bit about hurricane response. Someone mentioned something about the use of commercial resources for surveys.

Along the Gulf Coast we have a pretty good partnership with the Gulf Intercoastal Canal Association, and they have teams that come out and do survey works.

And so whenever we have a tropical storm or a hurricane, the Gulf Intercoastal Canal Association sponsors this, and we bring in private survey companies and they will do surveys for us, and a lot of it is along the intercoastal waterway.

But we use the NOAA assets all the time also. This just happened, I can just give you the impact. Here's, you can see, the tide, there. This happened last year. You can see the actual tides that happened during Isaac.

A couple of things about hurricane response. We have been very fortunate that we have NOAA people that are with us every day, all the time, whenever we have a response, whether it's predicting weather.

During a hurricane response, every morning leading up to the hurricane, we have a morning conference call with all the waterway users. We talk with the ports. We talk with the pilots. We talk with the

agents. We talk with the Army Corps. We talk with the Coast Guard.

And we talk about what's happening, what's being closed, what's the impact of that, and we'll continue with these daily phone conferences every day until this all ends.

And for an example, for Isaac, we bring NOAA survey assets to help us out. The problem we have is, when we get out to the outer bar, especially during Isaac, it was very rough for several days after Isaac, and you know, you can fly by and take pictures but until you actually get out there and see where that buoy has been moved, we had several of the buoys in the outer bar due to Isaac that were moved into the middle of the channel.

So we had to get a big -- a cutter big enough to be able to move those bigger, offshore buoys back off the middle of the channel, and that was our bid holdup from Isaac. It wasn't necessarily the survey work.

The survey was being done, but once you get out onto the outer bar and you are in rough weather, it's very difficult for the smaller survey vessels to be doing any type of survey work.

But you can see what we had, a plus five, plus five and a half foot tide last year from -- or this year from Isaac. Last year it was almost the same from Tropical Storm Lee, and of course Isaac went further west from us.

But it did shut us down for about three days, as we were waiting and trying to get all the survey work done, surveying the channel to make sure that we didn't have any draft restrictions, and also moving buoys into -- getting them moved out of the way.

Here's another one, I'll talk a little bit about the fog sensors that we have in the port. Of course, during the springtime, when we have cold water and a warm tropical -- or warm, we'll get fog delays.

And you can see, I just want to show you, this is one of our visibility sensors. We have two visibility sensors in the port. One is up toward the mouth of the river at Pinto Island and we have another visibility sensor about halfway down the bay in Theodore.

And the normal max visibility that it is going to give you is about 5.4. That just tells you that you are at unlimited visibility.

The nice thing about this is, you can see, and this correlates very well with the bar pilots when they are not sailing ships because of fog, and we are always watching that, the pilots are getting ready to bring a ship in, they are looking online to see what the fog is up at Pinto Island, and it helps them make decisions as to are they going to move that ship.

We may have, and depending on the weather, we may have fog in the upper bay and

1 not in the lower bay or vice versa. We may

2 have sea fog and we may not have fog up there.

So this helps them make some of their decisions as to are they going to bring in a ship or not.

This one was just, as you can see, we went through several cycles and several days, especially after about midnight, all of a sudden the fog is -- we are running around with unlimited visibility and within less than an hour, we are at total shut-in fog, where we have less than a quarter of a mile visibility, and it would last for about -- that's a full day, so that's almost -- it was like 10 o'clock in the morning before we were able to move any ships.

And that happened several cycles in a row, where you can see that happen.

Talk a little bit about -- and you can see, this is the chart of Mobile Bay and you can kind of get an idea of where we are.

Let's see.

You can get an idea of the bathtub effect that we do get in the port, as you get all the flow of water. Mobile Bay is roughly 10 miles wide, roughly 30 miles long, so

that's 300 square miles of Mobile Bay.

And you get about a foot and a half to two foot of tide that changes every 12 hours. So you can imagine, 300 square miles at a foot and a half of water, there's a lot of water that is moving in and out of the bay in that short period of time, and when we do get the wind pushing the water up in the bay, you can see where it just kind of pushes everything back and the same thing for the north wind, it really affects how we are loading ships and how we are moving ships based on that.

I will zoom in a little bit on this particular area because I just want to show you, we work also, in addition to the use of the PORTS system and the weather stuff, we also work real closely with Patrick, who is

1 assigned to Mobile, for chart additions.

These three terminals and this new turning basin are all within the last three years that we have opened all these things, and we are very -- we are working very closely, trying to get these new additions added to the chart as soon as possible.

As a matter of fact, we just cut out a corner of that turning basin and Patrick was saying it's going to be added within the week. We are going to have the new chart that comes out with that new turning basin.

And what that does for the Port of Mobile is it gives me a 1600-foot diameter turning basin right here. This whole area we can turn, like I said, we just turned a 1200 foot ship.

So we carry 45-foot draft ships all the way up to these three terminals, the Pinto Terminal, the container dock, and then McDuffie are all 45-foot draft terminals, and we bring in ships -- right now we are bringing

in three thousand-footers a week and we turn right here in this channel, right there in the new turning basin.

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And I really don't want to talk a lot. I just have some answers to more questions. That's all I wanted to show you, kind of what we do, how we use the PORTS. We have been a principle sponsor of it. We have signed on with them for five years. We recently I think just renegotiated the new contract with NOAA.

We are happy to do it and I think we are one of the bigger users in the Port of Mobile. I think Tim is going to talk a little bit about some of the storm surge modeling that they might do, some of the other hurricane response.

But if you have any questions for me? Yes.

MEMBER MILLER: How do you fund the, or what we understand is that each PORTS system is funded in a different way from, you

know, it may be a consortium, it may be commercial etcetera. How does the Port of Mobile fund the PORTS system?

MR. GILBREATH: We pay for it. I

-- we have a harbor entrance fee that we

charge for every foreign-flagged vessel that

arrives in our port, and that is one of the

jobs that I do, is collect that harbor

entrance fee for the state.

And it comes out of my budget and we just use it by paying for it with harbor entrance fee money. So it's essentially a tax on every ship that comes in, and then we use that to pay.

It's in excess of 100K a year that we pay for the NOAA PORTS system in our port.

MEMBER MILLER: Did you say only foreign ports or --

MR. GILBREATH: No, all foreign ships, foreign-flagged ships. We get about 1800 vessel arrivals a year, plus, you know, those same arrivals will come out every year,

so 3600 vessel movements that we have all the time.

Yes sir.

MR. ARMSTRONG: Andy Armstrong. I notice in your PORTS images both of the water level and the visibility, that there were some fairly abrupt changes in -- going from unlimited to nearly zero and from one foot high to one foot low.

Do you have any access to predictive models or predictive information on what is going to happen next? In hindsight there, it's fine. How do you manage the prediction of whether to start a move or not?

MR. GILBREATH: I think that they have started it, and they have done some work in the Port of Mobile where they have started some predictive modeling, trying, based on the wind effect, because it is such a strong effect of you know -- and most of it right now is anecdotal. We know that that front blew through. We knew that the wind is coming from

the north. We know it's going to blow water out of the bay.

But I believe they have done -- as a matter of fact, during -- there was a helicopter crash last year in Mobile where they were using some of this predictive modeling to help determine, based on the local wind conditions, what the current and what the effect of -- as they were doing that search and rescue in the port.

So yes, we do -- we are trying to get that way, but you are going to talk a little bit about that? Okay.

Yes sir.

MEMBER JEFFRESS: Gary Jeffress.

We have the same problem in Texas, in Corpus

Christi bay, especially. We have developed

some software using artificial neural network

technology, which uses long-term data sets of

both the astronomical tides and wind speed,

wind direction, barometric pressure and

forecast wind.

And we have gotten our storm

fronts for the 12-hour prediction up to over

3 90 percent correct.

MR. GILBREATH: Really? Okay --

5 MEMBER JEFFRESS: We can share

that with you.

MR. GILBREATH: I'd love to see that. I think that would be very helpful for us. I -- as you can see, it's the same bowl effect as Corpus has. It's just a big, you know, the water flushes out of the bay all at once.

Yes sir.

MR. EDWING: So we have a series

-- Rich Edwing with CO-OPS -- we have a series

of operational forecast system models which do

forecast out very accurately 36, 40 hours in

advance, water levels, currents, winds, those

sorts of things, and we just this last year

released one for the northern Gulf of Mexico

which you know, is really more off the shelf,

like within the year, so we are going to be

doing nested models, which in the various bays, one of which is Mobile Bay.

So in about a year, you'll be having access to that kind of information. It will not have the visibility in there, but it will have a lot of the other parameters.

MR. GILBREATH: One of the -- let met just mention, I did mention about the visibility. We only have two. We really would like to have another sensor further offshore, either right at the mouth of the bay, or even actually out on the water on a rig.

We have talked about possible — that. Some of the problems of putting one of the visibility sensors on a rig is it has to be intrinsically safe and they have to prove that this is intrinsically safe. Most of the rigs aren't going to even talk to you until you can present them with intrinsically safe.

But there are several rigs in the mouth of the bay that would be very good candidates because they are right there where

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we need them to be.

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So we do have -- so in terms of visibility sensors, we don't really have anything south of the middle of the bay.

MR. GRAHAM: Just a couple of points real quick. Even when the weather service was -- you know you have your natural predictions of the tides, but you know, even with us, we look at our weather models, they are -- you know, meteorological drivers of those tides is the biggest factor.

So we do have some of that within our models and it sounds like there's some other opportunities. But related to the fog, we have a, you know, a 2.5 kilometer database that we forecast the weather, about every different parameter in there.

We are already doing the visibility forecast for the airports, so what we are doing is we have visibility in those grids, and we are working with the pilots, working with Tim, getting together with some

of the pilots out there, to be able to do mile marker forecasts on the Mississippi River, including visibility.

But there's no way we can have a sensor at every mile. So we are going to try an experiment, and the pilots are on board with this, I don't know how it's going to work, it gets back to the social media comment.

We are going to have some of those pilots actually tweet us what they see and we can get that mile marker, see what they have, and actually keep our forecasts up to date.

So there's some really different ways to start attacking some of these problems. And the pilots, right Tim, they were about ready to cheer. So they want some of that.

So that's just some of the experimentation that we are doing in our office.

MR. GILBREATH: Yes, ma'am.

1 MEMBER DEMPSEY: Yes, you actually

2 operate with no under keel clearance?

MR. GILBREATH: Well, I mean,
they're not going to run a boat aground, but
they -- there is no minimum under keel
clearance in the port.

MEMBER DEMPSEY: Wow. I'm surprised, because I guess it's two foot around here. It's three foot -- it's three foot for us and it's -- we actually adjust the arrivals and departures based on the tide to accommodate the required under keel clearance.

MR. GILBREATH: There is no required under keel clearance. Now, some of the tankers that come into the port, we have several oil terminals, they will keel usually two to three foot under keel but that's their company policy. It's not a -- but they'll sail, we'll sail ships out of here at 45 foot draft with -- now, the channel of course is usually undercut, and so there's -- I mean they are not going to go aground and they keep

real close track of that. But that's why it's so critically important to them to keep a good eye on those tides.

MEMBER DEMPSEY: You must not have to deal with sand waves.

MR. GILBREATH: No, we don't. And everything in the Port of Mobile, we have nothing hard. It's all soft bottom. It's all muddy bottoms. We don't have any, any hard spots.

CHAIR WELLSLAGER: Real-time dredging though, right?

MR. GILBREATH: Yes, all the time.
(Laughter)

MEMBER MILLER: Are you going to deepen to 50 feet, or are you going to try to?

MR. GILBREATH: We are authorized to that but I don't think we are planning on going to 50 feet at this point. One of the things we are looking at doing right now is, because of the width of our channels, 400 feet

wide, when we bring in two, say, 140 foot

ships approaching each other, we'll have to run one-way traffic up and down the bay.

What we are working on now is trying to get a channel widening done, where we are going to widen the channel and give a big passing lane about a five-mile length, where the pilots can pass and time their passage within this length, and we are going to go to 550 feet so we have some of that.

So we are not looking at going deeper at this point. I mean we are authorized to, but we are going to stay at 45 feet.

CHAIR WELLSLAGER: Anything else?
Yes, Jeff?

MEMBER CAROTHERS: Jeff Carothers.

I was just curious. You talked about the tax on foreign vessels to help support the CO-OPS program. Is anybody else doing that, Rich?

Any other ports?

MR. EDWING: Yes. There's a couple of other ports that are doing it

through pilots' fees or other mechanisms like
that. I mean, as I think it was Joyce said,
every -- it does seem like every PORTS program
gets it from a different source, or different
ways. But some others are doing it through
some sort of, you know, pilot fee or you know
--

 $\label{eq:mr.gilbreath:} \text{MR. GILBREATH:} \quad \text{Harbor maintenance} \\ \text{fees.}$

MR. EDWING: Or vessel fee or something like that.

MR. GILBREATH: But like I said, I think it's a very wise use of the money. I think everyone in the port appreciates having the physical, the real-time system that we have, and I think that we are going to continue to fund it for the near future. I don't see that ending.

I know we do a lot of work also with -- I didn't mention a whole lot -- but we have got the new disaster response center for NOAA that's in Mobile, and I know that any

time we have a hurricane, if they ever stand

up a command center out at the disaster

response, if the Coast Guard goes out there,

I think I am going to be the designated Coast

Guard consignee if you will, to go out there

and be our representative from the port at the

disaster response center.

So I am going to be the one that gets that task. So --

CHAIR WELLSLAGER: Okay, thank you.

MR. OSBORN: I'll go ahead and just give a short, kind of broader overview across the other parts of the coast. In answer to your question though, in terms of PORTS systems along the Gulf Coast, Port of Mobile basically is using the harbor entrance fees for support of the system, which has actually been augmented by congressional support to put in a real-time storm surge monitoring network that Mobile County wanted to have because their flood vulnerability is

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You go across to the Port of

Pascagoula that Patrick has been working at,

and they just have instituted a new port fee

system, with the consent of the port industry.

Chevron Refinery actually supported this, to

essentially pay and maintain the operations of

the Pascagoula PORTS system.

We are going to hear tomorrow from Capt. Mike Lorino, the head of the Mississippi River, Southwest Pass bar pilots, which last year instituted a pilot fee in addition to their regular rates, to pay and operate the lower Mississippi River PORTS system, and Capt. Dave Trent of the Lake Charles PORTS --Port of Lake Charles Pilots Association will talk about how, at the same time Mississippi River PORTS was funded through pilot fees, they also instituted their own pilot fee, authorized by the state, as well, to support and maintain the operation of Lake Charles' PORTS system as well.

1	You talked about under keel
2	clearances, wait until you get to talk to
3	Capt. Dave Trent at the Port of Lake Charles.
4	Sometimes not only do they not have under keel
5	clearances, but some of the side-scan sonar
6	imagery of the channel will actually show you
7	the grooves of the hull ploughing all the way
8	to the terminals. And yes
9	(Laughter)
10	CHAIR WELLSLAGER: Hey Tim?
11	MR. OSBORN: Yes.
12	CHAIR WELLSLAGER: I hate to do
13	this but
14	MR. OSBORN: Go ahead.
15	CHAIR WELLSLAGER: I think we are
16	on a kind of a fixed time frame right now, and
17	it is 11:20 and we are supposed to leave at
18	12:15 for the transportation to the Port of
19	New Orleans.
20	Could we pick up your presentation
21	right at or before or right after the public
22	comment period?

MR. OSBORN: Yes, that's not a 1 2 problem. 3 CHAIR WELLSLAGER: Okay, if you 4 don't mind, could we please do that because --5 MR. OSBORN: Not a problem, let's do that. 6 7 CHAIR WELLSLAGER: We are kind of 8 on a fixed timetable I would assume. Lunch is 9 now until 12:15, from next door. That's right. We have our own dining facility. 10 is nice. All right. 11 And then from 12:15, we will meet 12 where? Here or --? 13 MS. WATSON: We'll meet all down in 14 15 the lobby and Tim has arranged with the port 16 people, there's a bus that will take all of us 17

to the port, and I would suggest, ladies, comfortable shoes, you know, and gentlemen, walking shoes.

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CHAIR WELLSLAGER: Okay, very good. So let's just be sure to be downstairs at 12:15 so enjoy lunch, get something

1 comfortable.

MR. OSBORN: We have some special guests, Hunter Lipscomb, T.J. Moran with Congressman Palazzo's office. I think they'd like to really get the chance to meet everyone, and a very good friend of ours, Myrtis Franke with Senator Thad Cochran's office out of Mississippi as well, and she is joining us and I think you will have a good chance to hopefully have a chance to talk with her as well. Thanks.

CHAIR WELLSLAGER: Okay. Thank you very much. So lunch.

(Whereupon, the above-entitled matter went off the record at 11:25 a.m. and resumed at 2:47 p.m.)

Page 175 1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N 2 (2:47 p.m.)3 CHAIR WELLSLAGER: One reminder 4 for everybody, please, in your blue folder, 5 Kathy has been kind enough to highlight what 6 needs to be signed. Sign that and give her 7 everything and the folder back yesterday, you 8 know, this is important stuff for us to get 9 signed and back to her, so please do that. 10 Okay, it's time to learn about congressional and budget update. So, Craig 11 12 Woolcott with policy, planning and analysis division is here to brief us on those. Craig? 13 14 MR. WOOLCOTT: Correct. Good 15 afternoon. 16 CHAIR WELLSLAGER: Thank you. 17 MR. WOOLCOTT: Thank you. I am 18 Craig Woolcott from the National Ocean

I wasn't able to make the

Anchorage meeting. I was supposed to go, but

Service, policy, planning and analysis

division. It's a pleasure to be here.

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like many, unfortunately got caught at the

last minute, in fact the Friday of my travel.

So I am very happy to be here.

I have been in New Orleans before.

I had never seen the port before. So that was great. Thank you Kathy.

Just as a quick background for all of you, I typically work in the budget shop in the National Ocean Service in our headquarters office.

I am actually currently filling in for Paul Bradley, who many of you probably know, who is our OMB analyst downtown. He will be back actually February 1st, but in the interim I am covering for him.

So it's been a learning curve for me, but it's been fascinating to work on the policy as opposed to the budget side, see how the two blend together.

Today I would like to talk to you in general about legislative issues, policy updates and as requested, some quick updates

on the budget, although we don't have too much unfortunately to divulge because we are under a continuing resolution and FY14 is currently under review and so it's basically sequestered under the release of the PresBud but I'll get into that.

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In particular I want to focus on NOAA's navigation services, which by now you have heard a lot about and I am sure many of you are more than familiar with, talk briefly about the current budget and the status of that budget and the outlook for this year, talk a bit about '14 and actually into '15 and touch on some congressional legislative updates as well as some planning we are doing for the new Congress, and there are actually, for the first time in a while, a number of emerging policy updates I want to give on the NOAA side, particularly in NOS but also in the administration that may offer some opportunities for us as a collaborative group, and some that may not.

I won't touch too much on nav
services as I am sure, again, you are familiar
with lots of what we do, but we continue to
work on shoreline mapping, we produce the
nation's charts.

As the Admiral here knows, we collect hydrographic surveys. We also are the national authority on global positioning and we manage the national coordinates system as well as the National Spatial Reference System.

We provide a network of coastal, tide and water level sensors, some of which we saw today, or at least I can infer they were there on the bridge, I couldn't specifically see them, but I believe they were there.

And we apply data to the new mission such as alternative energy development, which is actually becoming more and more of a responsibility for NOAA although we don't really have funding for it, energy is becoming a huge priority for the agency.

Emergency response, sea level

rise, inundation and we also do a lot of longterm planning through our coastal services center and other programs at NOS.

I just wanted to touch briefly on the tri-offices within NOAA. Again, you are familiar with these. But we have the National Geodetic Survey. Excuse me. The National

(Laughter)

MR. WOOLCOTT: The Center for

Oceanographic Operational Products and

Services and the Office of Coast Survey. This

is just a shot of -- you probably have seen

this shot before -- but I think it's from a

newspaper in the mid-Atlantic somewhere, just

showing the importance of specific reference

coordinates and measurements.

This bridge apparently was fractured, I believe because of sea level rise and inundation. It wasn't planned properly.

MS. BLACKWELL: But that's not real. That's made up. It's just to

1 demonstrate --

MR. WOOLCOTT: Well, you probably shouldn't keep it in the NOS headquarters library then. I'll take it out. Thank you.

MS. BLACKWELL: It's important to realize, you know, the need for having -- knowing what datum you are on and being able to build things so that they fit together, and so it is not real.

But I am sure there are circumstances where it could be applied. But we just don't have photos of those.

MR. WOOLCOTT: Thank you. We also run the CORS network, the continually operating reference system. There are greater than 1865 stations, more than 200 federal, state, local and academic partners.

Its' a great example of partnerships because as you can see from this map, we have a good density of CORS throughout the nation. We don't own all of these. We just make them compatible for use. And we

have four to five million data sets downloaded per month on average.

And of course we have come a long way from dropping lead lines. Just a quick shot of side-scan sonar and multi-beam. Our technology is growing rapidly and certainly sought out by the nation.

So, coast survey continues to be an important function for the agency and for the country.

We heard about PORTS before. I am sure you are all familiar with the PORTS system, Physical Oceanographic Real-Time System, and we saw some parts of that today on our site tour.

Just a quick shot of where they are throughout the country. And a quick schematic of how they operate, their air graph sensors as we saw today, meteorological sensors, water level sensors, wave buoys, visibility sensors and more.

And it's just a quick visual of

some of the real-time data we collect, surface winds, water levels, currents, salinity, waves and water temp.

As we talked about today, inches matter. I don't unfortunately have a video of the cranes that we recently passed through the bridges of the Chesapeake. I didn't think I'd have enough time actually to show the video.

Okay. I'm sure some of you have seen it.

But inches certainly matter. One inch can equate to millions of dollars in savings, depending on how deep the draft you can get through a bridge and also because of the time saved.

To focus on budget, we are under a CR right now. It expires March 27th of next year, 2013. I can speculate on what will happen. We certainly don't know.

There will be a new Congress. We have a new administration, although of course a Democrat is reelected and so they may want to come out showing the ability to pass a

1 budget.

Unclear at this point what will happen. The President's request for '13 was 458 million, as compared to the Senate, the mark was 497 million, and the House much lower at 429 million.

I think, if you ask me, I think we will likely see some way for them to push this forward meaning a punt. I doubt that we'll actually have a budget put forward but I don't think we are going to hit what they call a fiscal cliff, which is looming, coming January 1st.

As of Jan 1st there are automatic spending cuts directed by the Budget Control Act of 2012. It's likely that something will be completed before January to hopefully avert that.

We have been hearing, although I don't know how true it is, that the fiscal cliff may not be as terrible as people think. Sorry.

CHAIR WELLSLAGER: Craig, is that the NOS budget?

MR. WOOLCOTT: I'm sorry, I apologize. That's the NOS. Correct. The current budget for FY14 is in review at OMB, so our OMB submit is under review right now.

Passback was delayed, I heard this week. It's expected, I think, this Friday or the coming Monday. Therefore I can't really talk about the numbers in there.

The actual details of the President's budget are embargoed until February 1st. But it does show some increase in scenarios that we were cut in, in '13 and '12, and it's a bit more promising, at least for NOS.

Of course satellites and weather service continue to kind of dominate the budget outlook for NOAA and the rest of us are going to have to somehow find a way to work though that because it is definitely going to impact us throughout the next year or coming

1 years.

As far as the time line, I just wanted to show you where we are at here. We are currently in the execution phase of FY2013, excuse me I have that wrong. That's a mistake in the numbers. Although we are under a CR. So we are only given apportionments by OMB. We actually don't have a budget for the year. That runs out, again, March 27th. And then January 1st is when we have the looming fiscal cliff.

For '14, the budget is currently under review at OMB. We will start preparing the president's budget next month in December through January and we will roll that out come February, and I'll talk about the implications of that for opportunities on the Hill for us in particular, soon.

And we will be starting to develop budgets for '15 at the same time, concurrently with the rollout of the PresBud starting in January.

The budget is austere. We don't expect to have a real opportunity to provide

4 of things that NOAA is looking to focus on.

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Dr. Titley in particular talked about focusing on facilities and some of the other shortfalls at NOAA, of course, which include satellites and weather.

increased requests although there are a number

And as a quick snapshot of the nav services side of the budget from '11 to '13, for mapping and charting, which is our Office of Coast Survey, we have a bit of a cut I guess between '11 and '13. It's been a fairly level over the years. It's 91.6 at '11 in the spend plan, 91.7 in '12, that was the estimate, that was also a spend plan by the way, which is directed in some part by NOAA; and right now for '13 we are looking at 91.3 in the PresBud. Again, we have no enacted budget and so that could change, or it may not even come to fruition if we are just continued again with another CR, which is possible.

1 For geodesy, for the National

Geodetic Survey, we have 33.1 in '11, 28.8 in

3 '12, so a slight drop, and a bit of a bump in

4 '13 at 29.2 if I am reading that right.

And for tides and currents, which is our Center for Operational Oceanographic Products and Services, 29.4 in '11, 27.4, a bit of a decrease in '12, which doesn't help the PORTS program, which is a cost shared program of course, and a slight increase in '13 at 29.1.

In general, nav services

throughout the year and throughout the last,

I guess, five years, have been somewhat level

when you look at the rest of NOAA or at least

the rest of NOS. But there are certainly

budget issues within each of the offices where

we could certainly use more money to support

mission-critical needs.

And just a quick shot of our NOS budget trends. This is not just for nav services but for NOS in particular. Ignoring

'05, which is a year we did do well, but we also received a bit of an increase for emergency disaster funding.

We are -- ignoring '05, we are still significantly down over the last 10 years basically. The ocean service did well in the early 2000s. We didn't realize it at the time. And we actually did fairly well in '10, but every since then, we have been dropping precipitously.

Some of that of course is due to issues at weather service and satellite program, but in general we are definitely losing money, so we are looking at decreasing budgets and finding ways to do more with less.

The orange, by the way, is the PAC funding. That's our acquisition funding, so that is not as specific to the nav services side.

The blue is the ORF funding, which is operational funding. But with either case, the budget went up somewhat well I guess in

the early 2000s, and dropped precipitously since then.

Again, we did well in '10. We didn't know it at the time, but we did pretty well.

And by the way, this budget is -
I didn't show it across NOAA -- but our budget
is much smaller than the rest of the agency,
of course. We are not the smallest line
office but we certainly are pale at best
compared to fisheries, satellites, weather
service.

I don't have too many details on the fiscal cliff. It's a bit confusing as to what will happen, primarily because we don't know yet whether a small agency like NOAA or even the Department of Commerce will have any discretion over how the cuts are taken, or if it will come top down and Congress will say every agency will cut by X amount.

I don't think it's that simple. I think we will get some type of percentage we

have to cut by at the DOC level or maybe higher, and then DOC and/or NOAA will have to figure out how those cuts are taken.

But that's the confusing part. We don't know yet what we will be allowed to do. The graphic is a little blurry. This is just showing some of the pressures on the fiscal cliff that created the term in the first place.

We have a debt ceiling of course, which we have reached and surpassed. There's an ongoing trend of continuing resolutions.

We haven't passed a budget in a long time.

And the '13 budget is fairly large, not for NOAA, but across the federal government. And all three of those of course are pushing against the debt crisis.

We have an election that just occurred, which may provide some hope as far as passing an enacted budget this year, although it's not clear, and the new Congress comes in very soon, which leaves things a bit

confusing as far as what will actually happen.

They may want to show some improvement, but we don't know yet what that new Congress will look like or what the landscape will be.

I wanted to touch on some congressional legislative updates. Again, we just had an election, so there's implications there for NOAA and for nav services.

You may or may not have heard of
the COASTAL Act. I will talk about that. I
will also touch on the RESTORE Act, which I
have no expertise in. I have not been
involved, but I can tell you what I know about
it. It's certainly important here in the Gulf
and will affect all five states as we move to
the Deepwater settlement.

And I wanted to talk about Sandy briefly. I am sure you have heard quite a bit about that already. But there are some opportunities emerging on the Hill because of the storm.

The COASTAL Act is the consumer option for an alternative system to allocate losses act, nothing to do with coast, just a clever acronym I guess.

It was appended to the federal highway bill in 2012 and signed by Obama. It was actually attempted a few times in the past, earlier this year, and I think even in '11.

Senator Wicker has been the champion, for lack of a better term, for this Act, and it emerged post-Katrina to try and find ways to alleviate I guess some of the impacts on FEMA for funding storm damage to homes.

In essence, the goal of the Act is to better discern wind versus wave damage when processing flood claims. and so I guess, in essence, they are hoping that FEMA will not have to pay the bulk of storm damage if it's related to flooding and that private insurers will pick up the bill, which is challenging to

1 say the least.

The Act is fairly aggressive. It requires NOAA to produce detailed storm analyses following named storms. These are tropical, that impact the coastal zone of the U.S., and we have to complete these analyses within 90 days post-storm for every storm that occurs, every named storm I should say.

And I'll get to this, but there is absolutely no funding or even authorization for funding in the bill, to provide NOAA support to do this. But within 90 days of every named storm event throughout the country, we are supposed to provide response.

And we are supposed to also -- and this is no small task -- make the data available on the web through a database. As you probably know, standing up a database takes time and money and more importantly, the quality of the database requires maintenance, and that costs even more money.

And the database, post-storm model

is mandated to be operational by December 28th, 2013, 540 days after enactment, and our plan for doing all of this is early January. So we have been working on this quite aggressively in the last few months.

COAST survey, NGS, CO-OPS and our coastal services center are all involved in this, they have been taking quite a lead role in providing support and analyses to develop the model.

I should mention, this is a much broader effort, run through the office of the federal coordinator for meteorology, basically the weather service liaison to the President.

And they are basically, I guess, facilitating the effort for NOAA to provide these named storm models. But we are actually the agency charged with producing the actual models.

And so we have a storm modeling team. We have a team working on database issues. But in general, we have to come up

with a whole list of data sets basically that are required by the Act, and I won't go into them in detail, but they include tides, currents, wave heights, even extent of 4 inundation, to determine whether or not water can go far enough to actually damage a home, or maybe it was wind that damaged the home and not waves.

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But the data sets are quite robust and they are quite complex and FEMA, who is actually producing what they call a coastal formula, is charged with delivering the entire product to Congress, so that we have this model stood up, but FEMA is not doing the work on modeling. NOAA is. Or we are charged to at least.

FEMA will take what we give them and put it into their coastal formula. formula is then used to determine how best to assess claims when they come into FEMA.

And again, this is all due early So we are doing our best. We have January.

been meeting weekly, in fact biweekly, with the OCM, biweekly with NOAA, and then we have an internal NOAA team doing modeling, and none of us are getting paid for this, there's no allotment and nobody gets to relieve themselves of their other duties.

It's been quite an effort but it's important and it's a better way to, I think, manage public funding and not rely on FEMA for every impacted home.

In many cases the homes are damaged both by waves and by wind, and more importantly, by wind pushing those waves of course through inundation into homes.

And so the government shouldn't be required to pay the entire claim if it actually is wind-related.

And these are, I should mention, the COASTAL Act focuses specifically, thank

God, only on slabs and stilts, homes that are completely destroyed, with nothing but a concrete base, and homes that are completely

destroyed on stilts with nothing but stilt spanning.

Scott and others had asked me to touch on the RESTORE Act. I haven't really been involved in this. My boss has been I quess our champion on this.

But it is a way to basically
manage settlement funding and to establish a
Gulf Coast Restoration Trust Fund following
Deepwater, to reestablish recovery and
restoration along the Gulf.

What I can tell you is how it's split up, or at least how it has been proposed to be split up. The funding will come in eventually through the Oil Spill Liability Trust Fund, which is how most natural resources damage assessment funding comes through, and it will be split up in the following manner.

I don't have to read all the details here. But 80 percent will go to the Gulf Coast Restoration Trust Fund, who will

manage the funding; 35 percent will be split evenly, or proposed evenly across the five Gulf states; 30 percent to the Gulf Coast Ecosystem Restoration Council; 30 percent to states consistent with the goals and objectives of the comprehensive plan, which is also mandated to be developed for how we will actually manage the money and restore the Gulf; 2.5 percent for the ecosystem restoration science, preservation, monitoring and technology program; and 2.5 percent for the centers of excellence, which is supplemented by 25 percent of the interest generated by the trust fund.

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Now, Scott and others had asked me where these centers of excellence are going to be. I don't have those details yet. In fact I don't think those details are available.

I have an entire binder of talking points for NOAA internal on this, and you may know more about this than I do. But I think a lot of the reasons we can't distribute a lot

of the information is because it is still somewhat unclear as to how this will all play out.

But many of you probably know this better than I do, so if somebody just raised their hand, I think, they might know some of this. But anyway, the funding will be split up in this manner, if it's accepted and approved. This is still a proposal right now, I believe, and NOAA has been strongly engaged in this, actively, on a weekly basis.

And then I wanted to touch briefly on some policy updates. You have probably heard this morning from Margaret and others about our efforts to Position America For the Future.

It's more of a message of course for how we capture our navigation service programs, our response programs, our resiliency programs.

I'll touch on that. I'll touch on the White House Ports Task Force, formerly the

White House Navigation Task Force. One of the, I guess, the not so good stories. It's kind of disappeared. And so I'll touch on where that is right now.

I'll talk about the Committee on the Marine Transportation System, the Arctic marine transportation policy paper, the offshore wind development plan for the Atlantic Coast Port Access Route Study, and I'll touch on Port Tomorrow/Resiliency Planning Tool.

First I wanted to kind of think back and just give a quick slide on why we do this in the first place. Many of you know this more than I do.

But obviously, there is a need for policy, not just for esoteric purposes. But ships are getting bigger, much bigger, and they will continue to grow of course, with the expansion of the Panama Canal, opening of the Arctic, etcetera.

I just thought this was a good

slide to show, considering that first generation there, showing pre-1960, pre-1970 draft sizes, and it just seemed significant to me and a bit striking that it hasn't been more than 40 years since we've grown this big.

Ports are likely to be affected and we are going to have to manage those growing needs with a decreasing budget, and that's part of the issue we have at NOAA, especially when you have things like the COASTAL Act pulling staff away to focus on something not as related to some of the needs we have when it comes to navigation services.

I know Margaret talked about positioning America so I won't go too deep into bit, but it does involve our navigation managers, our navigation response teams. We have state geodetic advisers. We have all of you to advise us on how best to position NOAA to help you and your communities and your coasts in the future.

We have the CMTS, which I will

touch on, and we are trying more and more to do increased outreach to users to garnish more feedback, not just from this group, but from others around the nation, as to how we can do better as an agency to provide services that are beneficial for the community.

And we are also focusing on internal as well as external partnerships with less and less funding. We have more of a need to collaborate with other agencies and other partners.

I won't read this, but the White
House put out a release in July 2012 about why
they are announcing the establishment of a
White House-led task force that will consist
of senior officials from various offices to
produce recommendations on how best to fund
and manage infrastructure around the country
when it comes to ports, harbors and coastal
communities.

And the goal initially was to figure out a federal strategy for better

prioritizing funding for dredging and port infrastructure throughout the nation.

NOAA was called in early on to the CMTS, to work on a newly split up IAT or integrated assessment team on informational infrastructure, and to look at infrastructure around the nation, and through the help of Rich and others, we actually had the term informational infrastructure accepted and understood by many, not only in the federal community, but in the broader partnership for what I guess we were looking at for the White House Ports Task Force.

So we are looking at not only to hardened structure at ports and harbors, but we are trying more and more to focus on the need for informational infrastructure, to better manage port access and harbors.

There was a big to-do when this port task force was announced. There were a series of meetings. OMB is one of the coleads of the group.

There are a number of agencies
involved in managing what they are calling the
White House Ports Task Force. But
unfortunately none of them are actually
producing the deep analyses, the in-depth data
sets that are required to really look at
funding throughout the nation, how we did it
before and how we can better prioritize
funding for the future.

They look to NOAA and others for that and through the CMTS, we have been working through an interagency partnership to do just that.

We sent recommendations back. We actually provided comments on what they called the guiding principles, because even though we were pulled in back in early 2012, OMB had not actually developed guiding principles for what this task force will do.

I don't mean to sound critical, but it was unclear from the start as to what this team was supposed to be doing. We also

commented on what they called their draft policy paper, and then we never heard from them again, in essence.

We had heard recently at the CMTS meeting this fall, I think in October, that they were struggling with scale and scope.

Again, I mentioned earlier that they used to call themselves the White House Navigation

Task Force. They scaled that down to the White House Ports Task Force.

They were trying to figure out how big this should be. When they first stood it up, we said, "Okay, if you are the White House Navigation Task Force, what is your scope?"

And they said, "Everything intermodal, everything offshore and everything inland."

We said, "You are saying you are going to focus on air, rail, freight, shipping, everything?"

They said, "Yes."

"And you are going to prioritize

1 all of that?"

They said, "Yes." They said,
"Wait a minute. Maybe that's too broad."

So they scaled it down. And they, to be honest, they haven't figured out how to get from A to B since then, and so it really disappeared, unfortunately.

The goal of the whole thing was basically to get funding in the FY14 budget to better prioritize port and harbor funding throughout the nation, to stand up a program to actually look at the needs around the country.

That deadline came and went. They recently talked about getting it into the '15 budget. As I mentioned earlier, we are going to be drafting that budget in less than a month and a half.

So again, not to be critical, I'm not sure where this is going. But we'll see.

I think many of you are familiar with the Committee on the Marine

Transportation System. It's a sub-cabinet level -- excuse me -- a cabinet-level subcommittee; 28 departments and agencies are involved; they have a coordinating board as well as a leadership group that involves over 25 agencies, of which NOAA is a big part of.

Margaret Spring, who was here this morning, was our chair for the CMTS coordinating board for I think 18 months. She just stepped down recently at the October leadership meeting.

And David Murk from the Department of Transportation has taken over. Deputy Secretary Porcari came and spoke at that meeting. He is basically the chair but he delegated that position to David Murk.

That said, Margaret still has a lot of swing on that committee. She has a lot of pull, and people look to her for leadership and she will continue to provide that leadership and she is committed to do that, which is great.

Because while the CMTS is an important group, in the past it was less focused, I will say, on the needs of the nation, when it comes to marine transportation.

They did a lot of great work, and they looked at a lot of different opportunities. They looked at a lot of different data sets. But there wasn't as much focus. And I won't say it's all because of Margaret but she certainly did a great job the last year and a half of really pulling them together.

And I didn't want to list them, but there's a report that just came out with a series of accomplishments that are quite impressive, over the last, I guess two years really.

I am going to talk briefly about the 2013 priorities that were just approved, and a bit about NOAA's priorities for the CMTS. They are a bit different of course.

CMTS is a broad group of, like I said, 28 departments and agencies. Recently Margaret and others have asked us, well, what is our goal at NOAA, where do we want to see the CMTS go and where can we focus our limited budget on supporting the CMTS, and so we are looking at that right now and Admiral Glang and others are helping with that prioritization.

I'll talk about additional priorities they are setting for the year and just touch on the Coast Guard reauth bill and the opportunity for CMTS legislation.

So basically there are four or five areas that we are really focusing on with the CMTS. E-navigation is one of them as well as integrating e-navigation throughout the country, so not just the e-navigation system itself, but a system of systems if you will, looking at how can we better facilitate the compatibility of e-nav technology throughout the country, and CO-OPS and OCS and others

1 have been working on that.

They just completed a federal compendium of CMTS activities, the first ever draft database, I guess, for lack of a better term, of what the priorities are for each agency and who is involved across the system in the marine transportation world.

And they are also looking at offshore wind as a potential way to focus marine planning in a better light, and I'll talk about offshore wind in a moment.

And sorry to look through my notes here, but I'll touch on legislation. CMTS was never authorized officially in its own legislation, and so in the recent Coast Guard reauthorization bill that was proposed, there is actual language to support the CMTS which would give it a lot more strength as a cabinet committee and a lot more power.

And so we can actually implement more of the recommendations we are putting forward than we do now.

There is some authorization for CMTS but it does not have its own bill or its own specific language, and it's hopefully happening, with this new reauth bill.

Recently the U.S. Arctic marine transportation system overview and policy recommendations paper was completed. There is now an Arctic marine transportation policy.

It is currently under interagency review. It was reviewed by the CMTS. It is now out for interagency review. I think it's wrapping up soon.

It will be the first ever real strategy for marine transportation in the Arctic, which of course as you know is changing dynamically and rapidly becoming, I guess, more of a hotspot not just nationally but internationally for shipping and cargo opportunity.

There was recently an interim report completed for the Atlantic Coast Port Access Route Study. I am not sure if you have

all heard of this. You probably have. Many of you have been involved, I'm sure.

This is a quick schematic of I guess a heat map showing current shipping routes overlaid with density and -- you can almost see it, but --

(Off mic)

MR. WOOLCOTT: unfortunately never really done before, not in a GIS-based manner, and even the report itself actually produces recommendations on how best to do that.

One of the challenges has been integrating the automated information system of the Coast Guard with some of the data, primarily because of funding issues.

(Off mic)

COURT REPORTER: Excuse me, could you use the microphone please? That way I can record you.

CAPT. SWALLOW: Craig, I can clarify. The heat map is AIS traffic, so the green is like one level, red is high traffic.

They are not actual routes. It's just --

MR. WOOLCOTT: Oh, I apologize, right. High traffic and also that -- right, so that is the area that they would recommend you didn't cite because it is high traffic, it's higher density, right?

Thank you. And this just shows proposed routing in a traditional data set, and it shows how you can actually enhance that using heat maps and other AIS layers to better plan, and again, the red are areas of high traffic, yellow somewhat high traffic but a little better, and green, more likely an opportunity for siting.

It gets much more complex. I didn't want to bring out all the detailed maps because I really can't explain them, as you can see.

But it is a proactive way to start looking at better marine planning offshore, and -- I mentioned this -- but they did do it for the entire East Coast, which is great.

1 First time ever.

I want to touch on Port Tomorrow.

It's a concept that is still emerging in NOAA.

I guess I'll call it initiative. It's

basically an umbrella to capture some of our

current navigation and resiliency programs and

a way to better explain how we manage and plan

for growing traffic at ports and harbors and

how best to help communities.

One of the focuses of the program is a resiliency tool which I'll touch on in a moment. We are also looking at how to stand up a better PORTS system.

For example, if we were able to provide full federal funding for ports we could ensure that we'd have ports existing, I won't say in perpetuity, but at least with some sense of confidence throughout the nation. As you know, some of them now are in danger of closing, unfortunately, because of funding issues, like the New York-New Jersey harbor.

But again, this is more of a concept in NOAA, to think about how best to capture our navigation services to provide more function to the communities, a better way of supporting coastal needs.

Some examples include how to better inform communities about nautical charts; again, how to better stand up our PORTS system, meaning finding a way to support it from a federal perspective instead of having to rely on partners, which may or may not always be able to support their side of the cost-sharing program.

The National Water Level

Observation Network is another example of how we help the nation better plan. I'll talk about the Resiliency Planning Tool in a minute. We have ERMA maps, which are emergency response management applications.

Many of you are probably familiar with these.

We just finished one up in the Arctic.

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But there are better ways to look

at different ways of data at specific sites,
to understand what is there in the event of an
emergency, or in the event of an incident or
a national disaster.

You have probably heard of multibeam raster mapping, again another marine
planning tool, and we have the coastal
management program of course, which better
helps communities -- or helps communities plan
better for resiliency and changes along the
coast.

Some other examples across NOAA you may have heard of. There's a concept called Weather Ready Nation which is I guess a messaging strategy to capture our weather products and services.

There's also turning the corner on fisheries, a way to end overfishing. We have never really had a way to better message, I guess, our products and services for the nation on the nav side and that's what we are trying to do now.

In particular one of the first actual tools coming out of this program is called the Resiliency Planning Tool and it's an interactive website organized around port resilience indicators and criteria.

A better way to kind of capture and understand the perspectives needed by the coastal community, and the needs of the coast, and includes relevant documents, data, resources and links for port managers and other coastal managers, designed for users to explore resilience considerations and for developing marine transportation products and funding applications.

And the users are quite broad actually -- transportation planners, port infrastructure planners, community planners and hazard planners.

And we just recently rolled out a pilot beta site to see what the public thought of this tool, down in Tampa. It went fairly well. There are certainly some gaps we need

to work on, and it was a good way for us to get more information from the public about what they need.

Again, we are trying more and more to go to the public like we are here, to better inform us of how we could better serve the community.

And finally I want to touch on congressional outreach. We are planning a bit of a Hill blitz with the new Congress. We are also looking to reengage our current champions and the current members who support us, and we also have a series of new members of course we wanted to talk to, to educate them on what we do.

next to me coming over here mentioned to me that he had actually helped design the Nancy Foster, which was interesting. He was an engineer. And he knew about NOAA.

But he said, "You know if you asked somebody in the street, anywhere in the

country, what NOAA was, how many people do you think would answer?" And he thought it would be more like 10, 20 percent than 30 or 40, and I agree with him.

We are not known for the products and services we put out. People know about the Corps, they know about the Coast Guard.

Even with Hurricane Sandy, where we provided lots of response, people didn't even realize that NOAA was involved.

And so, we are going to try and change that. We are in an austere budget climate of course. We are not known and right now we are a line in the budget for many people. We don't want that to be the case because we think we would lose a lot of the benefits we provide to the country, if they turned to DOI for some of the products and services that we are uniquely providing.

We are also going to pursue congressional briefings with specific committees, House Natural Resources,

Transportation and Infrastructure Committee,
Senate and House Appropriations, and in
particular, Senate Commerce.

We have some ongoing relationships there but there are also some new opportunities for new people that are joining and we will have a new Congress in the spring.

But we are not going to wait until the spring. We are actually going to roll out some Hill briefings now to get Kennedy up on the Hill and hopefully Admiral Glang and talk a bit about our Sandy response.

But the great opportunity coming up is the rollout of the President's budget.

We, the line office are not typically involved in attending Pres Budget rollout briefings.

Some of the experts are. I think Rich you have been to a few.

But we haven't really had our leadership go in the past. We have actually been cut out of the loop and I think at this point, given some of the response we provided

to Hurricane Katrina, to Hurricane Sandy, and to Deepwater Horizon, it makes more and more sense for us to get the people out there.

They can speak across NOAA on the Hill when we are doing these President budget rollouts, because again, we are not well known and our budget is fairly small compared to some other agencies and yet we do a lot of work that needs to be known.

I mentioned we will be getting out and talking about post-Sandy response. I think we have some opportunities. We actually already briefed Senator Wicker and others on the COASTAL Act and we will certainly be out talking about the RESTORE Act. It's a big issue here in the Gulf and throughout the nation.

And we are also planning, I think, in the spring, if all works out, a spring navigation services all interested staff briefing on the Hill, probably at the visitors' center, to provide an opportunity

for new members, and I'm sure, many staffers whose members won't attend, to understand what we do for the nation, with our IOOS program.

So more on that soon.

And to summarize, we are currently under a CR again. It expires March 27th.

It's likely something will happen, whether that will be a second CR or a punt to next year. That's unclear.

I don't think we will hit what they are calling the fiscal cliff, but don't quote me, although I am I guess on record saying that.

And even if we do, some are saying it may not be as horrible for the federal government as people had originally thought.

I am not sure I believe that.

We are small, again, we could be easily cut and therefore our programs would disappear, which I think would be a shame, but we will see what happens.

The FY14 submission is at OMB. I

am no longer involved in the budget side as much. I sit with the staff so I hear about it and I have heard good things, and we have Paul down there, my colleague, currently as our analyst, and I believe things have gotten better as far as the understanding of what we do in NOAA, both on the navigation services side as well as on the coastal management side, at least for NOS and OMB, in part I'm sure it's due to Paul being there and educating them.

But in general we have made some good strides. We had some real challenges the last couple of years with OMB, more on the, I guess, conservation side, but in general, as you know, we were cut in '13, excuse me, in '12, and lost NRTs at that point. Hopefully that will change. I can't say much more than that but things are looking somewhat hopeful.

I think Paul had the same bullet, but things seem to stay the same on the Hill. The congressional appropriations process

remains uncertain and politically charged,
especially with the new Congress and a new -excuse me, a President and a new
administration which will definitely involve
changes in the administration that will affect
NOAA.

It's hard to know where things will go. Last year, the President's budget was delayed by I think it was a month. I am forgetting. But anyway, that was the first time in many years it was delayed that long.

It could be even longer this time. We will see.

Some major legislative issues I wanted to touch on. Again, we talked about COASTAL Act, RESTORE Act and Superstorm Sandy Recovery. I'll touch on HSIA in a moment.

We have been hearing about a supplemental. You have probably heard about this in the papers. Congress is talking about putting together a hurricane package. Many have called for millions of dollars. I think

Cuomo called for 30 billion, I believe.

The damage in New Jersey was originally estimated at 50 billion, although that estimate I think is grossly underestimated at this point. I think it's a lot higher. But I don't think New Jersey actually put out a number.

But some of the actual members and state representatives have been calling for funding to support Sandy recovery. What will happen, we are not sure. But it could provide some support to NOAA to continue, I guess, assisting with recovery, which we will do anyway, but it would be nice if we had some support for it.

And of course constituent support is essential during the formulation process, especially given decreasing budgets and austere times, and awareness, education outreach, remain one of our biggest challenges, but also, as I mentioned, one of our biggest priorities this year.

And I'll get to HSIA in a moment.

Before I go, though, I guess, I just wanted to say and I think our navigation service programs have more than shown their value over the last few years, and of course have always been there.

We haven't focused enough on them as far as outreach, and I think we need to do a little more of that. So we're hoping to do that now.

And let me real quickly just pull up a slide. So the Hydrographic Services

Improvement Act expires in 2012, this year.

Therefore I can unfortunately -- I could not unfortunately get numbers to show you for 13, and again, '13 is still a request, not appropriated or enacted.

But just a quick refresher, the '12 authorization amount for nautical mapping and charting or coast surveys work was 58 million, and the PresBud was 51.7 million.

The authorization amount for

hydrographic surveys was 34 million. That's compared to 31.2 in the PresBud request. And for vessels it was 27.4 million. I actually couldn't get a number in the Pres request for that. If they don't that on a specific line, it's the all-in number, I didn't have it handy.

We, I guess provided 29.5 in the President's request for geodetic survey functions, and the authorization amount, 34.6, and tide and current measurements was authorized at 28.5.

The PresBud actually was requesting 29. But again that's for '12. I don't have numbers for '13 and it's unclear where that will go, but Scott will be talking a little more about HSIA later.

Regardless, I think there may be some opportunities to push that a little bit forward. In general, bills are not moving on the Hill at all, but there are some members that are actually looking at specific items

and thinking about how they can, if anything, use them as leverage to better -- better show action, I guess, in the new Congress.

And so it's possible that this could move forward, especially given the need for dredging and other issues across the nation.

I appreciate all of you letting me talk today. I'll take any questions you might have.

CHAIR WELLSLAGER: Frank.

MEMBER KUDRNA: On the subject of continuing resolution, under a continuing resolution, you spend at the monthly rate of the previous year.

If, let's say we are six months into the budget, into March, and a budget is passed, and it's a reduced budget, does that mean you would have to eat all those cuts in the last six months of that period?

MR. WOOLCOTT: Yes, without getting into details, in general, yes. That

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1	is the general nature of how this
2	MEMBER KUDRNA: Which could be
3	pretty brutal.
4	MR. WOOLCOTT: Yes. It's
5	unfortunate, yes. The more you spend the more
6	you basically take at the back end
7	MEMBER KUDRNA: Out of the
8	remaining piece.
9	MR. WOOLCOTT: Correct. Yes.
10	That's the unfortunate scenario.
11	CHAIR WELLSLAGER: Okay, say that
12	again now.
13	MEMBER KUDRNA: Well, we're in a
14	continuing resolution so we are spending on a
15	monthly basis, as we did in 2012.
16	CHAIR WELLSLAGER: Right.
17	MEMBER KUDRNA: So if if at the
18	end of three months or six months a smaller
19	budget is passed, all of those cuts have to be
20	absorbed by October of '13 so
21	CHAIR WELLSLAGER: Okay.
22	MEMBER KUDRNA: So it would

1 greatly accelerate cuts. 2 MR. WOOLCOTT: Right, because you're only funded at the previous year's 3 level. And so anything you are spending, 4 5 again, you have yearly funding in essence from 6 the prior year. And so whatever you are 7 spending comes out of that year's amount, and 8 so you would have to eat that at the end of 9 the year. That's correct. Unfortunately. 10 CHAIR WELLSLAGER: Gary. 11 MEMBER JEFFRESS: Gary Jeffress. 12 You mentioned during your presentation this little phrase, "emergency investment funding." 13 14 Do your recall that? 15 MR. WOOLCOTT: Investment funding? 16 MEMBER JEFFRESS: Emergency investment funding. Did I not hear that 17 18 correctly? 19 MR. WOOLCOTT: I may have said 20 emergency disaster funding.

MEMBER JEFFRESS: Is that what it

21

22

was?

MR. WOOLCOTT: Yes, because we are hearing that it is possible we might get some emergency disaster relief funding for Hurricane Sandy.

I also mentioned that in '05 we had gotten disaster funding, supplemental funding, in essence basically, which is why the number there was so much higher.

MEMBER JEFFRESS: Over the last couple of years we have been hearing about the cost of these satellites that NOAA has to replace. Aren't they emergencies rather than an ongoing programming cost?

MR. WOOLCOTT: Oh, I see how you are equating them. Yes, and so when I was speaking to emergency disaster relief, I was talking about you know, natural disasters and issues that emerge that we have to respond to, without prior notice. Yes, though, those are basically stopgaps so all of a sudden they can't launch a satellite because they cost, I forget, but you know, billions of dollars to

1 send up in the air.

It's not an ongoing need. It's that you know, this particular year they are short X amount. If we don't have the satellite up in the air by October, you may lose two to three, two years' worth of weather data. How do you fix that?

So yes, those are emergency type requests. You are absolutely right. I can't speak to how we can alleviate the problem.

But it's certainly a challenge at NOAA that unfortunately is not going away any time soon.

and the satellite service are a huge priority for the administration, we as an agency need to figure out how to handle that, and unfortunately in the past, the solution was to provide those stopgaps and then figure out how to basically rescind the money from the rest of the agency to deal with that differential.

But it's a difficult challenge.

There's not a lot more I can say about it.

But those are one-time request type issues.

So yes, they are emergency stopgaps in

MEMBER HANSON: Bill Hanson. The RESTORE Act. NOAA has played a major role in the cleanup of the BP spill and was going to have a major role in the administration of the RESTORE Act, the way I understand it as well.

MR. WOOLCOTT: That's correct.

Yes. DOC is the chair --

MEMBER HANSON: Is there anything in that for NOS as well or is that going to be independent -- a lot of the states are being challenged to come up with their master plans on what they are going to do with the money when they get it.

MR. WOOLCOTT: That's correct,

18 yes.

essence.

MEMBER HANSON: Does NOS have a plan of survey ready projects and study ready projects that they can throw in the hopper as well?

1 MR. WOOLCOTT: Yes, again I don't 2 have the details myself because I haven't been involved. But I do know that they are working 3 4 on a plan for how we, NOS, we NOAA really, in 5 essence, not just NOS, but NOAA --6 MEMBER HANSON: So there's going 7 to be a lot of --8 MR. WOOLCOTT: Engaged, yes, 9 absolutely --10 MEMBER HANSON: There's a lot of agency budgets that are going to be --11 12 MR. WOOLCOTT: Yes. I believe there are biweekly calls right now talking 13 14 just about that. 15 MEMBER HANSON: All right and then 16 just a couple of other questions. You 17 mentioned the CMTS legislation and it gave some additional -- CMTS some additional 18 19 authority. Is that something you are 20 tracking? Is that something this group can --21 MR. WOOLCOTT: Yes. Yes, and I 22 can actually share that. We have the

1 language. I can certainly send it out to the
2 team.

MEMBER HANSON: I think that provides a lot of opportunity as well, at a lot of levels. That's part of the reason that we struggle with NOS as well as with Corps of Engineers, is it's not cabinet level.

MR. WOOLCOTT: Yes.

MEMBER HANSON: The discussions are secondary, so when you get up at that level, it's much more important.

MR. WOOLCOTT: Sure.

MEMBER HANSON: And finally, the
Port Tomorrow discussion, who is the customer
there? Is that something you guys came up
with or is that something --

MR. WOOLCOTT: So that's a great question. That's a great question. The customer in essence is the port community, the port manager. But originally, when it was first developed, that port resiliency tool, before we talked about Port Tomorrow, there

was a port resilience tool, and that specific initiative was focused on providing support for planners really. It was more focused on resiliency and for coastal zone planners, not so much for port managers, harbor managers.

And so it has expanded. We are looking at broader needs across the spectrum. But the original customer was the port -- excuse me the resiliency planner who is looking at zoning and looking at land use planning, that type of thing. That was the original intent, was to provide that support for that specific customer.

MEMBER HANSON: Okay. The question comes up because as we desire to be ambassadors for NOS and NOAA, we are looking for products that you produce, that come out of your research, come out of your capabilities, that we can advocate for, we want to be careful not to advocate for things that have been created without a purpose.

Frank asked a question at lunch

about AAPA in relationship with NOAA and NOS, and you know, I have heard him speak frequently of NOAA, but I don't know that I have ever heard him speak of anything specific other than you're a bunch of nice guys that do a nice -- provide a nice service.

So if there was something specific that we can throw on the table with AAPA, they can advocate and be a strong voice for you.

MR. WOOLCOTT: Great, no, I appreciate it. I agree and we do understand some of the concerns about this concept and it's one of the reasons I have said it's still emerging and we are still developing it, because I don't think it is ready for rollout, because we don't want to provide things that aren't needed by the community.

So I mentioned that in Tampa they did a recent rollout of their beta website.

Part of that effort was to inform NOAA about just that -- what do we actually need, and what do we need to provide for the community,

as opposed to what we think we might be able to just put out there?

That's never worked in the past, like CMSP you can't just tell people, "We have something new for you. Look how great it is."

You need to develop something that is useful, of course, and apply something that will actually have some benefit. And so we are concerned about that as well, and I guess without saying any more, making sure that the focus is on the user need, and not the NOAA concept.

And I realize I went way over my time. I apologize. The last thing I'll mention, while I can't provide details of the fiscal cliff, I can say that NOAA and the Department of Commerce, and I'm sure all bureaus, are planning for it, and we have looked at different scenarios.

If we were given a direct percentage, how would NOAA cut it across the board; if we were told to cut, you know, by

line office, how would we do that.

I don't have the details of that.

That's been done at the CFO level. But NOAA is planning for all different scenarios, knowing that January is coming soon. So thank you very much.

CHAIR WELLSLAGER: Thank you

Craig. Okay, next we have what will be

probably an abbreviated period for the HSRP

working groups. So first up will be Susan

talking about the legislative policy

initiatives, followed by David with a

different type of presentation I think, and

then we will close it with Lawson and the

emergency Arctic priorities.

Susan.

MEMBER SHINGLEDECKER: Well, Craig did a great job of summarizing pretty much everything I was thinking of talking about.

So that makes my job easy.

The purpose of the legislative and policy initiatives working group is to monitor

legislative and policy developments as they impact the tri-offices to monitor legislative and policy developments as they impact the tri offices.

Initially, the working group was created to consider recommendations for the reauthorization of the Hydrographic Services

Improvement Act.

We did start some work on that and I know Joyce did some -- a lot of reading for us on that. But with the election looming, we kind of understood that nothing was moving there.

So now with the election behind us, it sounds like that is something that we will look to take up again as a working group and dive back into that.

The three other items that we have been watching were mostly covered by Craig.

One was the RESTORE Act under the transportation bill, and the establishment of those five coastal centers in the region.

And as a working group, one of the main questions that we had was what are the -what is the role and what are the opportunity
for the tri-offices in those centers, knowing
that the data and the resources provided by
nav services played a large role in the
response there, you know, what are the
opportunities to bring additional resources to
bear as a result of some of the settlement and
the investment that goes into those centers of
excellence.

Next, as Craig also touched on, the COAST Act, or the COASTAL Act, and basically, as I understood it, it was doing this post-storm analysis of named cyclone storms to assist with the FEMA model development.

NOAA must inventory observing system capability of collecting the data necessary including conducting a gap analysis to identify shortfalls in the capabilities.

And from what we understand, that

the time line is viewed as quite aggressive, given the large scope and the nationwide coverage, down to parcel-level accuracy, just to give you an idea of the scope of that.

And since this is essentially a large unfunded mandate, I mean Craig seemed to say they were taking one for the team, and we will shuffle priorities and we will get it done, because that is what we have to do.

But I think as a working group we say, and perhaps as a panel, what things are suffering as a result of shifting priorities to get that work done and essentially, you know, do the work that must be done, well what has to give?

And I think in past meetings we have seen that also where, you know, especially in times of a disaster or something like that, the nav offices really seem to scramble to get the work done, but where's the reimbursement? Where's the resources put back into those offices to accomplish their core

1 missions?

And then lastly, the third main one was looking at the White House Ports Task Force and where is an opportunity for the panel to provide any input or any interaction with that task force.

I also saw some mention of new ports installations in Humboldt Bay,
California and New London, Connecticut, and just as a working group, how can we make sure that we interact or interface at any opportunity that we could when looking at the prioritization of those kind of things.

So as a -- from the working group's perspective, as a panel, if we are to provide recommendations to the administrator as a group, and then also serve as individual ambassadors for NOAA, I think information is key, and especially when it comes to policy and legislative initiatives, timing is always crucial. It seems to me that things will sleep for a while and then all of a sudden it

comes to life really fast and the opportunity to have input as an individual comes up really quickly.

So one way that you all can help support this working group is when you hear of opportunities, when you hear of things moving, get that information to us so that we can try and get it out to the rest of the group so that we can be more current, as opposed to just having an update, you know, twice a year on what's happening, because if we wait to just get those updates twice a year we will miss a lot of opportunities that we otherwise could seize on. Thank you.

CHAIR WELLSLAGER: Okay. Very good. Dr. Jay.

MEMBER JAY: I suppose I should start with a frank admission that it was a really busy six months and I didn't actually do a lot or anything with the committee, and we will indeed do better next time.

However I have been working with

several colleagues on historical data analysis related to, well, essentially NOAA's tide data, and coast survey tide data.

And in an unfortunate sort of way,
Hurricane Sandy is rather timely. I think it
will illustrate the four topics that our
committee is charged with: PORTS, the PORTS
system, better support of the PORTS system;
better use and delivery of data, historic and
modern; and a proactive water level response
both to sea level rise and to catastrophic
incidents, and I think, you know, as we have
heard, this was a real triumph for NOAA
provision of services that a lot of people
finally noticed; and then branding, which also
is helpful here.

I got my Masters degree working on New York harbor with Malcolm Bowman at Stony Brook. Philip Orton is a former member of my group, is now at Stevens Institute of Technology in Hoboken, and Stefan and I have been working on historical data analysis.

The background to this shot is a view of La Guardia Airport the day after Sandy hit. You can see the estuary has come back with a vengeance through those flooded, or those tidelands that were diked and made into runways.

NOAA did a really, you know, important job here. As bad as these predictions sounded, they turned out to be a little bit low.

I suppose one consolation is, well, it didn't really matter, if they had been higher, the simple fact of the matter is New York was not prepared.

These sandbags were overtopped and pushed over. These plywood sheets were under, I think they weren't sure, something like five or six feet of water, and you can see the ones over there trying to protect some sort of intake structures.

Everything under here was flooded.

Philip said he started to go down into some of

these spaces and realized it was just way too dangerous to even try to do that, that it was all flooded.

And this is Philip at South Street
Seaport with the water level line. You can
see where that is situated at the lower right.

I mean, you know, that is places where most of
us have walked around, you know, and all of a
sudden they were under eight feet of water.

And it also raises a rather interesting question, if there was eight feet of water here, the surge must have been higher here than it was at The Battery where the tide gauge is.

So, looking at these specific observations from the NOAA gauges, The Battery, which is the southern end of Manhattan, and let's see -- yes. That's right here. This is the Newark Bay, the East River tidal strait, Long Island Sound out here, here's Kings Point out here.

So they have gauges basically at

both ends of the East River tidal strait and then an air gap down here at the Verrazano Narrows Bridge. There's Sandy Hook here and Bergen and there's also an air gap here also in the same vicinity.

So at The Battery, the green line is essentially the surge, which is the difference between the observed in red here and the predicted. Notice that the surge occurred on a high tide but it was a lower high tide and if you look at the month, it really wasn't a spring tide either.

And at Kings Point, and there was about a nine foot surge, total elevation, it was about 4.5 meters, 4.3 meters. Up here at Kings Point, the surge happened a few hours later and you can see it's actually at low water.

So all of this, you know this is like a nine foot surge. This is like a 13 foot surge up here. So it's not too hard to believe that the surge was getting bigger as

1 it went up the East River.

And that's, you know, really impressive. I mean a 13 foot surge but it was at low water. Think if it had been at high water.

So we thought we would look at this from something of a historical point of view. As far as we know, the 13.1 feet or 13 feet of Sandy was the highest total elevation but by no means the biggest surge.

But from a geologic perspective, it appears that they know of three hurricanes that had pretty high water levels. This is not in -- these are estimates of height at The Battery based on somewhere in a nearby inlet; 1893 is going to turn out to be lower than this one when we look at the actual data, but it may not have been at this marsh where this was done.

And then you can see various other storms. So this starts -- this record starts based on a core in 1788 and goes forward.

We know of more or less almost direct hits in 1788, 1821 and 1893 and there was the Long Island or the New England hurricane of 1815, which was just huge, and there was also a 1635 hurricane called the New

England hurricane also.

And the distinguishing thing about here, about all of these, is New York isn't on the dirty side of any of them, and places like Providence have gotten hit with storm surges close to 10 meters, and we are talking, you know, three to four meters down here in New York, and this is partly a matter of geometry and partly just a matter of luck where the landfall is, and it may have something to do with predominant storm tracks as well.

It looks like Sandy is about the biggest event in 400 years. So then let's -- we actually took a look at the historic data. We have been -- New York, The Battery record is one of the two longest in the United States. We went back to the federal archives

to recover the part that NOAA no longer has.

We are still working on those. We did also recover data from Fort Hamilton in the 1890s that NOAA does not currently have.

So we can look at, based on hindcast highs for 1821 and some historical accounts, and we can actually look at the observed tides in 1893.

And then another point is that there was this 1938 storm that made landfall as a Category 3. That was the one that overwhelmed Providence.

All right, so the 1821 hurricane, this article by Redfield is quite interesting. He says, let's see here, that there was -- the water, having risen 13 feet in one hour at the time, so the time of low water, the wharves were overflowed.

And he was known as, he was the first head of, it's now the American Meteorological Society, and was a very precise observer.

And so this storm track is based

on, he's got page and page after page after page of notes from captains' logs on wind, where they were, what they observed, and so this storm track is pretty well -- pretty sound.

And when we hindcast the tide based on 1921 data or 1920's data, we found that yes, the storm was supposed to have been the strongest from I think it was six to five to eight, and yes, in the evening, and there's low water right there.

And if you add Sandy using the present mean sea level, you see that you end up with about 13 feet here, and that was exactly what happened then.

But the reason -- but it's a half a meter lower if you use the 1821 sea level, having it occur at high water.

Thrown into this is, there's about a half -- let's see, half a meter? Yes. It's about half a meter of sea level rise at this location.

And this is the 1893 surge. This one hit somewhere, kind of a similar track actually, to 1821. But it also hit out on Long Island apparently.

This is the -- these data are Fort Hamilton, which is under the Verrazano, was under what is now the Verrazano Narrows

Bridge.

And taking the surge out of those data, you see a 1.2 meter surge, and this time, this is considerably worse, about twice as large, and you can also see that the surge here is only -- only 2.5 meters, whereas it was more than 3 up at The Battery or about 3 at The Battery and almost four and a half up further north at Kings Point.

So things got bigger as they went landward, which is pretty common. So in summary, we have had -- New York has experienced a tremendously damaging storm, and the losses are just huge.

The sobering thing is that a lot

worse storms have hit further north and further south and you know, New York is not well prepared, and a lot of thinking is going to have to go into this, need to consider the range of historic and prehistoric storms.

changes -- and possible changes in storm tracks and intensities associated with climate change, which is actually a very controversial and difficult area, not easy to do.

And a variety of structural and non-structural options are available and need to be considered.

CHAIR WELLSLAGER: Okay, thank you. That's very interesting. And now emerging Arctic priorities.

MEMBER BRIGHAM: Good afternoon.

One anecdote before I talk on Arctic, a nonArctic subject. I have a family home on
eastern Long Island, and I was there sailing
in September, and I looked across the bay and
at Greenport, New York was the United States
Coast Guard cutter Eagle.

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the Coast Guard Academy. I guess some of the NOAA Corps officers here were trained at Kings But now they are all trained at the Coast Guard Academy, it further indicates the relationship, the new relationship of the Coast Guard and NOAA, probably never closer

And it was there for a festival,

but aboard were OCs, officer candidates, both

candidates. And the next day, after sailing

around and looking and waving at the ship, I

around the ship and there were white uniforms

aboard and Coast Guard blue. So it indicated

to me that the OCs from the NOAA Corps, had to

sailing aboard Eagle in the training program,

superintendent pretty well at the Coast Guard

Academy -- that the OCs, both Coast Guard and

NOAA, are fully integrated into the program at

went over to see the captain and I walked

be NOAA Corps officers, fully integrated,

and I was told, learned -- I know the

Coast Guard officer candidates and NOAA

than today. I am sorry that David and

Margaret aren't here to hear from a citizen's

viewpoint and Coast Guard officer's viewpoint

that never before have the two organizations

been this close, I think, and having the

training of the NOAA Corps officers embedded

within the Coast Guard Academy training

program is excellent.

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We have this working group, a small group. We are looking for volunteers if anybody else wants to join this Arctic group. We talk with email, even email. I haven't done Twitter yet on the working group but maybe that's passe.

But nevertheless we chat on the phone and meet electronically. But to remind you, I used this slide back in Anchorage and it hasn't really changed much, what are the driving forces for the Arctic with relationship to the United States maritime Arctic?

And surely oil and gas development

brings lots of marine traffic and rigs, et cetera, the onshore minerals development, the Red Dog Mine, maybe future carriage of coal to the world, it's minerals development on the land side.

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And then this increasing traffic that is not our traffic, it's international traffic, it's on the Northern Sea Route side, the top of Eurasia ramping up, and it goes through Bering Strait because it's the carriage of natural resources out of northern Norway and the Russian Arctic, to global ports, mostly in China, so it's the flow of natural resources and how do we protect the place and people in the Bering Strait region between our two countries, when it's one side that is ramping up on international traffic, both carriers and tankers, and on our side, traffic-related offshore development.

And then finally, what Andy

Armstrong and others are involved with, the

important exploration of the seabed and our

potential extended outer continental shelf.

This summer, in August, the 25th, there is a new record of minimum extent in the Arctic Ocean. Here's the passive microwave satellite image, the DMSP image.

And you can see on the 25th, but of course that's not the minimum extent time of the year really for sea ice, it's September.

And the old minimum, 2007, to the left, new minimum 2012, in September the 16th. So we see this increasing retreat of sea ice. But when you look at -- I'll see if I can use this here, well -- if you look at the right hand side and you see the reds and yellows, all of that of course is not 100 percent ice-covered.

So if you have a reasonable polar class ship you can navigate quite easily in most areas of the whole of the Arctic Ocean, except for perhaps the very northern coast of Greenland and the Canadian Arctic.

So really most of the Arctic Ocean today, for several weeks of the summer, is actually fully or nearly ice-free, so to speak.

By 2025 most of the models tell us

-- the most advanced models, even before 2025,

there will come a time when the Arctic Ocean,

for at least a short period of time, is in

fact completely ice-free. It means that there

will be no more multi-year ice, more difficult

ice to break.

On the other side of the Arctic, just to give you some context to this, this is in the Russian Arctic, the Pechora Sea. This is in the eastern part of the Barents Sea.

It's an offshore terminal.

But the players are this international collaboration of and consortium of investors and shipbuilders. Lukoil and ConocoPhillips are the investors and the developers of the rig, of the terminal, I should say. The ships are built in Korea with

Finnish technology and the operator is a

Russian-flag company, the largest shipping

company in Russian today, Sovcomflot.

Lots of players, lots of investment, lots of technology transfer, all in the new maritime Arctic, which is pictured, is a good example of coming to the United States maritime Arctic in the future.

We note in our little group lots of stuff going on. We heard a little bit about CMTS and my only criticism of CMTS is, and maybe this can be a recommendation to either Margaret or David, is that we as members of this panel get a chance to review what they are up to in the review process before, perhaps, it's published.

I think we probably have the legal right to -- maybe -- to actually review it.

It's only agency people, and I have only, and of course Andy Armstrong, being a public, federal employee, has access to it.

But I think -- I have actually

seen this top secret document, one of the sections on Arctic, and I actually think -- well, I think they need some help. I'll be gracious.

It's not just me. Others that have looked at it from the Arctic Research Commission, and others, think that the Arctic section of it all misses the international connection to some of this and then hypes maybe the global trade group connection.

But nonetheless, here are some things that are ongoing that relate to our working group, relate to HSRP. At the international level, the U.S. is in the lead with Canada and Iceland on an aviation and maritime infrastructure project.

So there would be output from that, surveys done on stakeholders that could be useful to us. There is a new agreement to be signed. I was part of -- kind of a technical adviser to this oil spill preparedness and response agreement of the

Arctic states, follows the search and rescue agreement.

So what will come out of that, we'll see what responsibilities the United States might have in that, and so it's tangentially related to our work in HSRP.

Lots of studies ongoing. One just released on decadal prediction of Arctic sea ice. I was on that one too and interestingly, the funders of this National Academy study, NASA, ONR, the intelligence community.

I did ask at the first meeting were our friends from NOAA kicking in 100 grand or something. But NOAA was not -- even though NOAA's priority of lists of Arctic things are -- top of the list is prediction of sea ice, it's just an indication that NOAA needs to be a player. Many NOAA scientists and researchers, modelers, we are part of the study group and part of our effort.

But I think some funding for, particularly on NRC studies, is helpful.

Then you can see the other

studies. There's Alaska state DOT and Army

Corps of Engineers study, looking at where

should we site an Arctic port, or a system of

ports around the coast of Alaska, of relevance

to all of us and relevant to the

hydrographers, because wherever we site these

places, probably going to require some future

planning for hydrography and charting work.

And then some new studies coming, a huge one on responding to oil spills, and I would add, if you can, in ice-covered waters.

A huge study of the National Academy coming, emerging research questions, the Arctic and then finally Marine Board, Admiral Glang and others, were at this meeting, workshop, Marine Board of the Academy kind of kicking off this study. I am not sure where it's headed, Admiral.

But it was a pretty good mix of industry people and looking at needs. Where the Marine Board takes us, who knows, but it

has relevance to I think our work in HSRP.

Some actions that -- some have been taken already. The Sikuliaq is the new UNOLS/UAF research icebreaker, a fairly large ship, 360 feet. And it has two multi-beam sonars.

So somehow an agreement should be reached, I think we would say in the working group, with UNOLS and the University of Alaska on the data and information in a more formal way.

This ship is going to be out there
300 days a year in a lot of coastal areas
where deeper draft ships can't go. My sense
is that it's just another platform of
opportunity, maybe not directly related to
charting, but surely related to all the other
modeling and all the other efforts that NOAA
does.

So new platform, along with the Aiviq, the Walrus, the new Chouest offshore ship. There's already agreement for data

1 passing.

But again, this new ship, commercial ship, one of the largest commercial icebreakers on the planet, it will be out there 300 days a year and somehow we should use the data and information that they could bring to bear, or conduct various projects in a commercial mode, and another asset.

New assets coming, additional assets, offshore vessels coming to the Alaskan Arctic, so new opportunities. And a lot more data in the Arctic, in the U.S. Arctic, from AIS, land-based, as we saw, AIS receivers, satellite receivers.

And then finally, with our standing group, there will be lots of surveys done by the National Academy and others, and we should -- surveys of stakeholders and actors. We should take advantage of those within our working group and then within HSRP.

Lots of data, as Ed Page, the executive director of the Marine Exchange

showed us some data in Anchorage, some recommendations on the passing of data between the Arctic states, probably the next agreement, I would say, will be related to this topic, of how can we share -- seven out of the eight countries can share the data today seamlessly, and you can guess that the eight country is the Russian Federation, how we break that chain, break that culture to have them pass information, passing information, knowing exactly where all the traffic is in any given moment, as the traffic passes between its transboundary.

Just one more slide to remind you in the marine world, that while this didn't happen in the Arctic, the searing images of the Costa Concordia on its side, 100 years after the Titanic, reminds us all, particularly mariners like some of us in the room, stuff can happen. Better not happen in the Arctic or we will have in fact the next Titanic. Better not happen in the United

States maritime realm anywhere, or in the world.

While only 50 passengers were lost, you could swim ashore from this. This happens in the coast of Greenland, all of us who are involved in this are really on the point here.

Hard to fathom for me being a mariner, Admiral Glang, that this happened in January on the coast of Italy, the most charted, historically charted area, among the most charted in the planet. Pilot error, perhaps master mariner error. But stuff happens.

This is what we are working on in IMO to prevent from happening in the Arctic.

I'll end with that one just to stir things up a bit.

CHAIR WELLSLAGER: Okay, Lawson.

Thank you. Deborah, do you have something to say? Joyce?

MEMBER MILLER: Yes, Lawson, do

Well, I don't

you know, on the two ships, the -- I won't try
to pronounce the University of Alaska ship and
the Shell ship, has anything -- have
conversations gone on with NOAA about using
the data and possibly cross-training and such?

MEMBER BRIGHAM:

know, I mean, Admiral Glang probably knows.

I don't know if there have been conversations yet with UNOLS and my university about the using of the Sikuliaq once it becomes operational in 2014, but it's coming, and its presence there, you know, it will be trying to work 300 days a year, if it gets funding for science. So my guess is that maybe more conversation might be required with UNOLS, the grand operator of our university fleet, plus my own university, maybe more direct talks are necessary.

I think Sikuliaq or Aiviq and Shell, there are agreements in place with three oil companies, and I suspect the operation of the ship and its information is

part of that agreement, I suspect.

So some headway, maybe a bit more is -- is called for, is what I would recommend.

MR. ARMSTRONG: This is Andy
Armstrong. Joyce, I have been tasked to make
some contacts with the University of Alaska on
the Sikuliaq, but haven't done it yet, so I'm
behind on that.

ADMIRAL GLANG: Let me add something that I know about the Sikuliaq and NOAA, which is that OMNO, the Office of Marine and Navy Aviation Operations, the folks who manage NOAA's ships and aircraft, that Rear Admiral Devany chairs, co-chairs the interagency working group on facilities and infrastructure.

And it's basically a working group of the different agencies that operate the federal fleet which would include the UNOLS ship. So Admiral Devany is well aware of what's going on with the Sikuliaq. He works

with the NSF folks who are helping to manage that.

And one of the key pieces on the Sikuliaq for ensuring an end to end stewardship of the data and the observations that are being made, is this R2R concept, rolling deck to repository.

And NOAA is working fairly closely with UNOLS on implementing that on the Sikuliaq in this case. So, while that doesn't address the mapping data that the Sikuliaq has the potential to acquire for us, it does start the conversation for the other kinds of data observations that the Sikuliaq will make.

And from what I understand, the backbone, the data acquisition backbone is actually one that NOAA has developed that will be put on the Sikouliaq and that isn't operational on some of the other UNOLS ships.

So there are different conversations happening. I know, Andy, through the Joint Hydrographic Center, you

have also got the multi-beam advisory
committee that is connecting with the
Sikouliaq to help with the activation, if you
will, in the simplest terms of that multi-beam
system.

So we have got some conversations going on. What was the other -- the other issue? I've talked myself --

MEMBER MILLER: I have one comeback, Admiral Glang. My concern is, having been involved with the Hi'ialakai, we are having trouble out in Hawaii collecting data on a NOAA ship because of some lack of communication perhaps.

You know, I was part of the team that put a system on that ship. It's no longer on that ship. And it's compromised, and I would just -- I mean, as critical as the data is to Alaska, not that the data in Hawaii isn't critical as well, it just, you know, every effort needs to be made to make sure that there's good coordination and you know

what systems are going on the ship and how the data will be collected and so forth.

MEMBER BRIGHAM: Yes, I think just in the working group, it's maybe our job just to highlight, but of course Admiral Glang has already suggested, there's some good communication already, but you know, our job probably just to keep the press on, make sure these are highlighted. We have more capability in the United States Arctic than we have had in decades as far as icebreaker capability, so it's actually a positive sign.

MEMBER JEFFRESS: Lawson, Gary

Jeffress. In all our briefings on the Arctic

over the past few years, there's been very

little mention of the Navy, and I know the

Navy operates up there, because I have

actually seen them from a cruise ship.

Are they a possibility for science as platforms as well?

MEMBER BRIGHAM: I don't know if I can comment about that, but I sleep at night

all the time knowing that our Navy has a superior submarine force that can and does operate more than occasionally across the Arctic in moving these stealth assets around the world, is all I should probably say.

And we know that -- all of us know that because usually there's a picture in the New York Times of a nuclear submarine at the North Pole, and we the United States tell the world that actually we can do this very well.

So the Navy's role, in my mind as a taxpayer, is that role, of tactical assets that go into the ice, has a role of course in modeling and the Navy was involved in this prediction report we had, the National Academy, a big role, as far as using the prediction systems to look at future planning for naval operations in the Arctic, by the ice-free surface vessels.

So there's a lot going on. You know, there's kind of doom and gloom in Washington about the United States role in the

1 Arctic.

We are the lead country in the Arctic Council. We have the largest by multiple times research budget both ends of the planet.

We have the most monitored,
advanced cold regions-trained military of any
country, in Alaska, Fort Richardson,
Elmendorf, et cetera.

We have missiles underground in the Arctic. There's a long list of positives. What we don't have, and what gets some attention, is infrastructure.

The satellite issue which you raised is a huge one, a kind of national security, bureaucratically bungled kind of thing over many decades, where we have satellite gaps.

That's the most important to the Arctic as anything, is the free flow of satellite information that we the United States provide the world.

So that's probably one of the weakest infrastructural links. But icebreakers, and their potential. One more comment about icebreakers -- sorry David isn't here -- but he caught the hype of the Chinese ships going around the world.

The Chinese icebreaker was built in the Soviet Union and the Ukraine, a refurbished ice-breaking cargo ship, a very fine logistics vessel, a very low-powered ship, but it gets around. It's been at both ends of the world.

The new Chinese ice-breaking research vessel is like the Sikouliaq -- slightly larger, same power. So China is, you know, advancing their science, they are playing in the Arctic and Antarctic game from a scientific standpoint. I'm not sure they are coming over to take over the Arctic, maybe buy the place, and buy the resources.

But from a maritime standpoint, they are pikers compared to the rest of us in

icebreaker capability, but you probably wouldn't hear that anywhere inside Washington.

But we actually have -- the Healy is one of the largest icebreakers in the world, among the top 10, but you don't hear that message.

It's very capable. Andy has sailed on it. I mean it can go most places.

But it's only one. We have responsibilities at both ends of the world, I would say, in the Coast Guard, and that capability is one that is in need for response and et cetera.

Anyway, I'll get off my soapbox on icebreakers.

MEMBER MILLER: Lawson and David, shortly after the Anchorage meeting, I rode one of the NAVOCEANO ships to look at their new sonars, and learned that the year before, they had been up in the Arctic with one of their big survey ships, and that there was intent or there was plans to be up in the Arctic again. Andy can probably confirm.

And you know, my question is, now they -- they have sensitivities about telling people in advance where the ships are going and so forth, so there is an issue there.

But it seems that data have been collected up in the Arctic by incredibly well-outfitted oceanographic vessels, just amazingly so, and I don't know, perhaps it could be a suggestion from the panel that, you know, that there be followup on that.

Admiral.

ADMIRAL GLANG: Admiral Glang, let me address Gary's question directly. Lawson took us the long way. The fact is we have an active and close relationship with the Naval Oceanographic Office and we do share survey plans, where we are going to survey, in particular in this case, western Alaska and northern Alaska, the Arctic, and that we make sure our plans intersect with the Navy's, that we work out areas of mutual interest, and we are expecting some data from their 2010

surveys in the near future.

So we -- and this is, it's nothing new. We have gotten data from the Navy before in other areas. So there's some technical challenges with the data they acquired up there, really interesting ones. So we are going to see what we can do with it.

But we have got some other survey data as well that is in the pipeline. So it's not a lot but every bit counts and it's coming. So I was just there on Monday, talking with them about it. Is that a better answer?

MEMBER BRIGHAM: Yes, I think Gary was also kind of hinting at what's the role of the Navy, actually physically in the Arctic Ocean, and you know, I'm somewhat biased, because I think it's a Coast Guard pond for allover response and protection issues, marine safety and all that.

Navy has its role in broad security issues and I think the submarine has

its role in the Arctic Ocean. It's the surface Navy which is deployed everywhere else in the world, and how they might fit in the Arctic is still an open question.

When, if they start building icestrengthened, Aegis-class cruisers down here
in Louisiana, I'll be pretty nervous as a
taxpayer, because I'm not sure the nation
needs that kind of ship.

So the Navy itself is figuring out through its task force what is the role of the Navy actually physically in the Arctic Ocean in the future, that is ice-free for a while.

It's an open book, an open question I think. Thank you.

MEMBER CAROTHERS: It's Jeff
Carothers. It may be more for my -- to learn
something here. Do the submarines actually -I know that's the most of the Navy assets are
probably submarines I'm guessing, do they
collect any bathymetric data or anything from
the submarines?

MEMBER BRIGHAM: Oh yes, over the last, well, since the Nautilus we have collected data. When I was a staff member of the Arctic Research Commission, we worked in agreement, because we had a nuclear submarine skipper who was the chair of the Arctic Research Commission, and we worked in agreement to release that data, and I think it's still being released, it's probably a few years behind from recent trips.

But there's a wealth of data and it's being released to the public and into the nation's database. It's a tough, it's a struggle, because the position of the submarine is the one thing we don't want to release. But the data is very valuable to climate change et cetera, particularly sea ice thickness is what we are looking at.

MEMBER BARBOR: Ken Barbor. In particular, of course, you know, the Navy has had SCICEX, science ice exercises every year, where you know, the submarine is up there

doing scientific investigation, and I say, I too have worked on the -- tried to release submarine data.

The Arctic is actually a less controversial one than a whole bunch of other areas, because it is an exploratory thing and not an operational per se sort of thing.

So the fact that you went from point A to the North Pole is not an operationally sensitive aspect, you know, once you've done it. But you know, where you routinely are on patrols, hugely, you know, concern.

So there's a lot of submarine data released in that respect.

VICE CHAIR PERKINS: Craig, something came to me that I meant to ask at the end of your remarks. NOAA did a 10-year strategic plan and then there was a five-year update that took place earlier this year. I had a chance to participate in the workshops on the front end of that 10-year plan and then

got pinged again here for the mid-, five-year updates.

Do you know, or maybe between now and the next meeting can -- is that thing in draft mode or --

Okay. Great. And then just going back to Susan and maybe David on strategic effectiveness, my Twitter feed, talking about the timeliness of social media, sent me the update on the LightSquared issue. So we had the briefing, I believe it was in Norfolk, on LightSquared, and then reported you know, the great news that LightSquared had gone, you know, toes up, and was headed towards bankruptcy.

And so the Twitter feed yesterday not only has Carl Icahn putting more money in, but he has hired Karl Rove as his strategist, and they have purchased another company and they have got a different piece of the spectrum, and it's now over top of the NOAA weather satellites.

So I am not sure that issue is really dead. It may not be our problem but then again, maybe it is our problem, as the weather is a strategic component of the planning and activities related to navigation services.

So I think, I'm not sure whether that falls on legislative and policy or on strategic effectiveness, but I think it's imperative that we keep our eye on the ball, on that one. So just wanting to share those two tidbits.

MEMBER BRIGHAM: Just to ask if anyone wants to join our group, I guess it's kind of free and voluntary, right, Matt, to join up and hear about and work on issues regarding Arctic? We are happy to expand our hold.

These working groups I guess are standing, till we get axed for some reason.

But I suspect the Arctic one might be around over a number of these HSRP groups, and

probably be around for a long time, these issues. We will work at -- try to kind of tease them out and put some relevance on them and reality, and Steve Carmel, who is on it, puts the commercial reality on some of this, of what we do. Thank you.

CHAIR WELLSLAGER: Let's take about five minutes, get up, stretch, then we'll come back and finish things up.

(Whereupon, the above-entitled matter went off the record at 4:25 p.m. and resumed at 4:43 p.m.)

CHAIR WELLSLAGER: Well, now it's

time for the favorite part of the whole
meeting, in essence the chair would like to
look and open the panel up for discussion
about stakeholder input, the site visit,
discussions about the topics that we have
heard today and to talk about tomorrow.

Briefly let me discuss a little bit about tomorrow, and the idea here is, we've got two stakeholder panel sessions and

we are going to hear, as most of you all know already, things that people like about nav products and services, things that they don't like, problems, needs.

And the idea is to use the information that they are going to provide to us and for us to think about that, because what will then happen is on Thursday we will break up into breakout sessions, and using this information, in conjunction with those that provided us with user input or stakeholder input, we want to arrive at some very specific points that we can use to make recommendations.

And my goal is to have these recommendations out within a month's time, and it needs to be done. So I really am going to put the task to you all, to think about what we are going to hear tomorrow, and to really put thought to paper, and work on some very good talking points for Thursday, and discuss, I mean, we are going to have a while, right

now, an hour and a half, maybe almost close to two hours, to sit and really discuss some specific issues.

There will be somebody taking notes and there will be people there to talk about what we need to have done. So do this and come up with what I think would be -- or what you think would be points that we as a panel can really tie down and make good recommendations with, because that's the purpose of this meeting.

We have done it before. This was one of the first times I actually have heard NOAA administration say you know, what, we read your letter, and this is what we are doing now. So there was a measurable, you know, it's like, oh, all right, this is good. I like this. Well, okay, the ball is rolling. Let's continue to do good work. We have been doing good work. And we have got people interested. We have a new DFO. He is pushing and it needs to be done.

So I really am going to put the task up to you all to come up with some good stuff. And the information is here, and the people that will be presenting tomorrow will be giving us some more information to build off of.

So that being said, it would be good to know right now -- Frank, did you have something that you wanted to talk about?

MEMBER KUDRNA: I did, and I had asked Matt if it was appropriate to raise it now. Now that it's my second meeting and I have one data point, I have a little more perspective on what to talk about.

But before joining this panel, one of the most effective things I have ever seen come out of a FACA committee was the top 10 list that I think was instrumental in changing the awareness and level of funding of the activities that HSRP does.

I mean it was terribly effective, and we were talking about the glass half empty

and the glass half full with budget
discussions, I mean the glass probably has a
hole in it these days.

And there could be some very difficult times from a budget standpoint coming up in the future, because if you look at NOAA's 5 billion dollars' worth of budget, and you take a billion dollars off for satellites that aren't going to get touched, and then you take whatever weather services that's protected and unionized and all of that, and then you take a look at all the fixed cost of rent and security and all those kinds of things, the reductions go to a much smaller area of NOAA that HSRP-type activities are included in.

And I think there is a real need to communicate the value of the things done by the areas of NOAA we support and review to the Congress, before they make all these big budget decisions, whether it's a revised version of the top 10 list, or some other type

of document, and I think it -- you know, I think it's great that some of the senior management from NOAA is going on the Hill, but that's not as good as a constituent, as someone who really is in a given state or port authority or American Ports Association or civil engineering society or the others who is benefitted by that use, and I think we ought to have a discussion of how we could put some support toward the Congress, to make certain that in tough budget times, an inordinate amount of cuts don't end up on the HSRP type area.

MEMBER MILLER: I have a related question. We can talk to congressmen, but I mean our recommendations are to the leadership of NOAA, when we make recommendations.

How can we carry that forward to Congress? Is it possible to do it as a panel? I don't know.

MEMBER KUDRNA: Other panels have done it, in terms of activities, produced a

set of recommendations and carried those 1 2 forward, distributed them to constituents who also bring them forward.

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VICE CHAIR PERKINS: Yes, I mean it's a sensitive issue, right, whether we go to the Hill and how we approach that. maybe rather than Mohammed going to the mountain, maybe the mountain should come to Mohammed. If we are going to schedule our next meeting in the D.C. area, and if we can actually become effective in planning and getting an agenda assembled ahead of time, then maybe we could communicate that agenda out to our congressional offices and our Senatorial offices, especially the ones, like my Congressman from the third district in Kansas who sits on House Appropriations, and invite their staffers, the appropriate staffers, that have an interest in what NOAA does, what nav services does, and the elected legislators who serve on the committees and the subcommittees that are of extreme

importance to what goes on inside the tri services.

You know so I think a much more effective strategy would be to invite them to come in and observe and learn and be part of our stakeholder panels, you know.

I mean it's great for the stakeholders to come in and for us to sit here and learn more about what we pretty much already know about with a slightly different perspective or twist, if we can put that knowledge in front of the staffers, because we all know it's the staffers who make everything happen on the Hill, that might be -- especially if we are going to move this meeting into the D.C. area in the spring.

Just a suggestion.

CHAIR WELLSLAGER: In reference to what you were saying, Frank, you know there was the Ten Most Wanted and then there was Ed's project, where he kind of did an update to something like this.

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A lot of that information is still good. A lot of the information contained within that report I think is spot on. There has been talk with conference calls and such about possibly taking that document one step further before laying it completely to rest,

and that would be making an executive summary.

I mean as it stands right now, you have got something that is what, let's say, 30-plus pages in length, and while it's got good information, and while it's beneficial in conveying what the needs actually are, it's too thick, and if we were able to kind of boil that down to, you know, one page or two pages tops, and then when we have the staffers at the meeting, say among other things, this is one of the things that we are willing to hang our hat on, and it would be the executive summary of that document. That is a readable thing, and it would have good talking points and vital information that they can then take and give to their boss and say, you know, good 1 stuff right here.

about something like that as the committee?

MEMBER MILLER: I've been thinking
about that, and one of the things that struck
me and we have heard repeatedly in every
meeting I've been in, was -- I mean, when I
read it, it was like we need more of this. We
need more of that. We need more of that. We

So I mean, what are the thoughts

And repeatedly we have heard more constrained budget environment, more -- you know, less resources to provide and so I think a review of that document and maybe honing in on some things that -- partnerships or -- that could be done more cost -- well, I don't mean that it's not being done cost effectively, but possible ways to accomplish things without more funding, because I mean the number one was more hydrographic surveying, well that's sort of, of course we need more hydrographic surveying. But you know, how do you get there

without the budget going up?

So I don't know that just an executive summary would necessarily be, you know, perhaps a little bit more budget consciousness, you know, we have talked about user fees, we have talked about you know, other options that the panels sees.

So I would think that simply an executive summary, I think we would want to reexamine that document and whether modify it or not, but certainly reexamine it to see, to see what we think of the, I guess, the more approach is what I would say.

MEMBER SHINGLEDECKER: I would agree with Joyce's sentiments there. I mean, I think that that document, while really effective and great for someone to take with them to make that case externally, it was created in a very different time than where we are now, and I think that yes, just saying we want more, more, more is -- it's almost laughable.

But if we could look at it and kind of cut away at it, take 10 to 5 and then look at exactly like what you said, okay, well these are the things we want, well what are some ways we can do it without just throwing more money at the problem.

MEMBER BRIGHAM: Related to this, if we have this meeting in Washington, it would be very useful for us to request that CMTS give us a full briefing on their current report.

But it would be very interesting to have a briefing from this White House Ports Task Force if we asked them to come, and the we would have a stakeholder discussion about both of them with staffers there.

Actually I don't think either effort gets stakeholder input from the maritime world. In fact, I am quite confident of that from the CMTS part of it.

So maybe if we invite those briefings and then have a group of

stakeholders, staffers and us in the discussion, we might say this is rubbish or this is great stuff, or somewhere in between.

And so there are these efforts in Washington that you know, we get the output but we don't get much input into it, so I think we should try to influence both efforts in some way, at a meeting actually.

CHAIR WELLSLAGER: -- quite effectively address the situation. Scott, did you have something?

VICE CHAIR PERKINS: Yes, going back to Susan's comment about the most wanted list isn't going to go very far. It's all about doing less -- doing more with less, or doing the same with less.

So maybe our emphasis should be on five best practices, five good examples of interagency cooperation. It may be as much about preserving, you know, the funding level that we have become, you know, accustomed to, as opposed to trying to get more.

It may be putting the emphasis on the one pager we can take to the Hill with the best practices as opposed to what we want, you know, as a budget preservation or a funding preservation strategy.

MEMBER MILLER: And I would think going to -- linking in with what Kennedy was saying this morning, about you know, more effective -- speaking of whom -- about more effective marketing of what navigation services does well and you know, sort of, I mean, I think this, you know, the hurricane response is a perfect example of, you know, how valuable the services are and how, you know. But I like your best practices too. I think that's probably a good idea.

MEMBER BRIGHAM: Not all of it is less because when you think about the Arctic and its emerging significance and importance, from an economic and security standpoint, less is not -- or even more of the same, which is not adequate.

So I think we can argue from at least our position that less or staying the same is just not appropriate for some emerging places.

VICE CHAIR PERKINS: Yes, that's a good point. If we can get the harbor trust funds directed for what they were really intended for, if we can get some traction on user fees, we don't necessarily have to do with less. That's a very good point, Lawson.

MR. EDWING: Rich Edwing, CO-OPS. So for the Washington meeting, if you decide to try to get staff involved, within the last 12 to 18 months, there has been a new House caucus formed called the PORTS caucus. It's capital PORTS. And I have decided not to sue them for infringing upon the PORTS trademark.

And I forget what their acronym stands for, but it's a bipartisan group, a Republican and a Democrat heading it up, and their whole purpose is just to kind of raise awareness about the MTS, particularly ports

and the importance to the economy, and their might be a partnership there that could be explored for the Washington meeting.

They even have a Facebook page.
So there's your social media.

VICE CHAIR PERKINS: Yes, that's a good segue, Rich, to something that Matt and I have been talking about off-line, and that's trying to do two things to make this panel more effective in our operations.

And so what we have discussed and what we have reached out to some of you about is forming, you know, an executive committee to try and keep traction and keep momentum going in between the meetings.

And then the secondary part of that was actually forming a program committee. You know, I'll be real frank about it. We have had the luxury, most of us, because Kathy carries all the water, of simply showing up -- showing up, maybe not even having read the agenda, right, and putting on a good face and

making this look and feel like we have done a great job and we have been really productive.

But you know, this panel can do a heck of a lot more and I think, you know, those two simple steps, if we can get, you know, some kind of continuity of our engagement in between these meetings, you know, if we can get a program committee that's truly engaged, you know, especially if we are going to go to D.C., and if we are going to invite people in, then we have got to have our A-game on, right?

That's my segue for Matt to be the heavy here and, you know, twist arms and get you engaged.

CHAIR WELLSLAGER: Gosh, thanks
Scott.

VICE CHAIR PERKINS: Any time.

CHAIR WELLSLAGER: Yes. Now it is interesting, because we had talked and trying to involve more and more of the HSRP panel, we have the working group. So we had three

people there, and there was some outreach to others that we had talked to via phone or by email, to see if they would be interested in working with the executive committee, and trying to develop what could be the agendas for the upcoming meetings, and the program groups.

Think about if this is something that you would like to work on. The chairs for the working groups, you've got your hands full in something like that. I want to involve more of the panel.

So this isn't going to be you know, one person or three people or four people carrying the load. I want more of the panel members in the HSRP to step up to the plate now, and it's important that we do this, because as Scott said, Kathy does the work of five people, and it's paid off in spades with every conference.

But along with her, you've got the nav managers. Well, okay, they have provided

Well, let's come up first with a panel. Let's let that panel think of things that we need to discuss based on the location that we are going, and then with that information, we can

some very outstanding ideas and information.

6 then present that to the nav managers to have

7 them pound the pavement and help get the

8 process going and address the issues that we

9 are really interested in trying to address at

10 the next selected site.

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So you know, names aren't getting passed out right now, but I just, I really want you to think about something like that and we will discuss this off-line. But this is -- this is the direction that we want to go and I think we would be shooting ourselves in the foot if I had more than three or four people on this panel, because decisions made by committees of six or more never happen.

It's like herding cats. It's not going to work. But with three, four people tops, I think we could come up with a good

plan and with this, we can move forward and have some very constructive and outstanding meetings.

Not to say that the ones that we have already had haven't been, because they've been great. We have had, well at least the last two that I have chaired, I have walked away amazed at the things that I have learned, and the ones that I had attended prior to that, were just as good.

But let's take it to the next step, and I think that would be helpful.

Kathy.

MS. WATSON: Matt, may I suggest something? FACA regulations and so forth, it may be, to avoid a lot of confusion, instead of calling it a panel, because you, all of you as a full panel, is the panel.

But if you are talking about a subcommittee or an en executive or program committee, two or three people, it's probably better to call that an executive committee or

subcommittee, because that then reports back to the full panel, on any of the work or any of the planning or any of the strategy that it develops. Thank you.

MEMBER KUDRNA: The SAB calls those working groups and their action needs to be blessed by the full body.

CHAIR WELLSLAGER: So I guess we could call this the planning working group or, you know, something to that effect.

Okay, so let's think back on today. We have heard some interesting discussions and there were some talking points that came up, and things that I think we should consider addressing a second or third time possibly.

One that came to mind that I wrote down, and I think this might have been one that Lawson put together, and if it wasn't I apologize.

But it was a possibility of a new working group and one was a commercial

response to natural disasters. Anybody have any thoughts about that? Andy?

MR. ARMSTRONG: Just for clarification, I was -- my notes indicated that we discussed adding that topic to the responsibility of one of the existing working groups, as opposed to setting up a different working group. Perhaps I was incorrect. But that was how I wrote it down.

CHAIR WELLSLAGER: Well, all right. If we were to do something like that, we have legislative policy initiatives, strategic effectiveness, and emerging Arctic priorities.

Of those three, the strategic effectiveness is the one that kind of comes to mind with me. But that's subject to debate.

Is there anyone that would like to debate that or they think they might go otherwise into something else?

MEMBER BRIGHAM: I think Andy's right, I mean, what I suggested was just embed

this topic in one of the working groups, not create a new one, and strategic initiatives sounds like a spot for it.

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What I didn't want to have was the issue to die.

CHAIR WELLSLAGER: Right.

MEMBER BRIGHAM: It was three or four panel members all from the commercial world have this interest, and I though we should pursue it a little bit and see where it goes.

Probably some good things could come out of a discussion with lots of stakeholders.

CHAIR WELLSLAGER: Right. Right. Well, and so be it then. I think that would be a good place for that to live. David help me out for a minute. How -- who was on your committee?

Say again?

(Off microphone comments.)

CHAIR WELLSLAGER: Two vacancies,

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MEMBER JAY: We have two vacancies

-- Michelle Dionne, who passed away, and I'm

sorry, Sherri, from the Port of Houston, was

on there, and she of course is no longer a

member.

Deborah, did you agree to be on?

I think you had agreed that you were going to
be on there and then we just never went any

further. So I think we made up one of those.

MEMBER DEMPSEY: I don't know if I can fill those boots.

MEMBER JAY: Yes, those were some boots, weren't they?

(Laughter.)

16 CHAIR WELLSLAGER: Would you even
17 want to try?

18 (Laughter.)

MEMBER DEMPSEY: I think that's true and there was a technical problem with my email address so I wasn't on the listserv for quite a while, so that has been corrected.

1 MEMBER FIELDS: I volunteered for 2 that working group also, I think. Oh, I'm 3 sorry, did I cut across you? No, I said I agree to be on that working committee and I 4 5 think I sent you an email but I am not sure what all happened. 6 7 MEMBER JAY: If I -- it's quite 8 possible I didn't receive it. But I 9 apologize, I do not recall receiving an email, 10 and then Bill Hanson is definitely on that committee too. 11 12 All right, so we will -- we have then filled our vacancies. 13 14 MEMBER CAROTHERS: I just think, 15 if you look at commercial issues, that panel 16 I don't think has many commercial people on 17 it. So I don't know if that's a -- except for 18 Bill, who is very good at commercial 19 obviously. 20 CHAIR WELLSLAGER: And I think you 21 should probably be on it, too. 22 MEMBER CAROTHERS: Well, I would

1 think so, yes.

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role.

2 CHAIR WELLSLAGER: Yes.

3 MEMBER CAROTHERS: And maybe

Scott. I don't know what --

5 VICE CHAIR PERKINS: I'm extremely

biased, so I am not sure --

7 MEMBER CAROTHERS: Well I am too,

8 so maybe neither one of us should be on it.

VICE CHAIR PERKINS: I'd be glad to advise and you know, provide input, but yes, I think it would be a real conflict of interests for me. You know, I think we would all be better served if I don't take that

MEMBER MILLER: Just one comment.

CHAIR WELLSLAGER:

Joyce.

I am not sure I have been getting all emails

18 either. Kathy, would it be possible for us to

19 sort of make lists of each committee and a new

20 list of the committee? Because I have got an

21 old list and a new list and I'm not sure who

22 I am sending anything to at this point.

MS. WATSON: Well, the current list 1 2 that I just recently sent out has everybody on 3 it. But are you asking for separate email 4 lists for your working groups? 5 MEMBER MILLER: We could probably do that internally, so long as we have got the 6 7 correct addresses. 8 MS. WATSON: Yes, well you have the 9 correct addresses, everybody is current. 10 MEMBER MILLER: Okay. 11 MS. WATSON: Matt, one question. I 12 just, recording I want to make sure --13 strategic effectiveness working group, we have 14 Dempsey, Fields, Jay, Hanson, and Carothers. 15 Correct? Thank you. 16 MEMBER JAY: Kathy, I think I am 17 on that too. MS. WATSON: And Jeffress thank 18 19 you. 20 CHAIR WELLSLAGER: Okay, and then 21 just for grins, let's figure thing out.

Legislative and policy initiatives, that was

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CHAIR WELLSLAGER: Oh, the plan --

were talking about --

oh, okay.

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1	MEMBER KUDRNA: Oh, I'm sorry.
2	That would be fine.
3	CHAIR WELLSLAGER: No. I
4	misunderstood you. Which one was it? That
5	one got rolled into strategic effectiveness.
6	MEMBER MILLER: I thought it was
7	the commercial response to disasters, I am a
8	little confused, that got rolled into the
9	strategic and not the planning group, or not
10	the
11	CHAIR WELLSLAGER: Oh, my bad, my
12	bad. I'm getting wires crossed right now.
13	Okay. Fine. Gotcha. Understood. Okay. And
14	that covers everybody there. Very good.
15	ADMIRAL GLANG: So let me
16	understand how many people are or who is on
17	the planning working group? Could you or
18	is that still open for discussion?
19	CHAIR WELLSLAGER: That's still
20	open for discussion.
21	ADMIRAL GLANG: Okay, because
22	right now it's just Frank. A working group of

1 one.

2 MEMBER KUDRNA: And I'm going to 3 seriously delegate.

ADMIRAL GLANG: In the Air Force when you had one of something, it was an element.

CHAIR WELLSLAGER: I'll be on that with you too, Frank. So we have two now. So we will come back and address that one.

That's one that I think that we need to really

think about first.

But at this point in time, we have a public comment period. Is there anybody here that would like to -- do we have -- I mean, would either of the three of you all like to address this panel?

Okay, thank you. Okay, Mr. Dasler we have a presentation here, so please feel free to -- okay. I mean, if you want to make a comment now, that would be fine.

Mr. Dasler?

MR. DASLER: Yes, Jon Dasler. I

just wanted to, I guess, comment, since you brought up the previous work and the Ten Most Wanted, that I know the economic climate has changed, but I still believe that there's a lot of good work involved in that. I think a lot of the issues really haven't changed.

I guess, getting back to Scott's comment on how do you do more for less and look at best practices, and you know, we heard Mr. Kennedy talk about, you know, this last year, that 3500 square nautical miles was surveyed this last year, the most 10 wanted, of course was 10,000 square nautical miles, and that would put surveying of critical navigation areas at a 50-year backlog.

So that need is still here, so how do you accomplish that with less? And the 2013, the hydrographic survey contracts, are going to be up for renewal, and at one point, NOAA was looking at maybe we should be doing - issuing larger task orders to minimize mobilization costs rather than sending a lot

of contractors into other areas throughout the country with high mobilization costs and having small task orders.

And then there was -- and that started to be implemented, and then there was sort of a push I guess to spread the work around, and divvy that up more, and more recently, there was a push for small business set-asides for doing set-aside contracts for hydrographic services, which would kind of undermine the larger task order, kind of more sustainable operation.

So that's certainly something that I think the HSRP could be looking at in terms of, you know, more effective hydrographic data acquisition. Certainly, IOCM is probably more critical now. I mean, there's a big push to - how can more data be acquired for multiple use and collecting backscatter information.

And really what it's going to take, I think you can't just do the same thing, status quo and expect the same results.

I mean, it's going to take groundbreaking R&D efforts to acquire data so you can start doing more for less, and I think if it becomes a small business set-aside on that front, that kind of undermines sort of the R&D efforts that are happening with some of the bigger companies moving that forward.

So I think certainly that's something HSRP ought to look at, and I would say go back and look at the Ten Most Wanted and there's a lot of good information in there. It's how do you move that forward under this current economy.

And then I would also I guess encourage HSRP to outreach to some of the other FACA advisories. Some of them are on -CMTS, there's a number of people that used to be on HSRP, and then the NOAA Science Advisory Board. Recently I ran into Admiral West and he was talking about, like, the satellite programs and maybe -- whether that should go to NASA.

I know that was -- some of the

business goal.

issues that were raised on subcontracting is that with the satellite program, right now NOAA has a 49 percent requirement for small business subcontracting, and with the satellite program, that leaves a burden of 80 percent on all their other programs. And one of the recommendations made was made even within NOAA contracting, is maybe they should try to see if they could alter that small

Because within NASA I think it's only like 15 percent subcontracting requirement. So from that standpoint, that's another burden I think that the satellite program is putting on NOAA, and I think outreach, like I said, with the science advisory board and now IOOS FACA committee coming up, that there could be some joint issues there that could be addressed. And I think again, you know, coming to Congress with multiple voices certainly adds to the strength

of those recommendations. Thank you.

CHAIR WELLSLAGER: I agree very much. Thank you. Tim? Oh, I'm sorry.

Frank?

MEMBER KUDRNA: Just a comment. I like what you said about the mapping and if we are talking about a document, we can talk about the original 10 list that talked about 10,000 square miles and a 50 year backlog, we can talk about recent levels of funding, and how that has even dramatically increased and the potential problems that could exist from that, and that's a really good selling point to talk to Congress about.

MEMBER HANSON: If I can just follow on with that as well, and maybe more of a question to you guys. The comment is more with less, and I think the question that comes, can you stand up to the scrutiny, if you are asked, are you doing everything you can with the dollars with you have? Are you getting everything out of the money that you

1 are being given?

Because quite frankly, the Corps of Engineers has actually gone to the phrase doing less with less. They have squeezed every dollar they think they can do to put enough band aids on locks and dams in some of the ports and some of the waterways, and they are getting to the point of saying, guys, we're not going to do that anymore, we are not going to not provide that service.

But to get there, you have to pass the first hurdle, which is, yes, we are doing everything we can to do more with less.

CHAIR WELLSLAGER: All right, very good. I guess that's something for us to look at. Mr. Osborn.

MR. OSBORN: I wanted to thank you guys for all bearing with us in going on the port tour. I hope you that was pretty informative, and if that wasn't good enough, and when you see Jen next, just ask her how her toes are. She just about froze them off

at the New Orleans cold storage facility.

But that was actually fascinating as well. One of the things about this discussion, opening this presentation, this is actually one of our historic charts of the New Orleans area back in the 1870s, 1863 as a matter of fact.

But one of the things I think Jon

Dasler just hit on, if you go and look in

terms of the challenges we have and the kind

of data we have today, we have made tremendous

advances and yet our age of hydrography is

actually suffering in very key, critical

areas.

In this chart, actually, Lake

Pontchartrain, which is just above here, if

you look at our actual present chart of Lake

Pontchartrain, and look at the age of

hydrography, it actually goes back to the

1890s in terms of the soundings and depths

that are actually posted to that chart of Lake

Pontchartrain today, in our product at this

1 time.

So the age of hydrography, in many areas of the Gulf region, are severely lacking, and as we essentially have to do as best we can with the amount of square miles of hydrography we can collect any given year in the Gulf, it's really based upon the knowledge that we are actually going backwards. We actually really need a real infusion to increase the amount of hydrography.

One of the things I think is very important about all of this is the fact that we, as you talked and saw with Gary LaGrange, port areas and port complexes like this reach more of the United States than any other port area in the country.

It was even recognized by Thomas

Jefferson as that New Orleans through which

the produce of three-eighths of our territory

must pass to market.

And if you see this is all the Gulf Coast ports that we have represented

across this region right now, and you can see the sheer tonnage and the amount of importance that they have not only to the nation but to the world.

This is an AIS track of just one year of ship movements that we see in the Gulf of Mexico. It basically eclipses all other ship movements that you see across the entire United States in terms of the sheer number of ship transits we have in and around, to overseas markets, going from port to port, and certainly in terms of servicing the production of energy in the Gulf.

I'll skip this, but one of the things I wanted to bring up is the fact that we have a -- we have a couple of things here.

One is we have a moving landscape and we have a moving economy.

While the rest of the nation has actually suffered quite a bit, and the Gulf has suffered equally in certain aspects, we actually are seeing we must address the fact

that places like the Port of New Orleans, 1 2 Houston, Galveston, other -- the Port of 3 Mobile -- are growing, growing They are growing entities 4 infrastructures. 5 and actually it's not a matter of can we do with what we have to meet the demand that 6 7 exists today; it's really the issue of what do 8 we do to get the resources to meet the 9 infrastructure and growth and economics that are going to be seen 5 and 10 years from now. 10

The Port of Mobile is going to be a lot larger. I mean, everyone is gunning for the expansion of the Panama Canal in terms of increased tonnage.

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Ships are getting bigger. Under keel clearance is disappearing in terms of sacrificing the need to move cargo to the docks and back, and I'll explain here how the coast is changing and moving as well.

And we have -- our ports and shipping are actually having a whole new set of entities we must interact with, not just

the U.S. Army Corps of Engineers, not just the U.S. Coast Guard, but soon we will actually have local flood protection authorities controlling very important infrastructure that are actually going to be shutting off navigation in and out of this area, depending upon the storm threat we are going to see.

This is actually a cool picture.

This actually a tornado in front of a ship on the Mississippi River that was taken last year by an over pilot. The answer to the question what did he do, was really answered by this fact, not much, because there is not a whole lot you can do with a 100,000 ton dead weight ship moving at eight knots down the river, and a tornado is about half a mile in front of your bow.

Fortunately the tornado moved across to the other side of the river. The ship continued. But it got the crew and the bridge actually awake, without the need for caffeine.

This also talks about the congestion and about the kind of challenges you saw with the Port of New Orleans. When you are coming on a downbound ship down the Mississippi River south of New Orleans and you run across this picture in front of your bridge, this actually tells you the type of challenges you have in terms of meeting and maintaining a safe marine transportation system.

One of the things we are doing, to touch on, is we have our PORTS system, which you got a briefing on with the Port of New Orleans. Almost all the pilots that are bringing ships up into the ports and down back out in the Gulf of Mexico are using electronic navigation with Raven laptops, Rose Point laptops, with our ENCs on them, with overlays with AIS, and also with recent U.S. Army Corps of Engineers soundings that are taken literally on a daily basis in some of the severe shoaling areas and crossings.

Advanced positioning, which is also very important, and our coastal observation sea level rise, are all very integral to this area.

I'll touch on -- not to disrespect the ports, but we had a briefing about that -- real-time, in place, able to be accessed from iPhones or any, BlackBerrys or anything, by the pilots, as they are moving up and down the river.

We are going to hear from Captain Mike Lorino talk about this tomorrow, with the bar pilots on the Mississippi River. Captain Dave Trent, president of the Louisiana River Pilots Association, is going to come and talk about it from his experience, not only as a user of the Lake Charles PORTS system, but he actually goes back to being a pilot in Tampa and actually was one of the first users of the first PORTS system in the Untied States, and that was the Tampa PORTS system. He will talk about that as well.

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One of the things you have heard about is why PORTS are so important. One of the things I think the panel may consider is the fact that this is a very important part of NOAA. This is the part that actually develops and collects data on a daily basis, through CO-OPS in terms of the time and water levels, through NGS in terms of elevations, the use of CORS, GPS observations, use of OPUS, through coast surveying and its charting, and its acquisition and processing and posting of new hydrographic survey data that is being collected either by our own assets or by the HSD contracts that are out there today.

But data that we generate is being used every day, and in fact as Captain Dave

Trent will talk about, for each foot of draft reduction we have of a crude tanker coming into the Port of Lake Charles, that is representing about 20-22,000 barrels of crude oil that will or will not make it into that port with that transit.

With an average load of 500,000 barrels per ship, that would mean one extra crude tanker every 25 voyages, to make up for that lost route.

Not only is it money, but it is also the risk of one more ship transit into the port to carry the product that is being lost by restrictions of draft in that navigation channel if we do not have a PORTS system able to provide the real-time means for that pilot to assess when he can make that transit. If he doesn't have that system, he is backing off and he is going to actually, as a pilot, reduce the draft of the ships he will be willing to bring into the Port of Lake Charles, and then come with this 1.5 million dollar hit per ship per transit.

One of the things about the lower Mississippi River PORTS is, just as it was going active, the USS New York being built for the Navy by Avondale Shipyard, couldn't get under the bridge, because we had high river

levels, very tall ship. You don't lower the mast on this.

And essentially the air gaps sensor on the Huey Long Bridge was tested as we were just ready to get the lower Mississippi River PORTS actually to go operational.

So working very closely with the Navy, and with Avondale Shipyard, we were able to actually make sure that that ship, a \$1 billion ship with 500 people on board, was able to make it under the bridge.

When we asked Avondale how close were they comfortable to get the ship underneath the bridge, and they said a sixinch clearance would be good.

A six-inch clearance on a 155-foot tall ship is, like, stunning to think that you would have shipyard saying, yes, if we can just get six inches, we would be good.

They made it by about 18 inches, and they were very happy.

Electronic navigation. NOAA ENCs,

U.S. Army Corps of Engineers soundings. We need to know that our actual data is being merged and compiled and processed with other users that are collecting data, such as the U.S. Army Corps of Engineers, to actually establish and put onto a Raven laptop the display that has the NOAA ENCs, the latest U.S. Army Corps of Engineers' soundings of high shoaling areas and AIS at the same time showing ships that are coming by and they are about to meet, and how to basically deconflict areas of very constricted traffic through a very active ship channel.

And in fact actually, as you navigate that large ship, it all comes down to, with this huge bridge, it really comes down to that little square box, and that screen, showing that ship moving on that river, in the channel, on our ENCs, with AIS showing everything that is coming our ways, and how we are going to essentially with their

passings or having been overtaken by other faster ships.

So in terms of the data being used actively, every ship that actually comes into the world's largest port complex, has electronic navigation actually bringing it to the port.

Day or night, this is another transit at another time, same thing. AIS depicting where the ship is relative to other ships, looking at management of the navigation channel, and making sure that the latest soundings the Corps has, showing that areas of high shoaling have been frequently dredged, are being displayed as well to make sure that ship is in the right position in that channel.

We are in a moving landscape, and another important source of data that we are actually applying here is through a combination of our data being applied, NGS elevational data with maintaining the spatial reference frame, and also looking at sea level

rise trends, which essentially is a relative sea level rise rate, which is the addition of sea level rise, eustatic sea level rise that we see in the Gulf of Mexico, and subsidence, meaning the loss of elevation that we are seeing across the 12 miles of coastal zone.

See level rise rates presently, as being depicted by CO-OPS, in the Grand Isle area, is actually one of the highest in the world for such a large landscape.

As CO-OPS predicts, as part of the IPCC process, this rate of 9.2 millimeters a year is likely to go to 12 later this century. Bottom line, about three, possibly four feet of relative sea level rise across the coastal landscape of Louisiana, with an average elevation of three feet or less, meaning essentially the inundation by the end of this century, of pretty much 50 percent of the economic base and 50 percent of the population that exists on the landscape with an elevation of three feet or less, with the sea level rise

rate that we are currently projecting.

What does this mean? And this is actually a suggestion that CO-OPS is making to move to 11.2 millimeters, actually starting now, and then go to as much as 16 millimeters later in this century, meaning accelerating the rate of coastal inundation that we are going to see in the coast.

What does this mean? Today's landscape is very low in elevation. This is the landscape that is depicted by using the trends and LiDAR entry of coastal Louisiana that you'll see and have presentations made by tomorrow.

This is by 2050, showing that the lands below sea level is going to be dramatic. And in fact the majority -- Lafourche Parish, when we were at Port Fourchon just recently with Captain Swallow and I, about 11 to 15 percent of Lafourche Parish today is at or below sea level rise -- or sea level and elevation.

By the end of this century, almost two-thirds, or roughly two-thirds or more of that same parish today is going to be at or below sea level rise, sea level and elevation.

MEMBER KUDRNA: May I ask you a question? Is that all sea level rise or is part of it subsidence?

MR. OSBORN: It's subsidence. In fact, actually three or four times the rate is actually attributed to subsidence. And in fact that's one of the things that we really, working with the State of Louisiana, we really — there is a really fundamental need for education and outreach about what realistically we can see in the next 50 to 75 years here in Louisiana.

We have a state master plan that says we are saving the coast. In 50 years from now, we are actually going to be making more weapons, and yet only at the very end of the state master plan process did they ever even recognize that, oh, by the way, there is

going to be three feet of sea level rise, relative sea level rise.

And it's probably -- and in fact,
USGS, using the same data, thinks it's going
to be four feet. So how do you basically have
one group saying we are saving the coast, and
yet science and the data from CO-OPS, sea
level rise trends and NGS, saying, guess what,
12,000 square miles of your coastal zone is
going to be under water in the next 75 years.
So what are you going to do?

And I think that's the kind of process that we need to have in terms of what our data can be used for. It is increasingly being used and in fact Louisiana State

University Coastal Studies Institute took our trends from CO-OPS, took a fairly clean depiction of the coast, put in the levees and everything, and basically created this progression in six inch intervals of the coastal zone, all the way basically to the end of the century.

By 2100, this is what the coast is going to look like. We are here. And the people that live here still don't understand that this is what it is going to look like in about 80 years.

So in a lot of ways, one of the considerations is, how do we take -- and Bill Hanson brought this up in terms of do less with less -- one of the issues is, is the fact that I don't think we need to get there at this point, because we have so much data, that in a lot of ways, the understanding of what we are trying to tell them, still hasn't sunk in.

So we have a tremendous -- the outreach and the education of what we can tell them is really a huge challenge that perhaps the panel can consider as being a really a principle key in how our science can be actually used and understood, and have people react to.

This is an example that Steve Gill and Billy Sweet put together. Grand Isle,

Louisiana, only inhabited barrier island in the state of Louisiana, being shown here being hit by a 10-year storm tide event in the year 2010, same 10-year storm tide event, but hitting 50 years later and you can see that the growing impact is much, much larger, because the island, the land features, are much lower in elevation, and the storm surge impacts pretty much totally all of Grand Isle, where it actually has a severe but not total impact to the island with present day 12 conditions that you see today.

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This is the first year that the National Hurricane Center actually started to publish and produce storm surge SLOSH models for a Category O hurricane for coastal Louisiana.

Because every time they went Why? 1, category 1, with their SLOSH models, it flooded everything. So they literally had to back it down to zero, just to show that some things would not flood. But as we saw with

Hurricane Isaac, and we saw with Tropical

Storm Lee last year, even tropical storms,

even hurricanes, even Hurricane Ike, a

Category 2 that made landfall in Texas flooded

every coastal parish in Louisiana.

So if you were in Hurricane Isaac this year and you were not behind a flood protection levee, you flooded, and in fact that was one of the things that actually woke people up.

Ken Graham will talk about this issue and the fact that as much as they have talked about how the category of storms has nothing to do with the potential vulnerability or threat of a storm surge event, people still don't understand that.

He still has emergency managers in LaPlace, Louisiana, just to the north of New Orleans here, who were told repeatedly, "You are going to flood," and to this day, they say, "We just didn't realize."

And they just don't have the --

they are losing that disconnect and that's why

I think, as Ken Graham is planning to do, he
is going to go on a very aggressive outreach
program to convince people that you are so
low, you have such a flood-prone coastal
community, that unless resiliency really takes
the form of flood protection levees or
something to keep that surge out of your
community, you are going to go down with a
storm that makes an approach predicted by the
SLOSH model that is going to put water across
your surface.

This is Port Fourchon. This is 2008. Hurricane Gustav had just gone by.

Hurricane Ike was making a run to Texas. One hundred Entergy trucks were in Port Fourchon reestablishing the electric power supply to the area, and the storm was over 300 miles away, and it started to flood the entire port area. One hundred utility trucks had to make it up LA-1 to safety and every one of them except for two made it.

at their station getting the trucks out and the crew out, but were trapped and actually had to take refuge in their operations center throughout the entire storm event.

But this gave rise to a very important consideration that is finally being applied. These are all static benchmarks in coastal Louisiana. This is the new process using GPS CORS that is actually replacing it.

By doing this, this is one of the things you will hear about very soon, tomorrow, talking about there is no other option we have. We have no more static marks in Louisiana that we can rely upon.

So NGS's support, working with local partnerships like the Center for Geoinformatics and maintaining a robust CORS network statewide, and also moving the realtime networks to augment it, are going to be the process by which the future positioning of Louisiana is going to depend.

That gives rise to need for best

practices, that gives need for recurrent

training, that gives rise for the fact that,

as Gary Jeffress has pointed out, in Texas

there are more surveyors over the age of 70

6 today, than there are surveyors under the age

7 of 40 in Texas.

Exactly the same way. The last issue I would like to bring up is, as the discussions go forward, is the need for data, not only on positioning, but in terms of sea level rise trends, in terms of new stations, coastal observation stations, more PORTS systems, and also in terms of new hydrography to update our charts but also to use in storm surge modeling, is one of the key attributes that really is occurring, and the need is growing with time.

So as the panel, in terms of exploiting the potential that really comes with this part of NOAA actually being a

collector of new data, and trying to then use
that to the advantage of how we can support
that as a primary priority of NOAA, hopefully
should be a good consideration for you in
terms of your discussions with our NOAA
leadership.

Thank you very much.

(Applause.)

CHAIR WELLSLAGER: That was very informative, Tim. Thank you. And we have, oh, about 15 minutes before we are supposed to meet downstairs at six o'clock. So the --well, I thought we were meeting -- dinner is at 6. We were -- Ms. Kathy, what is the schedule?

MS. WATSON: Six-thirty -- well, I suppose we should all meet downstairs about 6:15 and Tim is going to lead the pack, the group, down to the Oceana restaurant. Tim.

MR. OSBORN: Yes.

CHAIR WELLSLAGER: Okay, thank you very much. I think it's a wrap and we will

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1	meet downstairs about 6:15. We will meet back
2	tomorrow. Breakfast will take place at 7:30
3	to 8:30.
4	(Whereupon, the above-entitled
5	matter adjourned at 5:45 p.m.)
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<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: Hydrographic Services

Review Panel

Before: DOC/NOAA

Date: 11-27-12

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

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