

U.S. DEPARTMENT OF COMMERCE

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NATIONAL OCEANIC AND ATMOSPHERIC  
ADMINISTRATION (NOAA)

HYDROGRAPHIC SERVICES REVIEW PANEL

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PUBLIC MEETING

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TUESDAY  
SEPTEMBER 16, 2014

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The Hydrographic Services Review Panel met in the Courtyard Marriott Grand Cypress Room, 125 Calhoun Street, Charleston, South Carolina, at 9:00 a.m., Scott Perkins, Chair, presiding.

MEMBERS PRESENT:

SCOTT R. PERKINS, HSRP Chair  
WILLIAM HANSON, Vice Chair  
RDML KENNETH BARBOR  
RDML EVELYN FIELDS  
ED J. KELLY  
DR. FRANK KUDRNA  
DR. DAVID A. JAY  
DR. GARY JEFFRESS  
CAROL LOCKHART  
JOYCE E. MILLER  
SUSAN SHINGLEDECKER  
MATTHEW WELLSLAGER

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

ALSO PRESENT:

REAR ADMIRAL GERD F. GLANG, HSRP Designated Federal Official

MICHAEL ASLAKSEN, Chief, Remote Sensing Division, National Geodetic Survey, NOAA

PAUL BRADLEY, Policy Advisor, National Ocean Service, NOAA

CAPTAIN (sel) RICK BRENNAN, Chief, Coast Survey Development Laboratory, NOAA

RUSSELL CALLENDER, Ph.D., Deputy Assistant Administrator, National Ocean Service, NOAA

TIFFANY HOUSE, Project Analyst, Remote Sensing Division, National Geodetic Survey, NOAA

LT. COL. JOHN T. LITZ, United States Army Corps of Engineers (USACE)

RACHEL MEDLEY, Chief, Customer Affairs Branch, OCS, NOAA

LYNNE MERSFELDER-LEWIS, HSRP Coordinator

JIM NEWSOME, President and CEO, South Carolina Ports Authority (SCPA)

CAPTAIN (USCG ret) RUSS PROCTOR, Chief, Navigation Services Division, OCS, NOAA

CAPTAIN RIC RODRIGUEZ, USCG Captain of the Port Charleston

LESLIE SAUTTER, Geology Professor,, Ocean Mapping & Marine Geology Department, College of Charleston

KYLE WARD, Southeast Navigation Manager,  
NOAA

KATHY WATSON, HSRP Coordinator

DARREN WRIGHT, Maritime Services Program  
Manager, Center for the Operational  
Oceanographic Products and Services  
(CO-OPS)

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

9:06 a.m.

Welcome and Introductions

RDML GLANG: So good morning everyone. My name is Gerd Glang. I'm the Designated Federal Official. I just want to point out a couple of logistical details. Everyone should have an agenda before them. The bathrooms are down that hall there. I'm pointing to my left, if you haven't already found them, and if you need to get out in case of emergency, I notice there's glass doors straight out through the little foyer out front here. With that, I'll turn it over to you, Scott.

CHAIR PERKINS: Okay, great.

Well, welcome to the HSRP Advisory Panel Committee meeting. The first order of business, we would like to open, you know, with the Pledge of Allegiance. If we'd all raise, and please repeat with me.

[PLEDGE OF ALLEGIANCE.]

1                   CHAIR PERKINS: Thank you. Be  
2 seated. The mics are open mics, so be advised  
3 of that. They're not voice-sensitive, so they  
4 are on. They are always on. If you start to  
5 hear an echo, that's because the mic is too  
6 far away from whoever is speaking. So if you,  
7 you know, move the mic in closer proximity to  
8 you when you're speaking, that will reduce the  
9 echo. Even closer. Okay, great.

10                   But yeah. Be advised the paper  
11 rustling or any sidebar comments, you know,  
12 they may be audible, so be careful. So with  
13 that the first order of business here, you  
14 know, is the self-introductions. If we -- I  
15 guess I'll start, just because I'm already  
16 speaking.

17                   So my name is Scott Perkins. I  
18 have the privilege of serving as the incoming  
19 chair of the HSRP. So my background and  
20 experience is in geodetic surveying,  
21 photogrammetry mapping. I've served as a  
22 shoreline contractor and hydrographic survey

1 profession, you know, for NOAA. So with that,  
2 do we want to go to the left or to the right?

3 RDML GLANG: I can go next. Good  
4 morning. I'm Rear Admiral Gerd Glang. I'm  
5 the Director for NOAA's Office of Coast  
6 Survey, and I serve as the Designated Federal  
7 Official for the Hydrographic Services Review  
8 Panel.

9 DR. CALLENDER: Good morning. I'm  
10 Russell Callender. I'm the Deputy Assistant  
11 Administrator for NOAA's National Ocean  
12 Service. I have no real background in  
13 hydrography, although once upon a time I was  
14 a biological oceanographer, I did map a bunch  
15 of oyster reefs in Galveston Bay. So just  
16 kind of all that.

17 DR. BRADLEY: Good morning, Paul  
18 Bradley. I'm a policy advisor at the National  
19 Ocean Service.

20 MEMBER WELLSLAGER: Good morning,  
21 Matt Wellslager, immediate past chair of the  
22 HSRP and the Chief of the South Carolina

1 Geodetic Survey.

2 MEMBER FIELDS: Good morning. I'm  
3 Evelyn Fields. I'm on the HSRP Panel and I am  
4 presently retired.

5 MEMBER KUDRNA: Good morning,  
6 Frank Kudrna, member of the HSRP Panel,  
7 consultant with the URS Engineering  
8 Corporation, and I serve as chief engineer for  
9 the Illinois International Port District, the  
10 Chicago port.

11 MEMBER SHINGLEDECKER: Susan  
12 Shingledecker, Vice President of Boat U.S.  
13 Foundation, the Boat Owners Association of the  
14 United States, and HSRP Panel member.

15 MEMBER JEFFRESS: Gary Jeffress,  
16 Panel member. I'm a professor of Geographic  
17 Information Science, Texas A&M University,  
18 Corpus Christi. We run a tide gauge network  
19 for Texas, in cooperation with CO-OPS.

20 MEMBER KELLY: Good morning, Ed  
21 Kelly. I'm the Executive Director of the  
22 Maritime Association of the Port of New York



1 and New Jersey, representing over 550 various  
2 members involved in commercial maritime  
3 navigation and operations, and a Panel member.

4 MEMBER BARBOR: I'm Ken Barbor.

5 I'm Director of the Hydrographic Science  
6 Research Center at the University of Southern  
7 Mississippi.

8 MEMBER MILLER: Joyce Miller. I'm  
9 Director of Seafloor Data Services at  
10 University of Hawaii. I'm a licensed  
11 hydrographer and a member of the HSRP Panel.

12 CHAIR PERKINS: Over to you Lynne.

13 MS. MERSFELDER-LEWIS: I'm sorry.  
14 I'm Lynne Mersfelder-Lewis, and I'm not  
15 replacing Kathy, but I will follow in her shoe  
16 steps.

17 MS. HOUSE: My name is Tiffany  
18 House, and I am a project analyst. I work  
19 with Mike in RSD, Remote Sensing Division.

20 MR. ASLAKSEN: Mike Aslaksen with  
21 the National Geodetic Survey. I'm Chief of  
22 the Remote Sensing Division.

1 MR. WRIGHT: Darren Wright. I'm  
2 the Maritime Services Program Manager for the  
3 Center for Operational Oceanographic Products  
4 and Services, also known as the PORTS guy.

5 CAPT BRENNAN: I'm Rick Brennan.  
6 I'm the Chief of the Coast Survey Development  
7 Lab.

8 MS. MEDLEY: Good morning,  
9 everyone. I'm Rachel Medley. I'm the Chief  
10 of the Customer Affairs Branch under the  
11 Navigation Services Division, in the Office of  
12 Coast Survey.

13 CAPT PROCTOR: Good morning. I'm  
14 Russ Proctor. I'm the Navigation Services  
15 Division Chief in the Office of Coast Survey,  
16 and I also serve as your alternate DFO.

17 MS. WATSON: Kathy Watson, soon to  
18 be retiring HSRP coordinator.

19 MEMBER ARMSTRONG: I'm Andy  
20 Armstrong. I'm the co-director of the Joint  
21 Hydrographic Center at the University of New  
22 Hampshire, a NOAA University partnership, and

1 as such, I'm a non-voting member of the panel  
2 in accordance with the provisions of the HSIA.

3 MEMBER EDWING: Good morning.

4 Rich Edwing, Director of the Center for  
5 Operational Oceanographic Products and  
6 Services, and a non-voting member as well.

7 MEMBER BLACKWELL: Good morning.

8 I'm Juliana Blackwell, the director of the  
9 National Geodetic Survey, also a non-voting  
10 member of the Panel.

11 VICE CHAIR HANSON: And I'm Bill  
12 Hanson, Great Lakes Dredge and Dock Company,  
13 and current vice chair of the Panel.

14 CHAIR PERKINS: Great. Yeah,  
15 yeah, thank you. There are three members of  
16 the HSRP that weren't able to attend  
17 personally, so we have Dr. Lawson Brigham up  
18 in Alaska with the University of Alaska-  
19 Fairbanks, and a retired Coast Guard captain.  
20 We have Dr. David Jay with Portland State, is  
21 that correct? Yes, and he is on European  
22 travel, and we have Captain, I've just

1 forgotten --

2 RDML GLANG: That's Deborah  
3 Dempsey.

4 CHAIR PERKINS: Deborah Dempsey,  
5 thank you. I just forgot her last name. So  
6 Captain Dempsey is out on the water and unable  
7 to attend right now.

8 MS. WATSON: And we also have  
9 Carol Lockhart, who's not present, a Panel  
10 member.

11 CHAIR PERKINS: Thank you, yes,  
12 and Carol Lockhart is a certified hydrographer  
13 in professional practice space.

14 MEMBER ARMSTRONG: And one of our  
15 non-voting members, Dr. Larry Mayer, the other  
16 co-director of the Joint Hydrographic Center,  
17 is also not present. He's at sea as well.

18 CHAIR PERKINS: Great, thank you.  
19 I think that's the entire roster. All right.  
20 If all of our speakers are here, I think we  
21 can roll right into the 9:30 session and get  
22 that panel seated a little early. So it's

1 always good to be ahead of schedule at the  
2 beginning of the meeting. So at 9:30 we start  
3 with Dr. Callender. You ready to go sir?

4 NOS Priorities

5 DR. CALLENDER: I just asked Paul  
6 if my slides were in there, and he wasn't  
7 sure. So we're going to -- I live with  
8 notebook, so I've got to carry it around here.  
9 I've got a few notes.

10 There we go, thank you. So good  
11 morning. Again, I'm Russell Callender. I'm  
12 the Deputy Assistant Administrator of the  
13 National Ocean Service. That's just a fancy  
14 way of saying I'm the Deputy Director of the  
15 Ocean Service.

16 Holly Bamford is the assistant  
17 administrator, and she expresses her regrets  
18 for not being here today. I first of all want  
19 to thank the panel for all of the hard work  
20 that you've done in the past, and that I think  
21 you will do in the future.

22 I first became associated with the

1 Panel at the meeting in New York. Learned a  
2 lot, very impressed by the quality of the  
3 folks in the room and I'm very interested to  
4 hear where the Panel goes in the future. So  
5 first of all, thank you from me and from  
6 Holly.

7 In this presentation, what I'm  
8 going to do is walk you through some of the  
9 NOS priorities. You heard a fair bit of  
10 detail from Holly at the New York meeting  
11 where those priorities are. I'm going to  
12 focus on two that are most relevant to the  
13 activities of the HSRP.

14 I'm going to close with a request.  
15 Maybe it's a challenge to the Panel on how I  
16 believe NOAA can best use the advice that you  
17 provide, both as a conduit for strategic  
18 thinking, as well as a way to bring  
19 stakeholder needs to the Ocean Service and to  
20 NOAA writ large.

21 So next slide, please. So again,  
22 you've heard from Dr. Bamford about the three

1 fundamental priorities. They're shown in  
2 orange: coastal resilience, coastal  
3 intelligence, and place-based conservation.  
4 The blue boxes below are shorthand versions of  
5 major outcomes we wanted to achieve through  
6 what we termed an NOS road map.

7 This is a document that we  
8 finalized since the New York meeting.  
9 Hopefully, excuse me, the Panel has seen that.  
10 If not, we can make it available to you.  
11 Really, the two areas, the two major priority  
12 areas that I want to focus on this talk is  
13 going to be coastal resilience and coastal  
14 intelligence, which is the two major  
15 priorities that are relevant to HSRP.

16 And of the major outcomes, really  
17 the improved community preparedness and  
18 response is probably most relevant. One of  
19 our goals is to have coastal communities able  
20 to apply relevant criteria and standards to  
21 enhance preparedness and recovery.

22 Secondly, in the coastal

1 intelligence priority, the integrated support  
2 tools for port communities is again one of the  
3 major areas we want to focus on, which is  
4 really about meeting the need for expanded  
5 commerce and busy ports through enhanced and  
6 integrated decision support tools.

7 So the road map as such is not  
8 really meant to be a strategic plan, or an  
9 annual operating plan for the Ocean Service.  
10 But really it's a way to cluster some  
11 activities around the major priorities that  
12 we've identified over the last two-plus years.

13 Typically, I get bored and sort of  
14 roll my eyes when people start talking about  
15 strategic plans and priorities. But what I  
16 will say is it's actually had a pretty  
17 positive impact, in terms of how the Ocean  
18 Service is viewed from outside.

19 Currently, NOAA priorities include  
20 environmental intelligence, and I would say we  
21 blatantly snagged our coastal intelligence  
22 piece from that. Coastal resilience was a



1 priority that we actually pushed up into the  
2 NOAA priorities, and usually the priorities  
3 come on top and are pushed down, and everybody  
4 scrambles to figure out how can we connect to  
5 the administrator's priorities. We did it the  
6 other way around. We pushed our priorities up  
7 and got those as NOAA priorities.

8 Just as importantly, we got our  
9 priorities in the Department of Commerce  
10 strategic plan, again moving our priorities up  
11 versus having them come down.

12 The beauty of that is it's more of  
13 an open dialogue, more of an open access to  
14 both the NOAA administrator, in terms of what  
15 we do and how we do it, and also to the  
16 Secretary of Commerce, who actually gets  
17 briefed quarterly on the progress towards her  
18 plan, which is I've never seen a Secretary do  
19 that in about the 18 years that I've been in  
20 the agency.

21 So also the suite of priorities,  
22 the road map, the refocusing is starting to be

1 seen on the Hill as a very positive thing for  
2 the agency. We got some budget increases in  
3 FY '14 that I think were in large part because  
4 Congress had seen the fact that we are  
5 coalescing around a limited number of  
6 priorities.

7 NOS in the past has been seen as a  
8 very diverse organization, maybe even referred  
9 to as a holding company, with all the various  
10 parts of it. Now we're seen as a more unified  
11 organization. Maybe it's smoke and mirrors,  
12 maybe it's reality. I'm hoping it's reality.  
13 Certainly Congress is responding well. OMB  
14 understands what we do more than they have in  
15 the past. So all those are good for us.

16 For FY '15, we don't know what the  
17 budget's going to hold. We've seen House and  
18 Senate marks. We'll see if we actually  
19 receive a budget or whether we have a  
20 continuing resolution. There's all kinds of  
21 rumors swirling around that it's likely to be  
22 a continuing resolution, at least in the

1 beginning. We'll see how long that lasts.

2 So next slide, please. So this is  
3 a cartoon you've probably seen before. This  
4 really represents the kinds of things that we  
5 do in coastal intelligence, ranging from the  
6 fundamental observations from the National  
7 Geodetic Survey, to the maps and charts  
8 produced by Coast Survey, to the tides,  
9 currents, water levels produced by CO-OPS, and  
10 the use of a variety of technologies by the  
11 integrated ocean observing system.

12 You know, it's not really about  
13 data. It's about actionable information that  
14 is relevant and can be used. That's sort of  
15 the mantra, if you will, of the coastal  
16 intelligence priority for us. Let me dive a  
17 little deeper. Next slide, please. A couple  
18 of areas I'd like to focus on briefly is the  
19 airborne LiDAR and the National Water Level  
20 Observation Network, or NWLON.

21 Earlier this summer, the White  
22 House Office of Science and Technology Policy

1 released the National Plan for Civil Earth  
2 Observations. The plan included an assessment  
3 of 362 observing systems across the federal  
4 government, including 145 high impact  
5 observing systems.

6 The top piece of those high impact  
7 observing systems, the top 15 were systems  
8 that had the highest impact and also had  
9 societal relevance beyond many of the other  
10 observations, which included airborne LiDAR  
11 and the NWLON system.

12 So the point of that is what we're  
13 doing is extremely relevant, it matters, and  
14 it's being recognized, certainly within the  
15 administration if not beyond, to where it,  
16 frankly, it really matters with the  
17 stakeholders.

18 Next slide, please. So why does  
19 it matter to the stakeholders? So you've seen  
20 figures like this probably many, many times.  
21 At the New York meeting, John Vickerman gave  
22 an excellent and provocative presentation on

1 shipping trends.

2 One of the things that was  
3 blatantly obvious from that presentation, and  
4 all of you are probably aware, is just the  
5 evolution of the size and the draft of ships  
6 from the 1950's, when ships came out with the  
7 100 TEUs to where we are coming on board with  
8 the Maersk Triple E, with 18,000 TEUs.

9 So ships are getting bigger.  
10 Waterways, with some exceptions, aren't  
11 getting bigger. So it really highlights the  
12 need for coastal intelligence across the  
13 board.

14 Next slide, please. So the next  
15 couple of slides all talk a little bit more  
16 about some of the aspects of coastal  
17 intelligence. What is the value of coastal  
18 intelligence? So fairly recently, I'm not  
19 sure exactly when it was Rich, that the PORTS  
20 program did an economic valuation study of the  
21 PORTS system writ large, and we have copies of  
22 that available for the members. There we go.

1 I'll pass those out.

2 A lot of good economic statistics.  
3 This is going to be really useful as well work  
4 to market what we do on the Hill and beyond.  
5 One of the pieces that's in there is that the  
6 U.S. would see a \$300 million annual benefit  
7 from a port system that supported 175 of the  
8 ports around the country.

9 So it's a pretty large return on a  
10 pretty small investment for the port system.  
11 So I'd urge you to take a look at this. It's  
12 got some great summary statistics in there  
13 that I think you can provide -- it will  
14 provide some value to you as well.

15 Last year, we completed  
16 installation of the Charleston ports by adding  
17 an air gap sensor to the Don Holt Bridge. I'd  
18 like to recognize and thank Jim Newsome from  
19 the South Carolina Ports Authority for his  
20 support of this program, and Jim's going to be  
21 talking after me as well.

22 Also in PORTS in July, Dr. Kathy

1 Sullivan, the NOAA administrator, and Holly  
2 Bamford participated in the dedication  
3 ceremony for the Jackson ports. We received  
4 interest from the Georgia Ports Authority,  
5 that they want to work to install a PORTS  
6 system.

7 So the demand is ever-increasing  
8 for the PORTS, and that's just again a small  
9 piece of what we do. The charting,  
10 positioning and other navigation-related  
11 products and services are extremely valuable  
12 as well as to stakeholders. Next slide,  
13 please. So switching to how coastal  
14 intelligence connects to resilience. Again,  
15 resilience is a priority for not only the  
16 Ocean Service but NOAA and the Department of  
17 Commerce, and the administration writ large.

18 So resilience impacts the risks  
19 that stem from increased shipping and the  
20 challenges there, as well as weather and  
21 climate impacts. The point here is that  
22 coastal intelligence is a foundation for

1 coastal resilience in ports in the broader  
2 coastal communities.

3 For example, C4 mapping and  
4 coastal elevation data are critical for  
5 accurate inundation models. If you look at  
6 the figure on the right, this is a figure for  
7 potential storm surge flooding. The Ocean  
8 Service has been working with the National  
9 Weather Service to produce more accurate storm  
10 surge forecasts by incorporating tides and  
11 other model guidance into the Weather Service  
12 forecast model.

13 It kind of is stunning to me that  
14 this is really the first time in the  
15 operational side that the Weather Service is  
16 incorporating tides in the storm surge. So  
17 this is -- the figure is an experimental  
18 product. It was released this year.

19 Thankfully, we haven't really had to use it.  
20 It's been a pretty calm Atlantic season.

21 But the point of this chart is  
22 it's a graphic that provides more of an on the



1 ground view of what storm surge actually means  
2 with water measured in feet above ground,  
3 which is what people can relate to.

4 There's other tools, other  
5 resilience tools at the Ocean Service that  
6 rely on coastal intelligence, such as the sea  
7 level rise and coastal flooding impacts, fewer  
8 shown on the left. This is the Customs House  
9 here in Charleston, with a graphic showing  
10 with a five foot sea level rise what it would  
11 look like.

12 This is really great for managers  
13 to visualize in their community what the  
14 impacts of sea level rise might be. There's  
15 a lot of other pretty amazing products on the  
16 digital coast website. Mickey Schmidt is back  
17 here in the back. I call him the King of  
18 Digital Coast. So if you have a lot of  
19 questions about that, I'd urge you to talk to  
20 Miki.

21 Next slide, please. In terms of  
22 the future of coastal intelligence, the three

1 bullets there are where we see changes. But  
2 I would also urge the panel to think about  
3 those as questions for you. How can we lower  
4 costs and be more efficient in our  
5 observations, in our products that we produce?

6           How can we increase the accuracy  
7 of what we do? What is that capacity for  
8 multi-use? So for example, improvements in  
9 technology are bringing down the cost of  
10 equipment such as air gap sensors. Those  
11 sensors used to cost about \$35,000. Now  
12 they're down to about 3,500.

13           So it's really -- it's really  
14 important to figure out how we can lower those  
15 costs, and that's a great example of that.  
16 We're using microwave-based sensors to monitor  
17 water levels without having things submerged  
18 in the water, which cuts back on fouling  
19 issues and other maintenance costs.

20           The use of Topo-Bathy LiDAR figure  
21 in the lower right acquires both elevation  
22 data and hydrographic data, integrated with

1 complex and rugged shorelines. This  
2 capability really increases the efficiency of  
3 data collection, and provides near-shore  
4 bathymetry in places where it's really  
5 difficult to get those bathymetric  
6 observations.

7           These types of data are great for  
8 a number of missionaries beyond nautical  
9 charting, including inundation modeling, the  
10 storm surge graphic I showed before, habitat  
11 mapping and coastal change analysis. You  
12 should also be familiar with the GRAV-D  
13 initiative, which stands for Gravity for the  
14 Redefinition of the American Vertical Datum.  
15 I like GRAV-D better. This project is really  
16 about generating a better, faster and less  
17 expensive way to acquire gravity data and  
18 provide more accurate elevations for the  
19 nation.

20           Once the GRAV-D project is  
21 completed, it will inform the next generation  
22 model of the earth surface and enable fast and

1 accurate height measurements within two  
2 centimeters, versus the accuracy range of a  
3 meter or more than we currently have.

4           So the figure here of North  
5 American continent, the green shows the data  
6 that are now available through GRAV-D. The  
7 blue are the data that's currently being  
8 processed. The orange-looking colors are  
9 where collections are currently ongoing, and  
10 the white is planned.

11           So it's a pretty ambitious project  
12 that will have a large payoff in the future.  
13 We're also looking at the use of things like  
14 unmanned aerial systems, in partnership with  
15 the GRAV-D project, to really increase,  
16 potentially increase the efficiency and lower  
17 the cost of those collections.

18           Next slide, please. Another slide  
19 on the future of coastal intelligence. So  
20 we've talked about it. You've talked about it  
21 many times is the integrated ocean and coastal  
22 mapping concept of collection once, use many

1 times. I mean this is critical.

2 A great example of that is in the  
3 Long Island Sound area, shown in the upper  
4 right. There was a project where Coast Survey  
5 was going to do some work, but there was also  
6 needs from the state of New York, the state of  
7 Connecticut, as well as New York and  
8 Connecticut Sea Grant and EPA.

9 So trying to pull together all  
10 those stakeholder needs and align them with  
11 work that we were already doing, we were able  
12 to expand the work and make it more relevant  
13 at collecting not only bathymetric data but  
14 habitat data that's useful for all of those  
15 coastal partners.

16 One of the topics that this panel  
17 has talked about before is the concept of  
18 crowd sourcing. There may be some  
19 opportunities to use crowd sourcing, although  
20 we need to be very careful about data quality,  
21 especially in instances where NOAA is the  
22 authoritative source for coastal data. But

1 there may be some possibilities in the future.

2 Another possibility may be the use  
3 of a variety of diverse platforms. So using  
4 partnerships with the IOOS program, for  
5 example. The figure on the bottom right is a  
6 wave buoy partnership with the Army Corps of  
7 Engineers, IOOS and NOAA. There's a variety  
8 of gliders that are currently being used. So  
9 just an example of the kinds of technologies  
10 that may be useful for us in the future.

11 Next slide, please. Last slide on  
12 the future of coastal intelligence. NOS is  
13 continually striving to increase the value and  
14 utility of our data products. Many of the  
15 issues we're facing, such as coastal flooding,  
16 needs to be understood at the regional and  
17 local levels.

18 So it's very clear that our  
19 products need to be tailored geographically,  
20 even though we do have a national focus. For  
21 example, this summer the Coast Survey released  
22 a chart of the Charleston Harbor entrance and

1 approach shown on the bottom right.

2 This has created a direct response  
3 to the Charleston branch pilots. You wanted  
4 to have a single chart that covers the entire  
5 approach channel. The chart was truncated  
6 closer to shore previously, and this allows  
7 them to plan for the harbor expansion that's  
8 coming up in the future.

9 Also at the pilots' request, you  
10 can see the circle in the top left-hand  
11 corner. There's a beacon -- the arrow beacon  
12 on top of the Arthur Ravenel Bridge. This is  
13 a very prominent landmark for vessels  
14 approaching the city at night, and we made  
15 sure to connect that to the charts, so that  
16 the pilots can use this information more  
17 effectively.

18 We're also working to better  
19 integrate our data and products to enhance the  
20 application value of what we do. For example,  
21 in the Ports of L.A. and Long Beach, the Ocean  
22 Service is working on a new experimental

1 product to optimize information that shippers  
2 need to plan trans-ocean shipments, and that  
3 pilots need to navigate deep draft vessels  
4 into the harbor.

5           Currently in these ports, the deep  
6 draft ships are having to wait offshore or  
7 reduce their draft, excuse me, to enter the  
8 port without grounding when wave and water  
9 level conditions are unfavorable. So we're  
10 working with Maritime Partners and a Dutch  
11 software company to develop a tool that's  
12 going to integrate real-time observations,  
13 NOAA charts and vessel characteristics, to  
14 forecast windows when these deep draft vessels  
15 can safely transit into the port.

16           Admiral Glang is also engaging a  
17 Presidential Innovation Fellow to help us with  
18 this and so that -- I'm pretty excited to see  
19 where that goes. We're also working to  
20 provide more of our data in a format that  
21 allows third parties to take our data and  
22 develop value-added tools and products.



1                   This is similar to the model that  
2                   the Weather Service has used in partnership  
3                   with companies such as the Weather Channel and  
4                   others, providing opportunities for business  
5                   to add value to the NOAA data and products.  
6                   Last slide, please. So what can the Panel do?  
7                   I think there's two major focus areas, really,  
8                   advising NOAA on more strategic issues, and  
9                   advising us on the interface between the  
10                  regional and the national stakeholder needs.

11                  On the first issue, there was a  
12                  meeting that was held by the NOAA Science  
13                  Advisory Board with Dr. Sullivan in the summer  
14                  in Boulder, and she put out a challenge to  
15                  that panel to really decrease the focus on  
16                  sort of the daily or the administrative kinds  
17                  of issues, but really focus more on the  
18                  strategic issues that will be facing the NOAA  
19                  Science Advisory Board.

20                  I'd urge you to do the same. I  
21                  think you're in a great position with the  
22                  expertise you have, with the connections to

1 stakeholders, to provide us with information  
2 about where we go in the future. What are  
3 some strategic directions, in terms of science  
4 that we may not be aware of? What are some  
5 cutting edge technologies that you're aware of  
6 that NOAA could explore?

7           What are some opportunities to  
8 create new business models? Are there  
9 additional opportunities for partnerships that  
10 we're not seeing? You are on the ground.  
11 You're connected with folks on the ground.  
12 You're living in a place, and your expertise  
13 is really relevant to use being able to help  
14 with those partnerships.

15           What are some coastal issues that  
16 NOAA should be tackling that's relevant to  
17 this panel, that's relevant to hydrographic  
18 services that we should be tackling? In  
19 terms of advising us on the regional and  
20 national stakeholders' needs, you know, one of  
21 the great facets, if you will, of how this  
22 meeting operates is you come to a region like

1 Charleston, and we get to hear from folks on  
2 the ground what are their needs, what those  
3 stakeholder requirements, what are the  
4 challenges that they have, where we can we  
5 make our products better?

6           The challenge for you is listening  
7 to those stakeholders and incorporating not  
8 only what you hear in a region, but that  
9 broader national view, and try to find that  
10 right balance in terms of the advice that you  
11 can provide to us.

12           With that in mind, you know, what  
13 are some gaps? What gaps are you hearing  
14 about in terms of our products and services?  
15 What are some stakeholder needs, either  
16 regionally or nationally that aren't being  
17 met, and then there's of course the challenge  
18 for us is, how can we ensure that we meet  
19 those needs along the way?

20           Are there better ways, more  
21 effective ways to meet the stakeholder needs,  
22 and frankly how can NOAA writ large better

1 connect and strengthen its relationships with  
2 the stakeholders? So this is just a few  
3 examples of areas where I think the Panel  
4 could help.

5 I think the Panel has provided  
6 tremendously valuable advice in the past. One  
7 of the internal challenges that I've seen, and  
8 Scott and I talked about this last night is  
9 the delay in response back from the NOAA side.  
10 I think that was, from the recommendations you  
11 provided to Dr. Sullivan, there was a huge  
12 time delay through the NOAA bureaucracy, until  
13 you got your response.

14 So I'm committed to try to do what  
15 I can at that level to try to push, and really  
16 increase that dialogue back and forth. You  
17 know, we don't have to communicate also just  
18 through a suite of recommendations from a  
19 meeting back to the NOAA Administrator.

20 There may be opportunities in  
21 between meetings to provide additional bits of  
22 advice, guidance, thoughts, suggestions along

1 the way. I'd welcome you to do that. I'd  
2 like to really open the doors to really  
3 increasing that dialogue as much as we can.

4 So with that, I'll stop. I don't  
5 know if I have time for questions, but I'll be  
6 around all day too.

7 CHAIR PERKINS: Yes. Actually, we  
8 do have time for questions.

9 DR. CALLENDER: Okay. Joyce.

10 MEMBER MILLER: Yes. I think this  
11 is really valuable, but I have a question.  
12 Pretty much not every meeting, but every other  
13 meeting at least that we have -- that I've  
14 been involved in, PORTS has come up, and it's  
15 come up in many ways.

16 You know, it's come up with what  
17 stakeholder needs are not being met, you know,  
18 what opportunities, and we really haven't  
19 gotten much response from the administration.  
20 We have put PORTS in many times, and there's  
21 been somewhat of a silence. I'm very pleased  
22 to see this and the emphasis you put on.

1                   How can we better communicate that  
2 message from the -- because it's been in many  
3 of our letters.

4                   DR. CALLENDER: Yes, it absolutely  
5 has. There's two sets of challenges.

6                   One is through the administration.  
7 I think with Dr. Sullivan's focus on  
8 environmental intelligence or focus on coastal  
9 intelligence, we have a way to increase that  
10 visibility and that value.

11                   I think documents such as the  
12 PORTS evaluation document are going to be  
13 really useful on the Hill. So when I go and  
14 I'm briefing Members or I'm briefing staff, I  
15 pull out a graphic explaining what PORTS does,  
16 and universally, staff and members are excited  
17 and engaged.

18                   But again, we're not seeing that  
19 overwhelming support in terms of the monetary  
20 support for the program. You know, I think a  
21 lot of this is probably going to be in the  
22 hands of the NOAA team, and we've got -- we've

1 received a lot of advice from you, a lot of  
2 guidance on PORTS.

3 So I think it's -- I think the  
4 ball's in our court to some degree to kind of  
5 on this. Maybe not a great answer to your  
6 question, but you know, I think PORTS is only  
7 one of the issues that we're facing.

8 So maybe we need to push a little  
9 harder on the administration side to get that  
10 support, and it might be time, sorry Rich, to  
11 focus on some of the other issues broader than  
12 PORTS, in terms of what the Panel is looking  
13 at.

14 VICE CHAIR HANSON: If I can just  
15 follow up real quick on that, because you've  
16 got -- PORTS is more symptomatic, I think.  
17 It's kind of a good example, because we kind  
18 of understand it's one of the great things  
19 that NOAA's done. So much for the other  
20 people willing to pay for it.

21 So when you talk about new  
22 business models, you know, that doesn't apply

1 just to PORTS. It applies to other things  
2 within NOAA. What are you talking about?  
3 What are you willing to listen to?

4 DR. CALLENDER: I think the door's  
5 open in terms of what we're willing to listen  
6 to.

7 You know, if there are some  
8 opportunities to, and I touched upon it, I  
9 think, in the last slide, where there's  
10 avenues to make our data and information more  
11 available to industry, and try to spur some  
12 connections with industry, try to spur some  
13 value-added products, so that there's a  
14 pipeline, if you will, that there's a need to  
15 pull from industry more so than we've had in  
16 the past, to provide them data and information  
17 that they can grow and move beyond that.

18 We've had conversations with the  
19 reinsurance industry, you know, is one group  
20 of pretty large influential partners and  
21 customers. They need better observations from  
22 us. Not better observations; they need to



1 find the observations from us. You know, data  
2 discovery, data availability, so that they can  
3 enhance their catastrophic modeling work that  
4 they're doing, which is going to influence the  
5 reinsurance and the insurance industry across  
6 the country.

7 So you know, those kinds of  
8 efforts, if there's areas that you see from  
9 your connections with industry, where there  
10 may be an opportunity to move that dialogue  
11 forward in terms of data and information that  
12 they can use, that would be useful, I think,  
13 across the board.

14 I mean Gerd, Juliana, Rich, is  
15 there any other pieces of that?

16 VICE CHAIR HANSON: Let me throw  
17 it over to Ed, the PORTS guy. If there was --  
18 I mean is there data you're not getting,  
19 because I mean you want to put in -- you're  
20 paying for it. You're paying for PORTS. So  
21 is there data you're not getting because you  
22 can't afford it, you don't want to afford it?

1                   MEMBER KELLY:  It's not that we  
2                   can't afford.  We pay for the O&M, you know,  
3                   maintenance costs, really, and that's kind of  
4                   scattered around the country, various ways of  
5                   viewing it.  It's very ineffective.  But we've  
6                   had many discussions on PORTS and enhancement  
7                   of PORTS, including modeling, you know,  
8                   getting everything on an AIS basis.

9                   So there's a lot of things that  
10                  were would like to see for further enhancement  
11                  in the PORTS system.  In fact, we just had the  
12                  National Harbor Safety Committee and Area  
13                  Maritime Security Committee meetings down in  
14                  Philadelphia, an annual event run by Coast  
15                  Guard and the TRB and what-not.  Darren and a  
16                  couple of people were there.

17                  PORTS was highlighted.  It's of  
18                  tremendous value, but I think there was a  
19                  shopping list of enhancements we'd like to see  
20                  on that, and the resounding, echoing, constant  
21                  theme is this should be federally funded, that  
22                  the disparity of funding mechanisms around the

1 country is just falling apart.

2           There's quite a few locations,  
3 ourselves in New York and New Jersey included,  
4 who will not have a funding partner going  
5 forward, and the broad usage. It's a  
6 tremendous product as far as enhanced  
7 partnerships with academia, with coastal  
8 managers, with state OEM offices.

9           It's one of the best products NOAA  
10 puts out there. But it really needs to get a  
11 better response as far as future enhancement,  
12 and funding is a very key issue.

13           DR. CALLENDER: Yes. I would  
14 agree with you completely on that. We took a  
15 run this last year, trying to push for the  
16 full federal funding of PORTS, seeing that it  
17 is a -- it's a national need. It's a life,  
18 commerce, property-related issue, really  
19 trying to move from that public-private  
20 partnership to full federal funding, and we  
21 frankly were stymied at the OMB level.

22           There was not, you know, they

1 wanted to see more of this public-private  
2 partnerships. So we're going to have to  
3 figure out, I think, another way to run at it.  
4 You know, I do agree that full federal support  
5 would be the way to go.

6 I mean it's just like the Weather  
7 Service. They've got full federal support for  
8 what they do, and I think we need to push the  
9 same, the same kind of thing.

10 MEMBER KELLY: But beyond that, I  
11 think the products themselves and the  
12 enhancements, including expanded modeling,  
13 AIS, that type of stuff, is also very  
14 important to continue to improve the product.

15 DR. CALLENDER: Agreed.

16 VICE CHAIR HANSON: And at some  
17 point, I think, if you're looking for new  
18 business models, I would argue, just trying to  
19 be objective and keep the debate going, is  
20 that federal funding may not be the answer.  
21 It may be the other way, the private side.  
22 You can't dismiss it.

1 DR. CALLENDER: I agree.

2 (Simultaneous speaking.)

3 VICE CHAIR HANSON: If you're not  
4 providing a product, the full-value product,  
5 and whether it's public-private partnership,  
6 federal funding, a blend of them. But we  
7 haven't made a lot of progress with full  
8 federal funding, and so I think maybe it's  
9 time to think about Plan B.

10 DR. CALLENDER: So I think, you  
11 know, I do believe that full federal funding  
12 makes sense. The question is, can we sell it  
13 at this point in time. So I think, you know,  
14 it's incumbent upon us, certainly on the NOAA  
15 side, working as appropriate with the Panel,  
16 to do some strategic thinking on how we would  
17 pull it off.

18 MEMBER BLACKWELL: If I can. I'd  
19 just like to add another example of kind of  
20 the reverse system that is in place right now,  
21 as part of the Continuously Operating  
22 Reference Station network that NOAA, through

1 the National Geodetic Survey, manages.

2 I've reported out on this before,  
3 and you'll hear a little bit more in my update  
4 on Thursday. But this CORS network has over  
5 2,000 stations, and less than I would say five  
6 percent of those are owned by NOAA. So the  
7 majority of them are through other individuals  
8 who have established these stations that  
9 provide constant GPS data at a fixed site,  
10 which becomes really the foundational  
11 information for positioning for the nation, as  
12 part of the National Spatial Reference System.

13 So while NOAA owns a small number  
14 of the stations, the majority of these  
15 stations are through other federal agencies,  
16 state, local, universities that have  
17 established these stations as part of this,  
18 you know, their network, which then feeds into  
19 this national network of information.

20 We at NGS collect the data,  
21 quality-assure it and then provide the data  
22 back out to the public free of charge. So

1 while we do have some operating and  
2 maintenance costs and a little bit of  
3 infrastructure costs from our perspective, the  
4 majority of the costs are, you know, borne by  
5 those individuals who've established those  
6 sites for their specific needs.

7           So that's just another, you know,  
8 another way of looking at another business  
9 model that does work. Now the flip side of  
10 that is if these partners decide that they  
11 can't operate their stations, then we lose  
12 those stations out of the network and they're  
13 not available for others.

14           But the idea being there's enough  
15 redundancy and enough federal and state and  
16 enough diversity in the portfolio, that you  
17 can still make that work. Now it's not  
18 exactly the same as the PORTS, but it is just  
19 a different, you know, it is a model that has  
20 been successful.

21           It sort of came up from the  
22 grassroots effort, and while we still need to

1 maintain some overall costs, you know, costs  
2 associated with the overseeing and maintaining  
3 the body of the data, as Bill was mentioning,  
4 you know, maybe we do need to look differently  
5 at how we advocate for PORTS and other systems  
6 that we want to be able to support for the  
7 future, and just look at other models and  
8 opportunities and think outside the box a  
9 little bit too.

10 DR. CALLENDER: You know, there's  
11 many challenges, certainly in the PORTS  
12 system. But one challenge to -- if you will,  
13 we try to transition from the partnership  
14 business model to more privately supported  
15 business model. It's that transition, you  
16 know.

17 How will the port community writ  
18 large respond to oh, we used to get this for  
19 free, and now we're having to pay? Or we're  
20 having to increase the cost for the cost-share  
21 that we provide. So that's, you know, as we  
22 start to think about things like that, this



1 could be one of the many challenges we're  
2 going to have to sort through.

3 CHAIR PERKINS: Yes, Gary.

4 MEMBER JEFFRESS: I'd like to  
5 highlight the partnerships that NOAA can  
6 develop with the universities in terms of  
7 doing a lot of the exploration of, you know,  
8 new software and new products that NOAA can  
9 use out of its existing data.

10 We've started a relationship with  
11 CO-OPS. We have undergraduates and graduate  
12 students working on little projects to create  
13 phone apps for the data that's supplied by  
14 PORTS.

15 Our first success was the Houston  
16 Ship Channel, where we've integrated PORTS  
17 data into an app called Transit app, which is  
18 available to the public free of charge, which  
19 uses PORTS data and NOAA's hydrology model for  
20 Galveston Bay to give mariners an indication  
21 of depth and current, speed and direction in  
22 real time.

1                   We've also invented another app  
2 based on all the wind sensors on our tide  
3 gauges in Texas, and put that out there, and  
4 surfers and wind surfers and fishermen love  
5 it. It's just collecting the wind in real  
6 time and displaying it on their phone along  
7 the coast.

8                   It's simplifying the data and  
9 making it more usable, and that's just more  
10 products that this has all come out of the  
11 relationships between CO-OPS and our campus  
12 and our students.

13                  DR. CALLENDER: What I see over  
14 and over is, you know, you hand a problem like  
15 that to an undergraduate or graduate student,  
16 and you know, they can develop an app pretty  
17 quickly and pretty amazingly. I think, you  
18 know, continuing to push that partnership with  
19 universities is critical.

20                  There's a lot of talent that's out  
21 there that we could probably do a better job  
22 tapping. So those are great examples.

1                   MEMBER KUDRNA: Russ, following on  
2                   that theme as far as users go, I think it  
3                   might be worthwhile looking at a more enhanced  
4                   cross-semination of several of the silos that  
5                   already exist.

6                   We're sitting here, but we're also  
7                   mentioning academia and a lot of that, I'm  
8                   involved with the IOOS and the regional  
9                   associations, and I'm noticing they're kind of  
10                  conspicuously absent from this, and they're  
11                  not at the commercial harbor safety groups.  
12                  The OEM people, state municipal, you know,  
13                  coastal managers and emergency responders are  
14                  in a separate silo, but we all have very  
15                  common overlap as far as using a lot of this  
16                  information.

17                  I think we might want to look at  
18                  more structured ways to create cross-  
19                  semination and get all the people under one  
20                  tent. That's going to get a much broader  
21                  coalition, and as far as, an evolution of  
22                  what's important and what's not.

1                   Because we always talk about  
2                   PORTS, and I -- you know, kind of a sore  
3                   subject because I'm the commercial user that's  
4                   expected to pay for all of this, when the  
5                   government itself, Coast Guard and the DoD are  
6                   the biggest users, the Weather Service,  
7                   academia, everybody else.

8                   But there's no way to bring those  
9                   people into the structure, and we might want  
10                  to look at a more aggressive way to cross-  
11                  seminate some of those groups, to bring them  
12                  under one tent and take a look at the value of  
13                  the system, what enhancements are necessary,  
14                  and if there has to be a public type of a  
15                  contribution or whatever.

16                  There's an awful lot of people  
17                  that use the data, that right now we have no  
18                  way of reaching out to, to collect any money  
19                  or users fees from, maybe a 900 number.

20                  DR. CALLENDER: I think that's a  
21                  great point. I mean being able to bring in  
22                  more groups, more partners, more expertise,

1 more desire from users to the various products  
2 would make a lot of sense. We've done that,  
3 started to do that on the coastal side,  
4 bringing in a lot of the coastal partners.

5           You know, as the preschoolers  
6 would say, you're engaged in parallel play,  
7 okay. So they're all kind of doing their own  
8 thing. So we brought in coastal zone  
9 managers, coastal states organization, the  
10 IOOS, IOOS association, sanctuaries. We're  
11 bringing in Sea Grant, and it's not that hard  
12 to do, but it -- all of the sudden it opens  
13 people's eyes to the possibilities of enhanced  
14 integration, efficiencies.

15           You know, certainly with -- on the  
16 federal side, with the budgets being where  
17 they are, it's critical for us to look for  
18 those efficiencies. So I think yes, you know,  
19 having more people under the tent, the  
20 academic community. The IOOS program is  
21 engaged. Frankly, I think they could be  
22 engaged more.

1                   So there's -- I think that's a  
2                   great idea. That's, I think, a good action  
3                   for me to take up, in terms of trying to  
4                   generate that larger constituency and larger  
5                   group of partners.

6                   CHAIR PERKINS: Frank.

7                   MEMBER KUDRNA: Russ, going back  
8                   to your first slide on priorities, you know,  
9                   it's right on target. I think the strongest  
10                  set of priorities in 20 years I've seen from  
11                  NOS. So I compliment you on that. At our  
12                  last meeting, Holly talked -- and on this  
13                  subject of opening up to other groups, she  
14                  talked about pulling together a meeting and  
15                  bringing Sea Grant in.

16                  That's part of another part,  
17                  another part of NOAA, and as we all know,  
18                  there's many times competition between the  
19                  parts of NOAA. With your goal of dealing with  
20                  stakeholders, it would seem to me that Sea  
21                  Grant could be an enormously beneficial part  
22                  of that priority list.

1 I know there's been debate over  
2 the years of where's the appropriate place of  
3 Sea Grant. Is there any ongoing discussion to  
4 move Sea Grant to NOS, or at least change its  
5 relationship, because I think that could be  
6 enormously beneficial to the priority goals of  
7 NOS.

8 DR. CALLENDER: So they're not  
9 really conversations about moving Sea Grant,  
10 but there are conversations that are active  
11 and ongoing now with Leon Cammen, the Director  
12 of Sea Grant, with LaDon Swann, the Director  
13 of the Sea Grant Association, getting them  
14 more engaged with what we do and having us be  
15 more engaged with what they do.

16 So it kind of doesn't matter where  
17 it sits, you know. That's one box over in one  
18 line office versus another. It's about trying  
19 to generate those connections to do the on-  
20 the-ground work.

21 I think we're starting to do that.  
22 The doors are open. I think Leon and LaDon

1 have been really pleased with the fact that  
2 they're brought into this coastal element.

3 I think we could bring them into  
4 this kind of conversation as well. As you  
5 know, having come from a Sea Grant program  
6 years ago, it's a program that I think has a  
7 lot of value, that frankly is in many cases  
8 underused.

9 VICE CHAIR HANSON: Dr. Callender,  
10 thank for pushing resilience up the chart  
11 there as well in terms of PORTS. I was at the  
12 Corps of Engineers CERB meeting, the Coastal  
13 Engineering Research Board, meeting last week  
14 in San Francisco. We've been dealing with  
15 General Bostick's charge to understand  
16 resilience, what it means and what we should  
17 be doing about it.

18 Perhaps I should share that  
19 presentation that came out of that, because  
20 it's got, I think, maybe a thousand different  
21 definitions of resilience.

22 DR. CALLENDER: Sure.



1                   VICE CHAIR HANSON: But in order  
2 for resilience to move beyond the word of the  
3 day, and be lost until next year's storm, it  
4 needs to have some metrics.

5                   DR. CALLENDER: Absolutely.

6                   VICE CHAIR HANSON: We need to be  
7 able to measure it, look at it and taste it  
8 and figure out what we're going to do with it,  
9 and that's how we sell long-term solutions.

10                  You know, the Corps of Engineers  
11 is coming out with their Sandy comprehensive  
12 study in January, that we really think is  
13 going to be the foundation for the future of  
14 the nation in terms of coastal investment,  
15 whether it relates to coastal protection,  
16 PORTS, reliability, all those issues.

17                  So we'd encourage you to add  
18 metrics to that discussion, and figure out how  
19 we can measure and taste it, so we can sell  
20 it.

21                  DR. CALLENDER: We're actually  
22 doing that, and pushing the use of metrics.

1 So within our road map, it's how can you --  
2 how can you characterize resilience? How  
3 resilient are you as a community or as an  
4 industry? There's some groups that are doing  
5 that. The National Academy is pushing that as  
6 well.

7 I was in a conversation here  
8 yesterday, where one of the focus areas for  
9 the National Academy is here in Charleston,  
10 and the Academy is also focused on metrics.  
11 So there's a lot of interest in doing that,  
12 the partnership with Sea Grant. They're  
13 coming up with resiliency metrics as well.

14 So I resonate completely with  
15 that. I'd love to see that presentation from  
16 General Bostick. Holly and I are going to  
17 meet with him I think sometime in the next  
18 month, and so it would be useful to have that  
19 background as we go in.

20 But you know, if we don't have  
21 those metrics, if we don't figure out how we  
22 can make communities, industries, economies

1 more resilient, then it won't be the buzzword  
2 of the day that disappears. But you know,  
3 looking around here, I mean one of the  
4 challenges of resilience is recurrent  
5 flooding, coastal flooding.

6           You know, I was driving my rental  
7 car through the streets yesterday, hoping I  
8 wasn't going to fill it full of water. So you  
9 know, I think it's an issue that, buzzword or  
10 not, I think it's going to be around. I think  
11 it's going to continue. It might be called  
12 something different, but I think it's going to  
13 be important for certainly the coast and  
14 coastal industries.

15           CHAIR PERKINS: Great. Thank you,  
16 Dr. Callender. We're right about on schedule  
17 here, so we could do one more brief question  
18 or we can transition into the next session.

19           DR. CALLENDER: I'll be around all  
20 day. I've got some things with other NOS  
21 employees tomorrow. So feel free to quiz me,  
22 catch me, tell me if I've said it, got it all

1 wrong, whatever. But catch me during the  
2 breaks or any time during the meeting. Thank  
3 you.

4 CHAIR PERKINS: Thank you.

5 (Applause.)

6 CHAIR PERKINS: All right. Next  
7 on the agenda we have a keynote address from  
8 Mr. Newsome.

9 Keynote Address

10 MR. WARD: Good morning. Now the  
11 State of the Port address. Mr. Newsome is  
12 just fresh off that. He gave that last week,  
13 and we're definitely honored to have him here.  
14 There's a lot of development going on right  
15 now, which he will tell us all about, and  
16 we're very grateful to have him here.

17 CHAIR PERKINS: Jim, I do have a  
18 bio here for you. Would you like a formal  
19 introduction?

20 MR. NEWSOME: No.

21 (Laughter.)

22 CHAIR PERKINS: Well, it's very

1 impressive, and I appreciate you not making me  
2 read it.

3 MR. NEWSOME: Well, good morning.  
4 Thanks for having me. So I understand that I  
5 have like between 10:00 and 10:30, and I'm  
6 very grateful for the opportunity to tell you  
7 about the U.S. port industry and by extension  
8 our port, and how it fits into that.

9 I would say as a starting point it  
10 is -- there's a lot of good news concerning  
11 ports, because ports have really now become  
12 integrated into the whole transportation  
13 infrastructure discussion in this country  
14 today. That hasn't always been the case.  
15 Ports were always customarily a bit of a  
16 stepchild, I think.

17 But because of the reasons  
18 mentioned by your previous speaker, the big  
19 ship trend and things of that nature, I think  
20 we're right where we need to be today. We  
21 attend a lot of forums in Washington on the  
22 subject, and we have great partners in doing

1 what we're doing, particularly the Army Corps  
2 of Engineers, who's here today.

3 So we'll talk about a number of  
4 issues. If you can advance those for me.  
5 Think Deep is the title of my presentation,  
6 because indeed the major theme in the port  
7 industry today is big ships. So there's no  
8 question that the shipping industry is a big  
9 ship industry today.

10 It's all about building bigger  
11 ships to reduce costs and achieve the best  
12 economies of scale, and the ports in this  
13 country need to be able to deal with that, in  
14 terms of being able to handle them  
15 efficiently. So hopefully that will not drag  
16 your computer down too much. So you have to  
17 -- let's see. Go back to the top here.

18 There we go, okay. So just to  
19 tell you a bit about our port. I mean we are  
20 the ninth largest port in the United States,  
21 and in a state like South Carolina, and I  
22 would say most states, the port is seen as a

1 major strategic asset for the state.

2 I really believe in South  
3 Carolina, it is the most important strategic  
4 asset. That's very logical if you think about  
5 it. I mean we live in a global sourcing,  
6 global manufacturing world and a state with a  
7 great port is going to be able to prosper, I  
8 would say.

9 If you look at the BMW plant  
10 that's located in the upstate here, there were  
11 actually two states that were candidates,  
12 final candidates for that location. One was  
13 South Carolina, the other was Nebraska. The  
14 port played a pretty critical role in really  
15 getting that project here, because of  
16 proximity and the need to ship. They export  
17 about 80 percent of what they produce.

18 So about one in ten jobs in this  
19 state are related to the port indirectly. So  
20 it has a huge economic impact, and it's really  
21 why the state owns it and it's why the state  
22 operates it.

1                   In many states, the port is the  
2                   landlord. In the Southeast and Gulf states,  
3                   we are the operators of the ports typically,  
4                   and that's because we want to control that  
5                   important asset.

6                   So next. If you just hit your  
7                   left -- yes, there you go. So to give you a  
8                   picture of the top ten container ports in the  
9                   U.S., you'll see that we're number nine in the  
10                  U.S. What I think is striking about this  
11                  chart, if you look at LA, Long Beach, New York  
12                  and New Jersey, they account for about 50  
13                  percent of the TEU volume in the United  
14                  States.

15                  The other ports are pretty  
16                  fragmented. So there's no one real  
17                  concentration of volume anywhere else outside  
18                  of those three ports. Then we're -- so I  
19                  showed you we're number nine in the U.S.,  
20                  number 82 globally.

21                  And then we have been growing of  
22                  late, and in 2013 and 2014, if you'll just



1 click it one more time, we grew well above the  
2 market. We grew almost nine percent in fiscal  
3 year '13, and we grew eight percent in fiscal  
4 year '14.

5 The U.S. port market has grown  
6 between, really, three and four percent. So  
7 we're growing well above the market, and I  
8 think you probably would expect that. If you  
9 just think about the fundamentals of this  
10 region, we have a growing population base in  
11 the Southeast that drives imports, and  
12 probably more dramatically is the fact that  
13 we're manufacturing again as a country, and a  
14 lot of that manufacturing investment is in the  
15 U.S. Southeast.

16 For the first time, that  
17 manufacturing investment is really heavily  
18 geared to exporting. So you have again, 70  
19 percent of BMW production is exported.  
20 Seventy percent of the Michelin offroad tire  
21 production is exported. So it's really  
22 manufacturing with exporting in mind.

1                   And then if you hit it one more  
2                   time, we are also achieving record volumes on  
3                   a monthly basis. So just August we'll report  
4                   that on Wednesday. We had 93,000 pier  
5                   containers. That's the largest volume that  
6                   we've had since 2007 here.

7                   So the port industry is really  
8                   growing, is really experiencing a lot of  
9                   growth right now. I'd like to tell you,  
10                  because I think it's because I think our  
11                  economy is really strong overall. I'm not  
12                  sure I believe that.

13                  What I can say to you for sure is  
14                  the automotive industry is driving a lot of  
15                  growth in the port industry. So we went from  
16                  nine million cars sold in this country in  
17                  2009, to I think the projection this year is  
18                  for 16-1/2 million.

19                  That drives imports. It drives  
20                  exports as well, because that same trend is  
21                  happening around the world. Then on one day,  
22                  we had really a record day in our port. So

1 just to give you an idea of what a port looks  
2 like on a day, we had almost 5,000 gate moves,  
3 5,000 moves of trucks in and out of two  
4 container terminals.

5 We had 6500 lifts on and off  
6 vessels in the port. We had every one of our  
7 container cranes working that day, and very  
8 importantly, the labor force in this port  
9 provided by the ILA could meet every labor  
10 order.

11 I mean we had essentially the most  
12 labor demand that we had ever had, and we were  
13 able to accommodate that here. So I think  
14 that's important that a port is resilient  
15 enough to handle growth.

16 And then is a picture of our  
17 operating earnings. What this chart really  
18 tells you is that we are in a very competitive  
19 market. So we compete in the Southeast port  
20 market. Our major competition is Savannah.  
21 We fight fiercely for cargo with Savannah.

22 We serve a lot of the same market

1 basically. If you look at our rates in the  
2 port industry versus say a port like Norfolk,  
3 which is not subject to that same competition,  
4 our rates to our shipping line customers tend  
5 to be about 60 percent of the rates in  
6 Norfolk.

7 So it's a problem in terms of the  
8 large investment. It is the major issue that  
9 we have as a port, making the large  
10 investments we need to make to keep up and to  
11 remain a top ten port with this level of  
12 operating earnings, and so we have to improve  
13 those.

14 So again, we have -- one thing  
15 that I would say is that we have been  
16 profitable throughout the cycle. Even in the  
17 worst times of the port, we made money.  
18 That's not necessarily the case with all the  
19 ports. If you look at the Port of Norfolk,  
20 they lost \$17 million last year, on the  
21 highest rates in the port industry, basically.  
22 So that's problematic.

1                   So anyway, if I look at our port  
2 system, if you can click that one more time,  
3 we have really three phases. So when I joined  
4 the port in 2009, we had to reposition the  
5 port and we had to reestablish our growth  
6 track. We had lost 40 percent of our volume  
7 when I joined the port in 2009 in the previous  
8 five years.

9                   So that's the reason I joined the  
10 port. It was a big professional challenge,  
11 and I'm happy to say that we're back on a  
12 growth path today. So the next six years  
13 really, we would have to grow well above the  
14 market and we have to invest a lot.

15                   So to be a top ten port, to handle  
16 the big container ships, to have modern  
17 automated terminals, you have to really be  
18 able to invest, and that's the hallmark of  
19 this asset-based industry. So the next five  
20 or six years will be our most challenging  
21 years.

22                   Then, from 2021 and beyond, I

1 think we'll revert to a period where we really  
2 see that we'll grow with the port market.  
3 It's not going to be possible to grow twice  
4 the port market forever and ever. I don't  
5 think that's a realistic goal.

6 So we will -- once we make our  
7 huge investments, we will revert to a more  
8 normal growth pace. So we see the port in  
9 three phases.

10 So to tell you a little bit about  
11 the markets we serve, 78 percent of our  
12 revenue's in the container business, you would  
13 probably expect that. I mean containerized  
14 trade is actually the engine of globalization.  
15 If you think about it, there are about 200  
16 million 20-foot-equivalent containers that  
17 move with loaded cargo throughout the world.

18 Without those 20 lines that carry  
19 that cargo, there would not be any  
20 globalization. Wal-Mart brings in about  
21 500,000 containers a year into the United  
22 States. So containerization is really the

1 engine of globalization.

2 We handle sort of what I call  
3 sophisticated break bulk. BMW SUVs, GE and  
4 Siemens gas turbines, nuclear power plant  
5 parts. We don't handle grain, we don't handle  
6 soybeans in bulk, things of that nature in our  
7 port.

8 Then last, we have a very small  
9 cruise business that will never be that large,  
10 but it is an important piece of our  
11 diversification. We make good money at it,  
12 and it's a business that we want to be in, you  
13 know, within the scale that it's in today.

14 So the port's about growing. If  
15 we're going to invest, we have to grow, again,  
16 well above the market. So how do you do that  
17 in the port business? So if you'll click that  
18 one more time. So one is you basically need  
19 to capture all the cargo that should move over  
20 your port. So freight moves based on the  
21 cheapest inland cost, all things equal.

22 So you've got to make sure you

1 capture the cargo that's supposed to move over  
2 your port. That's fairly obvious on the one  
3 hand, but it's not always the case. Lines  
4 route their cargo in crazy ways. I'm not a  
5 port guy. I come from a shipping line. I  
6 worked for 30 years with a series of ocean  
7 carriers, so I know this only too painfully.

8           The second thing is that we try to  
9 attract a lot of discretionary cargo, and this  
10 is what helps us grow above the market. What  
11 discretionary cargo is, is cargo that can move  
12 over multiple ports, and if I look at my  
13 career in the industry, I never thought that  
14 in the Port of Charleston we would handle a  
15 lot of agriculture products.

16           I mean you don't think about  
17 Charleston as handling Midwest cargo. But  
18 indeed today, we handle about 500 containers  
19 a week of grain products that are translated  
20 into containers here. Dried distillers grain,  
21 soybeans, free flow wheat, things of that  
22 nature.



1                   So that's been one trend because  
2                   American agriculture products are very desired  
3                   in rising standard of living parts of the  
4                   world. So if you think about the world today,  
5                   we're growing a middle class of over two  
6                   billion people in the world, and American food  
7                   products are a key part of that.

8                   The other thing that is even more  
9                   surprising, having started my career in  
10                  Houston, I never thought that we would handle  
11                  plastics in Charleston. I mean most plastics  
12                  are manufactured in the Gulf. They were going  
13                  to be manufactured in the Middle East until  
14                  the price of natural gas went down.

15                  Now, all that manufacturing is  
16                  coming back to the U.S. There's not enough  
17                  port capacity in Houston to handle all of  
18                  that. Anybody from Texas in here? So there's  
19                  not enough port capacity in Houston to handle  
20                  all of that trade. So we are actually seeing  
21                  a lot of exports of plastics coming to the  
22                  U.S. East Coast, and particularly Charleston.

1                   The third area is growing imports,  
2                   and that increasingly is e-commerce related.  
3                   We went through a big boom of distribution  
4                   center development related to bricks and  
5                   mortar retail. You probably would all agree  
6                   with me that bricks and mortar retail is kind  
7                   of yesterday's news.

8                   We are buying on e-commerce today.  
9                   Amazon is the wave of the future. So we see  
10                  a lot of distribution centers built with e-  
11                  commerce in mind. The last thing for the port  
12                  is that we have to have competitive rail. So  
13                  what I have learned in five years in the port  
14                  industry is you have to have two railroads  
15                  that are enthused about serving your port, and  
16                  that want to offer competitive rates, because  
17                  if they don't price competitively to your  
18                  port, the freight will go elsewhere basically.

19                  So it's really an integrated way  
20                  of moving cargo that is part of this volume  
21                  growth strategy.

22                  So next, and then finally, we are

1 an integral player in the economic development  
2 picture in South Carolina, and it's a place  
3 that we've been very good in this state. We  
4 have a governor who is very aggressive in  
5 economic development.

6 She's a great salesperson, she's  
7 very enthusiastic, and I think the track  
8 record of Boeing coming to Charleston, BMW and  
9 Michelin making multiple billion-dollar  
10 expansions in this state speaks to the fact  
11 that we're pretty good at economic  
12 development.

13 We actually are the largest tire  
14 manufacturing state in the country today now,  
15 having I think just passed Oklahoma in that  
16 regard. So there's nothing there. Okay.

17 (Laughter.)

18 MR. NEWSOME: Okay. So again, I  
19 think I covered a lot of this. We can just  
20 click that forward. So this is a graphic of  
21 where some of the investment is in new  
22 manufacturing, and again, what sets this

1 manufacturing apart is a lot of it is export-  
2 related.

3           You know, we make a lot --  
4 Michelin and Bridgestone make offroad tires  
5 here. There's not really any demand for  
6 offroad tires in the United States. All of it  
7 goes to Canada, it goes to Australia, it goes  
8 to Brazil. So there's a heavy export  
9 component related to a lot of this investment,  
10 and we --

11           For the port to succeed, the  
12 denser this chart is, the better things are  
13 for us basically, because the port only works  
14 if there's a cargo base.

15           So I mentioned rail. You have to  
16 be an intermodal rail-capable port. That  
17 means -- what that means in English is that  
18 more containers are going to move by rail.  
19 One of the big challenges in the port and  
20 shipping industry is that we face a shortage  
21 of trucks. Our children don't want to be  
22 truck drivers, basically. It's not an

1 attractive profession.

2           There's some reasons for that. I  
3 really don't think it has to be that way. I  
4 don't think we have to accept that, but that's  
5 the case today. We definitely need to fix it.  
6 So we have worked very hard to make ourselves  
7 a rail-capable port. We don't have on-dock  
8 rail. We built a terminal, the Wando Terminal  
9 in Mount Pleasant in the 1980s.

10           To build that terminal, we had to  
11 forego the right to have on-dock rail. So  
12 we've done some things locally here, I won't  
13 get too much into detail, to make our port  
14 work rail-wise for containers. We created a  
15 drayage program where we coordinate the moves  
16 from our terminals to the rail ramps to create  
17 more efficiency, hopefully less congestion.

18           We built an inland port, which  
19 I'll talk a bit about, and then we're building  
20 an new intermodal container transfer facility,  
21 ICTF. We're laden with acronyms in this  
22 industry. Sometimes I'm convinced it's so we

1 don't want to explain to people what we really  
2 do, actually. So we make it intentionally  
3 confusing to understand what we do.

4 So we built an inland port, and I  
5 had a lot of fun with this in South Carolina,  
6 because people know that we're deepening the  
7 harbor here, and they said, well Jim, what  
8 harbor are you -- what river are you deepening  
9 up to Grier, South Carolina? You know, what  
10 ships are you going to take up there?

11 But obviously that's a bit of a  
12 joke. But there actually are four rivers that  
13 would get you close to Grier, none of which  
14 are navigable. This isn't a ship-served port;  
15 this is a rail-served inland port. So it is  
16 served by overnight train service with the  
17 Norfolk Southern. It's adjacent to the BMW  
18 plant.

19 So we started with a base cargo of  
20 about 25,000 containers, and go back just for  
21 a second if you would, sorry. Okay. And you  
22 know, really the port today handles about

1 40,000 containers, and it's right in the  
2 middle of the biggest manufacturing and  
3 consumption area in the Southeast, the I-85  
4 corridor.

5 So it's an innovative development  
6 that we're very proud of, and I think will be  
7 a big distribution hub in the Southeast. If  
8 you think about what we did here, we built an  
9 intermodal rail terminal, added another  
10 intermodal rail terminal.

11 There are only six in the  
12 Southeast. We made a seventh one, and it's in  
13 South Carolina. So it was a big strategic  
14 investment for us. Cost about \$50 million  
15 actually to build, and we did it very fast.

16 So next. Within -- while I think  
17 that it's an important distribution hub, it's  
18 within 500 miles of almost a 100 million  
19 consumers, and 500 miles is the range which  
20 you can really serve on overnight distribution  
21 and be competitive.

22 So in addition to containers, we

1 handle a lot of what we call project cargo.  
2 That's the real challenging part of our  
3 industry. It's fairly easy to handle  
4 containers; it's pretty routine. This stuff  
5 is very different. It's valuable. It's  
6 heavy. It's cumbersome, and you need  
7 capability to do that.

8           So we are in -- we are in a  
9 situation where there are four permitted  
10 nuclear power plants in the United States.  
11 Two of those are in South Carolina, two are in  
12 Georgia. So the parts of the two in South  
13 Carolina move over our port today.

14           GE has a huge deal in Algeria for  
15 gas turbines. They have a huge deal  
16 everywhere for gas turbines. They're sold out  
17 for years in gas turbines right now. So  
18 that's good for us. We have a big heavy lift  
19 crane that has 700 tons of capability  
20 basically.

21           So we can lift, make one lift of  
22 700 tons. Then we have a very capable



1 contractor provider here. So this is an  
2 interesting business for us, and something  
3 that we see as a growth area.

4 So to talk a bit about our harbor,  
5 something we are very proud of. Number one is  
6 our partnership with the Army Corps of  
7 Engineers, you know. They are federal  
8 channels. I think we have to realize that all  
9 these harbors are owned by the federal  
10 government, and thus we need to work with the  
11 Corps to do deepening.

12 There's a lot of confusion about  
13 harbor deepening in this country if you read  
14 the literature, because I think the main thing  
15 that is confusing is it's often intermingled  
16 with harbor maintenance. So understand that  
17 a harbor has an authorized depth. Our harbor  
18 today has a 45-foot authorized depth, and  
19 there's an amount of maintenance that goes  
20 with that every year to keep it at 45 feet.

21 In the case of our port, it's  
22 between 13 and 15 million a year. That comes

1 from a thing called the harbor maintenance  
2 tax. Like many trust funds in this country,  
3 the harbor maintenance tax is 100 percent  
4 collected and 50 percent spent. We don't know  
5 where the other 50 percent is. It's probably  
6 not important.

7           There's just a move now that will  
8 compel 100 percent of the money to be spent.  
9 That's pretty logical actually, if you think  
10 about it. If you collect money for harbor  
11 maintenance, you ought to spend it on harbor  
12 maintenance. So I don't think anyone would  
13 have an argument with that.

14           But that does nothing for  
15 deepening. So deepening is a separate capital  
16 investment, and every project is seen as a  
17 separate capital investment. The problem in  
18 the U.S. today in a nutshell is there's no  
19 capital budget in the federal government for  
20 harbor deepening, and we have been, I would  
21 say and I will say it, and I would not expect  
22 my colleagues with the Corps to say it, but I

1 can say it.

2           There has not been a lot of  
3 prioritization of deepening projects. Every  
4 project has been looked at with equal  
5 enthusiasm to some extent. That will have to  
6 change, in terms of what the federal  
7 government will fund. So I'll say it very  
8 directly to you.

9           The federal government is not  
10 going to fund the deepening, all the deepening  
11 projects that are on the table today. There's  
12 simply not the money for it; there's simply  
13 not the merit for it as well. So we have a  
14 good deepening project. It's on track time-  
15 wise.

16           What does that mean? It means  
17 that we will complete our harbor deepening  
18 study in four years, basically. So that is a  
19 record time frame. This is thankfully, and  
20 again the Corps district here has done a great  
21 job in really piloting this. We are the first  
22 deep draft navigation project in what is known

1 as Smart Planning, to move projects along  
2 faster.

3           There are some other studies that  
4 have taken up to 20 years to do. There's --  
5 I just say it, there's no way a harbor  
6 deepening study should take 20 years. It's  
7 impossible. I mean we've had the head of the  
8 Panama Canal here. He says I'm spending 5-1/2  
9 billion to widen the Panama Canal, and I can  
10 do it in eight years, you know. Why does it  
11 -- why should it take you that long to do a  
12 study?

13           But that was the system before.  
14 It's not the system now. So we will have a  
15 Draft Environmental Impact Statement within a  
16 month. So that is the first phase of ending  
17 the study. There's a period of public comment  
18 and then we look for a chief's report some  
19 time about this time next year, which means  
20 the study is accepted. The federal government  
21 says it's a meritorious project and it's time  
22 to move into construction.

1                   What sets our project aside is  
2                   that our legislature, not knowing how much  
3                   money the federal government will appropriate  
4                   for any deepening project, has put aside \$300  
5                   million in an interest-bearing bank account,  
6                   to pay for our share, certainly the state's  
7                   share. It's a cost share, but in case of  
8                   need, the entire project. I don't say that  
9                   lightly. I will say the taxpayers of South  
10                  Carolina should not have to pay for the  
11                  federal share of our deepening project.  
12                  There's just no reason for that. If that has  
13                  to be the case, it's enough of a strategic  
14                  initiative that we will do it.

15                   I think that sends a strong signal  
16                   to the administration, that we're very serious  
17                   about this project. You may also say well,  
18                   why on earth is Jim talking about the Bayonne  
19                   Bridge being raised in 2016. The Bayonne  
20                   Bridge, as you all know, is in New Jersey.

21                   Well, because without raising the  
22                   Bayonne Bridge, it's impossible for big ships

1 to come to the East Coast, because if a ship  
2 can't call in New York, it can't go to Norfolk  
3 or Charleston or anywhere else, because  
4 there's so much cargo that goes to New York.

5 So the Bayonne Bridge will be  
6 raised to 215 feet just in the nick of time.  
7 We actually believe, and we're more aggressive  
8 about this. But we think that our project can  
9 certainly be deepened by the end of this  
10 decade basically. So we want to push that  
11 forward.

12 That's not the official time  
13 table. That's what we think can be  
14 accomplished. So this is a great project. On  
15 all measures, it delivers the deepest harbor  
16 in the Southeast for the cheapest cost with a  
17 minimum of environmental mitigation, and  
18 environmental mitigation on this project is,  
19 I think, less than five percent of the project  
20 cost. So it's a very good value.

21 This is the picture that underlies  
22 all this. If you'd hit it one more time for

1 me. So already before our project, four  
2 harbors have been authorized to 50 feet of  
3 depth at mean low water, so New York,  
4 Baltimore, Norfolk and Miami.

5 Miami's an interesting one. It's  
6 a cruise port. Cruise ships basically require  
7 about 30 feet of draft, but they have a vision  
8 where they want to handle deep draft container  
9 ships. We don't necessarily think that's a  
10 logical vision but, you know, that's what  
11 makes the world go around. People don't  
12 always see things the same way.

13 But what is clear from this  
14 picture, if we're a major exporting region,  
15 there needs to be a harbor in the Southeast at  
16 50 feet or deeper, because you have to load  
17 the ships full out of the Southeast to sell  
18 foreign. So we actually aspire to get a 52  
19 foot harbor basically. That is what we're  
20 seeking in Charleston.

21 Next, and we will be, just because  
22 of the dynamics of other deepening projects,

1 we will be the only port to achieve 50 feet or  
2 deeper in the Southeast basically. So that  
3 puts us in a very unique competitive  
4 situation, in our opinion.

5 Next. What's the impact? You say  
6 why? You know, what's the point of all of  
7 this? What are you trying to achieve with  
8 this deepening. Well, an 8,000 TEU container  
9 ship like this size ship and the workhorse  
10 size of ship that comes to the East Coast will  
11 be eight to ten thousand TEUs.

12 When that ship is fully loaded, it  
13 has a draft of 48 feet, and a 52 foot harbor  
14 will accommodate a ship with a draft of 48  
15 feet 24 hours a day without tidal  
16 restrictions. So the name of the game is to  
17 be able to bring this ship in and out without  
18 tidal restriction, and indeed a shipping line  
19 wants to get this ship in and out with 2,000  
20 moves in a 24 hour period, pilot to pilot.  
21 Not dock to dock, pilot to pilot.

22 So from when the pilot boards to



1 when the pilot's off, having done 2,000 moves  
2 within 24 hours. So basically we have a six  
3 foot draft advantage to make that happen.  
4 It's something that a shipping line, like I  
5 worked for before, cannot ignore. I mean you  
6 simply can't leave 1,000 containers behind a  
7 week, you know, by not coming to a deep port  
8 basically.

9 Next. So as I said to you, it's a  
10 big ship, cost-focused industry. It is what  
11 this industry's about. It is an incredibly  
12 valuable industry in terms of globalization,  
13 but it is an industry that behaves like a  
14 commodity today. It's all cost-focused, and  
15 there was just an article by the CEO of Maersk  
16 yesterday, and he said very clearly the lines  
17 with the lowest cost are going to win.

18 How does the line achieve lowest  
19 cost? You build the biggest ship possible.  
20 So the idea is to take the biggest ship you  
21 can take into a port basically. That's the  
22 name of the game today.

1                   So future ship deployments are  
2                   pretty clear. The Asia-Europe trade, which is  
3                   the largest long haul trade, will have 18,000  
4                   TEU ships or larger. So again, 18,000 TEU  
5                   ships or larger, and I can tell you in '97-  
6                   '98, in my previous company, we never thought  
7                   we'd build bigger than a 5,000 TEU ship. So  
8                   today we have 18-19 thousand TEU ships being  
9                   routinely built.

10                   So next. That means the Asia-  
11                   U.S.A. trade will have 8 to 13 thousand TEU  
12                   ships. So I showed you an 8,000 TEU ship. We  
13                   clearly believe that we'll handle 13,000 TEU  
14                   ships here routinely in the not too distant  
15                   future, once the Bayonne Bridge is raised.

16                   In the Europe-U.S.A. trade, we  
17                   have five to eight thousand TEU ships. So  
18                   again, mostly post Panamax or new Panamax  
19                   ships, and then the remainder of the trade is  
20                   depending on the port capability, anywhere  
21                   from three to eight thousand TEU ships.

22                   So in South America today, if you

1 know anything about ports in Brazil, they are  
2 not very capable in terms of, you know,  
3 turnover and productivity. They're handling  
4 up to eight thousand TEU ships.

5           So this is a picture that we like  
6 to show people. So that little spec is a BMW  
7 X-5. This little plane is a Boeing 787.  
8 That's not such a little plane actually. If  
9 you look across the harbor, you'll see the  
10 aircraft carrier Yorktown. The lighter blue  
11 container ship is a 9,000 TEU ship like we  
12 handle today, and this big ship is a 14,000  
13 TEU ship like we will handle in the future.

14           It's 1,200 feet long. It's a beam  
15 of 167 feet of width. If you know anything  
16 about sailing, a ship is sort of ten degrees  
17 off center. So 167 degrees of width means you  
18 need a 350-foot wide space to handle that ship  
19 in a harbor basin.

20           And that, the Adidas guys like  
21 this, the Nike guys don't like it, but it  
22 would handle 70 million -- this ship would

1 handle a total of 70 million Adidas running  
2 shoes if the ship was full of Adidas running  
3 shoes, which it would never be. But it's  
4 anyway just a calculation, maybe the  
5 Department of Meaningless Statistics or  
6 something. I don't know.

7 So the basic requirements to be a  
8 futuristic port, and this is a picture of our  
9 Wando Terminal. So you have to have a growing  
10 cargo base. You have to have reliable ingress  
11 and egress within 24 hours, not fog delays,  
12 not tidal restrictions.

13 You really have to get ships in  
14 and out. Lines can't afford to speed up and  
15 spend a lot of fuel to stay on schedule. Fuel  
16 costs, believe it or not, on a ship like that,  
17 the fuel costs are more than the capital and  
18 crew costs of the ship today, with bunker fuel  
19 at \$700 a ton.

20 So 48 feet of draft, competitive  
21 dual rail service, ample truck capacity,  
22 competitive land for port-related logistics,

1 inland port facilities, attracting human  
2 capital to our industry, lowest possible  
3 costs, the most technology that we can have  
4 and the ability to participate in economic  
5 development.

6           What does technology mean on a  
7 terminal like this? It means the next  
8 terminal we build will be highly automated.  
9 So you can actually run one of these terminals  
10 from a room like this on screens basically, if  
11 the labor component allows you to do that. So  
12 it's a very high tech business.

13           There's no shortage of challenges.  
14 Some of the challenges that we have, if you  
15 can just click through those. It's certainly  
16 a slower growth marketplace than we had in the  
17 last decade. We have a very competitive port  
18 marketplace as I mentioned. We have huge  
19 investment requirements.

20           There's not a lot of large low  
21 cost land tracks close to the port. We have  
22 to have appropriate capacity for large ships,

1 and we have to get some revenue improvement to  
2 justify the investment that we need to do.

3 I just want to point out this  
4 trucking issue again, because like I said, we  
5 face a huge shortage -- if you want to click  
6 that one -- face a huge shortage in the  
7 trucking industry.

8 Think about this. The container  
9 trucking industry, which are pretty much  
10 entrepreneurs that hook up with trucking  
11 companies every day. They own their trucks.  
12 They get paid per move. That industry has 100  
13 percent turnover in a year. A Wal-Mart store  
14 has 40 percent turnover.

15 So this is 100 percent turnover  
16 industry, and they get -- if they get hung up  
17 on a terminal, they don't make money. So what  
18 our imperative in the port is is to make sure  
19 they get in and out fast, and make sure we  
20 have the proper gate hours, so they can make  
21 a living and not go build houses or do  
22 something else. It's a big challenge.

1                   So you know, the port has to be  
2 leader here to make all this happen. We have  
3 a big strategic vision, a large capital plan,  
4 if you click that, and this is a picture of  
5 three new Panamax ships, three 8,000 TEU ships  
6 at the Wando Terminal, which is what we will  
7 see in the future. It's what we see today;  
8 it's what we'll see in the future.

9                   So there's a lot of opportunity  
10 here. I think the Southeast port market is  
11 the best port market fundamentally, which is  
12 good for us. But there are a lot of  
13 challenges to invest, to handle these ships.

14                   So that's my 30 minutes pretty  
15 much. If you have time for questions, I'll be  
16 happy to answer any.

17                   CHAIR PERKINS: Yeah. We do have  
18 time for questions, because we have a break  
19 and poster viewing, you know, coming up after  
20 this. So no worries that we're a little past  
21 10:30.

22                   VICE CHAIR HANSON: Mr. Newsome,

1 Bill Hanson, Great Lakes Dredge and Dock.

2 Good to see you again, sir.

3 MR. NEWSOME: Good seeing you.

4 VICE CHAIR HANSON:

5 Congratulations on the great progress you've  
6 made in a short time here in Charleston. One  
7 of the sea changes in the Southeast ports, as  
8 you mentioned, has been the governor's  
9 support, and I know Christine's here from the  
10 Southeast Governors Alliance.

11 You know, we've seen Governor  
12 Scott in Florida, Governor Deal in Georgia,  
13 Governor Haley here and even Governor McCrory  
14 in North Carolina step up to the plate when  
15 the federal dollars weren't available for  
16 this.

17 I'd like for you to talk a little  
18 bit about how that developed, and then maybe  
19 a second question. As the Corps goes through  
20 their analysis, you and I know from our  
21 careers that when you deepen a port, there's  
22 many, many other benefits that accrue to a



1 regional economy, that the Corps is not  
2 allowed to count in their economic plan.

3 Do you have plans for additional  
4 port dock space, dock development, inland type  
5 facilities, or what's your plan to handle the  
6 growth that will come?

7 MR. NEWSOME: So yeah. I mean I  
8 think that it is -- I would say what have we  
9 accomplished in five years' time. For sure,  
10 we had everyone in the state on the same page  
11 about the strategic importance of the port.  
12 So the governor, this is a very strong  
13 legislative state. Everyone believes the port  
14 is the biggest strategic asset.

15 So that was a big deal, and anyone  
16 who's lived in South Carolina knows that we  
17 went through a bad period, where we had a lot  
18 of internal disharmony about whether the port  
19 was a good thing or a bad thing or if it  
20 should be Jasper County or Charleston or  
21 wherever.

22 So we got through all of that, and

1 that enabled us to make, you know, a  
2 statement, which was really putting the \$300  
3 million aside for our deepening ahead of the  
4 realization of the project was huge, because  
5 that essentially said that we're ready to do  
6 this. You know, we're going to deepen this  
7 harbor come hook or crook.

8 We don't know today, and I'll say  
9 this very clearly. No one who's doing a  
10 deepening project today knows that they're  
11 going to get a dime of federal expenditure.  
12 Everybody can talk about it. It's written  
13 about. They're all going to do it, etcetera.  
14 There's not one dime secured.

15 The last harbor that has achieved  
16 a federal dollar for construction is the Port  
17 of New York and New Jersey, and it should  
18 have. There's no reason it shouldn't have.  
19 It's 5-1/2 million TEUs. So in addition to  
20 the harbor deepening and our cost benefits are  
21 quite good, we know that, but we are investing  
22 in a new terminal at the former Navy base.

1                   We had a BRAC here in '94. We got  
2                   some land in the former Navy base, and we're  
3                   investing in what is essentially almost a  
4                   billion dollar terminal, you know, for 300  
5                   acres. Why is it so expensive? Because we  
6                   live on quicksand here, and you have to  
7                   stabilize the muck to be able to build, you  
8                   know, handle these heavy weights and things of  
9                   that nature.

10                   So we are investing on top of  
11                   that, you know, in new facilities. What was  
12                   also surprising and somewhat disappointing,  
13                   which I think a lot of us never thought about  
14                   until recently, is that we have to invest a  
15                   lot of money in our existing terminals, to  
16                   retrofit them for the big ships.

17                   Because when we built the Wando  
18                   Terminal I showed you, it was for two to four  
19                   thousand TEU ships. We talk about handling  
20                   14,000 TEU ships. So the dynamics of doing  
21                   that are very different today. So it's -- we  
22                   have to invest, you know, to keep up.

1                   MEMBER MILLER:  What's your  
2                   current harbor depth?

3                   MR. NEWSOME:  45 feet at mean low  
4                   water.  What it means is you can handle a ship  
5                   at 48 feet of draft for two hours, which is  
6                   the length of the harbor basically.  So we  
7                   want to remove that tidal -- this project's  
8                   aim is to remove that tidal restriction for a  
9                   ship at 48 feet or 14.6 meters of draft.

10                  CHAIR PERKINS:  So if you get  
11                  authorized the 52 feet, and you have 24-7  
12                  access, do you no longer need the real time  
13                  PORTS system?  I guess it's elementary, right?  
14                  You don't need it.

15                  MR. NEWSOME:  Well, I wouldn't be  
16                  the one to answer that.  John, you want to  
17                  take a --

18                  CAPT CAMERON:  The bridge senor  
19                  will definitely need that component of PORTS.  
20                  But underkeel clearance is an important issue.  
21                  I'm with the harbor pilots.  We try to  
22                  maintain ten percent underkeel, which is the

1 largest safety factor in place in the United  
2 States right now, and tidal barriers here are  
3 2-1/2 feet with wind-driven effect.

4 So at a 52 foot depth, a full-  
5 loaded ship will be right at that ten percent.  
6 If tidal fluctuations are greater than normal,  
7 we'll need to know that.

8 CHAIR PERKINS: So have you  
9 squirreled away a little bit of that \$300  
10 million for your PORTS system?

11 MR. NEWSOME: Yeah. I mean that  
12 \$300 million is for the deepening project.  
13 There are other investment dollars put aside,  
14 and we will borrow significant amounts of  
15 money to accomplish that, because you build  
16 long term assets in a very discrete --

17 You build long term assets before  
18 you have a dime of payment for them basically.  
19 That's the issue that we have. So we have an  
20 ambitious capital plan. But the \$300 million  
21 alone was for the entire cost of our harbor  
22 deepening. But now because we're going deeper

1 and the project's more expensive, it covers at  
2 least the 60 percent state share.

3 So there's still a gap. I'll tell  
4 you that I think if any harbor's going to  
5 qualify for federal reimbursement, I think  
6 we're in good shape to do that, because we  
7 have -- our harbor project is half the cost  
8 of, you know, comparable harbor projects,  
9 delivering a much greater benefit.

10 Some of the other harbor projects  
11 that are competing with us for dollars are not  
12 going to even achieve the functionality that  
13 we have today. That's a whole different  
14 debate, you know, why you would do that not --  
15 I don't want to get into that debate really.  
16 It's not for me to do. I have an opinion on  
17 that, by the way, as you might imagine. Other  
18 questions?

19 MS. MERSFELDER-LEWIS: Could you  
20 clarify? Are you looking now to go down to 50  
21 or 52?

22 MR. NEWSOME: So the official name

1 of our project is the post-45 foot project.

2 So we studied -- the Corps studies  
3 alternatives, and we're somewhere at the 50 to  
4 52 foot range, and that largely comes down to  
5 a question, frankly, of who's going to pay for  
6 the extra two feet, because there's probably  
7 no way that we would not -- we would opt for  
8 50 feet and start another study again in two  
9 or three years. It wouldn't make sense.

10 VICE CHAIR HANSON: I hate to hog  
11 the microphone here. Grab it from me later,  
12 okay. We'll be on a panel together down in  
13 Panama here in a couple of months, at the ACE  
14 meeting, talking about the impact of the  
15 expansion of the Panama Canal to U.S. ports.

16 But there's another canal that  
17 recently started expanding. Can you talk a  
18 little bit about the expected impact?

19 MR. NEWSOME: Yeah. So what's  
20 really interesting, there obviously is a lot  
21 of excitement about the expansion of the  
22 Panama Canal. It's a \$5.5 billion project

1 that was authorized by referendum of less than  
2 100,000 votes in Panama. If you think about  
3 it, it's pretty sensational. But we all  
4 thought this big ship deployment thing was  
5 going to wait for the Panama Canal expansion.

6 It's two years late, and because  
7 of the cost dynamics of the industry, many of  
8 the lines didn't wait. They started deploying  
9 the ships through the Suez Canal. So there is  
10 really effective competition between both  
11 canals. They have a similar toll structure.

12 You may not believe it, but you  
13 know, the 13,000 TEU ship that goes through  
14 the new Panama Canal will pay a million  
15 dollars, one million dollars to go out of the  
16 Panama Canal. So they will, in my judgment,  
17 have a competition between them.

18 But I think the canal that will  
19 get the business is the one that provides the  
20 shortest haulage basically, the lowest cost.  
21 It's pretty obvious. If you come from  
22 Northeast Asia, you're probably going to come



1 by the new Panama Canal. If you come from  
2 Southeast Asia, you'll probably come by the  
3 Suez Canal.

4 There's a pretty clear line of  
5 demarcation, which is defined by the number of  
6 hours of streaming basically.

7 CHAIR PERKINS: Okay. Well thank  
8 you Mr. Newsome.

9 MR. NEWSOME: Thank you very much.  
10 (Applause.)

11 CHAIR PERKINS: I don't know if  
12 you got one of these yet, but this is a copy,  
13 fresh off the press, corrected through this  
14 week, last week, of the new chart of  
15 Charleston. So I'll present that to you as  
16 well.

17 MR. NEWSOME: Well I appreciate  
18 that. Thank you very much. Thanks for having  
19 me today.

20 (Applause.)

21 MR. NEWSOME: Thank you.

22 CHAIR PERKINS: Thank you, Mr.

1 Newsome. Next up we have a short break, and  
2 an opportunity to do some viewing of the  
3 College of Charleston's Benthic Acoustic  
4 Mapping and Surveying, the BEAMS program and  
5 student posters, and we will reconvene at --  
6 promptly at 11:00 a.m. Eastern.

7 (Whereupon, the above-entitled  
8 matter went off the record at 10:42 a.m. and  
9 resumed at 11:05 a.m.)

10 CHAIR PERKINS: If I can get us  
11 reconvened here. Thank you for returning  
12 fairly promptly, as requested. So now our  
13 next session is from the U.S. Coast Guard  
14 Charleston sector. My pleasure to introduce  
15 Captain Ric Rodriguez.

16 U.S. Coast Guard Charleston Sector

17 MEMBER MILLER: Sir, I think you  
18 need to speak into a microphone, because it's  
19 being recorded.

20 CAPT RODRIGUEZ: Okay. That goes  
21 totally against my way of doing business. I  
22 like to move my hands. So my name is Captain

1 Ric Rodriguez. I'm the sector commander here.  
2 I've been here in Charleston for about 14  
3 months. I've been in the Coast Guard a little  
4 over 30 years.

5 Just to clarify, I was talking to  
6 Mr. Perkins about whether you all understand  
7 the role of sector command, and you may and  
8 I'll give you just a little bit of an insight.  
9 There are 35 of us around the Coast Guard,  
10 which includes Puerto Rico and Guam.

11 Our responsibility is to manage  
12 all Coast Guard missions that fall within our  
13 area of responsibility, primarily captain of  
14 the port responsibilities. That's probably  
15 the biggest one. But the other piece of it,  
16 which is really where my bread and butter  
17 comes from, is search and rescue, and a lot of  
18 it dovetails it.

19 So there's facilities security,  
20 there's waterways security. It's managing,  
21 working with our port partners and with  
22 agencies which includes all of you. But I

1 carry a lot of broad authorities given to me  
2 by statutory law, and then our mission.

3 So we have 11 statutory missions.

4 I exercise nine. One of them is not ice  
5 breaking thankfully. I'd rather not be in  
6 Alaska. So I'm very happy to be here in  
7 Charleston. But the captain of the port  
8 responsibilities is probably one of my  
9 greatest ones, and the one that I probably  
10 fear the most. And I'll say that out loud and  
11 I'm recording that I do fear it, because  
12 there's a lot that goes into it.

13 I am currently responsible for the  
14 Coast Guard missions within two states. So I  
15 have Georgia and South Carolina that I'm  
16 responsible for. The captain of the port  
17 though, there is a separate captain of port  
18 zone in Savannah, Georgia.

19 So though I supervise the  
20 commander who's there, she is her own captain  
21 of the port, and we both report to our boss,  
22 which is in Miami. So I just wanted to give

1           you that as a little bit of a background. I'm  
2           going to go through the questions first, and  
3           then I'll elaborate a little bit on it.

4                        Again, as mentioned, we are multi-  
5           mission here. With regards to our future  
6           capabilities and how prepared are we here,  
7           regarding the port expansion and the growth of  
8           the marine commercial shipping along the U.S.  
9           Southeastern coast, it depends. I say that  
10          because we're as prepared as we need to be in  
11          terms of our Coast Guard overall authorities  
12          and responsibilities.

13                      But we recognize a port like the  
14          Port of Charleston is hoping to expand and  
15          grow, working with the Army Corps, working  
16          with NOAA and working with other federal,  
17          state and local agencies. We are going to be  
18          as prepared to address the concerns.

19                      I would say as the sector  
20          commander, I'm not concerned about the  
21          maritime transportation impacts. I am  
22          adequately staffed to address my current

1 challenges, and I believe I will be able to  
2 address any future challenges. I don't see  
3 them expanding significantly more.

4 We will still regulate the  
5 shipping industry as it comes in. We'll still  
6 respond to the hurricanes that come in with  
7 regards to, you know, regardless of how much  
8 of an expansion it is. But a lot of it rests  
9 with our relationship with the Army Corps,  
10 which in Colonel Litz's brief, you'll get more  
11 detail as to their part of that expansion  
12 progress or process.

13 How does Sector Charleston use  
14 NOAA's navigation data and products to support  
15 its mission? I could not do what I need to do  
16 with regards to hurricane preparedness, heavy  
17 weather, climate change preparedness without  
18 NOAA. There's no way I can.

19 I rely heavily on the data that  
20 comes to us, so that we can make adequate  
21 assessments. Sector Charleston is part of  
22 District 7, which includes from the North

1 Carolina border all the way down to the  
2 Caribbean.

3 When a storm starts brewing in the  
4 Caribbean, we stand up not just a heightened  
5 sense of awareness, but the district office,  
6 my boss, my admiral will stand up an Incident  
7 Command post, and we get on regular conference  
8 calls.

9 So we start monitoring the heavy  
10 weather as it works its way up. We base a lot  
11 of what we do on the predictions, and the  
12 prediction comes from you all, in terms of how  
13 the storm is going to track, what the impacts  
14 are going to be, and then I can make an  
15 appropriate assessment as to whether I need to  
16 eventually close the Port of Charleston, and  
17 with that ask the ships or direct the ships  
18 that here in port to leave.

19 For those that can't, to work with  
20 them on ways that they can mitigate whatever  
21 heavy weather or storm comes in. So I cannot  
22 do what I do with regards to hurricane

1 preparedness without the information that you  
2 all provide.

3 And a second piece to that is --  
4 which is where my biggest concern will be is  
5 post-storm recovery. One of the things that  
6 I'm charged with is right after a storm is how  
7 soon I can open up the port, and that pressure  
8 will come in various forms.

9 It will come from our port  
10 partners, it will come from the local  
11 government, it will come from the state  
12 government. It might even come from the  
13 national government.

14 So one of the things that I look  
15 at doing is mitigating the threat once the  
16 storm or heavy weather hits, and then as soon  
17 as possible, I want to be able to, with  
18 collaboration with our partners, open up the  
19 port so we can allow the flow of commerce to  
20 come back in.

21 I need your information. I need  
22 the prediction, and I need to be able to rely



1           on what you provide us, so that we can make  
2           the appropriate assessment to minimize the  
3           impacts in the maritime transportation system.  
4           But it's not just that. One of the things  
5           that we have to be able to do, and this is a  
6           lot of work with the Army Corps, is to be able  
7           to open up the shipping channels and the  
8           intercoastal waterways.

9                         It's not just the commercial  
10           traffic, but it's also to the average citizen.  
11           So I'm very concerned about where the buoys  
12           are. I'm very concerned with the placement of  
13           the buoys, and there's a lot that goes into,  
14           when we have a buoy that's off station and we  
15           want to place it, I'm relying on the  
16           navigational charts.

17                        But as I was talking to Kyle Ward  
18           a little while ago, one of the challenges we  
19           have is in the Coast Guard we're very  
20           programmatic. So when we're told to put a  
21           buoy here, that's where we put it. Whether it  
22           looks good on the chart or not, we base it on

1 the GPS coordinates, and that's where we place  
2 it.

3 I think we need to evolve a little  
4 more than that. We have to be able to provide  
5 feedback to you, if that is indeed the best  
6 place to do it and where to make the  
7 adjustments. Because as you all know, the  
8 mariners are quick to tell us if something is  
9 off station or if something is not working.

10 Whenever we have a maritime  
11 incident, whether it's a grounding or there's  
12 an accident, I have to send resources out to  
13 verify that the chart was accurate and if the  
14 buoy was properly watching or if it wasn't  
15 even in place, and if it's not, address that  
16 concern. So that goes into part of my  
17 assessment or evaluation.

18 What products will we need for  
19 future capabilities to address the marine  
20 shipping growth for this region? We need  
21 continued support with mapping surveys, to  
22 provide the latest, most accurate data for our

1 maritime community, and the professional  
2 mariners that safely guide the projected  
3 increased size of the ships that will be  
4 calling upon the port here in Charleston.

5 Again, a lot of it, we can already  
6 address the concerns. We will work hand in  
7 hand with the pilots on being able to address  
8 the increased workload coming in. We are  
9 required -- as you all may know, there's a 96  
10 hour notice of arrival that every ship that  
11 comes into port has to notify us.

12 We will work with the pilots to  
13 make sure that we can adequately meet them  
14 coming in, do the threat assessment, and if  
15 necessary board and escort them in and out if  
16 necessary. So I think we can meet the  
17 increased demand that's going to call upon the  
18 Port of Charleston.

19 What's working with the use and  
20 application of our data and products and  
21 what's not working? At this point, we've been  
22 very satisfied with the level of support and

1 products that NOAA provides. There's going to  
2 be a push for increased technology. So I  
3 guess the question for all of you is what will  
4 you all be able to do with regards to  
5 additional apps?

6 I have no -- I haven't given it  
7 much thought in terms of what type of  
8 application. But as you know, the mariners  
9 are quite savvy. Whether it's the private or  
10 the commercial side, they want technology in  
11 their hand. So whatever you might be able to  
12 provide, that is at that level. That  
13 granularity, I think, is really important.

14 I know there's some applications  
15 out there that can be used on the iPhone or  
16 Samsung or other things that will, you know,  
17 AIS data. But I'm not sure what the mariner's  
18 going to demand, but I think it's worth  
19 looking into, is how much more can technology  
20 provide the information that the mariner needs  
21 in order to navigate safely and to know what  
22 is out there.

1                   The last thing I would say is we  
2                   welcome the continued collaboration and  
3                   support with NOAA and with our other partners.  
4                   We can't do this by ourselves and neither can  
5                   you. So I believe we have a forum that allows  
6                   us to have open and honest communication.

7                   We attend the same meetings. I  
8                   look across the room and see John Cameron over  
9                   there from the pilots. Kyle attends a lot of  
10                  the meetings that we're at. The Army Corps is  
11                  at the same meetings. So we benefit. In  
12                  Charleston, it's a small town in a big city.

13                 So we all know each other, and  
14                 that's very helpful, and we all attend the  
15                 same meetings. So I would say we have a great  
16                 relationship among the federal agencies and we  
17                 will continue to do so. We just need to be  
18                 honest with each other.

19                 If there are things that are not  
20                 working, we cannot be so protective and  
21                 frankly -- and not worry about hurting your  
22                 feelings.

1                   I think we have to tell you if  
2                   what's working is not working, and vice-versa.  
3                   So at this point, I'd say we just need to  
4                   continue to be honest with each other. Is  
5                   there anything I can answer for you? Sir.

6                   RDML GLANG: Thanks, Captain  
7                   Rodriguez. I'll pop out my notes. So the  
8                   conversation this morning, we mostly focused  
9                   on deep draft vessels, but you've got a fair  
10                  bit of inland waters, intercoastal waterway  
11                  that cuts through your AOR.

12                 Can you talk about how usable our  
13                 products and services are in those regions,  
14                 the usability of the charts, their content?  
15                 Are the scales appropriate, those kinds of  
16                 things?

17                 CAPT RODRIGUEZ: I would say here  
18                 one of the biggest concerns we have in this  
19                 AOR is shoaling, and though the charts are  
20                 fairly accurate, one of the things that we  
21                 have trouble accounting for, and there's big  
22                 fluctuations in tide.

1                   We have extreme low tides and I  
2                   don't want to say extreme high tides, but the  
3                   low tides matter, and that is probably the  
4                   biggest concern, is though the charts are  
5                   accurate, it's the shoaling that has  
6                   increased, that is making this a very  
7                   difficult place to navigate.

8                   So unless you're a very one,  
9                   experienced mariner and two, that you are  
10                  really aware of your surroundings at all  
11                  times, it is very common for vessels to run  
12                  aground. And that is probably my biggest  
13                  concern, and that's more on the inland side.

14                  If you look at the Port of  
15                  Georgetown, for example, it's a nice port.  
16                  But they have significant shoaling that's come  
17                  up, and Colonel Litz is shaking his head  
18                  because he knows. It is a constant concern.  
19                  But eventually the shoaling will restrict  
20                  vessels from coming in.

21                  So it is a big impact on the  
22                  inland waterways. I'm limited to one,

1           responding to those that need -- that are in  
2           distress, work with the commercial salvors,  
3           respond to any potential threats to the  
4           environment. But with regards to shoaling, I  
5           can't do much about it.

6                         So that's where I rely on others,  
7           whether it's Army Corps or other agencies, to  
8           be able to help us with that. I would say  
9           that's probably the biggest challenge we have  
10          on the inland waters.

11                        The second piece, I'm not sure if  
12          this falls under your concern is, the Coast  
13          Guard is trying to move away from managing all  
14          the aids that we have. We're trying to push  
15          some of the responsibilities onto the states  
16          and even the private side.

17                        I think that's going to be a  
18          potential problem down the road, because I'm  
19          not sure the states are going to be able to  
20          manage or address all of their aids and  
21          navigations concerns.

22                        But it's we're having -- it's a



1 lot harder for us to get into the inland  
2 waters, to fix all the aids that need to be  
3 repaired. Does that answer your question sir?

4 RDML GLANG: Yes. No, that's  
5 great. Thank you.

6 CAPT RODRIGUEZ: Sir.

7 MEMBER ARMSTRONG: Andy Armstrong  
8 from NOAA's Joint Hydrographic Center. Are  
9 you using any virtual aids here, or how do you  
10 feel that virtual aids to navigation will  
11 impact navigation in your area?

12 CAPT RODRIGUEZ: I am not aware  
13 that we are using it right now, sir. I would  
14 be interested in finding out what the benefit  
15 would be and where it might alleviate some  
16 mariner concern or work. But I don't think I  
17 can answer it now, because I'm not aware of  
18 it, sir.

19 CHAIR PERKINS: Captain, this  
20 summer a series of listening sessions, you  
21 know, took place, I think. There were 16 of  
22 them across the country that were joint, you

1 know, Coast Guard, Army Corps and NOAA. Do  
2 you have any feedback or were you able to  
3 personally participate in those? Can you  
4 share anything or lessons learned or benefit  
5 --

6 CAPT RODRIGUEZ: I did not, but a  
7 few members of my staff did. They found it  
8 very insightful. I don't think -- you know,  
9 it validated what we were doing and what we  
10 had already heard. I'm not aware of any big  
11 concerns that came out of the listening  
12 sessions.

13 But I had about -- I know of two  
14 people that participated, on my staff that  
15 participated fairly regularly on the listening  
16 sessions. So they just came back saying it  
17 was very helpful for them to hear if there  
18 were any concerns out there, but nothing came  
19 up, sir.

20 CHAIR PERKINS: It's a hard  
21 question, but do you think that was a  
22 beneficial use of federal dollars to conduct

1           those listening sessions?

2                        CAPT RODRIGUEZ:  I do.  I think  
3           they're very beneficial, especially if people  
4           can call without having to travel, and if they  
5           have issues that they want to bring up, I  
6           think it's very beneficial sir.

7                        CHAIR PERKINS:  Okay, thank you.  
8           Yes, Joyce.

9                        MEMBER MILLER:  To what extent  
10          does the Coast Guard use the Charleston Port  
11          system?

12                       CAPT RODRIGUEZ:  In what regards  
13          ma'am?  I'm not sure what, in terms of the  
14          Charleston ports.

15                       MR. WARD:  The new air gaps sensor  
16          that's in place.  I don't think you guys --

17                       CAPT RODRIGUEZ:  Yeah, I was going  
18          to say.  I don't think we do.  Anything else?

19                       MR. WARD:  Yes, and just -- I  
20          don't know if it's been explained yet.  But  
21          the port system here consists of an NWLON  
22          gauge that always been here, so we all -- you

1 know, we use that.

2 But the air gap is the only other  
3 sensor, and that's the only new sensor. So  
4 very limited for that specific purpose of  
5 getting those vessels underneath there.

6 CAPT RODRIGUEZ: I'd like to  
7 invite for a moment John Cameron, who used to  
8 have this position a couple of tours ago, and  
9 he works with the Pilot Association. John, is  
10 there anything from your perspective that you  
11 think would be valuable for the Committee?

12 CAPT CAMERON: Well, that sensor  
13 is very important, even though it's just one  
14 sensor. We have a two foot safety margin  
15 there, and at least every week, we're looking  
16 at that sensor while a ship is coming in, and  
17 we're telling the pilot, you know, you might  
18 want to speed up or slow down to get there for  
19 his optimal clearance So even though it's  
20 just one sensor, we use it.

21 CAPT RODRIGUEZ: Yes he -- the  
22 pilots use it certainly much more than we do.

1                   MR. MILLER: Mr. Perkins, I just  
2                   want to go back to your question about the  
3                   listening sessions, the country-wide tri-  
4                   agency listening sessions. I actually had  
5                   Kathy Post, the -- I don't know if the HSRP  
6                   saw this. But it's in your -- on your  
7                   website. There was a whole sort of feedback  
8                   form that the Coast Guard put together, that  
9                   shows all kinds of different questions and  
10                  responses based on those listening sessions,  
11                  the countrywide listening sessions.

12                  Then I also wrote up a NOAA  
13                  perspective report on that as well. So there  
14                  is a holistic report out there, and it's sort  
15                  of broken down by recreational users,  
16                  commercial industry and various other users.  
17                  So if you wanted more information on how those  
18                  talks went and what were the major issues and  
19                  what we're hearing, it is on there.

20                  CHAIR PERKINS: That's great. I  
21                  wasn't aware that it was on our website.

22                  MR. MILLER: I think you guys get

1 a lot of information thrown at you so, you  
2 know.

3 CAPT RODRIGUEZ: One of the things  
4 --

5 CHAIR PERKINS: I think that's a  
6 very gracious way of you covering the fact  
7 that I haven't looked at it recently. So  
8 thank you so much for the courtesy. Yes, Ed.

9 MEMBER KELLY: I don't want to  
10 take from the comment.

11 CHAIR PERKINS: No, no, please,  
12 please.

13 MEMBER KELLY: Just briefly on the  
14 listening sessions. I was a part of the  
15 initial small group with the TRB that was  
16 initially put at standing that up and it was  
17 very well presented. But then when it got out  
18 into the field, we had local representatives  
19 who were totally unclued-in to what the major  
20 program was.

21 I felt that the program in New  
22 York was a waste of my time, you know. It

1 kind of meandered around and some questions  
2 were thrown about. But I don't think they had  
3 the same team going around to a listening  
4 post. So you had a lot of divergent opinions  
5 coming in. So I think that it could and  
6 should have been done a lot better than it was  
7 done. So just my two cents.

8 CHAIR PERKINS: Thank you for that  
9 input. Do we have any other questions for  
10 Captain Rodriguez? Sir.

11 MEMBER KUDRNA: You didn't talk  
12 about recreational boats. When you have calls  
13 on recreational boats and there's elevation  
14 errors, are those conveyed to NOAA also?

15 CAPT RODRIGUEZ: I'm not sure.  
16 Can you ask that again? I'm not sure what you  
17 mean, sir.

18 MEMBER KUDRNA: If you a distress  
19 call, a grounding of a recreational boat or  
20 someone calls for assistance, and there's an  
21 elevation error regarding shoaling or  
22 something like that, do you transmit that

1 information to NOAA?

2 CAPT RODRIGUEZ: You know, I'm  
3 going to probably say we don't, and I -- now  
4 that you mention it, it's probably a  
5 significant gap that we need to let them know  
6 about, because that shoaling here for the  
7 recreation side is the biggest concern that we  
8 have with regards to recreational boaters.

9 They can go out first thing in the  
10 morning in one direction and try to reverse it  
11 coming back, and they'll hit the higher  
12 ground. We've been very fortunate that  
13 frankly there haven't been more lives lost.

14 We had a couple of cases last year  
15 where that very same thing happened, and if  
16 they didn't have life vests they --- you know,  
17 there was a mother -- there was a mother,  
18 father and a young child, and that's exactly  
19 what happened. They came back and they hard  
20 aground, where the starboard side tipped right  
21 over and fell in the water, and we found them  
22 two hours later.



1                   So we were really lucky that they  
2                   had survived. But that is a huge challenge,  
3                   and I think that's probably a gap for us, that  
4                   when that happens, we should be able to  
5                   communicate that to NOAA, so they're aware of  
6                   that issue.

7                   But the challenge with that is it  
8                   might be more related to the high tide and low  
9                   tide aspects, which a lot of your recreational  
10                  boaters are not paying attention to. Yes,  
11                  ma'am.

12                  MEMBER MILLER: To what extent is  
13                  the ICW maintained by NOAA versus Army Corps?

14                  CAPT RODRIGUEZ: It's almost  
15                  exclusive.

16                  LT COL LITZ: We do the dredging  
17                  on it. Unfortunately, over the last several  
18                  years, the money for dredging has not been  
19                  there. We have barely enough money to do  
20                  caretaker activities along the AIWW.

21                  So we know the places that are  
22                  shoaling hard, and we're aware that there are

1 recreational boaters running aground there,  
2 and it's very difficult to navigate,  
3 especially around I think it's a breach inlet  
4 area and others, and we try to identify those  
5 areas as best we can.

6 But we just simply don't have the  
7 funding of late to dredge the AIWW. It is an  
8 authorized project and we'd love to do it. It  
9 just requires an appropriation we don't have.

10 CAPT RODRIGUEZ: Great, thank you.

11 CHAIR PERKINS: Wait, I won't let  
12 you off the hook, because there's still time  
13 on the clock.

14 CAPT RODRIGUEZ: Oh no. I'm here  
15 as long as you want me to.

16 CHAIR PERKINS: So one of the  
17 things I do is when I go around the country,  
18 I try to talk and hear from a cross-section of  
19 users, and recreational boaters are  
20 particularly concerned, because the way they  
21 use navigation information is changing, right?

22 You mentioned that they're more

1           and more tech savvy and they want the  
2           information in the palm of their hand. And  
3           yet what that leads to is -- are changes in  
4           behavior, right? If a boater even cares about  
5           a nautical chart, they may take a moment to  
6           look at it before they get underway, or they  
7           know the area and they're not going to worry  
8           about it.

9                         But when you're in your car, it's  
10           really easy to bring up your phone, because  
11           our interstate highway system has excellent  
12           cellular phone coverage. But when you're out  
13           on the water, maybe not so much.

14                        CAPT RODRIGUEZ: Oh definitely  
15           not, sir. I will tell you that.

16                        CHAIR PERKINS: But the behavior  
17           of recreational boaters, they're really just  
18           practicing what they do when they're driving,  
19           right? They bring out their cell phone and  
20           they say oh well, I can figure out what's  
21           going on. So do you have an opinion? Do you  
22           -- are you observing that kind of change, that

1           boaters are expecting their phones to work, to  
2           give them information or even for emergencies?

3                        CAPT RODRIGUEZ: Absolutely, sir.

4           In fact we -- one of the things that makes it  
5           particularly challenging, it doesn't take the  
6           search out of the search and rescue. It's  
7           just that, is mariners are tremendously --  
8           recreational mariners are tremendously  
9           complacent with regards to how well their  
10          electronic devices will work.

11                       They will run the risk of going 40  
12          miles off, you know, off of Charleston, hoping  
13          that their cell phone will work, and it will  
14          probably stop working after four miles, and  
15          they fail to communicate. So despite the  
16          education that they need to have a marine band  
17          radio, they still rely foolishly on their cell  
18          phone, because there just isn't the coverage.

19                       It does pose the challenge, you  
20          know. The app is great, but they do need to  
21          have a navigational chart, and they should be  
22          looking at the chart beforehand.

1                   We put out broadcast notices to  
2                   mariners, which many recreational boaters  
3                   ignore or are not even aware that they're out  
4                   there. So not having the marine band radio,  
5                   not listening to the appropriate frequencies  
6                   makes it particularly challenging.

7                   So it is part of the education  
8                   process that we do when it comes to National  
9                   Safe Boating Week, when we're giving them the  
10                  opportunity. I stress to folks don't rely on  
11                  your cell phone. It's great initially when  
12                  you're at the dock. Check the weather. If  
13                  you have access to charts, great.

14                  But once you leave the pier, it's  
15                  not going to work for you. And oh by the way,  
16                  if you drop it in the water, it's gone. So it  
17                  will fail for you in many ways. But there is  
18                  an over-reliance on it. We will get  
19                  intermittent communications sometimes with  
20                  folks and then, you know, they're cutting it  
21                  off because their battery is going to die.

22                  So that's another big challenge

1 with it. So we're trying to educate them that  
2 they need to be smart about being out there,  
3 and the cell phone is great initially, but you  
4 need to have the marine band radio and EPIRB  
5 and you know, life vessel, all this stuff.

6 But that's the course of  
7 technology. It's an over-reliance, and you  
8 hit the nail on the head sir. They're acting  
9 as if it's in their car and they can pull up  
10 Google Maps or TomTom and it will work, and  
11 that's not the case.

12 RDML GLANG: How about in the  
13 Coast Guard? What are you all using for  
14 technology, and are you able to pull in the  
15 NOAA data that you need?

16 CAPT RODRIGUEZ: We do, and we are  
17 using the electronic charts. We have -- our  
18 folks are very well versed on the electronic  
19 charts, and especially on larger cutters,  
20 that's exactly what they are using. But they  
21 also continue to take fixes.

22 We still have some of our young

1 kids who are in our smaller boats that are  
2 running around as well. But they have the  
3 charts on board and they're supposed to follow  
4 the charts, and they don't always as well.  
5 But it is -- I think it's part of the curse of  
6 technology too. It's that over-reliance. Yes,  
7 sir.

8 CHAIR PERKINS: Any further  
9 questions?

10 CAPT RODRIGUEZ: I know Colonel  
11 Litz is chomping at the bits to jump up and  
12 tell you all that he has. Thank you.

13 CHAIR PERKINS: Thank you,  
14 Captain.

15 (Applause.)

16 CHAIR PERKINS: All right. Our  
17 next speaker is Lieutenant Colonel John Litz,  
18 commander and district engineer for USACE  
19 Charleston.

20 U.S. Army Corps of Engineers Charleston

21 LT COL LITZ: All right. Ladies  
22 and gentlemen, thank you for having me here

1           this afternoon to speak to the panel. This is  
2           my first opportunity to do so, but as I look  
3           around the room, I do see some familiar faces,  
4           Kyle Ward, Captain Rodriguez, and others.

5                        So just thank you for having me  
6           here today, and what I'll do is give you a  
7           brief overview of the Corps of Engineers in  
8           the Charleston District and how we interact  
9           with NOAA, and which is a great federal  
10          partner for us.

11                       We've -- it seems like in so many  
12          meetings and forums lately, I do see NOAA. So  
13          it's a pleasure for me to be able to bring  
14          this to you today.

15                       But so I'll talk to you today, but  
16          I have three experts that will be here  
17          tomorrow I believe, that will give you some  
18          more detailed information and the first of  
19          those, he's not here today, David Warren will  
20          speak about the Atlantic Intercoastal Waterway  
21          in detail.

22                       So you know, he's the guy that can



1 answer just about any question. If anybody's  
2 got the answer, he'll have it, and that will  
3 be tomorrow. He's a civil works project  
4 manager for me in the district. I have Mr.  
5 Brian Williams, who's back here in the white  
6 shirt, and he is the project manager for the  
7 harbor deepening project.

8 So a very large, important job,  
9 and there's probably -- if there's a question  
10 on the harbor deepening, he's the guy to  
11 answer that in the most detail.

12 Then also back here in the blue  
13 shirt we have Mr. Phil Wolf, who's the chief  
14 of the newly stood up GIS Branch in the  
15 Charleston District, and I believe he'll talk  
16 tomorrow on eHydro and GIS. So I'm glad we  
17 could have them participate in this couple of  
18 days of the panel as well.

19 Just to note, I am one of those  
20 people who has lost their cell phone in the  
21 water, as Captain Rodriguez mentioned. So I  
22 have to learn by touching the stove, I guess.

1                   So very busy slide here. There's  
2                   really just one key point here. But the Corps  
3                   District has been in the Charleston area for  
4                   a very long time, even before we were the  
5                   Charleston District. Some of the projects  
6                   that we trace our lineage back to is Fort  
7                   Sumter, Fort Jackson, Charleston Air Field,  
8                   which is now Joint Base Charleston and a  
9                   regional airport.

10                   But particularly in navigation  
11                   projects, I think everybody here probably  
12                   knows about the jetties that were built in the  
13                   late 1800's. We hear about them every day  
14                   still, especially if you're from Folly Beach.

15                   We hear about them quite a bit.  
16                   Actually, it was a structure that pushes silt  
17                   out of the harbor. A lot of folks don't, you  
18                   know, think it's just a protective measure.  
19                   But it uses the Venturi effect to flush the  
20                   harbor.

21                   So but really what's important  
22                   about this is the long history that we have of

1 development in Charleston and in South  
2 Carolina, at the local, state and federal  
3 level with those partners, and also industry  
4 partners, and particularly the navigation  
5 mission.

6 So this is the United States, and  
7 that's obvious to every one. But the colors  
8 here mean they are our nine Corps of Engineer  
9 divisions, and within each division there are  
10 districts. There's around 40 districts around  
11 the world, most of them here in the  
12 continental U.S.

13 The Charleston District, as you  
14 can see called out there in blue, it's my  
15 boundary. It's my area of responsibility, the  
16 Charleston Corps of Engineer District. It's  
17 a political boundary of South Carolina.

18 The lighter blue down there just  
19 means that we're part of a five district  
20 region, and my regional headquarters is in  
21 Atlanta, and my commander is Brigadier General  
22 Turner. As mentioned earlier, Lieutenant

1           General Bostick runs the Corps of Engineers,  
2           that three star major command, whose  
3           headquarters is in Washington, D.C.

4                        The Charleston District is about  
5           256 personnel. There are two of us that are  
6           active Army and the rest civilians, and we are  
7           primarily project-funded, meaning we take a  
8           fee for service. Very few of our programs are  
9           direct-funded from the federal government.

10                      So that's an interesting fact  
11           about, you know, sometimes we're 256  
12           personnel. In the past we've been 156  
13           personnel, about eight years ago. So the  
14           workload that we have from our federal  
15           partners kind of determines how big the  
16           district is and what capabilities we carry and  
17           are able to bring to the table.

18                      I think it's worth noting that our  
19           workload is healthy right now in the district.  
20           We're bigger than we've ever been in the past.  
21           Our objective is not to grow but to provide  
22           value to the nation. And whatever

1 capabilities we don't have in the district, we  
2 can leverage other districts around the Corps  
3 of Engineers as well, so --

4 So moving on, these are our  
5 primary mission areas that we deal with the  
6 Charleston District. Some districts in the  
7 Corps have other mission areas, but these are  
8 the primary ones that we have.

9 Civil works, the one down here at  
10 the bottom, that cutter head dredge picture  
11 right above it, is the main one of interest  
12 here, although you know, our regulatory  
13 program and our emergency management mission  
14 area also interfaces with NOAA, and I'll get  
15 into that a little later in the presentation.

16 But as Captain Rodriguez kind of  
17 alluded to, the Charleston District and the  
18 Coast Guard and NOAA and other agencies  
19 partner when it comes to opening the harbor.  
20 If there's a harbor closure due to a natural  
21 disaster or otherwise. So a little bit more  
22 on that as we get through this presentation.

1                   Probably the most well-known thing  
2                   that our civil works program does is our  
3                   navigation and survey mission. We get an  
4                   annual budget of sometimes between 15 and 20  
5                   million dollars, mostly utilized on  
6                   maintenance of the Charleston Harbor.

7                   We have two deep draft harbors  
8                   that we maintain, Georgetown-Charleston; about  
9                   300 miles of channel and coastal inlets. The  
10                  Atlantic Intercoastal, as I mentioned before,  
11                  it is an authorized project. Just very little  
12                  funding and no dredging as of recent for that  
13                  project.

14                  Also within our navigation and  
15                  survey mission, we produce plans and specs for  
16                  dredging and ditching and dyking for our  
17                  dredge material disposal areas, which if you  
18                  drive over Highway 526 or over the big bridge  
19                  and look down, you'll see disposal areas and  
20                  those are the ones we use for harbor  
21                  maintenance.

22                  Okay, and we have a couple of

1           vessels that we utilize. We're not nearly as  
2           big as the ones that you see out there in the  
3           Coast Guard or NOAA, but we have -- our  
4           flagship is a 42 foot vessel called the Evans,  
5           and that's it right there in the center  
6           screen, and we have the Wilson, a much smaller  
7           vessel up there in the upper right-hand  
8           corner.

9                           That's -- those are the assets we  
10           use to survey all the federal channels in  
11           South Carolina. They both use multi-beam  
12           sonar systems to obtain full bottom coverage.  
13           The ATV you see down there in the lower right-  
14           hand corner is kind of a home cooked  
15           innovation that some of our folks have put  
16           together.

17                           It's a relatively new capability,  
18           and it carries a topographic LiDAR retrofit  
19           system, that we'll use out on the shoreside.  
20           We'll run it along the beaches both pre- and  
21           post-storm to gain, to give ourselves an idea  
22           of what, you know, how much material a certain

1 storm washed away, for instance.

2 So it's a new capability. We've  
3 been employing it for probably not quite the  
4 last year. But I thought it was worth  
5 mentioning here in this forum, even though it  
6 doesn't float.

7 Things we provide to our federal  
8 partners. We supply channel conditions data,  
9 map products via e-Hydro, which is an art GIS  
10 application or GIS-based application, that  
11 takes our sounding data and basically puts it  
12 into a format that our customers can use. I'm  
13 sure you're aware of that.

14 We have a couple of different ways  
15 that get information out to the public, and  
16 one of them's our website, and that's on the  
17 next slide I'll show you, and we also use our  
18 GIS app for your mobile device. I think we  
19 talked about that a little earlier when  
20 Captain Rodriguez was up here.

21 There's our district website. I  
22 think Dr. Calender mentioned earlier, and it's



1           worth recognizing, that we all have phoning  
2           challenges as of late, and the more agency  
3           cooperation that we have, I think that's the  
4           message there, is it leads to cost savings.  
5           We're definitely in the Corps seeking those  
6           opportunities, and we do get those  
7           opportunities with sharing capabilities and  
8           data, and we greatly appreciate that.

9                         We've made several improvements to  
10           our web products, modernizations over the last  
11           year or so, and what's worth noting is that  
12           you're a user of those, of that data or you go  
13           to those websites and you have feedback, we  
14           greatly appreciate it, and our contact  
15           information's on our web page.

16                        So please remember that as you --  
17           after you leave here and you navigate through  
18           our websites. Any feedback would be useful.  
19           I think David Warren and Phil Wolf will  
20           probably talk a little more in detail about  
21           the products we provide tomorrow, when they  
22           give their more detailed presentations to the

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Panel.

So here's where I'll make a plug for our engineering capability. Engineering Division is one of the subordinate divisions within the district. We do have a pretty decent in-house capability, but as I said earlier, we also have the ability to leverage other capabilities from other Corps districts.

A fairly broad range of project types within our civil works, a mission area that engineering division supports. We deal with beach erosion and shore protection projects which result in beach nourishments and coastal structures, such as growings and revetments.

If you've ever been on Folly Beach recently, we finished that project in July. We're doing some cleanup work right now, some hard material that keeps surfacing from one of the borrow areas, where we picked up some material that's kind of consolidated and cemented together. But largely that project

1 is complete.

2 We'll be doing some sand fencing,  
3 which should be fairly transparent to the  
4 public later, but that five miles of beach  
5 nourishment is complete and that's worth  
6 mentioning, and if anybody's got a question  
7 about that here at the end, I will certainly  
8 do my best to address that.

9 Other things that we're looking  
10 for in our coastal studies are sand sources.  
11 If we have to nourish Folly Beach again next  
12 year, I'm not sure we have the sand borrow  
13 source identified yet. So that's one thing  
14 we'll be looking at, that we use our survey  
15 capability for.

16 We study the effects of our  
17 projects on adjacent shorelines. We look at  
18 project costs and benefits, and we do so -- in  
19 conjunction with the engineering division, we  
20 have a planning division, a small planning  
21 capability within the Charleston District, and  
22 again, we can leverage other Corps districts

1           for planning capability that we don't have in-  
2           house.

3                         But they do a lot of our project  
4           cost and benefit studies. Then also worth  
5           mentioning is beneficial use of dredge  
6           material. I think I took a question, sir,  
7           from you on the last break. So we can talk  
8           about that a little later as well.

9                         Okay. Emergency management is a  
10          capability. It's a mission area that we have  
11          within the Corps, and it's worth mentioning  
12          here because this is an area where, as a new  
13          district commander, when you're finding out  
14          your responsibilities, when you find out you  
15          have the responsibility to make a  
16          recommendation to the captain of the port on  
17          whether he should open the harbor or not, it  
18          kind of dawns on you that this is a very big  
19          responsibility, especially when you know the  
20          economic and other impacts of the port, that  
21          I think Mr. Newsome did a great job of  
22          highlighting a little earlier today.

1                   It's a big deal. So the survey  
2                   capability is what Charleston District  
3                   provides. But from a recent tabletop exercise  
4                   that we had, for the first year that I'm aware  
5                   of, recently in July, and we will continue to  
6                   do so next year, preferably before hurricane  
7                   season, where the Coast Guard, Corps of  
8                   Engineers, NOAA and others partnered.

9                   We found out that it's probably  
10                  the NOAA capability that will be first on  
11                  scene to do channel surveys. That has  
12                  everything to do with our small vessels and  
13                  what we have to do with them, with CAT-3 or  
14                  above hurricane. We're going to have to pull  
15                  them out of the water and put them somewhere.  
16                  And then reintegration of our employees that  
17                  operate that vessel, and getting the vessel  
18                  ready to do its mission is a consideration.

19                  So considerable lag there, that I  
20                  think we'll look to the NOAA capability, at  
21                  least initially. So I'm very glad we had this  
22                  table top exercise, and one that we're

1 definitely going to do again next year,  
2 hopefully before 1st of June. We can get it  
3 before hurricane season so --

4 Here's some products that we use  
5 from NOAA. The tide gauge measurements and  
6 predictions are used daily by the District, by  
7 our hydrographic survey crews, and they depend  
8 heavily also on benchmarks and vertical datum  
9 that are used on many of our other projects  
10 here in South Carolina.

11 There are the nautical charts that  
12 Captain Rodriguez was harping on earlier, that  
13 everybody should have with them.

14 Finally, we've got a couple of  
15 slides in here about the harbor deepening  
16 project. So right now, we're in the  
17 feasibility stage, as Mr. Newsome did a good  
18 job of highlighting, and he mentioned that  
19 we're in a -- well what I'll call the civil  
20 works transformation era, where we're trying  
21 to get -- do business a little differently  
22 within the Corps.

1                   Mr. Newsome mentioned sometimes it  
2                   took 20 years to get a feasibility study  
3                   completed, and there are a lot of reasons for  
4                   that. The Corps was studying a lot of things  
5                   in very fine detail, and you know, the more  
6                   things you study, the more time you study it,  
7                   you know, the more certainty that you have in  
8                   your final product.

9                   But we realize that we can make  
10                  decisions based on, you know, perhaps better  
11                  science in a quicker time frame, and save more  
12                  money, and basically get the feasibility  
13                  studies done quicker. The Post 45 project is  
14                  the first project of its type, of its size in  
15                  the Corps of Engineers going through this  
16                  process.

17                  So what we are going to realize  
18                  from it is about an \$8 million savings in the  
19                  feasibility study, and we'll probably shave  
20                  somewhere between three and four years off of  
21                  the study time line.

22                  I believe Brian Williams is going

1 to cover in greater detail some of the key  
2 aspects of the feasibility study, to include  
3 the environmental aspects, the economics and  
4 the engineering that go into the study, and  
5 what to expect there.

6 I think also Jim did a good job  
7 this morning of highlighting that the study is  
8 about reducing transportation inefficiencies  
9 and the light loading that goes on with the  
10 vessel, due to the draft restrictions that  
11 exist right now. Although others will  
12 probably tell you that there are other  
13 benefits that we aren't studying in the  
14 feasibility study for us, for the Army Corps  
15 of Engineers, it's about reducing  
16 transportation inefficiencies.

17 And so what's next with the study?  
18 October, really this fall I'll say, I should  
19 qualify, is a big month for us. We're very  
20 close to releasing a draft feasibility study  
21 and environmental impact statement, and that  
22 will let the public know what the tentative



1 depth will be.

2 We studied 48 feet, 50 feet, 52  
3 feet and when this draft comes out, you'll  
4 know what the depth that we will pursue on our  
5 way to the final feasibility study and final  
6 environmental impact statement. You'll know  
7 what that will be.

8 I think it's worth noting that  
9 after the chief's report is complete, after  
10 the final report and final EIS are complete,  
11 there's still a period of time. There's a  
12 phase called the PED phase, pre-construction,  
13 engineering and design is what it stands for.

14 That is where we will get into the  
15 details. We'll do a ship study based on the  
16 post-Panamax vessels, the Gen 3 vessels. Some  
17 of the things that we traditionally would have  
18 done in the feasibility stage will occur in  
19 the PED stage.

20 So it's a phase of the project  
21 that we can't skip, that we still have to do,  
22 but we're looking for ways to get to that

1 phase as soon as possible, in accordance with  
2 the laws and the framework that's out there,  
3 that regulates the Corps and the feasibility  
4 study process.

5 We're very fortunate to have the  
6 partnerships that we have between the Ports  
7 Authority and many other federal agencies such  
8 as NOAA. This -- I think Brian Williams,  
9 who's far more versed on this project than I  
10 am, he's been working on it for years.

11 I've been the commander for about  
12 14 months now, and that's my limitations with  
13 being exposed to the project. I think that  
14 it's a model relationship.

15 I think it sets the example for  
16 all other projects out there in the Corps, as  
17 far as the partnership and the cooperation  
18 that we've achieved, to get to the point we're  
19 at now in such a short period of time. So I'd  
20 just like to state that that is a great thing  
21 about this partnership and the project.

22 We still have a ways to go.

1 Things are on track, and at this point, I  
2 think I'll stop there and see if there any  
3 questions.

4 CHAIR PERKINS: Yeah, great.  
5 Thank you, Colonel. Yes sir.

6 MEMBER ARMSTRONG: Colonel, I  
7 actually have three questions, if you'll bear  
8 with me. So I'll give me one --

9 LT COL LITZ: I hope I have three  
10 answers.

11 MEMBER ARMSTRONG: You mentioned  
12 that you're doing web delivery of your channel  
13 condition information. Are you actually  
14 delivering survey data from your channel  
15 condition surveys, and if so, what's the time  
16 frame between survey and delivery?

17 LT COL LITZ: That data is on our  
18 public website. As far as the time frame,  
19 Phil O'Brien, do you know? I'd be guessing.

20 MR. WOLF: Typically when we do  
21 the survey, we can consolidate the survey and  
22 we'll get it out in probably about a week.

1                   MEMBER ARMSTRONG: Okay, and then  
2                   that's available for the public, anyone to  
3                   use?

4                   LT COL LITZ: Yes sir.

5                   MR. WOLF: Yes. I think though,  
6                   the data that we have on the website is  
7                   static. So it's not something we can download  
8                   that acts like a file.

9                   MEMBER ARMSTRONG: It's an image?

10                  MR. WOLF: Yes, correct. They're  
11                  end use products, JPEGs, TDS used for an  
12                  application.

13                  MEMBER ARMSTRONG: Oh, okay.

14                  MR. WOLF: We use the actual data  
15                  to get the surveys to pilots on an as-needed  
16                  basis. We are building more capability on  
17                  the public website, to incorporate a lot more  
18                  additional products and we're working on that  
19                  right now for the customers, i.e., the  
20                  recreational boater.

21                  LT COL LITZ: You can actually go  
22                  to the website if you're a recreational

1 boater, and you can see where, for instance,  
2 the Atlantic Intercoastal is shoaled in, so  
3 you'll know to avoid those areas.

4 MR. WARD: There's a few posters  
5 in the back that have some of their  
6 information as well out in the lobby.

7 CHAIR PERKINS: So Andy, you've  
8 got two more?

9 MEMBER ARMSTRONG: I do.

10 LT COL LITZ: That was already a  
11 three-part question.

12 CHAIR PERKINS: Go ahead. We'll  
13 let you filibuster.

14 MEMBER ARMSTRONG: Okay. You  
15 mentioned sand sourcing for beach  
16 replenishment, I think.

17 LT COL LITZ: Right.

18 MEMBER ARMSTRONG: So how do you -  
19 - do you run surveys offshore with your survey  
20 vessel for that, and what sort of technology  
21 do you use for doing that?

22 LT COL LITZ: We use a multi-beam

1           technology for that, and we do the surveys  
2           offshore. But the vessel Evans, which was the  
3           one in the middle of the screen, the -- within  
4           our navigation section, I would say it's  
5           around 12 personnel or so.

6                        Out there at their station out of  
7           the -- at the Joint Base, what we call our  
8           Construction and Survey Annex, and that's --  
9           those are the folks who do that for us in-  
10          house.

11                       MEMBER ARMSTRONG: Do you interact  
12          with BOEM's sand resources project that seems  
13          to be going on up and down the East Coast?

14                       LT COL LITZ: We do, absolutely.  
15          In the details of such, I'll defer over here  
16          to the right side of the -- my right side of  
17          the room. But I know that we interface with  
18          BOEM, because I've had to do some mea culpas  
19          with BOEM before, with regards to the Folly  
20          Beach project. But we're all good there, so  
21          you know.

22                       MEMBER ARMSTRONG: Those sand

1 surveys are outside of the project limits?

2 MR. WOLF: Yeah, that's correct.

3 Anything past the three mile line we have to  
4 coordinate with BOEM. Recently, a lot of our  
5 -- the majority of our borrow sites are inland  
6 in the three mile zone. But there are some  
7 that are on the cusp or some are out, a little  
8 bit further out past the three mile.

9 However, we're going to have to  
10 make future efforts to go past three miles  
11 looking for sand. So that's what we're doing  
12 right now for Folly Beach, and we coordinate  
13 them through, you know, through their policies  
14 and procedures, going through sand sources in  
15 detail, doing their EIA or EA and procedures  
16 of that nature.

17 Any kind of mining we do past  
18 three miles, we have to go through them to  
19 coordinate that.

20 MEMBER ARMSTRONG: And those sand  
21 source surveys, are they going to NOAA for  
22 churning applications?

1                   MR. WOLF: Well any surveys that  
2 we get, we send to NOAA. Like an example, we  
3 just did Folly Beach, working with Chris  
4 LeBeau up in Silver Springs.

5                   Any surveys, they'll take it. So  
6 I ask them every time we do a survey, anything  
7 that's not within the navigational channel  
8 areas, and they said we'll take anything  
9 you've got. So anything that we do outside  
10 the channel we give to them.

11                  LT COL LITZ: Folly Beach actually  
12 had four sand borrow sites that we utilized.

13                  MEMBER ARMSTRONG: And there's one  
14 final question. Thank you for that. I'm glad  
15 to hear that that data's getting to NOAA. In  
16 terms of the disaster response, you indicated  
17 that your vessels, you know, have to come out  
18 of the water.

19                  So have you had any discussions  
20 with NOAA about the possibility of augmenting  
21 NOAA survey teams with your survey folks, and  
22 has anything like that come up?



1                   LT COL LITZ: No. Kyle, do you  
2                   want to --

3                   MR. WARD: Yeah. With the Evans,  
4                   and they can talk to that, but just having  
5                   their survey folks needing to tend those  
6                   vessels, and their plan is such that they take  
7                   them out of the water, the inherent getting  
8                   them back operational again, based on what  
9                   NOAA's process has been in the past for Sandy  
10                  and other storm responses.

11                  Our ability to splash boats faster  
12                  would probably take place. However, for a  
13                  port of this size, I'm sure Captain Rodriguez  
14                  is going to want everybody, all assets on  
15                  hand, and definitely they'll be getting back  
16                  into the water as soon as possible.

17                  But you know, with actually at  
18                  that tabletop exercise, which was excellent,  
19                  one of the things we talked about was just  
20                  with all the pine trees around here and Hugo,  
21                  they all went down. So being able to get  
22                  vehicles and things like that back and your

1 labor force back is very tough, and having the  
2 NRTs as one confined unit is, you know, that's  
3 about as quick as you could be if you are  
4 moving assets out.

5 LT COL LITZ: So what Kyle's  
6 alluding to is that we will COOP. We will  
7 move away from our headquarters here in  
8 Charleston. Our COOP site right now is the  
9 St. Stephen Dam, which is a Corps project in  
10 St. Stephen. So we'll be about four stories  
11 under the dam, but -- and we'll pop out when  
12 the storm's over.

13 But getting back is a different  
14 story, with all the tree fall, and our survey  
15 crews will also COOP. So you know, days,  
16 hours before the event, we'll pull that boat  
17 out of the water. So we do have a plan.  
18 We're refining it right now based off of  
19 results of the tabletop exercise. We still  
20 have some things to work through.

21 MEMBER ARMSTRONG: Thanks Colonel.

22 LT COL LITZ: Thank you, sir.

1                   CHAIR PERKINS:  You're welcome  
2                   Andy.  Colonel, regarding you know, your  
3                   survey crews and only having two vessels, and  
4                   then NOAA also having, you know, hydrographic  
5                   survey contracts, and knowing that the nation  
6                   has a tremendous capacity in the private  
7                   sector to provide those services, is the  
8                   mechanism in place that if your vessel were  
9                   down for maintenance or repair or assigned on  
10                  some other priority, do you have MOA in place  
11                  where you could reach out to the Office of  
12                  Coast Survey and get hydrographic survey  
13                  support from NOAA?  Do you have the contracts  
14                  available in the Charleston District, where  
15                  you could reach to the private sector for that  
16                  support?

17                  LT COL LITZ:  I know I have  
18                  contracts in place.  In fact, that's how we  
19                  would remove debris or vessel from the harbor.  
20                  We don't have that capability in-house.  So it  
21                  would all be through our contracts, IDIQ  
22                  contracts that are basically standing

1 contracts.

2 CHAIR PERKINS: We have a -- you  
3 know, we have a reality that we have a family  
4 of hydrographic survey contracts that were  
5 just awarded. They have, you know, they don't  
6 have adequate funding, you know, to be fully  
7 utilized.

8 Is that mechanism in place between  
9 NOAA and the Army Corps, where you could use  
10 and access those service providers?

11 LT COL LITZ: I don't have the  
12 answer to that question. I don't know if any  
13 -- does anybody have the answer to that  
14 question? That's a great question. I'm going  
15 to have to research that.

16 CHAIR PERKINS: So I like to ask  
17 the great questions. I never have great  
18 answers. Thank you.

19 RDML GLANG: I'll give you the  
20 short answer, sir.

21 LT COL LITZ: That's one to take  
22 away from me.

1 RDML GLANG: This is Gerd Glang  
2 from NOAA, that there is no memorandum of  
3 agreement or understanding between NOAA and  
4 the Army Corps, that allows for the effective  
5 transfer of money.

6 CHAIR PERKINS: Sounds like that's  
7 a topic the Panel should consider, you know,  
8 looking at, because that mechanism might be  
9 useful for both parties. Glad to see you went  
10 to that school up the road in Leavenworth,  
11 from where I call home town. So it's always  
12 good to see that somebody's been to the  
13 Command and General Staff College.

14 LT COL LITZ: That was  
15 interesting. I lived right behind the big  
16 federal prison.

17 MEMBER KUDRNA: Question. For the  
18 deepening of Charleston Harbor, after your  
19 study's completed, for any federal  
20 participation in that, do you have to wait for  
21 the Water Research Development Act?

22 LT COL LITZ: Yes. A WRRDA would

1 be what would authorize the project.

2 CHAIR PERKINS: Do we have a  
3 question from the audience?

4 CAPT CAMERON: If you don't mind,  
5 I'd just like the endorse their survey  
6 section. At the pilots two weeks ago, we  
7 called Phil. We were taking a ship that is  
8 deeper than normal to a part of our harbor at  
9 four o'clock in the afternoon.

10 I asked Phil what was the most  
11 recent soundings, and in a half an hour, I got  
12 a color-coded presentation of a very specific  
13 area that we were concerned about the  
14 shoaling. So their services are excellent and  
15 timely.

16 LT COL LITZ: Thank you, John.

17 MEMBER KELLY: Colonel Litz, I do  
18 have one question, and we could talk about it  
19 maybe during lunch. But when I go talk to  
20 recreational boaters and they bring up the  
21 Intercoastal Waterway, their most frequent  
22 complaint is it's not a project depth. Just

1 north of Emerald Island, I think it's at six  
2 feet or two feet or something in shoaling. So  
3 what do I tell them?

4 LT COL LITZ: The answer is not  
5 satisfying, and that is, you know, their --  
6 probably write their Congressman. I mean it's  
7 all about an appropriation, you know. We have  
8 the assets. We have the contracts in place to  
9 dredge the Intercoastal. We just don't have  
10 the money.

11 If there was money, there was an  
12 appropriation, then we could do it. If there  
13 was somehow a realignment of funding at the  
14 federal level, which you know, it takes  
15 Congress to do, then we could get to it.

16 I mean that's really -- it's not a  
17 satisfying answer. I mean I guess the other  
18 answer is just don't use it, you know. But  
19 none of those are satisfying, acceptable  
20 answers really to the public. That's all I  
21 can tell you sir.

22 And just to add to that, I do

1 answer a fair number of congressionals --  
2 congressional inquiries based on individuals  
3 and groups concerned with the state of the  
4 AIWW all the time, over the last year for  
5 sure.

6 MEMBER KELLY: Colonel, Ed Kelly  
7 from New York/New Jersey. Particularly in  
8 light of the deepening project, the Post 47,  
9 what is the plan for the dredge material  
10 disposal or constructive use, and what are you  
11 doing with normal maintenance dredge material  
12 right now?

13 LT COL LITZ: Normal maintenance  
14 goes in one of the disposal sites that you'll  
15 see. There are an array of them. I don't  
16 have a good slide that shows where they are,  
17 but so -- and I mentioned earlier, the ocean  
18 disposal is an option, but you know, there are  
19 a lot of costs associated with that.

20 I mean when you can get the  
21 material to a closer, confined disposal site,  
22 that's what you want to do with the material.



1           As far as beneficial use from Post 45, Brian,  
2           do you want to take that one? I mean we don't  
3           -- we don't have an answer right now. Brian  
4           can tell you what stage of the project we'll  
5           figure that out.

6                       MR. WILLIAMS: So like the Colonel  
7           said earlier, when we went through this civil  
8           works transformation and SMART planning, we  
9           really had to get down to basically what was  
10          required to make a sound planning decision on  
11          alternatives analysis.

12                      And one of the things that you  
13          would normally see in a report like this would  
14          be a detailed analysis of beneficial use of  
15          dredge material. You will not see that in  
16          this feasibility study. That's not to say we  
17          won't do it, but it just will not be in the  
18          draft report that will be released in a couple  
19          of weeks.

20                      So we have met with the state and  
21          federal resource agencies. They have provided  
22          some input on potential ideas, and their,

1            basically their wish list. We've received  
2            public comment in our public scoping period  
3            that was at the beginning of the study. So  
4            we've taken all that into account.

5                        So we have several things that we  
6            could focus on. If you're familiar at all  
7            with Charleston, there's areas like Crab Bank,  
8            Shutes Folly, Morris Island, places that could  
9            benefit if the material is deemed satisfactory  
10           enough for that use.

11                       We have the information on the  
12           material we would anticipate to dredge during  
13           deepening. So we have grain size, we have  
14           whether or not it, you know, all the chemistry  
15           analyses.

16                       What we don't have is any detailed  
17           plans and analysis of well how much material  
18           could you put there, in what configuration,  
19           and the likelihood of its performance  
20           criteria.

21                       So those are the things that will  
22           have to be done in our pre-construction

1 engineering and design phase after the  
2 feasibility phase. Did that answer your  
3 question?

4 MEMBER KELLY: Yes. Good luck  
5 with it. In New York/New Jersey, the disposal  
6 of dredged material was probably the biggest  
7 obstacle to getting it done.

8 CHAIR PERKINS: Okay. One last  
9 question.

10 VICE CHAIR HANSON: Sir if I  
11 could, thanks Andy for bringing up BOEM.  
12 There's a group that doing the offshore sand  
13 surveys, much needed for a very long time, and  
14 the group's been responsible for the old MMS.  
15 Now BOEM got a slug of money, thanks to the  
16 Sandy appropriations, and they're actually  
17 spending it well.

18 So I actually think that it would  
19 be good to have this Panel maybe get briefed  
20 on the activities that BOEM's been doing up  
21 and down the East Coast, including the  
22 Charleston area.

1                   Just a little side story, because  
2                   we're going to tour the Wando Terminal this  
3                   afternoon. My company actually had concurrent  
4                   contracts. It was two deepenings ago we were  
5                   deepening at this channel. At the same time,  
6                   we were actually doing the early development  
7                   of the Wando Terminal.

8                   We actually had an idea to use the  
9                   sand from the deepening. It was sand actually  
10                  back then, not rock, to fill the terminal. We  
11                  actually reached agreement with the Corps to  
12                  do that, got a value engineering proposal, and  
13                  we all got letters from this new organization  
14                  we never heard of called MMS, advising us that  
15                  they had the rights for all the sand three  
16                  miles offshore.

17                  We never heard of them before,  
18                  never had to go that far offshore before. So  
19                  as we continued, we ended up having to truck  
20                  in all the sand, because we couldn't reach the  
21                  agreements in time to use that.

22                  But just a little story so we

1           could get out there, and that was some 20  
2           years ago so it's been a while. That's  
3           developed a little bit since then.

4                       Then I guess finally sir, and  
5           having been with General Turner and General  
6           Savre last week, and we had the 9/11  
7           commemoration last week, and they've asked me  
8           to do this with each commander, to say thank  
9           you.

10                      You've served in Kosovo,  
11           Afghanistan and Iraq. Thank you for your  
12           service. 3,000 people perished in that  
13           tragedy in New York. 5,000 men and women have  
14           lost their lives since then in service to our  
15           country. Thank you.

16                      LT COL LITZ: Thanks Bill. I  
17           appreciate it.

18                      CHAIR PERKINS: Thank you,  
19           Colonel. You know, we have a lunch break  
20           coming up. You know I know, gentlemen, your  
21           schedules are extremely busy, but we do have  
22           stakeholder panel sessions scheduled for

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tomorrow.

So you're welcome and, you know, I don't expect that you'll be able to join us. But if you can, or someone from your staff can, we'd certainly appreciate the input.

LT COL LITZ: Absolutely.

(Applause.)

CHAIR PERKINS: All right. Lunch until 1300 hours promptly.

(Whereupon, the above-entitled matter went off the record at 12:08 p.m.)

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A F T E R N O O N S E S S I O N

12:30 p.m.

Luncheon Speaker

DR. SAUTTER: I speak loudly for a living. But please raise your hand if you don't hear me because of whatever. I do teach at the College of Charleston. I'm in the Department of Geology and Environmental Geosciences, and I want to just give you an overview of a program that I've been running since 2007.

It's called the BEAMS program. I have several co-workers, one here at the College of Charleston, Scott Harris, who is another geologist in my department, and we also collaborate. We have a partner group at the University of Washington. Dr. Miles Logsdon is there.

We also, this whole program really evolved through a partnership with CARIS, which is the primary vendor of the software that is used on almost all NOAA survey

1 vessels. So we've had a great working  
2 relationship with CARIS. They give us  
3 licenses for free, and out of that we have  
4 developed a program which is basically  
5 training the workforce of tomorrow basically.

6 We always say "next generation,"  
7 but these students are graduating and going  
8 into the workforce immediately, and they are  
9 finding jobs immediately. You've seen the  
10 posters in the hallway. I hope you'll take a  
11 look at them.

12 We have three of the students  
13 right now and a couple were here earlier.  
14 They had to go to classes. We're just close  
15 enough so they still have to go to class.  
16 We're just two blocks down. In fact, I have  
17 leave immediately after, because I have a lab  
18 to teach, and I just came from class.

19 I will be here tomorrow morning,  
20 all morning and at lunch, and so if you do  
21 have questions, you want to learn more, please  
22 don't hesitate to ask me tomorrow. So again,



1 I apologize that we don't have -- okay, still  
2 don't. That's fine.

3 So this is very photo-rich. I'm  
4 going to go through it pretty quickly, because  
5 of the time that we have. But one of the best  
6 things about this program for me is that I get  
7 to interact with these wonderful young people,  
8 who are just so energized by learning this  
9 state of the art technology, getting out to  
10 sea, doing research with the technology, and  
11 then going off and doing work in the  
12 workforce.

13 So it's been a real pleasure and  
14 privilege of mine to be able to generate this  
15 whole program. Let's see if the advance works  
16 now too. We're having all sorts of technical  
17 difficulties. It worked in rehearsal, as we  
18 say.

19 So I want to give you a quick  
20 overview. We started it in 2007, basically  
21 because we had ship time on the NOAA ship  
22 Nancy Foster. They had a multi-beam system,

1           and a former student of mine was on the  
2           vessel, and they started talking to us about  
3           doing multi-beam, and everything evolved from  
4           that point. So it's really a fortuitous  
5           situation that all started with ship time that  
6           NOAA generously gave to us.

7                         I did a sabbatical at the  
8           University of Washington, and in that time,  
9           convinced poor Dr. Miles Logsdon to do the  
10          same thing. He still gets mad at me because  
11          it's so much fun and so time-consuming, but he  
12          does love it. So he is able to take students  
13          out and train them in the software and the  
14          research as well.

15                        So we now have two institutions.  
16          We are pretty sure that they're only  
17          institutions in the country that do anything  
18          like this, if not the world. So we have the  
19          market right now, it's great.

20                        So the program elements. This is  
21          not a certification. It's not a CAT A, it's  
22          not a CAT B. These are geologists and

1 oceanographers, sometimes marine biologists  
2 who take the course with me. They are  
3 scientists who are mapping, and learning how  
4 to map and interpreting.

5 They are scientists first, and  
6 some of them may go on to become full time  
7 hydrographers, but basically we train them as  
8 scientists first. We have course work that is  
9 very minimal, required. It's a three course  
10 program. We expect them to do research. This  
11 is what is part of the program.

12 We try to get every single student  
13 out on a dedicated cruise, and we try to get  
14 them out onto some internship or volunteer  
15 opportunity, and I'll go through those in a  
16 little more detail. But just to show you the  
17 stats, that way I want to make sure I get  
18 through that.

19 But we've had, at the College of  
20 Charleston alone, 98 students who have gone  
21 through the program since 2007, and with UW  
22 starting the first program in 2011, they've

1 already had 29 students. 46 of the 84  
2 students who have graduated, some are still  
3 matriculated, but I keep tabs on everybody  
4 who's been through the program, 55 percent are  
5 currently in the workforce.

6 That's a very strong percentage.  
7 That shows you, first of all, the availability  
8 of jobs, and it also shows you the interest  
9 level that these graduating students have, and  
10 many of them have persisted within the  
11 workforce since graduating, even since 2007.

12 They're in a variety of  
13 government, academic and private situations,  
14 private industry. Another important thing is  
15 a third, more than a third of that group is  
16 women. So we are definitely helping to infuse  
17 more of a diverse community of hydrographers  
18 or mappers.

19 So we have a requirement of  
20 research, and so every student either does a  
21 joint project or a single project. So we've  
22 presented 64 posters at national meetings in

1 the last few years, and some of them are  
2 international, and we win awards, especially  
3 if it's the first time they've offered a  
4 poster session. We kind of sweep the awards  
5 there.

6 But we also make sure we get  
7 students into internship or volunteer  
8 opportunities, by getting them on board  
9 vessels, and we've been able to help so many  
10 principal NOAA principal investigators by  
11 offering a free volunteer student -- by having  
12 a student volunteer as a survey tech on their  
13 vessel.

14 Tremendous learning experience for  
15 the student. Often, it's the first time  
16 they've done something completely on their own  
17 like that after the program, but also a huge  
18 boon to the investigators on board, to have  
19 another survey tech.

20 The course work that I mentioned  
21 really is only three courses that provide the  
22 foundation of the training. It's in addition

1 to being a geology major. So there are many  
2 other courses, which I'll also show you. But  
3 we are looking for someone who has either  
4 first of all, a marine geology or an  
5 oceanography course, at a higher level, not an  
6 introductory 101 kind of thing.

7 So they come into the program with  
8 some knowledge about the ocean, and  
9 particularly we would like to see them have  
10 the marine geology aspect. Then they take a  
11 two credit Intro to Sea Floor Mapping, which  
12 is basically the CARIS software training.  
13 It's HIPS. It's the bathymetry side of the  
14 CARIS software, and we call that SeaMap.

15 So they dedicate a two credit  
16 program to learning that software, and then  
17 the next two credit course is the research  
18 course, in which they use that software to  
19 actually conduct viable research, and I'll  
20 show you some of the results of that, and of  
21 course you've seen some of the posters out in  
22 the hallway.

1                   The other courses that we very  
2                   much encourage -- we cannot require this,  
3                   because this is not an official sanctioned  
4                   program within the state system of higher ed.  
5                   We are simply doing this. We're giving them  
6                   guidance of where to go for more course work  
7                   to boost their resumes.

8                   Almost every student takes a very  
9                   strong GIS class we offer. They are required  
10                  to take one semester of calculus. With a  
11                  geology major, we expect them to try to get  
12                  that second one in, if they're going to go off  
13                  in this field, and then geophysics, special  
14                  topics, any other training that we can  
15                  provide.

16                  There's also annually we have  
17                  several different software vendors who  
18                  willingly come in and train our students for  
19                  a weekend, as much as a full week of free  
20                  training in different software packages. So  
21                  they get that additional experience, even  
22                  though they don't get credit for that.

1                   Once they have the course work we,  
2                   as I mentioned, they are expected to do  
3                   research. So we mine the existing data.  
4                   There's so much information out there. NGDC  
5                   has a wealth of data that we tap into every  
6                   semester now, and you know, one data set, 20  
7                   different purposes.

8                   Why rely on collecting your own?  
9                   Obviously, if we could collect our own for  
10                  every student, we would do that. So we are  
11                  very grateful for any data sets that people  
12                  send us too. With all the investigators we've  
13                  collaborated, they send us data as well.

14                 From that information, they design  
15                 scientific questions. So they are doing real  
16                 research. They make their first base surface  
17                 and then they come up with questions. How can  
18                 they quantify channel meandering or the  
19                 characteristics of a submarine canyon, et  
20                 cetera. So there's plenty you can do once you  
21                 have that information in hand.

22                 And then we expect them to present



1 at a local poster session meeting, and then we  
2 also expect them to try to present at a  
3 professional meeting, either being present at  
4 the meeting or sending their poster to a  
5 meeting. Almost every single student has  
6 presented at a professional meeting in the  
7 last three years -- four years, excuse me.

8 Some of the meetings we've  
9 attended in New Orleans. I will never take 18  
10 undergraduate students to New Orleans again.  
11 We drove in vans too. So it was just insane.  
12 But they were all very well-behaved during the  
13 meeting, and they dressed up pretty well.

14 That was the US Hydro meeting in  
15 New Orleans. We'll be attending that same  
16 meeting in D.C., and I'm sure after that I'll  
17 say I will never take students to D.C. again.  
18 And then in the Ocean Sciences meeting in Salt  
19 Lake City it was a wonderful merging of both  
20 the UW students and the College of Charleston  
21 students, and we had our own poster session  
22 during that particular meeting.

1                   This past summer, I took 15  
2 posters and I got to go to Brest, France.  
3                   There are some perks to this job. And they  
4                   were extremely well-received there, and opened  
5                   up some new doors for international  
6                   collaborations. We have a student on an Irish  
7                   vessel right now because of that meeting.

8                   The research cruise, though, is  
9                   the cornerstone of the success of this  
10                  program. By getting every single student out  
11                  on a vessel, to actually undergo the entire  
12                  process of acquisition, the ancillary data,  
13                  deployment of other instruments and then  
14                  processing the data at sea, coming home and  
15                  doing research on that work.

16                  We have had many years' worth of  
17                  donated ship time through Coastal Services  
18                  Center on the NOAA ship Nancy Foster. It's  
19                  very convenient that it happened to be home  
20                  ported here, so we get the tail end or the  
21                  beginning of their field season. But more  
22                  recently, we haven't been able to rely on

1           that, as budgets have been reduced.

2                         So we have just recently started  
3           to acquire our own funding for ship time.  But  
4           while we're out there, we do more than just  
5           multi-beam sonar.  We get to do all sorts of  
6           other deployments that are all contributing to  
7           the understanding of what the character of the  
8           sea floor is.  So we do training while we're  
9           out there, but we're actively conducting  
10          research.

11                        The ships, I've mentioned Nancy  
12          Foster already.  More recently, the Savannah,  
13          that the College of Charleston is supporting  
14          the ship time on that.  It's a 90-foot vessel.  
15          It's a UNOLS out of Skidaway Institute of  
16          Oceanography, and Kongsberg, sort of the  
17          premier vendor of multi-beam sonar, generously  
18          has loaned us the use of their state of the  
19          art EM2040C.  Absolutely amazing system, and  
20          they're going to loan it to us again this next  
21          year.

22                         So very -- we couldn't do this

1           without the partners that we have. Before I  
2           forget, I've never had a grant support any of  
3           this work. It's all been through  
4           partnerships. So that's pretty significant,  
5           and at this point, you can't get a grant,  
6           because it's too established.

7                         The University of Washington also  
8           has a Kongsberg system, and Miles Logsdon gets  
9           a few days each year for his students on that  
10          vessel. Also, they have a smaller vessel at  
11          UW and we have -- this is an email tree name.  
12          I call it the Little Beamer.

13                        But at the College of Charleston,  
14          we have a 21-foot vessel that we can -- we've  
15          also been donated use of a couple other  
16          systems, so that we can do some of the shallow  
17          water stuff, and maybe help some of the other  
18          local groups like the Army Corps and the Coast  
19          Guard.

20                        So just some shots from our most  
21          recent cruise. Some of these students are  
22          here today. We have Hunter Miles in the

1 green, Nick Damm in the dark green, and well  
2 Savannah wasn't on this cruise, but she was  
3 from an earlier class of BEAMS, and we had a  
4 few others here earlier. I hope you at least  
5 got a chance to meet some of them.

6 The other thing that we hope to  
7 continuously grow within this program is more  
8 internship opportunities. NOAA has been  
9 wonderful through the years. Captain Rick  
10 Brennan started a summer internship program in  
11 2009, and three of the four students who went  
12 out to sea on either the Fairweather or the  
13 Rainier are still with NOAA.

14 So it had a very strong impact on  
15 those four. This one happens to be my son, so  
16 it was particularly important for me, and he  
17 works up at in the Biogeography Group at NOAA,  
18 with Tim Battista's group.

19 So those partnerships or those  
20 internships, excuse me, are extremely  
21 important. We have other partners, not just  
22 NOAA, and they are providing internships, as

1 well as some volunteer opportunities out at  
2 sea. Some of the -- almost all these  
3 internships are paid. We don't really promote  
4 unpaid, unless it's a survey tech volunteer  
5 position.

6 Another wonderful thing that we  
7 can provide to the students is people love to  
8 come visit us. They either come to recruit  
9 students for their job positions. We have so  
10 many people who have met our students, they  
11 want to come see them again. We have so many  
12 alums now, and they come back and tell their  
13 stories. We have alums who have started to  
14 hire our students now.

15 So it's really this wonderful  
16 giving back, and just recently we had a live  
17 teleconference with the RV Nautilus, Bob  
18 Ballard's boat, and one of my beamers was on  
19 board. So she was virtually giving a  
20 presentation to the current group.

21 So it's been really helpful to  
22 have these people come back and show the

1           breadth of the workforce needs, and also what  
2           the jobs out there are, not just NOAA, believe  
3           it or not. But you'll see the stats of NOAA  
4           in a few minutes.

5                        So these are some of our regular  
6           contributing partners, of either the software,  
7           loaning us hardware, loaning us people.  
8           Geodynamic loans us a person to go to sea with  
9           us as an expert, and people who support  
10          software licenses and hire our students.

11                      So some of the where have they  
12          gone with this training. These are  
13          undergraduate students, remember, and  
14          basically everyone who graduates, who wants to  
15          go into this field gets a job. It may be  
16          part-time, it may be full time, but they get  
17          a job within a few months of graduating.

18                      That's why my numbers have gone up  
19          so high. It's not because I'm such a great  
20          teacher or anything. I'd like to think that,  
21          but it's -- we have a very strong program.  
22          Eleven full time NOAA employees, 30 paid

1 internships, 11 of which are with NOAA.

2 Those two numbers, the 11-11,  
3 that's not a coincidence. Almost every one of  
4 the NOAA interns has become a full time NOAA  
5 employee. So keep that in mind, as we look  
6 ahead at recommendations within NOAA.

7 But many just want the adventure  
8 of different jobs all the time, travel the  
9 world, be a contractor. So I can't even keep  
10 track of all the numbers of those. But we  
11 also have people going into oil and gas with  
12 private firms, software companies. We have  
13 two at CARIS, now, who come back and train our  
14 students.

15 So a wonderful giving back to the  
16 program, and a couple, three, have started  
17 their own businesses and now some are hiring  
18 our students. Only 12 to this point have gone  
19 into graduate programs, because the job  
20 opportunities are great, but they are some of  
21 them now going back to school to learn even  
22 more.



1                   And when I say 12 have gone on to  
2                   graduate programs, I mean with using these  
3                   skills, not just simply a geology program.  
4                   There are many more have gone into geology.  
5                   I keep track of all the goings on with my  
6                   students. I had a huge database that I try to  
7                   update regularly, and they all tell me where  
8                   they are.

9                   We have a great lively Facebook  
10                  group page, and I just try to plant it and  
11                  they search the globe for good sea floor to  
12                  map, apparently, with many different partners.  
13                  And you'll see the yellow as being internships  
14                  or jobs. So they're well -- they're covering  
15                  the country and in some cases covering the  
16                  globe.

17                  And these are some of the areas  
18                  that they are working or some of the agencies  
19                  within which students are currently working,  
20                  and of course NOAA is the leader of this  
21                  group. I mentioned 11 full time positions at  
22                  this point, including NOAA Corps. Some, you

1           may not have heard of many of these. You've  
2           probably heard of Fugro if you've been doing  
3           any of this work in the past.

4                         But a huge number of different  
5           companies now know about beamers, and they  
6           come back to us. They call me, they email me.  
7           Send me the resumes. So it's a direct pipeline  
8           now, and it's extremely exciting, because some  
9           of them call me up and I can place a student  
10          with them within a heartbeat.

11                        I got a call the other day, this  
12          summer. Do you have a student who could go to  
13          Sweden for two weeks, and by the way, they got  
14          paid \$300 a day and she hadn't even graduated  
15          yet? So yeah, she could do that and now she  
16          has this great experience.

17                        We have several contractors who  
18          call us regularly seeking students. That  
19          lower picture on the right was just  
20          gratuitous. A cruise that was -- I think it  
21          was a NOAA contract, but it turned out that  
22          five of the people contracted to be on that

1 cruise from separate mechanisms were all alums  
2 of our program. So they had a good time.  
3 They didn't even know each other, because they  
4 were from different years.

5 And as I said, some of them go  
6 into the actual software companies. Both  
7 CARIS and EIVA have hired our students in the  
8 past, and another company called OneOcean.

9 As I said, some go into academia.  
10 I don't have a list of all the things they've  
11 done, but they've done some great stuff,  
12 including water column research, looking at  
13 methane plumes.

14 We have this ability to borrow  
15 data, existing data, as well go collect our  
16 own. The students have conducted an  
17 incredible variety of research projects, and  
18 we've also been able to collaborate with many  
19 groups, to help them with the analysis of  
20 their data.

21 Not just developing a pretty  
22 picture, but actually doing the analysis, and

1 the South Carolina Department of Natural  
2 Resources, who we're working very closely  
3 with, identifying -- they identify to us  
4 critical fish habitats. We go out and map it  
5 for them, and we hope to continue that.

6 But we've worked with the marine  
7 sanctuaries, Gray's Reef. Hunter Miles, in  
8 the light green shirt, did his work on the  
9 shelf edge, looking at fish habitats there,  
10 and lionfish habitat with Paula Whitfield's  
11 group out of NOAA.

12 So we are doing these little  
13 projects, but they're all putting together  
14 into the larger picture of what's out there  
15 and what is that habitat like, and also  
16 recently looking at deep coral habitats.

17 Savannah Norvell back there, raise  
18 your hand. She did some of the submarine  
19 canyon work along the northeastern margin, and  
20 we have a couple of -- Sonya Tyson was here  
21 earlier, of this group. And then Nick Damm,  
22 who is in the darker green, did the salt dome

1 work with a colleague. So these are just some  
2 of the aspects, some of the data sets that we  
3 get from the National Geographic Data Center.

4 I'm also very involved with the  
5 Ocean Observatory initiative, Washington's --  
6 University of Washington's Regional Scale  
7 Nodes Program, which is why I did my  
8 sabbatical out there, and we took to them the  
9 ability to do the processing. They've since  
10 gotten CARIS on board, and they have since  
11 started their own BEAMS program.

12 So that collaboration really  
13 developed into something pretty nice, and we  
14 still use the data that we collect while we're  
15 out there, have done some really exciting  
16 things with those data.

17 Some of the other research that  
18 Dr. Harris, Scott Harris and I have  
19 collaborated with others, but we compiled many  
20 of the different areas that had been mapped  
21 locally with other researchers, and some of  
22 the data we had collected, including the

1 meandering channels that we collected on board  
2 the Foster.

3 This one on the lower left is also  
4 from the Foster. But to establish paleo-  
5 shorelines. So looking at sea level changes  
6 and the effects of shoreline on our margin,  
7 and the 10,000 year shoreline in the lower  
8 right showed a low country, just like  
9 Charleston, of the 10,000 year vintage, with  
10 meandering tidal channels.

11 Pretty exciting stuff. We went  
12 out this past year, and the first pass with  
13 multi-beam we found another channel somewhere  
14 else. So there's a lot to be learned, not  
15 just fish habitats, but also about the  
16 geologic history of this area.

17 So now because it's gotten so  
18 popular and now I have to do it every  
19 semester, which I love doing, but it's a lot  
20 of work, and so we'll be producing 25 students  
21 per year while -- UW's still smart to keep it  
22 small, and what we hope to do is to develop a

1 certificate.

2 Again, not a CAT A or B, but a  
3 beam certificate, so that as people learn more  
4 about the program, a student who has just had  
5 the SeaMap class won't have the certificate.  
6 It will be more involved with that. They sort  
7 of know at what level a student has reached  
8 while they were an undergraduate student.

9 Of course, we need to develop more  
10 courses and we also need some more staff. So  
11 we are requesting funds of that nature for the  
12 next few years of fiscal resources at the  
13 College.

14 We're hoping to get our own multi-  
15 beam instead of having to borrow one all the  
16 time, and get this annual ship time into the  
17 budget so we always know we have a dedicated  
18 cruise on the Savannah, which is a perfect  
19 vessel for the training and the kind of work  
20 that we do. So far two years in a row we've  
21 gotten it, and with the success of the  
22 program, I think we'll be able to establish

1           that.

2                           We are expanding partners  
3           constantly. With every meeting we go to, more  
4           people want to contribute to the program and  
5           want to hire our students, and we're starting  
6           to develop collaborations with institutes.  
7           There's one in Portugal that would like to  
8           work with us on autonomous underwater  
9           vehicles, and we'd really like to get into  
10          that aspect of sea floor mapping.

11                        We also have an amazing  
12          telepresence venue at the College now, a nine  
13          panel video wall that we can communicate with  
14          anyone basically. And we are looking at cloud  
15          sourcing, where data being collected at a  
16          different port on the other side of the globe,  
17          and we can process the data in-house at the  
18          College of Charleston. We're working with  
19          CARIS, Paul Cooper, to make that a reality in  
20          the next year. So we're really excited about  
21          that, as well as teaching people remotely from  
22          that location.



1                   So if you're interested and you  
2                   want to just see the excitement of what our  
3                   students are doing, and if you want to  
4                   contribute ideas, whatever, please email me  
5                   and ask to be invited to our Facebook page.  
6                   We have 150 people on it and about a third of  
7                   those are not alums. So we have lots of  
8                   people who are interested. We have a website.  
9                   I'm sorry to say I have not had time to keep  
10                  up with it. We're working on a new one.

11                  But you'll see a lot of the  
12                  posters that have been produced up until 2011,  
13                  I think. Maybe 2012's on there. But we are  
14                  developing a new one.

15                  And please, please, email me if  
16                  you want to know about shoreline changes,  
17                  paleo-shorelines. Please email my colleague  
18                  Scott Harris. If you know people on the West  
19                  Coast who would like to be involved, you might  
20                  want to communicate with Miles. And Paul  
21                  Cooper has been an absolute leader within our  
22                  group to make these things happen as well, and

1 to make sure we always have our software.

2 I think that's it, and I know  
3 you're just trying to digest at this point.  
4 So but if you have questions, I'm happy to  
5 take them. I have a just a few minutes before  
6 one. Yes.

7 MEMBER JEFFRESS: Hi. I'm Gary  
8 Jeffress, Texas A&M Corpus Christi.

9 DR. SAUTTER: Yes, hi.

10 MEMBER JEFFRESS: We have one  
11 course in Hydrographic Science, which is not  
12 enough to make a program. But a lot of our  
13 students have to get hired by the hydrographic  
14 industry out of Houston.

15 DR. SAUTTER: Out of Houston, by  
16 oil industry.

17 MEMBER JEFFRESS: Yes. Some of  
18 them stay forever, but a few of them go there  
19 to get their loans paid off and then go back  
20 to shore and get girlfriends.

21 DR. SAUTTER: It's hard to say no  
22 to the kind of money that is being offered

1 through oil and gas, yeah.

2 MEMBER JEFFRESS: I was wondering  
3 if your CARIS class is taught by CARIS? How do  
4 you manage two credit courses?

5 DR. SAUTTER: Okay. Well, the  
6 first question is CARIS does a two and a half  
7 day workshop at the beginning of our semester.  
8 Actually, I do the CARIS training on a half  
9 semester. The three, two and a half day  
10 workshop accounts for more than half of the  
11 hours of contact that they have to have in a  
12 course.

13 So they get the basics of the  
14 training there. But then I continue training  
15 and I have a grad student who also helps to  
16 teach them beyond just the cleaning of data,  
17 and we do backscatter and we show them more  
18 detail, and it really is more of the cleaning  
19 side once CARIS leaves.

20 But yes, we've developed that and  
21 my former student is the trainer who comes.  
22 So he's worked very well with us to develop a

1 course specific to us. It is not your  
2 standard CARIS course, and we've developed  
3 many additional resources, exercises, data  
4 sets that the students use, because they need  
5 --- I know that they need specific experience,  
6 and I know they need lots of practice and  
7 things, which you don't get in the five-day  
8 workshop.

9 Then the other question you had was how  
10 you get a two credit course? I just said  
11 that's what we needed. You know, they know we  
12 can do that. We can have one credit courses.  
13 So we have flexibility. You could make it a  
14 three credit for sure. Any other questions?

15 CHAIR PERKINS: Thank you. It's a  
16 very enlightening presentation. It's amazing  
17 what you're doing. I've just to ask a  
18 question about software agnostics. So GIS  
19 geospatial educational environment, right,  
20 there's a lot of emphasis on trying to be  
21 software agnostic and not teach and educate to  
22 a specific licensed package.

1                   So how do you navigate that  
2                   challenge? Are there any other competitive  
3                   softwares? I'm not, you know, it's not my --

4                   DR. SAUTTER: Oh, there certainly  
5                   is. They just haven't given me free 15  
6                   licenses.

7                   CHAIR PERKINS: So it really is just pay to  
8                   play?

9                   DR. SAUTTER: Yes. Well no, it  
10                  really isn't that. It's just that we started  
11                  with CARIS, and because of our very strong  
12                  association with NOAA and the HIPS software is  
13                  what is used on NOAA vessels, to me that's a  
14                  priority, that they know that particular  
15                  software.

16                  Then when we have the Fledermaus  
17                  group come in and do a workshop, we absolutely  
18                  encourage them to take it. The reason we  
19                  don't teach a course with Fledermaus or EIVA,  
20                  which was the other software that we partner  
21                  with and they come and do training, is that I  
22                  am not going to learn any more software, and

1 I am not going to teach any more software.

2 This isn't even my field. I'm a  
3 paleo-oceanographer. But I'm passionate about  
4 it, and I do love the mapping. But I'm not  
5 going to learn anymore, and we just don't have  
6 the staff and we don't have the time. We all  
7 teach three to four courses a semester.

8 CHAIR PERKINS: I'd like to ask one  
9 more, and then I'll relinquish the microphone.  
10 You know with the advancement that NOAA is  
11 seeing in, you know, and they're now  
12 contracting for bathymetric LiDAR, you know,  
13 in the land/water interface, do you see that  
14 being added to your course load?

15 DR. SAUTTER: What we would like  
16 to see with the expansion of the program is  
17 that more short courses are developed, where  
18 experts can come in and they are paid by the  
19 tuition of the students, and/or we can  
20 supplement their salary, where they come in  
21 and teach a dedicated course in maybe a summer  
22 week or a Maymester, something like that.

1                   And it would be only to the  
2                   students who already have the background  
3                   training. We've seen students who didn't have  
4                   the background come into a workshop and leave  
5                   after the first day, because they don't know  
6                   what's going on.

7                   So our hope is that with more alums, we  
8                   have an alum returning this fall, who has  
9                   offered to teach a course in marine geophysics  
10                  in the coming year. So those are the kinds of  
11                  opportunities we are seeking now, where people  
12                  can come in and teach short courses on their  
13                  schedule, and the students will sign up for  
14                  it, I'm pretty sure.

15                  CHAIR PERKINS: Other questions?  
16                  Thank you very much.

17                  DR. SAUTTER: Thank you very much  
18                  for having me.

19                  (Applause.)

20                  DR. SAUTTER: And I'm sorry I have  
21                  to run.

22                  CHAIR PERKINS: Can we do an

1           impromptu 15 minutes, not on the agenda, so we  
2           have a chance to spend some time with the  
3           posters and the students while they're here  
4           from COC?

5                               (Whereupon, the above-entitled  
6           matter went off the record at 1:00 p.m. and  
7           resumed at 1:22 p.m.)

8           HSRP General Discussion

9                               CHAIR PERKINS: All right. I'd  
10          like to everyone know that you should have two  
11          emails in your inbox, one from Mr. Aslaksen  
12          with the National Plan, and one from Kathy,  
13          distributing the Coast Guard/Army Corps/NOAA  
14          listening session PowerPoint. So this is our  
15          time. Yes, Eveline.

16                              MEMBER FIELDS: Army Corps  
17          listening sessions? What was -- was that the  
18          survey or the final report or --

19                              CHAIR PERKINS: Yeah. What it  
20          says it's a listening session PowerPoint.

21                              MEMBER FIELDS: Okay.

22                              RDML GLANG: So can I just qualify



1           what that is Scott? It's really just a  
2           PowerPoint. If you look at it, you may  
3           realize you have more questions than it will  
4           answer. But it is -- it is the product that  
5           we received from the Coast Guard.

6                         MEMBER FIELDS: Is this the one  
7           that has the -- kind of a survey and the  
8           responses to the questions and that sort of  
9           thing?

10                        RDML GLANG: Yes.

11                        MEMBER FIELDS: All right. I've  
12           seen that. Okay.

13                        MS. MEDLEY: And I also have the  
14           raw data of that. So I think we provided you  
15           guys with the cleaned up PowerPoint  
16           presentation of that. But if you're  
17           interested in seeing the raw form, which is  
18           not so raw, but it just lists all the  
19           different questions and what user groups the  
20           answers are coming from and everything, I have  
21           that as well.

22                        So if you're more interested or

1 want to know more about the nature of the  
2 questions, I'm happy to talk to anybody about  
3 it afterwards.

4 MEMBER FIELDS: You know, I think  
5 from a personal perspective, that the Panel  
6 would be interested in that, because I think  
7 they'll be surprised at the user group, the  
8 user groups that responded, because I was a  
9 little surprised when I took a look at the  
10 information, that the biggest user group that  
11 responded or that was a part of that process  
12 seemed to be the recreational boaters.

13 Nothing against recreational  
14 boaters, but it's just that it's kind of -- it  
15 seems to be a little one-sided, because they  
16 were the biggest responders or the largest  
17 group of responders to the survey.

18 MS. MEDLEY: I think that might be  
19 because during the actual listening sessions,  
20 they were in-house. There was a bit more of  
21 industry that came to that, those ones, and  
22 they were able to express their views in

1 person.

2 The rec community didn't maybe  
3 have as big numbers in turnout. So they felt  
4 more compelled to respond to this, and the  
5 Coast Guard's calling it a feedback form,  
6 because it's not a survey. So it's a feedback  
7 form.

8 (Simultaneous speaking.)

9 MEMBER FIELDS: I can't get into  
10 your politically correct terms.

11 MS. MEDLEY: Yeah, right, right.

12 MEMBER FIELDS: There was a lot of  
13 questions that were asked. The questions that  
14 were answered were answered mostly by  
15 recreational, the recreational community.  
16 Which there's nothing wrong with that.

17 MS. MEDLEY: Right.

18 MEMBER FIELDS: But I just think  
19 that when you look at the information that --  
20 it sounds like you've sent to us an email. It  
21 needs to be clear that it's not a balanced  
22 necessarily response, what I would call a

1 balanced response from all the users. It  
2 seems to be a little bit lopsided.

3 CHAIR PERKINS: Rachel, in the raw  
4 data -- in the raw data, is that other input  
5 from the people that were at the live sessions  
6 in the raw data and not --

7 MS. MEDLEY: You know, I can't  
8 exactly speak to how the Coast Guard compiled  
9 their feedback form. But I think what  
10 happened was whoever clicked on their feedback  
11 form link, that that's how they captured  
12 whoever was reporting back.

13 The report that I did was what all  
14 the nav managers were hearing from the in-  
15 person sessions, and it really does mimic  
16 exactly what was being reiterated in the  
17 feedback form. So it's the same -- the same  
18 issues were being brought up, same concerns.

19 But Admiral Fields is correct. It  
20 does seem -- from that feedback form, it seems  
21 a little bit more weighted to the rec  
22 community. But again, if you've seen the

1 Coast Survey sort of user pyramid that we've  
2 been sort of shopping around, and we say we've  
3 got Solis class vessels and pilots and here's  
4 our different tiers of users, the rec users  
5 make up, what is it, like -- what did we say,  
6 like ten million users, and then you've got  
7 industry and pilots only have a smaller  
8 percentage up there.

9 So I don't actually think that  
10 that's concerning. I mean if we're talking  
11 about we've got an exponentially larger group  
12 of users in that bottom tier, it actually it's  
13 kind of reassuring more than anything that we  
14 reached different segments in the maritime  
15 community with these listening sessions, and  
16 that we are sort of seeing the percentages and  
17 fallout of what we would -- what we should  
18 expect to see, right, larger amounts of rec  
19 users.

20 So hopefully that answers that  
21 question. But thank you, Admiral Fields, for  
22 noting that.

1 Public Comment

2 CHAIR PERKINS: I want to follow  
3 up on that. Before we do that, we have, you  
4 know, our public comment period scheduled here  
5 for 2:15. But if we want to take that out of  
6 order, we have a few people in the audience.  
7 So I just wanted, out of courtesy to them,  
8 would like to entertain any public comments at  
9 this point in time.

10 (No response.)

11 CHAIR PERKINS: Okay, great. Just  
12 wanted to make sure. Didn't want to make you  
13 sit there, anyone sit there and wait.

14 (Laughter.)

15 CHAIR PERKINS: So we have a block  
16 of time here in front of us, and then we have  
17 a departure time in front of us, so that we  
18 can go and get our firsthand experience, you  
19 know, here locally at the Port of Charleston.

20 So during the break, you know, in  
21 our intermission, a couple of things have come  
22 up. There have been a couple of questions

1           that were asked regarding, you know, the  
2           Federal Register announcement regarding the  
3           open seats and the candidate selection  
4           process, and the filling of the unoccupied  
5           seat.

6                         So we might try to take a little  
7           bit of time to see if we can get an update,  
8           you know, on that, you know, because I know  
9           there have been some questions on that.  
10          Rachel, do you think it would be beneficial to  
11          schedule time for a GoToMeeting or a WebEx for  
12          us, to look at the listening session results  
13          with you?

14                        I mean I don't want to waste  
15          people's time, but you know what I mean, 16  
16          cities across the country. A lot of --  
17          hopefully there might be something there that  
18          would be a better way for us to digest that  
19          data than all of us collectively going back  
20          and looking at it our laptops while we're  
21          flying home on Friday. It's just a thought.

22                        MS. MEDLEY: You mean a WebEx

1 outside of this HSRP meeting?

2 CHAIR PERKINS: Yes.

3 MS. MEDLEY: I would be happy to  
4 present that and talk about anything that  
5 we've been hearing, and answer any -- well,  
6 try to answer any questions that the HSRP  
7 members would have concerning that, and  
8 specifically what NOAA Nav Services has been  
9 doing to try and address some of those issues  
10 that were brought up during the triagency  
11 listening sessions.

12 I think Rear Admiral Glang, the  
13 Board has tasked the three directors to give  
14 an overview about how we've performed  
15 outreach. I think that's coming up on  
16 Thursday to various customers, and I think  
17 you'll be really pleasantly surprised to hear  
18 that all three offices are actually completely  
19 attuned with what different users are looking  
20 for and what their expectations are.

21 The triagency listening sessions  
22 helped to reemphasize for us that we were



1 heading on the right track with issues and  
2 concerns. But I'd be happy to go over that at  
3 another later date, and then speak to how  
4 we're trying to address those concerns as  
5 well.

6 CHAIR PERKINS: Okay, great. If  
7 we can try to make that happen in the next 30  
8 days, I think that, you know, hopefully we'll  
9 have a report out letter completed before  
10 then, and we can maybe optimistically have a  
11 response back, and that would be a good time  
12 to do a little phone chat and get the briefing  
13 maybe on the listening sessions.

14 MS. WATSON: Excuse me, Scott. If  
15 it's just like an informational administrative  
16 meeting, you don't need a Federal  
17 Register notice.

18 CHAIR PERKINS: Right.

19 MS. WATSON: That's only when  
20 you're going to ask for comments and input  
21 from the public.

22 CHAIR PERKINS: Yeah, no. I'm

1           just saying 30 days, because it's still  
2           September and we have end of FY and it's busy.  
3           Great, thank you.

4                       MS. MEDLEY: I wonder if the  
5           directors are okay with that.

6                       CHAIR PERKINS: So Admiral, can we  
7           put you on the spot for an update regarding  
8           candidates, Steve Carmel's open seat and time  
9           line for that process?

10                      RDML GLANG: Sure. I just want to  
11           cover the last topic. So if we're going to  
12           schedule a conference call to go over the  
13           triagency listening session outcomes, we  
14           should -- can we also include our own Coast  
15           Survey customer survey, lower case S, the  
16           outcome of that?

17                      MS. MEDLEY: Sure.

18                      RDML GLANG: Every two years,  
19           Coast Survey has a customer survey. It's a  
20           real survey that we run through a contractor,  
21           and it meets all the federal requirements to  
22           be called a survey. It's under A-16 or

1           whatever the OMB directive is on surveys. So  
2           why don't we include that one as well, since  
3           that's the focus?

4                       MS. MEDLEY: And Juliana and Rich,  
5           do you guys have anything comparable that you  
6           would want to include?

7                       MEMBER EDWING: Yeah. I'm not  
8           familiar with the survey.

9                       MS. MEDLEY: I think a lot of what  
10          we heard from the listening sessions, you guys  
11          are concurrently addressing.

12                      (Simultaneous speaking.)

13                      MS. MEDLEY: Right, exactly. So  
14          we can work on that together. Okay.

15                      RDML GLANG: I'm not sure we'll  
16          get at, but we'll do it, sort of lump that  
17          into one call. All right. So update on the  
18          new member selection. So we actually have --  
19          let me just orient myself here.

20                      As you know, Steve Carmel resigned  
21          after he was reappointed for a second term.  
22          Let me just dig up my notes on this. I'll

1           just do it from memory. We have several Panel  
2           members who are scheduled to rotate off, five  
3           of them, and four of the five are eligible to  
4           reapply, and you know who you are. We look  
5           forward to that.

6                        The public announcement, the  
7           Federal Register notice for new members has  
8           gone out, went out last -- about two weeks  
9           ago, and is open until October 10th. So we  
10          stretched it a little bit, but we knew we were  
11          stretching it because we had this meeting  
12          here, and we felt there was an opportunity to  
13          hear from you all if you had any more  
14          suggestions on who we might target for that.

15                       We have a standard mailing list,  
16          very extensive mailing list of -- across the  
17          range of navigation user groups, both on the  
18          geodetic side and the academic side, that  
19          cover the different topics of interest, and  
20          we're sort of selectively resending that  
21          Federal Register notice to folks who we think  
22          have particular backgrounds that we're looking

1 to fill on the Panel.

2 So for instance, right now we  
3 don't have someone from a large shipping  
4 company or the equivalent. So we reached out  
5 through our network to try and attract some  
6 applicants from that user group or that  
7 sector. Anything else on that Scott?

8 CHAIR PERKINS: I don't think so.  
9 I think that answers the general inquiries  
10 that came over lunch.

11 RDML GLANG: So if Panel members  
12 know of people who they feel would -- should  
13 be considered by us, by the directors for  
14 membership on the Panel, we certainly  
15 encourage you to send them an email or send us  
16 an email and say hey, I think this person  
17 would be -- represents either geography or a  
18 technical area that this Panel covers, or is  
19 an industry representative that this Panel  
20 would find useful.

21 So either let us know or you're  
22 welcome to approach them directly. As I said,

1 the call for membership applications is open  
2 until October 10th.

3 CHAIR PERKINS: And so Mr.  
4 Carmel's seat and the other seats will be  
5 dealt with all in one batch?

6 RDML GLANG: Yes, yeah. We made  
7 that decision last year or back in -- after  
8 the New York meeting, that we would not fill  
9 --

10 MEMBER KUDRNA: Wouldn't short  
11 term it.

12 RDML GLANG: Right. The only  
13 person who can't reapply is our own Matt  
14 Wellslager, who has successfully -- he is  
15 successfully concluding his second term come  
16 December.

17 MEMBER KUDRNA: But this is a  
18 comment. NOAA never lets you go.

19 (Laughter.)

20 RDML GLANG: Well, we always  
21 welcomed back John Dasler, right. He's our  
22 groupie, our HSRP groupie.

1                   MEMBER KUDRNA: But I want to add  
2                   one other thing. We've talked about working  
3                   committees. Coming from the Science Advisory  
4                   Board, they've used outside membership in  
5                   working committees as kind of an introduction  
6                   to the FACA, and elevated a number of those  
7                   folks over the years to that.

8                   It's a very good opportunity to  
9                   bring some people forward you might want to  
10                  consider for appointment in the future.

11                  RDML GLANG: Right.

12                  CHAIR PERKINS: There was one  
13                  comment made about working with a Presidential  
14                  Innovation Fellow, and I actually applied for  
15                  the Presidential Innovation Fellow program.  
16                  I got a really, really nice letter back,  
17                  thanking me for my application, which I kind  
18                  of was flattered. But I didn't get selected.

19                  But I would be curious just to  
20                  hear a little bit more about both the fellow  
21                  and what the goal is, and what we think the  
22                  impact will be.

1 DR. CALLENDER: I can start and  
2 ask Admiral Glang to finish up. So basically  
3 we had an opportunity through one of the  
4 political appointees downtown who's well  
5 connected with the White House -- yeah, had an  
6 opportunity through one of the political  
7 appointees in NOAA to potentially have an  
8 Innovation Fellow.

9 We're able to get the CIO's  
10 office, basically the head guy for all things  
11 IT in the agency to pay for it. So it's good  
12 to have a fellow that someone else is paying  
13 for.

14 Let Admiral Glang know of this  
15 opportunity, and then he spent some time  
16 working with the CIO's office, to try to  
17 narrow down the selection, and then to try to  
18 identify what you're going to want this  
19 identify to do.

20 So Admiral, if you want to go into  
21 what you're thinking now, in terms of what  
22 this individual would do, that would be great.



1                   RDML GLANG: So technically the  
2                   Presidential Innovation Fellows are not on  
3                   board yet. So I can't talk too much. I can't  
4                   really talk about who they are. They'll be  
5                   aboard in the next two weeks, September 22nd,  
6                   I think.

7                   There are two individuals that are  
8                   coming to NOAA. They're part -- excuse me,  
9                   they're part of a cadre of about 20 or 22 I  
10                  believe, that are coming to Commerce, as I  
11                  understand it, or broadly are in the program.  
12                  Let me rephrase that. They may not all be  
13                  coming to Commerce.

14                  NOAA's interest is, some of you  
15                  are familiar with the recent request for  
16                  information that went out from NOAA on big  
17                  data. NOAA is looking at engaging the private  
18                  sector to come up with ideas and innovations  
19                  about how we can better deliver all the data  
20                  that NOAA acquires.

21                  So this is NOAA writ large. So  
22                  you know, we're just a little drop in the

1 ocean of data on our side, compared to what  
2 comes in through the satellite programs and  
3 certainly what gets generated in the different  
4 weather models.

5 The original motivation was to  
6 bring in Presidential Innovation Fellows to  
7 look at NOAA big data, and to come up with  
8 ideas on how to better deliver those products,  
9 see where the private sector can help take  
10 advantage of that. The opportunity was really  
11 through Dr. Bamford and her connection with  
12 NOAA leadership.

13 So we identified that an area of  
14 interest for PIF might be to look at  
15 delivering coastal intelligence for the marine  
16 transportation sector, and maybe there are  
17 some innovations there that we haven't  
18 considered yet, about how to more smartly  
19 deliver our data.

20 I certainly feel like we could use  
21 some help on infrastructure, you know, how do  
22 you -- you can't deliver coastal intelligence

1 unless you've got the data delivery  
2 infrastructure. But there are other  
3 challenges too, how people take up that  
4 information.

5 In different ports, our data is  
6 used to make decisions by different users.  
7 Whether it's a pilot or a coastal zone planner  
8 or a community that's planning for resilience  
9 or a port authority, they're all -- at the  
10 foundation, they're all using our information,  
11 but they're making different kinds of  
12 decisions. So how can we better serve up that  
13 information?

14 So these folks will be aboard by  
15 the end of the month. They'll go through and  
16 they'll be here for a year is my  
17 understanding, and they'll be given -- we'll  
18 be developing expectations of -- obviously we  
19 can't throw all our ideas at them, and we're  
20 really looking for them to come up with the  
21 solutions, right.

22 So there's an initial orientation

1 period. We'll set some expectations, and then  
2 we'll set them loose and see what they come up  
3 with. It's really about how we better serve  
4 up our data and our information, for others to  
5 make best use of and enable business along the  
6 way.

7 CHAIR PERKINS: Great. It looks  
8 like an interesting program. It will be  
9 interesting to see that, not only the results  
10 for NOAA, but for government in general, and  
11 how that Innovation Fellow program plays out.  
12 So we have one hour in front of us.

13 Lynne, is it possible to call Dr.  
14 Callender's last slide back up? And the  
15 reason is because I -- you know, that kind of  
16 had the ask, right, the ask from the  
17 administration bullet points on it. So I'd  
18 like to have that on the wall as a framework,  
19 because I can't remember it primarily, but  
20 hopefully to help guide our conversation here  
21 as we work towards --

22 (Simultaneous speaking.)

1                   CHAIR PERKINS: Okay. You're  
2                   right. We do have a hard copy in our folder.  
3                   So comments on today's opening remarks,  
4                   opening sessions and working towards  
5                   establishing our pathway to completing a  
6                   productive report out. That's -- we have 60  
7                   minutes in front of us.

8                   I can fill 60 minutes of time. I  
9                   get paid to talk about anything, right. I  
10                  don't think that's what we want to do though.  
11                  So I'm hoping to have a dialogue. Yeah, Ken.

12                  MEMBER BARBOR: Yeah, Ken Barbor.  
13                  You know, one of the things I see in terms of  
14                  -- because I was along the same lines, of what  
15                  rose to a recommendation out of today's  
16                  presentations, and of course part of it is I  
17                  think we're getting more detailed  
18                  presentations later, whether it's the, you  
19                  know, After 45 or the Intercoastal,  
20                  Intracoastal or whatever.

21                  So I think unless we want to say  
22                  what sort of lingering recommendations do we

1 think and want to drill into these next  
2 presenters on those sorts of topics.

3 CHAIR PERKINS: Yeah, and I think  
4 the intent isn't that we let the presentations  
5 guide our thought process, right. I mean  
6 that's regional information, that's beneficial  
7 information at a macro level, you know. Where  
8 is the science going, you know? What is the  
9 new technology NOAA should explore using these  
10 bullet points?

11 And then hopefully those  
12 presentations, you know, help refine small  
13 pieces of the answer or reconfirm, you know,  
14 our direction. This is more painful and more  
15 awkward than I anticipated.

16 VICE CHAIR HANSON: You just need  
17 to stir the pot there a little bit.

18 CHAIR PERKINS: And just the  
19 reminder, you know. We are -- we do have the  
20 webcast, so just as Bill did, please move the  
21 microphone close when we talk.

22 VICE CHAIR HANSON: I think when

1           it comes to opportunities for new  
2           partnerships, I'd like to actually engage our  
3           academic friends, because I really see -- one  
4           of the things I've learned being in D.C. is  
5           that Texas A&M actually has a fairly robust  
6           lobbying office in D.C. about a block from the  
7           White House.

8                         They have a group that lobbies for  
9           engineering research and all these types of  
10          things. So I've actually been talking to them  
11          quite a bit about how to help out the Ocean  
12          Engineering Program at my alma mater.

13                        I was wondering when it comes to  
14          engaging a stronger voice, the academics  
15          typically have been not very organized in  
16          terms of advocating for research and making  
17          the case. I was just wondering how a  
18          partnership with NOAA, how you partner with  
19          NOAA now, and how you might see some  
20          improvement in that.

21                        MEMBER JEFFRESS: We've done a lot  
22          of that in the past, up until when earmarks

1           went away. That stopped the whole process.  
2           It's back to chaos now.

3                         MEMBER BARBOR: And I don't think  
4           that's partnershiping. That's, you know,  
5           forced indenture, but more on NOAA's side. I  
6           mean we obviously benefit. But I think that's  
7           -- every institution has lobbyists up there,  
8           and they may not occupy buildings, but they do  
9           occupy.

10                        And we're actively involved in  
11           trying to restore those NOAA partnerships,  
12           because it's part and parcel of what we do,  
13           and it's difficult. So I won't go any  
14           further.

15                        MEMBER MILLER: Yeah. One of the  
16           things that I was chatting with Ken about on  
17           one of the breaks is I used to work through  
18           the University, but for a NOAA program. One  
19           of the big challenges was, and this NOAA  
20           program had a lot of data that was valuable  
21           across the board.

22                        But we had some data from the



1 Mariana that the Navy very much wanted to see  
2 expedited, and they were willing to put three  
3 quarters of a million dollars on the table to  
4 expedite it, and we almost had to turn down  
5 the contract, because there was no NOAA  
6 mechanism for that partnership.

7 And when the Army Corps or when  
8 was it, I think, Admiral Glang said there's no  
9 MOU or MOA between Army Corps and NOAA, I see  
10 that as one of the -- a major issue for  
11 partnerships. If you can't move money among  
12 federal agencies, how in the world can you  
13 partner with some teeny little organization in  
14 Alaska or something?

15 I mean it just seems to me that's  
16 a major stumbling block for partnerships for  
17 NOAA.

18 MEMBER BARBOR: To go back there,  
19 I think clearly what the mechanism that is the  
20 easiest to use from an academic NOAA side is  
21 cooperative institutes, and that is, you know,  
22 you find a researcher at NOAA that's

1 interested in something and has money, and you  
2 partner with them, and the money flows very  
3 quickly.

4 But again, you have to have that  
5 cooperative institute relationship to make  
6 that work that seamlessly, and unless you have  
7 that, it becomes much more laborious.

8 VICE CHAIR HANSON: If I can also  
9 just maybe follow up and this may be more of  
10 a question for Dr. Callender. But one of the  
11 big issues that came out of the last WRRDA  
12 bill was the ability for the first time for  
13 the Corps of Engineers to take money from  
14 outside the government, non-federal funds from  
15 states or even local users.

16 Does NOAA have the same issue?  
17 Because we're seeing, particularly on the  
18 coastal front, we're seeing a lot more of the  
19 private foundations. The Rockefeller  
20 Foundation in New York got very involved in it  
21 post-Sandy. The Walton family and Gates  
22 Foundation have been very active in Louisiana

1           because of societal issues related to coastal  
2           resilience, coastal protection.

3                           Is this a market you've tapped  
4           into or thought about as potential sources of  
5           funding and partners?

6                           DR. CALLENDER: Yeah. We've tried  
7           to do that, we, the larger "we" in NOAA. Been  
8           a lot of challenges. There's a few places  
9           that can do that, but it involved legislation  
10          that indicated that NOAA could actually do  
11          that. One is actually here in town with the  
12          Hollings Marine Lab, which has the ability to  
13          take or bring in money from outside of federal  
14          sources.

15                          There was some talk a year or so  
16          ago about trying to do this to spur on some  
17          Arctic innovation, and I don't know the  
18          details of how that worked, but it did not  
19          seem to work. So that -- it has been a  
20          fundamental challenge. There's a few  
21          organizations that have used foundations, not  
22          to bring money into the agency but to do some

1 things in partnership with the agency.

2 It's very unfortunate that no one  
3 is here from IOOS, because there's the IOOS  
4 Association, which may be a way to do  
5 something like that. Sanctuaries has a  
6 foundation. The NERRS program, NERA has an  
7 association, Coastal States.

8 So those might be some mechanisms  
9 to explore, not so much to bring money into  
10 the agency but to do things in partnership,  
11 bringing money into those associations, those  
12 foundations. So that to your point on the MOA  
13 with the Army Corps, I believe there's a NOAA  
14 level MOA with the Corps.

15 NOAA doesn't bring, use these to  
16 bring in money at the first step. It's  
17 usually an agreement, and then there's  
18 subsequent amendments to that agreement, as a  
19 way of bringing in money. Frankly, you know,  
20 from the NOAA side and having been in a  
21 science organization trying to expedite those  
22 MOAs, I've been frustrated for years.

1                   NOAA does not do a good job of  
2                   bringing money in from outside. It seems like  
3                   more of the emphasis is on how can we spend  
4                   our money on time that we get appropriated  
5                   from Congress. So the whole process of MOAs,  
6                   money coming in, has been a huge challenge for  
7                   many years.

8                   There's been some lip service  
9                   quite frankly paid to it in the agency, but  
10                  it's not really been solved. Not a great  
11                  answer, but that's sort of an on the ground  
12                  perspective in terms of the challenges there.

13                  RDML GLANG: So we would have to  
14                  actually check if there's a NOAA level  
15                  Memorandum of Agreement or Understanding with  
16                  the Army Corps. I'm not sure that there still  
17                  is. There was an NOS level memorandum of  
18                  understanding with the Army Corps, which  
19                  expired last year, and we've made a few  
20                  attempts to get that going again.

21                  The challenge in a memorandum of  
22                  agreement, which would be the mechanism that

1 NOAA needs for accepting money from the Army  
2 Corps, it gets stuck up at the general counsel  
3 level, and we talked about this last year.

4 So that's certainly something that  
5 could be looked at again. We do have -- NOAA  
6 does have a high level memorandum of  
7 understanding with the Coast Guard and several  
8 MOAs, I believe, and then we also have several  
9 agreements with NGA.

10 Certainly for the three navigation  
11 programs, we do have a statutory mechanism for  
12 accepting money. The Coast and Geodetic  
13 Survey Act of 1948 is the piece of legislation  
14 that allows us to receive money, and then  
15 execute our missions. So we do have that.

16 Rich.

17 DR. BRADLEY: Yeah. So two kind  
18 of examples is we have -- whether or not  
19 there's a high level agreement with the Corps  
20 is almost irrelevant, because you still have  
21 to establish another agreement for kind of the  
22 project you're trying to do, and having that

1 umbrella agreement doesn't really help.

2 We have an agreement with the  
3 Corps to -- right now to help them establish  
4 datums for their projects, for coastal  
5 projects, and we have an agreement in place to  
6 do that, and each project is kind of a task  
7 order underneath that.

8 It's taken us years to get that in  
9 place, and we're just now really starting to  
10 get to work on some of that. I was just  
11 mentioning to Andy, I think, that I'm trying  
12 to pass money to the Corps right now, to do  
13 some engineering design work for us for NWLON  
14 stations up in the Lakes.

15 It's taken a long time to get that  
16 in place, and the lawyers right now on both  
17 sides are haggling over the dispute resolution  
18 boilerplate language in there, because the  
19 words on the Corps side are not the same as  
20 the words on the Department of Commerce side,  
21 and they're, you know.

22 So the agreements process is a

1 huge challenge, I think, for making an  
2 efficient government.

3 MEMBER SHINGLEDECKER: On the  
4 agreements discussion, I'm not sure if this is  
5 the same thing or if it's related. From the  
6 New York meeting, one of the recommendations  
7 that was made had to do with having  
8 prescribed mission assignments for, I think  
9 more for an emergency response capability, to  
10 enable a faster response.

11 It sounds like those are related.  
12 The response in the letter said that NOAA  
13 agrees with the intent and will work to  
14 establish, as appropriate. I was wondering  
15 are there barriers to this that we're unaware  
16 of, and you know, how can we as a committee  
17 help further the cause for you guys in that  
18 area?

19 CHAIR PERKINS: Paul, do you want  
20 to take that one?

21 DR. BRADLEY: So do you mean  
22 barriers to the prescribed mission



1 assignments specifically, or more broadly  
2 working with other agencies?

3 MEMBER SHINGLEDECKER: Both.

4 DR. BRADLEY: I shouldn't have  
5 offered both. So I was planning to cover the  
6 FEMA prescribed mission assignment in my  
7 updates on Thursday, but the short and sweet  
8 of it is that FEMA's been besieged -- since  
9 Sandy, FEMA's been besieged by mission  
10 assignment requests.

11 So in light of that, they've kind  
12 of taken a new line of thinking to the mission  
13 assignments, and the response that we got,  
14 after working with them extensively over a  
15 long period of time; we put in the request.  
16 We talked about it with them. I think they  
17 basically handed it to their lawyers, you  
18 know, in the scheme of this big issue that  
19 they have with all these requests for mission  
20 assignments is if you already have the  
21 authority to do the work that you're asking  
22 for a mission assignment for, then you don't

1           need a mission assignment.

2                       So that was the response. I think  
3           we had six different areas that we requested  
4           these PSMA's for, and that was the case for  
5           five of the six.

6                       MR. ASLAKSEN: Well tell them what  
7           the one they did accept was.

8                       DR. BRADLEY: Was it knowledge  
9           manager, right?

10                      MR. ASLAKSEN: No. It was the  
11           coastal manager.

12                      DR. BRADLEY: Oh, coastal manager,  
13           that's right, yeah.

14                      MR. ASLAKSEN: They denied all the  
15           surveying, all the airborne part of it, and  
16           they basically said this is your mission to do  
17           everywhere.

18                      (Simultaneous speaking.)

19                      DR. BRADLEY: So it's not done.  
20           We pushed back at Holly's level to FEMA, to  
21           Grover Fugate, raised the concern that this  
22           was something that he wanted to see happen.

1 We're getting way into the weeds here, but I  
2 just got a note this morning from Grover,  
3 wanting to meet with Holly and I to discuss  
4 this.

5 So I think the pushback may have  
6 helped. The story's not over yet. I'm hoping  
7 that it's not over, because at his level and  
8 at Holly's level, this is something that makes  
9 sense and that we want to do. As in many  
10 cases, the lawyers may not be in sync with  
11 where the leadership wants to go on things,  
12 and may not be helping to facilitate.

13 So we'll see. The story's not  
14 over. We may still be able to pull this off.

15 DR. BRADLEY: Right, and I think  
16 so one of the nuances that we're trying to  
17 have a legal conversation with them about is  
18 in the Hydrographic Services Improvement Act,  
19 it provides the authority for us to do the  
20 types of things that, you know, we wanted the  
21 mission assignments for.

22 So I think they're holding that up

1 to say well, you already have the authority.  
2 You don't need the mission assignment. But it  
3 also follows onto that by saying NOAA has the  
4 authority to obtain mission assignments.

5 So there's that, you know, hiccup  
6 in the authority that, you know, we're trying  
7 to -- you know, our lawyers are trying to work  
8 with their lawyers to, you know, come to some  
9 resolution as to what does that mean for the  
10 present request.

11 MEMBER SHINGLEDECKER: Yeah. It  
12 was my understanding in the discussion we had  
13 in the breakout from the New York meeting that  
14 the prescribed mission assignments would help  
15 improve the efficiency and the speed of  
16 delivery in the ICS approach in a situation  
17 like that.

18 So looking at the questions of,  
19 you know, how can we increase efficiency,  
20 that's why I brought it up.

21 DR. BRADLEY: And the comment I  
22 wanted to make, following up on the Admiral's

1 point about the Army Corps agreement, yes, we  
2 had an umbrella agreement between Army Corps  
3 and NOS that expired a year or two ago. There  
4 was some interest in doing that again at the  
5 NOAA level, because Army Corps wanted to also  
6 establish an agreement with the Weather  
7 Service.

8 So there was some, you know, sense  
9 that well, it makes a lot more -- it makes a  
10 lot more sense to do it at the NOAA level, as  
11 opposed to one with Weather Service, one with  
12 NOS. But in reality, every time we set up an  
13 agreement with the Army Corps, we had to write  
14 a new agreement for each one of those, you  
15 know, partnership projects or whatever.

16 So the umbrella is really more of  
17 a kind of feel good. We promise to keep  
18 working with you, but we're going to have to  
19 continue to write more agreements as we  
20 develop the projects.

21 MEMBER MILLER: Well, one of the  
22 things I see about, you know, partnerships,

1           the PORTS system in particular, is it would  
2           make sense if Army Corps and EPA and, you  
3           know, U.S. Coast Guard and so forth  
4           contributed to that system, because they're  
5           federal users of the system.

6                         But in order to do that, I mean  
7           this is two of your questions, you know, are  
8           there are opportunities for new partnerships,  
9           it just seems like NOAA makes it -- or  
10          whoever, the lawyers, whatever, make it so  
11          difficult to establish those partnerships that  
12          it effectively blocks off that type of  
13          cooperation.

14                        And I don't know. Is it  
15          appropriate for this panel to, you know, to  
16          recommend that, you know -- we've done it a  
17          couple of times in very small areas.

18                        RDML GLANG: I think it would be  
19          appropriate for the panel to recommend  
20          something, if you believe, feel strongly about  
21          this, that you know, streamlined mechanisms  
22          across agencies to develop partnerships and

1           you mentioned some in particular would be  
2           useful.

3                         Recommending how we do it is  
4           probably less useful. I think it's a stronger  
5           message to say, you know, we recognize the  
6           value of partnerships. We recognize some of  
7           the challenges. We recommend NOAA to work  
8           through whatever channels possible, to  
9           streamline those mechanisms.

10                        Not so much for the money side,  
11           but for the outcome side. I think I -- you  
12           guys can jump in on the NOAA side here, but I  
13           think that would be a useful type or flavor,  
14           if you will, of recommendation.

15                        It's less about the how we do it  
16           but more about the why, the importance, and  
17           what are some outcomes that we don't see  
18           happening that we think some partnerships  
19           would help with. They're coming for me.

20                        MEMBER KUDRNA: Scott, a couple of  
21           thoughts for our general discussion, one on  
22           the small side. We've heard about

1 interrelationships with both Sea Grant and the  
2 IOOS Regional Association, and I think we  
3 ought to routinely invite them to our meeting,  
4 if we're in a particular area.

5 We did have someone from Sea Grant  
6 here, but I think the IOOS Regional  
7 Association and the local Sea Grant program  
8 should be invited, so they hear what's going  
9 on and provide some input to us in the future.  
10 I think that would be a good general thing to  
11 do.

12 The second topic is -- and by the  
13 way, I thought this PORTS thing was terrific.  
14 I mean this connected to commerce, talked  
15 about the value, and Ed and I just had a  
16 discussion over lunch, and I think there's an  
17 opportunity to do something bigger, because  
18 when we look at the ability of NOAA to get  
19 resources to do the activities they need to do  
20 and an expanded budget in various PORTS area,  
21 it's difficult, you know. It's a zero-sum  
22 game in Washington.



1                   We heard from the Corps of  
2                   Engineers exactly the same story along the  
3                   way. I think it would be useful to put  
4                   together a working group that talked about the  
5                   subject of port development expansion, and put  
6                   it in a perspective that could be understood  
7                   by Commerce and talked about what the U.S. is  
8                   not doing compared to other countries, in  
9                   terms of capital and infrastructure  
10                  investment.

11                  Really, in order to deal with  
12                  these issues, more capital has to become  
13                  available, and it's a sales activity that has  
14                  to take place at an economic level to the  
15                  country, not at a budget level for NOAA. I  
16                  think something like that would be very useful  
17                  to NOAA and the other agencies, and I think it  
18                  would be well-accepted and viewed by  
19                  Department of Commerce.

20                  VICE CHAIR HANSON: If I could add  
21                  to that, because I think there's a lot of work  
22                  out there already, Frank, and then perhaps a

1 briefing by ASCE, who's done a lot of PORTS  
2 work, not just in relation to the report card,  
3 but just more in general to the value of  
4 ports, as well as the American Association of  
5 Port Authorities, which has put out an awful  
6 lot of stuff and gotten -- upped their game,  
7 in terms of the PR as well, the value of  
8 ports.

9 I know when I started doing this  
10 five or six years ago, it was a difficult  
11 discussion. But almost every port in the  
12 country right now can tell you what a foot of  
13 draft is worth to them, and that means a lot.  
14 It means a lot to people in terms of jobs and  
15 dollars.

16 So and I think the byproduct of  
17 all that, to your point Frank, is once people  
18 realize the value, when we start talking about  
19 infrastructure, you're not talking about  
20 whether it's federal, state or private  
21 dollars. You're just talking about it's got  
22 to get done.

1                   That puts the discussion on a  
2                   whole different plane, who's going to get  
3                   credit for it. In the Southeast, we've seen  
4                   the governors want to take credit for it,  
5                   which is why they're writing some very, very  
6                   big checks for this, and kind of changed the  
7                   dynamic of how these types of things get  
8                   funded.

9                   I keep bringing up the academic  
10                  side, because I really think there's going --  
11                  there's a different discussion to take place,  
12                  that it's not just the federal partners  
13                  anymore for the academic side. You guys  
14                  already have a lot of partners outside the  
15                  federal side, and perhaps your governors and  
16                  your folks there need to take another look at  
17                  their budget, and just see how important your  
18                  institutions are to them.

19                  CHAIR PERKINS: So that cross-  
20                  cooperation with other groups and, you know,  
21                  knowing that, what was it, the U.S. Hydro,  
22                  Hydro U.S. conference is every other year. So

1           that's coming up in 2015. So it could be a  
2           segue for discussion about future meetings,  
3           you know.

4                         We tried something different and  
5           we're able to come to Charleston concurrently  
6           with the NSGIC conference. A small delegation  
7           of us were able to attend, you know, their  
8           Coastal Caucus luncheon, a little cross-  
9           pollination, you know. We haven't had any  
10          NSGIC people come over here, but I didn't  
11          really expect that.

12                        But does it make sense for us to  
13          spend some of this time talking about  
14          locations and dates for future meetings, where  
15          we can continue that, trying to target our  
16          meeting dates at a time and place where we can  
17          get that force multiplier.

18                        I don't like to use the word  
19          "synergy," but you know, if U.S. Hydro is  
20          going to be in Washington, D.C. in 2015, and  
21          this Panel's going to meet in the D.C. region  
22          in 2015, it sounds like we should spend a

1           little bit of time on long-range planning, you  
2           know, of meeting dates and targeted groups.

3                           MALE PARTICIPANT:  Scott.

4                           CHAIR PERKINS:  Because other than  
5           John, we don't get a lot of people in the  
6           room, and John, we really appreciate the fact  
7           that you still come.

8                           MEMBER ARMSTRONG:  When the  
9           hydrographic conference was in San Diego, we  
10          held the HSRP together with it, and one bit of  
11          advice I would have on that if we did that was  
12          not to try to hold the meetings concurrently,  
13          which is what we did in San Diego, because  
14          then the people who were here weren't there,  
15          and vice-versa.

16                           But if it were held just ahead of  
17          or just before or a shortened HSRP meeting of  
18          a day at the beginning or the end, in order to  
19          give the Panel the opportunity to have the  
20          interaction with the group without forcing  
21          people to be in one place or the other, would  
22          be a good deal.

1 CHAIR PERKINS: Yeah, which is  
2 part of our problem here. We're directly over  
3 top of NSGIC, so you can't cross-pollinate  
4 very well.

5 RDML GLANG: So one thing we're  
6 trying to start doing in NOAA is just instead  
7 of going back to the well time and time again,  
8 and start looking for the non-usual suspects  
9 of people to partner with.

10 And, you know, we've been having a  
11 lot of success at the Ocean Service level  
12 partnering, for example, with the Weather  
13 Service, taking advantage of some of their  
14 meetings, because it's a service kind of  
15 mentality.

16 So I'm not saying meeting with the  
17 Weather Service, but there may be some other  
18 groups that you could think about trying to  
19 meet concurrently with or connect with.

20 Maybe it's an economic development  
21 council or a chamber of commerce or something  
22 like that, that really pushes on the economic

1 benefits of what you do rather than talking to  
2 the same kind of folks that know what it is  
3 this group does. Maybe a way to sort of  
4 broaden that that's important visibility.

5 CHAIR PERKINS: That's a good  
6 suggestion. The American Association of Port  
7 Authorities is in progress on what they're  
8 calling a port investment tool kit project.  
9 So they've, you know, they've got a group of  
10 different stakeholders and I've attended two  
11 or three of their meetings.

12 Their intent is to come out with a  
13 road map, you know, with a document and a  
14 series of, you know, tutorials, to help  
15 someone like in Ed's seat at a port authority.  
16 Here's a way, you know, here's your formula.  
17 Here's your tool box of return on investment  
18 and here's your time line and here's how you  
19 have to market it and here's how to bond it  
20 and finance it.

21 In hydrographic surveying, you  
22 know, of the facility, in landside surveying

1 of the facility, you know, it's one bullet  
2 point, you know, in that table of contents for  
3 that investment tool kit right now. But yeah.  
4 So doing something concurrently with the  
5 Association of Port Authorities, you know, may  
6 be a little closer to home for us, but trying  
7 to, you know.

8 We talked about LA/Long Beach, you  
9 know, as the next location, and Merle are we  
10 -- is it nothing disrupting that?

11 RDML GLANG: No. So we had talked  
12 about the next location for a panel meeting  
13 being in the LA/Long Beach area, because we  
14 have some projects there that we think we can  
15 report out on. The Hydro conference is in  
16 March, I believe. So you all are of course  
17 invited to come to that. We don't have to  
18 have a full on panel meeting.

19 Maybe we'd count that one  
20 differently. Maybe you all come as members of  
21 the Panel, but on your own dime, and you know.  
22 Our legislation, our statute of course says we



1           have to meet at least twice a year, and unless  
2           we have extraordinary budget circumstances, I  
3           think the programs are prepared to fund two  
4           meetings a year.

5                         But maybe the hydro conference is  
6           an opportunity to think about a shorter  
7           meeting. I think Andy, were you suggesting  
8           that maybe immediately following, give the  
9           Panel members a chance to digest and discuss  
10          what they heard, and then use that maybe to  
11          inform your next meeting, for instance.

12                        I don't know. I'm just thinking  
13          off the top of my head.

14                        MALE PARTICIPANT: Yeah, and what  
15          would be our guess at a date for the LA/Long  
16          Beach meeting?

17                        CHAIR PERKINS: We haven't even --  
18          so I think that's still somewhat open, but  
19          notionally, I think February is what we were  
20          thinking, the latter part of February. It's  
21          starting to get close to the hydro conference,  
22          of course, but --

1                   MEMBER MILLER: One question. Is  
2                   there any concurrent meeting that anyone's  
3                   aware of in -- or any meetings in Long Beach  
4                   or the California area in that time frame,  
5                   that we might be able to, you know, in some  
6                   way interface with?

7                   CHAIR PERKINS: I haven't looked  
8                   at that yet, Joyce. We can do that.

9                   MS. MEDLEY: Yes. There's the  
10                  Annual Passenger Vessels Association meeting.

11                  CHAIR PERKINS: Annual Passenger  
12                  Vessel Association meeting. Do you know when  
13                  that is, Rachel?

14                  MS. MEDLEY: Yeah. September or  
15                  January 31st to February 4th.

16                  CHAIR PERKINS: And where is that?

17                  MS. MEDLEY: LA/Long Beach.

18                  CHAIR PERKINS: Wow. If I were at  
19                  the VFW, I'd yell bingo.

20                  MS. MEDLEY: And you all probably  
21                  recall that Ed Welsh was the former chairman  
22                  of the HSRP. He is also an active member at

1 the PBA.

2 CHAIR PERKINS: So I think there's  
3 complimentary passes in our future.

4 (Laughter.)

5 CHAIR PERKINS: Who's going to  
6 call Ed and ask him for a freebie?

7 DR. CALLENDER: So we brought up  
8 the idea of trying to work more effectively  
9 with IOOS and with Sea Grant. They both have  
10 national level meetings.

11 Sea Grant Week was held fairly  
12 recently. I'm not suggesting that maybe the  
13 whole Panel would go, but there might be some  
14 opportunities for some levels of cross-  
15 fertilization. Individual Panel members could  
16 probably finagle invitations, if that's what  
17 it takes.

18 But that might be a great venue to  
19 start some of that cross-fertilization,  
20 meeting with those groups.

21 RDML GLANG: So one comment on  
22 scheduling a meeting too early in the year in

1           2015 is that we do have -- we'll have  
2           hopefully six new panel members to bring on  
3           board, and that process, as you all know, can  
4           take a while.

5                        So the January-February time frame  
6           could be a real challenge to get those new  
7           panel members seated. Just as a caution out  
8           there. So something to keep in mind. You  
9           certainly have our commitment to our best to  
10          move those along, but there is a vetting  
11          process that has to happen.

12                      CHAIR PERKINS: So then I have to  
13          ask, what do we think would be a date where  
14          they would be in place by?

15                      RDML GLANG: Well late February, I  
16          thought, was doable, don't you think, Kathy?

17                      MS. WATSON: The solicitation  
18          closes on October the 10th. The evaluation  
19          team is going to be meeting in mid- to late --  
20          or I would say mid- to late October, and then  
21          the package should be submitted through the  
22          NOS, the NOAA chain late October, early

1 November.

2 You've got to give the NOAA  
3 administrator at least 30 days to review the  
4 information, and hopefully make a decision.  
5 So that's pushing it into December, and of  
6 course the terms end January 1, and then if  
7 the people that are appointed accept, then  
8 you've got to go through the HR processing,  
9 NOAA Security.

10 So you've got to give at least  
11 another 30 days for that. So we're looking at  
12 maybe mid-February, late February if possible.

13 FEMALE PARTICIPANT: That's the  
14 earliest.

15 (Simultaneous speaking.)

16 MS. WATSON: And Paul Bradley may  
17 be able to give us a little bit of input on  
18 that.

19 DR. BRADLEY: Sorry, I'm trying to  
20 multi-task and doing a poor job of it. What  
21 was the question?

22 CHAIR PERKINS: How soon can we

1 get those panel members seated?

2 DR. BRADLEY: Oh, that's always a  
3 tough question.

4 CHAIR PERKINS: That's not the  
5 body language we wanted to see.

6 (Laughter.)

7 DR. BRADLEY: I hate giving any  
8 sort of a time table, because then I'm  
9 inevitably wrong, and I hate to be, you know,  
10 held accountable for that. If we get it into  
11 the review chain some time late October, I  
12 know there's a security clearance process in  
13 place.

14 So you know, in terms of swearing  
15 in, I wouldn't be so optimistic to say that it  
16 would happen by January 1st. But it should be  
17 some time in January, I would think.

18 CHAIR PERKINS: We don't have to  
19 go to LA/Long Beach this time, you know. The  
20 hydro conference is March 16th through 19th.  
21 It's in Washington. So if you want to -- if  
22 you think something, we could be creative

1           around that time frame as well. Just another  
2           alternative.

3                         DR. CALLENDER: March is a busy  
4           time in Washington as well, for March Madness  
5           on the Hill. But there's also -- forget that  
6           for a moment -- everybody's in town. So there  
7           may be some venues at that point in time to  
8           maybe find some of the non-usual suspects to  
9           connect with.

10                        CHAIR PERKINS: Yeah, that's a  
11           very busy time on the Hill, a very good time  
12           for force multiplying and cross-pollination,  
13           that's true. We did have a plan to have a  
14           session, you know, or had a discussion about  
15           possibly having a session at this meeting on  
16           contracting-related issues, at Holly's  
17           request, you know.

18                        And after a lot of discussion and  
19           consideration, we took that off the table for  
20           this meeting, and we have the commitment, you  
21           know, to do something at some point coming up  
22           about in that time frame in Silver Spring.

1                   So you know, perhaps doing that  
2                   and doing a D.C. meeting in the spring, I mean  
3                   doing -- I don't know how bad everybody was  
4                   looking forward to going to LA.

5                   DR. CALLENDER:   Sunshine in the  
6                   spring, snow in the spring.

7                   CHAIR PERKINS:    I know.

8                   MEMBER SHINGLEDECKER:  Just avoid  
9                   the cherry blossom time, right.  It's double  
10                  crazy.

11                  CHAIR PERKINS:    I would need to  
12                  look, but probably --

13                  Okay.  Well, we do have a planning  
14                  committee, you know, has been established.  So  
15                  it sounds like we need to have some  
16                  discussion, you know, about east or west.  I  
17                  mean this is -- we have time for a discussion  
18                  now.

19                  MEMBER KUDRNA:   I have a question.  
20                  I understand, Admiral, that we only have  
21                  resources to do twice a year.  But some of the  
22                  others FACAs have scraped up enough resources



1 to send the chairman or the vice chairman to  
2 some companion meeting to represent the FACA.

3 Is there a possibility with some  
4 of these other organizations that we'd do  
5 that, that we allow the chairman or the vice  
6 chairman to represent us and kind of cross-  
7 pollinate with another organization?

8 RDML GLANG: Yeah. I'd be happy  
9 to pay for the vice chair's travel to  
10 Washington.

11 (Laughter.)

12 RDML GLANG: Yeah. That's a good  
13 suggestion, Frank.

14 VICE CHAIR HANSON: Buy him a  
15 Metro card and stuff.

16 (Laughter.)

17 (Simultaneous speaking.)

18 RDML GLANG: No. That's a good  
19 suggestion, and I think after the last -- the  
20 one and only webinar-based public meeting, my  
21 observation was to never have a virtual  
22 meeting again without the chair and the vice

1 chair at least in the room with us. Remember  
2 that, Matt? That was one of our takeaways.

3 So I think that's possible, Frank.  
4 For the right venue, we would certainly  
5 entertain that.

6 VICE CHAIR HANSON: More than just  
7 the vice chair.

8 RDML GLANG: More than just the  
9 vice chair. I would --

10 VICE CHAIR HANSON: But that was  
11 fun.

12 RDML GLANG: Two Metro cards. You  
13 know, and we do have -- you know, Susan's not  
14 that far either, and some of you may have  
15 reasons to come to Washington.

16 MEMBER SHINGLEDECKER: I've  
17 definitely learned that driving Route 50 is  
18 less painful than sitting on a webinar all  
19 day.

20 (Simultaneous speaking.)

21 RDML GLANG: So Scott, this isn't  
22 the only opportunity in the next few days to

1 bring this topic up, and then we also have the  
2 planning committee.

3 I liked your suggestion. Maybe  
4 the planning committee could dissect the  
5 calendars in March for Washington, for  
6 instance, and say okay, how could we leverage  
7 a panel meeting or at least even just a visit  
8 by the chair and the vice chair? How can we  
9 leverage that the most? Just a suggestion.

10 CHAIR PERKINS: I like that  
11 suggestion. We did have a near split vote on  
12 Charleston versus LA/Long Beach, you know. So  
13 at least a few months ago we had a pretty good  
14 base of support for going west.

15 MEMBER SHINGLEDECKER: I still  
16 support going west, and I think Long Beach  
17 would be a great opportunity for the Panel.  
18 Given the discussions that we had, you know,  
19 just an hour ago about partnerships and  
20 working across agencies, that makes lights go  
21 off in my head about the opportunity that D.C.  
22 presents in terms of trying to facilitate

1           those kind of things.

2                       MR. ASLAKSEN: Andy, for the San  
3           Diego trip, that was pretty well-attended  
4           publicly, as I recall. It's been a while, but  
5           it was standing room only at times. So you're  
6           going to get a lot of draw and lot of broad  
7           interest in there. So that's one thing I  
8           recall. It's been -- that was a long time  
9           ago.

10                      MEMBER ARMSTRONG: Time flies when  
11           you're getting old.

12                      (Simultaneous speaking.)

13                      VICE CHAIR HANSON: I think I'd  
14           ask a strategic question, because we're  
15           talking about partnerships, and the question  
16           becomes what kind of partnership do you  
17           develop at these individual conferences, you  
18           know. I have been kind of knowing a message  
19           and travel weekly to a bunch of different  
20           venues. So that's not lacking.

21                      But I was trying to identify what  
22           kind of partnerships you're looking for. It's

1 not -- one thing we found in the  
2 infrastructure discussions, you don't want to  
3 be preaching to the choir. That gets old and  
4 it doesn't get you anywhere.

5 So you need to get outside the box  
6 of folks you normally talk to, to get your  
7 message across. At a Hydro Conference, for  
8 instance, who's your target there? Who's your  
9 partners there? I just came from a meeting  
10 last week in California.

11 California has no money, no  
12 interest in investing in coastal issues.  
13 They're willing to complain about it; they're  
14 willing to push it on the feds, but they have  
15 no interest in doing anything more than that.

16 So if you're going to California,  
17 maybe there's a plan, but let's think about  
18 what that is.

19 MR. ASLAKSEN: Well, wouldn't it  
20 be an opportunity too to have staff attend the  
21 FACA? Is that not unheard of, and put in a  
22 big push from a leg affairs approach to have

1 the right staff, to maybe come and attend the  
2 conference as well, if we could tie that in,  
3 because it is right there, you know, and they  
4 will be there.

5 A lot of this needs to be rolled  
6 up into a big idea of thinking, right. So  
7 coastal intelligence? Let's all wrap that up  
8 in one thing, right. I think that's a big  
9 opportunity.

10 CHAIR PERKINS: So if we were  
11 going to do a straw poll, east or west, right.  
12 Let's try to move the ball down the field a  
13 little bit. Do you want to do a show of hands  
14 or do you want to take a post-it note and  
15 write an E or a W? I don't want to have to  
16 form a standing committee and get out the  
17 Robert's Book of Order and all of that but --

18 MALE PARTICIPANT: Show of hands.

19 MEMBER ARMSTRONG: Straw poll on?

20 CHAIR PERKINS: Show of hands,  
21 okay. East or west for our next meeting.

22 MEMBER ARMSTRONG: Oh.

1                   MEMBER MILLER: You mean in  
2                   conjunction with the Hydro Conference?

3                   CHAIR PERKINS: If we go east,  
4                   we've got lots of other potential targets to  
5                   try and hit it in conjunction with.

6                   So east in conjunction with some  
7                   other beneficial potential partnership  
8                   organization. How's that for a broad brush?  
9                   So that could be before or after the Hydro  
10                  Conference or some other IOOS or other related  
11                  beneficial party. I don't think we can say  
12                  Hydro specifically.

13                 MEMBER MILLER: It's a little hard  
14                 to say. I mean if I knew that there was a  
15                 really good IOOS opportunity on the West  
16                 Coast, that would sway my vote that way. I  
17                 mean if we could get some research on what  
18                 potential --

19                 The Passenger Vessel Association  
20                 is exciting, but I'd be more interested in an  
21                 IOOS overlap personally. So if there were  
22                 something like that on the West Coast, that

1 would sway me or depending on where it is.

2 CHAIR PERKINS: So do you think we  
3 could be prepared to have a more intelligent  
4 and higher fidelity discussion in the next 48  
5 hours before we adjourn on Thursday?

6 So we can look at our calendars  
7 and do our research, and each one of us will  
8 come back to the table with a recommendation  
9 of some other party that potentially would be  
10 a beneficial concurrent, consecutive --

11 DR. CALLENDER: So I can reach out  
12 to the IOOS folks, and see if they have things  
13 going on. I mean there's three IOOS  
14 associations on the West Coast too. So  
15 there's maybe some venues there as well. I  
16 can sort that one out pretty quickly.

17 MEMBER KUDRNA: Well, I could  
18 help. I'm on the IOOS Association Executive  
19 Committee, and SECOORA is based at La Jolla,  
20 one of the largest ones. They have terrific  
21 facilities too there with fisheries. So that  
22 might be a possibility. I'll contact the



1 executive director and see what they have  
2 going.

3 Public Comment

4 CHAIR PERKINS: Okay, all right.  
5 We will visit east or west again on Thursday.  
6 One more call for public comments?

7 (No response.)

8 CHAIR PERKINS: Okay. At least I  
9 officially asked.

10 VICE CHAIR HANSON: John Q. Public.

11 MEMBER KELLY: I've got just a  
12 procedural or a concept type of thing. If  
13 we're looking to get partners, if we identify  
14 these partners, what is the plan? To bring  
15 them to this meeting and then stand them in  
16 front of the room and tell them we want to  
17 work with them or we want their money or --

18 I'm not understanding exactly how  
19 our normal FACA meeting would really directly  
20 tie into that partnering concept, that we  
21 would try to pull people in and talk to them,  
22 or we would attend their meetings and try to,

1           you know, slip behind them and grab their  
2           wallet or, you know.

3                         It's all stuff I'm very willing  
4           and able to do. I've done it before. I'm  
5           pretty good at some of that.

6                         (Laughter.)

7                         MEMBER KELLY: But you know, I  
8           think we really have to question our concept  
9           about partnership, and if our FACA meeting is  
10          really the right venue, or if we need to  
11          identify some targets, find some people within  
12          this group, and maybe get a delegation to make  
13          a phone call or to talk it through or  
14          something like that.

15                        I mean, you know, you generally  
16          hit more targets if you aim with a rifle than  
17          if you shut your eyes and shoot a shotgun out  
18          the window.

19                        So I think we have to do a little  
20          more work in refining who we think our  
21          partners might be, and what a valid reason,  
22          not just for us but for them, some commonality

1 of purpose, and then try to find, you know,  
2 maybe an offline way to develop that a little  
3 bit, rather than just hoping that they may or  
4 may not be at a physical geospatial location,  
5 where we're going to have to have our meeting.

6 I think, you know, I'm entirely in  
7 favor of the whole thing, and I think we can  
8 find some more partners, and I think we can  
9 certainly, through the IOOS and the IOOS RA  
10 things. I know that the Mid-Atlantic Regional  
11 Association has been very active with some  
12 shareholder, you know, and stakeholder  
13 meetings and outreach, and with power  
14 companies and people like this, you know,  
15 where there's dollar value.

16 And then through the data that can  
17 be provided for pre-positioning their response  
18 trucks and what-not at the right time and the  
19 right places. Maybe we need to talk to some  
20 of those groups and find out. Maybe there's  
21 some synergy there.

22 But I'm a little mystified as to

1           how we make a partnership agreement as part of  
2           our FACA meeting. I'm just questioning the  
3           process of that. If we do have a meeting in  
4           D.C., and there might be three or four people  
5           we may or may not wish to partner with, how do  
6           we do it in conjunction with our meeting?

7                         Do we pull them in or is it a  
8           sidebar meeting at a dinner someplace or --  
9           because I've been asked to partner an awful  
10          lot of times. I've asked other people to  
11          partner with me over the years, and I have  
12          found that one of the least productive ways to  
13          do that is to grab somebody and put them in  
14          front of a bunch of people he may or may not  
15          know, and ask him to make a commitment,  
16          especially if it involves funding.

17                        So you know, I'm in favor of  
18          partnerships. I think we just have to do it  
19          -- kind of devise the right way to do it, and  
20          each partner might require a different type of  
21          approach. So I think we need to identify our  
22          partners long before we decide we're going to

1           have our meeting in either Washington or Long  
2           Beach.

3                           I don't care. I've, you know,  
4           traveled so many damn times. I don't even  
5           know how many times I've been in Long Beach.  
6           So it has no allure to me where we meet.

7                           But, you know, I think we just  
8           need to find something that would be of  
9           interest to this group, and then also set our  
10          partnership program, you know, and give that  
11          some traction and build a strategic plan for  
12          that.

13                           MEMBER BLACKWELL: May I just ask  
14          if we can define what it is we want a partner  
15          to do?

16                           MEMBER KELLY: Yes.

17                           MEMBER BLACKWELL: I mean I think  
18          we need to have an objective. What do you  
19          want us to work on? What do we want to work  
20          on together, and then let that what helps us  
21          define who our partners are.

22                           Now I think Sea Grant and IOOS and

1 all the other components we've talked about,  
2 groups that we've talked about are probably  
3 candidates. But what are the big things that  
4 we want to focus on doing, so we can identify  
5 the appropriate partners?

6 MEMBER KELLY: My viewpoint is we  
7 need to draw partnerships from a much broader  
8 base, and either the purely academic or  
9 scientific communities, and get buy-in from  
10 insurers, reinsurers, coastal managers, you  
11 know, just a host of people. Power companies,  
12 a lot of people who could -- ways that would  
13 have value for NOAA products and data, that  
14 would be willing to come in and say yes, this  
15 is important to us.

16 So perhaps the partnership is just  
17 getting endorsements from some of these  
18 people. That's an easy thing to do. Do you  
19 say this has value, you would be willing to,  
20 you know, give us a letter or make -- or  
21 support or sign on to this, so that we can get  
22 a broader base, you know, for the value of

1           some of this data.

2                           Which then leads us towards  
3           finding better ways that there's this many  
4           people that have interest in it, and either go  
5           toward expanded federal funding for whatever  
6           program it is, not just PORTS, although PORTS  
7           should be federally funded.

8                           I have to say that; it's a reflex,  
9           and you know, or we bring people in to  
10          recognize the value of some of this data and  
11          what-not to them, and maybe get them to be  
12          constituents to also help to either fund or  
13          have their lobbying groups or whatever help to  
14          put pressure to get this thing to preserve.

15                          I don't know. I think there's a  
16          lot of different things you can expect from  
17          partnership. You'll never find anybody  
18          against partnership. But when it starts  
19          rolling down and asking well, what do you want  
20          your partner to do, and what do you think he's  
21          going to want you to do, you know, that's  
22          where it gets a little tricky.

1 I think we have to define our  
2 objectives and partnership a little bit better  
3 before we just, you know, find a partner in  
4 D.C. or Long Beach. Having been to both  
5 places, I'd be very wary of any partner I'd  
6 find in either of those locations.

7 (Laughter.)

8 CHAIR PERKINS: Sounds like we're  
9 coming to Kansas City.

10 MEMBER KELLY: This is just  
11 throwing things against the wall at this  
12 point, but you know, just some concepts and  
13 ideas about what do we want from partnership.  
14 We need to define some of that.

15 Do we want somebody to just  
16 provide money? Do we want somebody to help us  
17 to become part of our broader group of value-  
18 added or endorsement people? Or do we -- what  
19 do we want from them, and what can we expect  
20 they're going to want back from us, because  
21 most partners, you know, kind of want  
22 something in each direction.



1 CHAIR PERKINS: Mr. Dasler.

2 MR. DASLER: Since it's semi still  
3 public comment, I think I would just say I  
4 think before you can define partnerships is,  
5 and I think if I understood the context of  
6 what was being asked there, of how the HSRP  
7 can help NOAA is how you vet out --

8 NOAA has a lot of great data, and  
9 there's tremendous value in that. But it's  
10 not really being used to the fullest extent  
11 and its capabilities. So what are the ideas  
12 that the HSRP can bring forward, that all of  
13 the sudden partners are going to come out of  
14 the woodwork and say yeah, we will help you  
15 support that?

16 I mean some of it that comes to  
17 the top of my mind is higher resolution data.  
18 I mean we're doing a lot of work with the  
19 pilots in trying to get higher resolution data  
20 onto their portable pilot units.

21 I mean can Google Earth or other  
22 partners, Esri, use some of the data and

1           develop products and partner in developing new  
2           technologies and new advancements for the use  
3           of the data that's there?

4                        So I think maybe the first step is  
5           coming up with some ideas, you know, rather  
6           than trying to figure out who the partners  
7           are, what are some of the new insights that  
8           can come forward, that are going to --  
9           partners will rise up out of the woodwork to  
10          help move that forward?

11                      CHAIR PERKINS:   That's good input.  
12          Kyle, can you give us instructions on the  
13          transportation logistics?  So we have one  
14          public comment.

15                      MS. MERSFELDER-LEWIS:  Are there  
16          ways of -- the question is from Chris Freeman,  
17          who's a senior geologist with  
18          geodynamicsgroup.com.

19                      His question is there are several  
20          working groups within the Corps districts, not  
21          just navigation units that acquire high  
22          accuracy surveys for regional sediment

1 transport modeling, sand searching, shoreline,  
2 beach profile surveys, et cetera.

3 As a contractor for both  
4 Wilmington, Norfolk and Baltimore Corps  
5 Districts, we have observed several areas  
6 within NOAA, priority areas, that have  
7 existing, modern data. It appears there is a  
8 data disconnect in some areas between the  
9 Corps and NOAA.

10 Under the idea of map once, use  
11 multiple times, it seems there could be a  
12 better way to let all stakeholders know of  
13 existing data to potentially reduce effort or  
14 increase knowledge of a particular area. NOAA  
15 has been doing a great job with SeaSketch,  
16 which could be a good platform to achieve  
17 better cross-talk on existing and modern data  
18 sets.

19 While SeaSketch could be updated  
20 by NOAA and organized a little better, I think  
21 there is a great potential to keep both NOAA  
22 and the Army Corps of Engineers informed on

1 data inventory. I can expand if needed.

2 MR. WARD: We're running short on  
3 time.

4 MS. MERSFELDER-LEWIS: We  
5 acknowledge the comment and thank you. We  
6 will have somebody get back to you.

7 RDML GLANG: So we can actually  
8 prepare an answer for this and read it back  
9 into the record here tomorrow or Thursday. It  
10 was a great question, and clearly Mr. Freeman  
11 is well-informed about what IOCM has been up  
12 to. So that's great to read.

13 MR. WARD: All right. We board the  
14 shuttle at 2:45, so that's in nine minutes.  
15 So you have time to run up to your room  
16 quickly and come back down. We will be outside  
17 at the Wando Terminal. So tennis shoes or  
18 shoes are good. Don't wear sandals, and then  
19 we'll be on the bus. So 2:45 in the lobby.

20 CHAIR PERKINS: Thank you, Kyle.

21 (Whereupon, the above-entitled  
22 matter went off the record at 2:37 p.m.)

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**9**

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Hydrographic Services Review Panel

Before: NOAA

Date: 09-16-14

Place: Charleston, SC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.



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