

## 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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WEDNESDAY, APRIL 8, 2015

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The Hydrographic Services Review Panel met in the Long Beach Hilton International Conference Room, 701 West Ocean Boulevard, Long Beach, California, at 8:30 a.m., Scott Perkins, Chair, presiding.

## MEMBERS PRESENT

SCOTT R. PERKINS, HSRP Chair

WILLIAM HANSON, Vice Chair

ANDY ARMSTRONG\*

LARRY ATKINSON

RADM KENNETH BARBOR

JULIANA BLACKWELL\*

DR. LAWSON W. BRIGHAM

RADM EVELYN FIELDS

ED J. KELLY

DR. FRANK KUDRNA

DR. GARY JEFFRESS

CAROL LOCKHART

DR. DAVID MAUNE

JOYCE E. MILLER

CPTN. SALVATORE RASSELLO

SUSAN SHINGLEDECKER

\* Non-voting members

## ALSO PRESENT

REAR ADMIRAL GERD F. GLANG, HSRP Designated  
Federal Official

HONORABLE ALAN LOWENTHAL, U.S. House of  
Representatives, California's 47th  
Congressional District

MICHAEL CHRISTENSEN, Senior Executive Lead,  
Supply Chain Optimization, Port of Long  
Beach

CAPTAIN JENNIFER F. WILLIAMS, Sector  
Commander, Sector Los Angeles Long  
Beach, US Coast Guard

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

GLENN BOLEDOVICH, Chief, NOS Policy and  
Constituent Affairs Division

PAUL BRADLEY, Policy Advisor, National Ocean  
Service, NOAA

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

DANA CACCAMISE, Pacific Southwest Regional  
Geodetic Advisor, National Ocean  
Service, NOAA

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

ASHLEY CHAPPELL, IOCM Coordinator, Office of  
Coast Survey, NOAA

JEFF FERGUSON, California Navigation  
Manager, Office of Coast Survey, NOAA

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

AUDRA LUSCHER-AISSAOUI, Resilience Program  
Manager, Center for Operational  
Oceanographic Products and Services

LYNNE MERSELDER-LEWIS, HSRP Coordinator

RUSS PROCTOR, Chief, Navigation Services  
Division, Office of Coast Survey, NOAA

PETER STONE, Technical Director, Center for  
Operational Oceanographic Products  
and Services

BIANCA TERRY, Office of Assistant  
Administrator, National Ocean Service, NOAA

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

2 (8:32 a.m.)

3 CHAIR PERKINS: Good morning.

4 Well welcome, to the 28th meeting of the  
5 Hydrographic Services Review Panel. While the  
6 Members have changed since the Panel was formed  
7 in 2004, the Panel continues to advise NOAA on  
8 its Hydrographic Survey programs, projects, and  
9 services.

10 Good morning, my name is Scott Perkins,  
11 and I have the privilege of serving as the  
12 elected Chair of the Panel.

13 We have a whole three days of meetings  
14 ahead of us, including many interesting speakers  
15 and presentations, updates on NOAA programs, the  
16 report on the Long Beach Precise Navigation  
17 Project, and interactive breakout sessions on  
18 Coastal Intelligence and Coastal Resiliency.

19 So we have much to do together over the  
20 next three days. To help us start this meeting  
21 off, it's my privilege to introduce Rear Admiral  
22 Glang, the Director of NOAA's Office of Coast

1 Survey, and the designated federal official for  
2 the Panel. Admiral.

3 RADM GLANG: Thank you, Mr. Chair. Good  
4 morning, I'm Gerd Glang, Director of Coast  
5 Survey, the designated federal official. I'd  
6 like to welcome all the Panel Members.

7 We've got tremendous turnout, I  
8 appreciate that. And we have lots of staff to  
9 help facilitate and support us throughout the  
10 next three days and I welcome our guests, our  
11 stakeholders and partners.

12 Just a quick note on safety, if we have  
13 to leave this room for some emergency, it's best  
14 to go down the main hallway and down the  
15 escalators, but there are alternate exits that  
16 are marked exits. So we should have no trouble  
17 getting out of here.

18 And the facilities are just a short walk  
19 down the hall on your left, if you hadn't found  
20 those yet. So that's all I had for this morning.

21 CHAIR PERKINS: Great, thank you. Just  
22 one note in the meeting. It is a public meeting,

1 it is being recorded. There is a Court Reporter  
2 seated at the back of the room. The logistics of  
3 his seat in relationship to this table and your  
4 name placards, he is not able to see and identify  
5 who is speaking by your name placard.

6 So please try to remember to introduce  
7 yourself when you're speaking, for the benefit of  
8 the Court Reporter you know, to be able to  
9 accurately capture in the transcripts of the  
10 meeting, you know who is providing what comment.

11 You all have an agenda in front of us,  
12 but our first order of business is our guest  
13 speaker.

14 RADM GLANG: And some self-introductions.

15 CHAIR PERKINS: Oh, I'm sorry, thank  
16 you. And self-introductions of the people at the  
17 Panel.

18 MEMBER JEFFRESS: Hi, I'm Dr. Gary  
19 Jeffress, Professor of Geographic Information  
20 Science at Texas, A&M University, Corpus Christi.

21 MEMBER KUDRNA: Frank Kudrna, I'm with  
22 AECOM URS Corporation, I serve as the Chief

1 Engineer of the Port of Chicago.

2 MEMBER BARBOR: Ken Barbor, I'm the  
3 Director of Hydrographic Services Research Center  
4 at University of Southern Mississippi.

5 MEMBER FIELDS: I'm Evelyn Fields, and  
6 at present I'm retired.

7 MEMBER BLACKWELL: Morning. I'm Juliana  
8 Blackwell, the Director of NOAA's National  
9 Geodetic Survey.

10 MEMBER BRIGHAM: Morning, I'm Lawson  
11 Brigham, Professor at University of Alaska  
12 Fairbanks.

13 MEMBER KELLY: Good morning. Ed Kelly,  
14 I'm Executive Director of the Maritime  
15 Association of the Port of New York and New  
16 Jersey.

17 MR. BOLEDOVICH: I'm Glenn Boledovich,  
18 I'm the Policy Director of the National Ocean  
19 Service.

20 DR. CALLENDER: Good Morning, I'm  
21 Russell Callender, I'm the Acting Assistant  
22 Administrator of NOAA's Ocean Service.

1           RADM GLANG: Good morning. Gerd Glang,  
2 Director of NOAA's Office of Coast Survey.

3           CHAIR PERKINS: Good morning, Scott  
4 Perkins, I'm the Director of Federal Programs and  
5 Surveying and Mapping. I'm headquartered out of  
6 Austin, Texas.

7           VICE-CHAIR HANSON: I'm Bill Hanson of  
8 Great Lakes Dredge and Dock Company.

9           MEMBER ARMSTRONG: I'm Andy Armstrong,  
10 I'm the NOAA Co-Director of the NOAA-University  
11 of New Hampshire Joint Hydrographic Center.

12          MEMBER RASSELLO: I'm Captain Salvatore  
13 Rassello, Director of Safety of Navigation,  
14 Carnival Cruise Lines.

15          MEMBER SHINGLEDECKER: Susan  
16 Shingledecker, Vice-President, BoatUS, Boat  
17 Owners Association of the United States.

18          MR. STONE: Hello, I'm Peter Stone with  
19 the NOS' Center for Operational Oceanographic  
20 Products and Services. I'm the Technical  
21 Director representing Rich Edwing today.

22          MEMBER ATKINSON: Morning. I'm Larry

1 Atkinson from Old Dominion University in Norfolk,  
2 Virginia.

3 MEMBER LOCKHART: Carol Lockhart, I'm a  
4 woman-owned small business owner and  
5 hydrographer.

6 MEMBER MILLER: Joyce Miller, Director  
7 of Seafloor Data Services at the University of  
8 Hawaii.

9 MEMBER MAUNE: I'm Dave Maune, Senior  
10 Remote Sensing Project Manager, of Dewberry  
11 Consultants in Fairfax, Virginia.

12 CHAIR PERKINS: Great and we have on the  
13 phone with us, Dr. Larry Mayer, Larry are you  
14 here?

15 (No audible response)

16 CHAIR PERKINS: Okay, Larry is the  
17 Co-Director of the Center in New Hampshire,  
18 Co-Director with Andy Armstrong.

19 So good morning distinguished Panel  
20 Members. We have three new Panel Members, and we  
21 have some re-appointed Panel Members, so our next  
22 agenda item is an official swearing in and the

1 Oath of Office. So new Members and Re-appointed  
2 Members if you'll find your way to the front?

3 DR. CALLENDER: I'd like you all to  
4 stand in front of the flag, if you would?

5 I'd like you all to raise your right  
6 hand please?

7 (Whereupon, HSRP Members were sworn in)

8 DR. CALLENDER: Congratulations, thank  
9 you.

10 CHAIR PERKINS: So we have a table at  
11 the front of the room with name placards and  
12 mics, you know, for our speakers this morning.  
13 So if our speakers can find their way to the  
14 front of the room and be seated at the  
15 appropriate spot at the table please.

16 Well good morning, Panelists. You know,  
17 first on our agenda, it's an honor and a  
18 privilege to be able to introduce Congressman  
19 Lowenthal.

20 So Congressman Alan Lowenthal during his  
21 two decade tenure as a city councilman, and the  
22 California legislature from this region. It's

1 Congressman Lowenthal's dedication to common  
2 sense and bi-partisan solutions that earned him a  
3 reputation among his colleagues and constituents  
4 as one of the most respected and effective  
5 Legislators in both Long Beach and Sacramento.

6 Congressman Lowenthal is currently the  
7 U.S. House of Representatives California, newly  
8 created 47th District representative. So without  
9 further ado, please join me in welcoming,  
10 Congressman Lowenthal.

11 (Applause)

12 HON. LOWENTHAL: Thank you. I'm really  
13 pleased to be here. You know, you're never too  
14 old to learn something. Yesterday, I spent a  
15 very important afternoon with some of the people  
16 that are here from NOAA, and the Jacobsen Pilot  
17 Service going through my port, the Port of Long  
18 Beach which I've represented now since being on  
19 the city council, and first fought with very  
20 contentiously and now become a great, great  
21 supporter.

22 The story of what's happened out here

1 with our ports, is really of a national and  
2 international significance. We should all be  
3 very, very proud of what California ports have  
4 done in terms of leading the world in moving  
5 towards new clean technologies, leaning towards a  
6 real acceptance of impacts of climate change, and  
7 what we can do about it.

8 So and I've represented this area for  
9 so, so long, first on the city council, and the  
10 state, now at the federal government. And it's a  
11 wonderful district.

12 But yesterday going through with NOAA  
13 and the Jacobsen Pilot Service, as my  
14 understanding and how the Ports are changing, and  
15 the world is changing in terms of global trade,  
16 with new alliances developing and ships getting  
17 larger and having more and more of an impact in  
18 terms of the size of what we're going to be  
19 bringing, it's just a different world that's out  
20 there.

21 And to make that world work, is really  
22 what you are all here to, and that's to provide

1 us with the information and hydrographic  
2 understanding of, you know, what the depths are,  
3 and where we are.

4 Because it has to be, there can be no  
5 mistakes, no mistakes. And I'm proud to say with  
6 the partnership between NOAA and the private  
7 sector, and both to protect our communities, and  
8 to allow this tremendous amount of trade that is  
9 going on and to do it in the most positive way.

10 And so the fact that you are, really are  
11 charged with your volunteers who come together to  
12 learn, and to provide us with the information is,  
13 I'm just really pleased to be here and to support  
14 what you do.

15 So a little bit about, I just already  
16 mentioned it, I just want to mention a few things  
17 about you know, the importance of safe and  
18 efficient ports. And I've mentioned that, we  
19 have such a wonderful story out here to tell  
20 about that.

21 And it's a great partnership, and that  
22 partnership could not have happened without your

1 input and your ongoing input. Precise  
2 navigation, pilot's programs in the ports to make  
3 information available. And it's the fact that as  
4 boats get bigger, we need more and more real time  
5 information and just what you provide.

6 For me, what you do is also critically  
7 important in another way, and that is what are  
8 the long term impacts going to be of climate  
9 change? And you no longer, even though I believe  
10 that the Congress is still in denial about,  
11 really grappling with the issue, which it is, we  
12 cannot any longer I think out here especially  
13 with being a coastal community, I represent this  
14 coastal part of where we are right now, in Port  
15 of Long Beach and the Long Beach Coast.

16 We're talking about sea level rise here  
17 of two to seven feet by the end of the century.  
18 I mean that is staggering for us, staggering for  
19 us. You know over the next 85 years to have sea  
20 level rise potentially that high with our  
21 infrastructure, and impacts upon our communities  
22 is just tremendous.

1           And so I've kind of taken that on more  
2 as just kind of as a warning, and you know, not  
3 that I really have -- you know I just want to be  
4 part of this wave. I don't really think -- and  
5 that is that I've taken on the Congress to become  
6 the Chair of the Safe Climate Caucus.

7           And that Safe Climate Caucus really  
8 deals with how we're going to educate ourselves  
9 and others about what the impacts. And how we've  
10 upped climate change are going to be on the  
11 nation, and the impacts are so static to me that  
12 we just really need to begin to talk about it and  
13 try and come up with some kind of rational  
14 planning about that.

15           I'm also on the House Natural Resources  
16 Committee. I'm, which I just became a ranking  
17 member of the Subcommittee on Energy and Minerals  
18 Subcommittee.

19           And I really think that that to me has  
20 become a great learning experience also because  
21 it is now allowing me to kind of raise some  
22 issues to become much more aware of how do we

1 balance the responsible use of all of our federal  
2 lands.

3 Purposes that Americans really come and  
4 treasure their federal lands for recreation, for  
5 aesthetics, preservation, fishing, hunting, and  
6 balance that with resource development. And  
7 that's been the most contentious that last one,  
8 is resource development, how we balance it.

9 And I think that that would lead us  
10 hopefully to beginning to have a much more, in  
11 the future work with my colleagues, to have a  
12 future energy policy that would begin to  
13 prioritize what are the fuels of the future. And  
14 just start that process of doing that and begin  
15 to really kind of set up some of those  
16 priorities.

17 So I look forward to working with you.  
18 That's why I'm here, and again I'm just here to,  
19 I mean without your input, without your helping  
20 on strategic planning, our country is already,  
21 you know, we're falling behind in our  
22 infrastructure.

1           But if we don't have the information  
2           it's, we're in very serious trouble as a nation.  
3           So I really applaud all the work that you do.  
4           Thank you.

5           (Applause)

6           CHAIR PERKINS: I know the Congressman  
7           has a busy schedule today, so if, what we would  
8           like to do is entertain questions for the  
9           Congressman now before we move on to the  
10          following presentations out of respect for your  
11          schedule. So with that I'll go first.

12          And Congressman, can you tell us a  
13          little bit about the Freight Infrastructure  
14          Reinvestment legislation that you know, that  
15          you're working on?

16          HON. LOWENTHAL: Yes, a little  
17          background since you've asked me the question,  
18          how much time do I have, an hour?

19          (Laughter)

20          HON. LOWENTHAL: I mean come on.

21          CHAIR PERKINS: Our charter doesn't  
22          allow for filibusters, but if --

1           HON. LOWENTHAL: All right. This is not  
2 a filibuster, but many of you are not from  
3 California I gather. You're really from the rest  
4 --

5           So I have to tell you where I am on this  
6 bill and what I'm trying to do on the bill is  
7 that -- I was elected to represent this district  
8 right here on the city council. And I was a  
9 college professor, and this was many years ago.  
10 This was in 1992.

11           And I walked this district from the Port  
12 of Long Beach to the Redondo Avenue which is just  
13 a couple of miles going towards the east, and you  
14 know, right from the ocean up to about 10th  
15 Street.

16           And I would tell people why I was  
17 running in 1992, and they all said that's really  
18 interesting, Alan why you're running. But will  
19 you tell me what's this black soot in the window?

20           And I kept saying I don't really know  
21 what that is, I had the same black soot in my  
22 window. And I said, but if you'll elect me,

1 we'll kind of work on a task force and we'll  
2 figure out what that black soot is. And we'll  
3 start to research the matter, you know.

4 And that has led me on a 20, if not 23  
5 year now odyssey to find out what that black soot  
6 is, which much of it are the particulates from  
7 the tremendous concentration of ships, and  
8 trains, and trucks. In 1992 we weren't even  
9 dealing with some of those issues.

10 And so in doing that, California made  
11 some tremendous strides. People came together to  
12 figure out how we can make these ports more  
13 efficiently? How we can make them green? How we  
14 can keep them open longer? How do we bring them  
15 new technology? How do we work together and not  
16 have confrontations?

17 Because there had been for many, many  
18 years kind of a hundred year war between some of  
19 our ports and the communities. But people began  
20 to see that we could change the goals. We could  
21 change the goals from one in which environmental  
22 protection was thought of as a mitigation, after

1 the decisions were made, to saying that economic  
2 development and environmental protection go hand-  
3 in-hand and they have to be common goals, common,  
4 and have to invest.

5 And so that led me in the state  
6 legislature, which I didn't quite get through,  
7 the Governor vetoed it. But a bill which was a  
8 container fee in the mid-2000s, which balanced  
9 both economic development of the ports, how we  
10 could build, invest in infrastructure.

11 Regional planning and having  
12 stakeholders at the table and investing on having  
13 those that owned the goods pay for some of the  
14 this economic development. And it was a  
15 tremendous coalition of people who basically were  
16 in support of that.

17 I actually had bipartisan support in the  
18 California legislature. Republicans voted for  
19 some, you know a fee, a container fee. And that  
20 was just, that was a great, great victory. But  
21 the Governor didn't quite sign it.

22 That gets us now to the -- and part of

1 the reasons were that it would be very hard for  
2 California to do something like that, when in  
3 fact the nation, it would just put us at a  
4 competitive disadvantage if we were going to  
5 charge for every container that came in, a small  
6 fee to build an infrastructure and environmental  
7 protection. It would put us at a disadvantage.

8 Fast forward to now, where you know, I'm  
9 now in Congress. And I've learned after working  
10 in the state legislature for 14 years, working on  
11 these issues, I learned that we're going to do  
12 the reauthorization.

13 There's a tremendous amount of momentum  
14 to have freight in the discussion because of all  
15 the work of advisory committees, and freight  
16 coming up to the forefront, and people realizing  
17 that you know we have a freight system that's a  
18 Rube Goldberg kind of design.

19 It does, nothing is coordinated, nothing  
20 was done to plan it. There's no redundancy, you  
21 know we don't know what's going to happen when  
22 there are real problems that really hit us in how

1 we move goods throughout the nation.

2 And so there's a lot of momentum in that  
3 direction. And so this just builds upon that.

4 This says, this is a federal bill that says,  
5 okay, let's have a sustainable, let's have a  
6 system that's designed that we all kind of, based  
7 upon all the input of both public and private  
8 agencies.

9 The people that are working on that, its  
10 state advisory systems, that were asked for in  
11 the last bill but were only voluntary.

12 Let's set up a system where we will  
13 build infrastructure in the country. There will  
14 be monies that go to states on a competitive  
15 basis. And monies that go to states on a formula  
16 basis. And we will pay for that, and it will go  
17 through the planning process that I think that is  
18 kind of agreed upon now.

19 How we can kind of get local input into  
20 the decision making and keep as much of the  
21 decision making in the region as possible,  
22 encourage regionalization, and encourage

1 environmental protection, and pay for it with a  
2 way which is when any goods are moved in the  
3 country, there's a bill for that.

4 This would be one percent on the people  
5 who owned the goods, who pay for the movement of  
6 their goods, and throughout the nation. It would  
7 generate about \$8 billion a year. It would be  
8 put into a trust fund for that. It would go for  
9 competitive, or that would go for formula, that's  
10 our best estimates on how much would be in the  
11 fund.

12 It also has a definitive competitive  
13 side, monies been set aside for zero emission  
14 projects and so we're kind of proud of that too.

15 CHAIR PERKINS: Do you have a companion  
16 Senate bill that would be introduced, what's the  
17 future look like for the bill?

18 HON. LOWENTHAL: Well, I think trying to  
19 get as much support as possible, is right now  
20 the, where, we're trying to be part of the  
21 discussion at this moment on and focusing on T  
22 and I in the House side. And to try to, we do

1 not have yet a Senate companion but I think  
2 that's absolutely essential.

3 I think the real question is going to be  
4 that makes this unique, is much of it is where  
5 the President is, do we really want a sustainable  
6 funding stream?

7 Are we going to have something that's  
8 put into a lock box that's just going for freight  
9 infrastructures, going to have a process by which  
10 the money is decided, that everybody agrees upon?

11 And are we going to build the kinds of  
12 things or support the kinds of things on an  
13 ongoing basis and say it's not going to come out  
14 of the national treasury on an ongoing basis.  
15 But just like the gasoline tax, it's going to be  
16 paid for by the users. And the people who own  
17 the goods.

18 And they're going to get the better  
19 system. And they're going to get a system that  
20 works. Now they have a system that doesn't work  
21 and we all know that. So at least they're going  
22 to get something that works, if it can be planned

1 in the right way.

2 But that's a tough sell at this moment.  
3 Right now you know, the feeling of the Congress  
4 and for whatever reason, and I'm not even denying  
5 that we're so polarized, is that there are just a  
6 significant number of people who have such  
7 distrust in any funding coming in. There's such  
8 distrust because of what they say has been  
9 abuses.

10 Whether that's, I personally don't  
11 subscribe to that but I can certainly understand  
12 where they're coming from. And it makes it very,  
13 very difficult. But I don't think, we don't have  
14 people addressing this issue and figuring out how  
15 we can have a sustainable funding stream. And  
16 how we're going to pay for this.

17 You know, the President wants to bring  
18 in one time monies or a couple years money, and  
19 which we should be, a repatriation and I think  
20 that's a great, I think that's a great idea.

21 But I think that we still have to  
22 address the issue of a sustainable funding

1 stream, no matter how little, or how much, or  
2 what you're going to do, if it's going to be  
3 successful. And that's really what I do. I also  
4 bring to the table the fact of formula grants.  
5 Again I think that we have to maintain the system  
6 that we already have.

7 VICE-CHAIR HANSON: Congressman, if I  
8 can dig just a little deeper in the time we have  
9 available. In your bill or in your  
10 interpretation of infrastructure, does the word  
11 infrastructure include the foundational  
12 information such as the water elevations, and  
13 position of the shoreline and you know the  
14 contours of the land?

15 You know, is that type of  
16 information included in that definition of  
17 infrastructure? Because that hits closer to  
18 home, to this Panel, and the programs on  
19 positioning, and navigation, and observation, you  
20 know that this part of NOAA's already engaged in.

21 And that this Panel, this Panel could be  
22 advocates, you know for your bill if we have a

1 clearer understanding of --

2 HON. LOWENTHAL: I need to have my  
3 staff, because if it isn't, it should be. So  
4 we're talking about the language how it is. It's  
5 at 37 pages, so I'm not exactly sure how we've  
6 defined that, but I would certainly entertain  
7 working with you.

8 VICE-CHAIR HANSON: Great, great. Thank  
9 you, sir. Because I think this is --

10 HON. LOWENTHAL: I think that would be  
11 very important to have. Again as I say, I'm  
12 saying that after seeing yesterday, just how  
13 critical all of this is, you know, we're talking  
14 about inches.

15 We're talking about kind of doing,  
16 getting ships through that I just close my eyes  
17 and say, no way is that going to happen. No way.  
18 And you do it, and without that kind of online  
19 information all the time, with things changing it  
20 would be a disaster for us. And we're talking  
21 about moving almost half the goods of the nation.  
22 We're not talking about light weight stuff.

1           So I really appreciate what you're  
2 hearing and I will work with you. Because this  
3 is really about all of that, and we need that  
4 information. Both land side and you know --

5           And so I would be very supportive of  
6 that, I just don't see how we build a system  
7 without taking this into account. And really  
8 what I'm trying to do is to get us to think in  
9 terms of a system, of how we build it and what's  
10 really needed. And how do we protect people  
11 while we're doing it?

12           CHAIR PERKINS: Are there other  
13 questions from the Panel?

14           VICE-CHAIR HANSON: Congressman, again  
15 thanks for being here today. And you know your  
16 ships, and your ports, and coastal issues over  
17 the years is well known and thank you for that.

18           I actually got to start my career out  
19 here in the original Port of Los Angeles  
20 deepening back in 1980, so it's been amazing to  
21 watch this port complex grow, and truly it does  
22 all start with dredging which is our business,

1 because that's what got it kicked off.

2 But it's been an example actually of how  
3 ports develop around the long sea ports. And the  
4 importance of port infrastructure to the nation's  
5 economy.

6 But you also mentioned another piece of  
7 the puzzle which is the coastal piece, and  
8 coastal protection, coastal awareness, coastal  
9 adaptation, all those issues that are near and  
10 dear to you.

11 But that's not just a California issue.  
12 It's a national issue and we've actually spent a  
13 lot of time traveling the country at various  
14 meetings listening to many of the same, very  
15 similar conversations.

16 You mentioned sustainable funding. Most  
17 of the coastal issues get solved with  
18 supplemental emergency appropriations. And it's  
19 not a way to manage the system that you speak of.

20 We know that Congressman Jolly of  
21 Florida, in combination with his good friend  
22 Patrick Murphy from Florida, have introduced a

1 new Coastal Communities Caucus. I think it has  
2 12 members now trying to draw attention to  
3 Congress and to the nation about the national  
4 interest and coastal protection, and coastal  
5 issues.

6 And certainly the west coast, and our  
7 home area of the Great Lakes, need to be part of  
8 that conversation as well. What message do you  
9 and your colleagues need to hear from science and  
10 engineers to help make the case that the nation  
11 needs a coastal policy, coastal investment?

12 HON. LOWENTHAL: Well first of all  
13 you've already just educated me on the fact that  
14 there is a new Coastal Caucus. And that from,  
15 you know from the leadership coming from Florida  
16 to do that. And that that's going to be a  
17 vehicle by which members of Congress are going to  
18 educate themselves and to learn about things.

19 And so you need to help to, first of all  
20 keep talking about this every place you go, and  
21 to every member of Congress about how we can work  
22 together. How are we going to educate ourselves

1 on critical issues about sustainability, coastal  
2 protection, and multi-use, all the things that  
3 we're all about?

4 You know and that too is a serious  
5 issue. And so the more you talk to me, talk to  
6 others about it, and urge me to join the Coastal  
7 Caucus, if it's a good urging, I --

8 VICE-CHAIR HANSON: We'll follow up,  
9 sir.

10 HON. LOWENTHAL: I have a little bit of  
11 the coast, not a lot, but a very significant part  
12 of it, you know. So that's what I would say to  
13 do.

14 And also in terms of the appropriation  
15 and the funding, I'll just have to learn more  
16 about it, and I'm on the Oceans and Water  
17 Subcommittee of Natural Resources, so I can kind  
18 of bring it up there and find out what we're  
19 doing about it. And whether you know, what are  
20 the plans for any kind of sustainable funding  
21 these issues? I won't get very far but it's all  
22 about planting seeds.

1 CHAIR PERKINS: Well this Panel has  
2 particular expertise from the academics all the  
3 way to practitioners, so very much willing and --

4 HON. LOWENTHAL: Good, I could really --

5 CHAIR PERKINS: -- actually I think  
6 we're all obligated to engage.

7 Okay, thank you so much for taking the  
8 time to join us this morning.

9 (Applause)

10 VICE-CHAIR HANSON: I get the privilege  
11 to do the intro, Mike if that's okay. I promise  
12 not to make it rushed. Mike first off, thanks,  
13 I'm glad that your schedule change allowed you to  
14 be here today.

15 It's important since we are in the Port  
16 of Long Beach to have the Port Long Beach  
17 represented. And Mike, his title currently it's  
18 Senior Executive Lead for Supply Chain  
19 Optimization. And I'm sure there's a shorter  
20 version somewhere.

21 But I've known Mike for many years.  
22 He's been in the area for many years. He spent

1 actually his last, he's just recently with Port  
2 of Long Beach as of February. Eight years prior  
3 to that he was the Deputy Executive Director of  
4 Port of Los Angeles, prior to that spent a lot of  
5 time with Parsons and all the while was with  
6 supply chain issues.

7 So Mike knows ports. He knows  
8 California, and thanks for joining us today,  
9 Mike.

10 MR. CHRISTENSEN: Thank you very much,  
11 Bill, and for that gracious introduction.

12 And welcome to Long Beach. On behalf of  
13 the City of Long Beach and the Long Beach Harbor  
14 Department, also known as the Port of Long Beach,  
15 we're very glad you're here. We're honored to  
16 have you here in this beautiful City of Long  
17 Beach talking about such important things.

18 I think it's important for me as I lead  
19 off to recognize the great appreciation and  
20 respect that I have for Congressman Lowenthal.  
21 And for the leadership he has shown, as he's  
22 mentioned 14 years in the legislature, years with

1 the city. I can't think of anyone in Congress  
2 that has more knowledge of our area, and of the  
3 ports, and the port industry than Congressman  
4 Lowenthal.

5 He's been a great advocate for us on so  
6 many things. And just for the record, we do  
7 strongly support his proposal to put the funding  
8 of the important publicly funded infrastructure  
9 associated with the port in a sustainable funding  
10 stream.

11 That's been one of the funding  
12 challenges we've faced for years and years, so  
13 we're very much supportive of that.

14 I was very interested in listening to  
15 your self-introductions. This is a tremendous  
16 group, both in terms of your knowledge and  
17 experience, applying to something that's  
18 critically important to us.

19 As you probably know looking at media  
20 over the past year or so, the port industry is  
21 changing and we have been in the midst of a  
22 pretty significant crisis here in the San Pedro

1 Bay ports. You know we move almost half the  
2 containerized goods into and out of the United  
3 States through this port complex.

4 And particularly over the past few  
5 months, we've been very, very impacted by some  
6 tremendous congestion. That's really caused by a  
7 number of issues. And even after the labor issue  
8 was solved, we find that there are a number of  
9 other issues that are leading to congestion.

10 That's one of my new callings here at  
11 the Port of Long Beach is working with a broad  
12 reach of experts on this. In fact, the Federal  
13 Maritime Commission granted us about a month ago,  
14 permission to get into a whole new level of  
15 cooperative discussions with the Port of Los  
16 Angeles.

17 So now you have both of the San Pedro  
18 Bay ports that are completely engaged in dealing  
19 with what is becoming a monumental change in the  
20 container shipping and the Pacific trade,  
21 actually international trade.

22 We are dealing with ship sizes that we

1 never thought we would deal with in the time  
2 frame that we're seeing. When we look at the  
3 14,000 TEU regular callers now in L.A./Long Beach  
4 that we never thought would be here. And we're  
5 hearing that the 14,000 TEUs are practice for the  
6 18,000s. The work you're doing becomes even more  
7 critical.

8 Ships that call one month on one of the  
9 ports, could call at the other port the next  
10 month. The access, the channels, the depths, are  
11 critical. Mapping, the approaches, understanding  
12 what happens.

13 I always used to say when I was at the  
14 Port of L.A. that the real story of this port  
15 complex could not be told unless you were to  
16 erect a wall out in the ocean about ten miles,  
17 and then pull the plug and drain the bath tub  
18 here. And see what is really here.

19 Our channels, our berths are like the  
20 landing strips on a major airport. And just like  
21 you can draw an analogy between what's happening  
22 in aviation with some of these large aircrafts

1 with the A380s and so forth. And what's  
2 happening there, is happening here too.

3 So the work you're doing is so  
4 important, it's so critical to our success -- our  
5 safety and success, we very much hope that you  
6 have a successful meeting here. You're talking  
7 about issues near and dear to us.

8 Resiliency is important, considering  
9 recovery as well. What happens after an event?  
10 When you have a port complex that if it were  
11 taken down for any length of time, could have a  
12 \$2 billion per day impact on the economy. I  
13 think you can justify the effort that you're  
14 putting forward.

15 I think the Congressman mentioned energy.  
16 Energy is a key point. Our Executive Director,  
17 or Chief Executive put out a massive sweeping  
18 energy initiative here just a month or so ago to  
19 create what we call, Energy Island.

20 Where we would become self-sustainable.  
21 We would become a minigrid composed of microgrids  
22 that could keep going under almost any condition.

1           And then dealing with the science, I was  
2 encouraged as we heard the self-introductions of  
3 the amount of brain power in this room. And we  
4 would encourage you to apply science, good  
5 science to everything in front of you.

6           We've seen a lot of let's say, not-so-  
7 good science applied, particularly related to  
8 sediment and water quality issues. We are the  
9 green port, at the Port of Long Beach and we are  
10 going to do exactly -- we're going to do  
11 everything that is needed to do, to fulfill our  
12 environmental stewardship.

13           At the same time, we would like that to  
14 be guided by good science. And we see that  
15 sitting around the table here.

16           So with that again, welcome to Long  
17 Beach. We trust that you'll have productive  
18 meetings. We would like to offer any assistance  
19 that we can give in helping your meetings to be  
20 successful. Don't hesitate to contact us. Thank  
21 you very much. And good luck on some great  
22 meetings.

1 (Applause)

2 CHAIR PERKINS: Great. Thank you, Mike.  
3 Any questions specifically for Mike? Dr. Kudrna.

4 MEMBER KUDRNA: Frank Kudrna, clearly  
5 getting cargo in and out of the port is a major  
6 issue. Highway Trust Fund running out of money,  
7 supplying major improvements, how critical is  
8 that infrastructure funding in some relief for  
9 the trust fund to your port?

10 MR. CHRISTENSEN: Good question. It's  
11 very critical. The Port of Long Beach has a \$4  
12 billion capital program right now. And that's  
13 stuff that we're funding largely out of our own  
14 revenues and our own bonding capacity.

15 We're pretty much at the limit of what  
16 we can fund. Yet as we look at the  
17 infrastructure, both the stuff that's kind of  
18 beyond our bubble, beyond the immediate terminals  
19 that we're responsible for, both on the land side  
20 and then also as we look on the water side, we've  
21 got to have some method of funding. That's one  
22 of the reasons that the Congressman, we're

1 supportive of his legislation.

2 But also as we look at supply chain, the  
3 trails that the supply chain makes throughout the  
4 country. When you get a little ways out, there  
5 is no funding for the kind of things that have to  
6 be done as we see that commerce, both on the road  
7 system and on the rail system.

8 So we are watching very, very closely  
9 and very carefully the policy that's set, and the  
10 funding that would come through transportation  
11 reauthorization.

12 We've been very active along with Bill  
13 and a number of others, in trying to get some  
14 other funding streams fixed. Certainly the  
15 Harbor Maintenance Trust Fund, getting that to  
16 where we could get a full spend on HMTF.  
17 Particularly as it would relate to maintenance of  
18 channels and also some expanded uses as per the  
19 WRDA from last year.

20 But it comes down to how can we get  
21 goods from the origin to distribution center, and  
22 then distribution center to the end users? And

1 there are so many choke points on that ribbon on  
2 the supply chain that need some sustainable  
3 funding.

4 So we think the first and foremost is to  
5 get the policy in place. To get a freight policy  
6 as part of the transportation reauthorization,  
7 and then find some sustainable funding that would  
8 go along with that.

9 MEMBER MILLER: Joyce Miller, what  
10 changes need to be made to the Long Beach Ports  
11 in order to handle the larger ships?

12 MR. CHRISTENSEN: Presently, Long Beach  
13 Port is what we'd call big ship ready. We have  
14 the 53, 16 metered depth alongside most of our  
15 major terminals. We do have some maintenance  
16 dredging to do on the main channels, in a couple  
17 places. We have sufficient depth for the VLCCs  
18 for the most part. But we need to maintain it.

19 We did have a little bit of a scare last  
20 year, and this kind of goes to the issue of both  
21 maintenance and also resilience. We had a little  
22 scare last year from hurricane storm damage to

1 the breakwater.

2 And this is a hundred year old structure  
3 that's really performed marvelously. I think  
4 it's one of the great feats of engineering that  
5 we have in our harbor.

6 But as a non-natural harbor, at least in  
7 our current configuration, that breakwater is  
8 critical. And it went down, and we had some  
9 pretty good breaches. Thanks to our friends at  
10 the Corps, we got that put back together in good  
11 order. But every one of these issues, both in  
12 terms of the maintenance dredging, and then as we  
13 continue to work on that breakwater is important.

14 MEMBER JEFFRESS: Thanks Mike, for your  
15 great words of wisdom. I was wondering if you  
16 and the Congressman have a strategy to get all  
17 the land locked states involved in this  
18 discussion?

19 You know, it's the folks in like Topeka,  
20 Kansas that go to Walmart and buy all their  
21 underwear, and their clothes, and all that stuff  
22 that's manufactured in Southeast Asia, has to

1       come through your port.

2                   And I think they are aware of that. Is  
3       there a strategy to get them involved?

4                   MR. CHRISTENSEN: Well I think the first  
5       strategy, Dr. Jeffress, is education. I was  
6       always interested in an antidote when I was over  
7       at L.A. that we were having an outreach, and  
8       there was a person in the audience that said, why  
9       should we have ports? If I want to get something  
10      from China, I just go to Target and buy it.

11                   So that kind of showed that there's a  
12      real lack of education as to where those things  
13      come from. Both of the ports have activities  
14      that do that. So we need to do a better job of  
15      educating.

16                   We can trace between the San Pedro Bay  
17      ports, impacts to every Congressional District in  
18      the United States. And we need to let the folks  
19      in Topeka know, that their tennis shoes at the  
20      Walmart come through, probably come through  
21      L.A./Long Beach.

22                   The other thing is I think embedded in

1 the Congressman's proposal is to utilize the  
2 programs like Tiger, and like some of the other  
3 existing programs that could fund a project if  
4 they needed a grade separation, because they have  
5 a lot of container trains going through their  
6 community. They would have a way to access that  
7 through a competitive process, so that we're  
8 putting the money where it needs to go, but  
9 having the funding stream that can do that.

10 So a lot of education on both of those  
11 issues I think is the strategy right now.

12 MEMBER KELLY: Mike, Hello. Ed Kelley,  
13 I'm from the Port of New York. In my prior life,  
14 I was running one of the top ten container  
15 carriers. And part of the problem that we see as  
16 carriers, in some of the port community with this  
17 type of a plan, is there's an excess of targeting  
18 on international containers.

19 Where are the assessments going to be  
20 made against domestic businesses, against things  
21 like coal, bulk petroleum products, domestic  
22 transportation et cetera?

1           Because as we mentioned before, for  
2 those people who do like to wear underwear in the  
3 Midwest, everybody in the United States benefits  
4 from international healthy trade. To target this  
5 only on container operators, is an undue burden.  
6 And I have to mention that the word, trust, does  
7 not exist in the Harbor Maintenance Trust Fund.

8           We have never gotten full accountability  
9 of that. We've never gotten the actual monies  
10 used for the purposes it was described for. But  
11 there is potential for infrastructure development  
12 where within what, a mile, of the Alameda  
13 Corridor here, which was very successful?

14           It was targeted, it had a specific  
15 purpose. It was a lock box type of a situation.  
16 And carriers and other people were very happy to  
17 pay into that because they saw an actual end  
18 result.

19           If we have formulas that go to inland  
20 states and whatnot, the fear of the international  
21 shipping container businesses is that they will  
22 be looking to float the infrastructure of the

1 United States on the backs of the carriers. And  
2 that's a problem.

3 What if now Japan, Korean, Germany, all  
4 start to decide they're going fund their  
5 international or their domestic infrastructure  
6 projects on the backs of container carriers?

7 This is a significant burden and  
8 although I agree infrastructure in the United  
9 States needs to be revamped, I think we have to  
10 really seriously look at who we target for this.

11 If everybody benefits, why are only  
12 certain corporate entities being targeted to fund  
13 it? And very frankly, the word trust does not  
14 exist, because we've been burned too many times  
15 in the past.

16 So that's the pushback you're going to  
17 get from the carrier base and the international  
18 commerce people who would be expected to pay  
19 this. It needs to be a much broader base. And  
20 the United States has never actually developed a  
21 national freight policy. And it had never really  
22 gone into infrastructure funding in a meaningful

1 way.

2 We agree it needs to be done. I think  
3 the objection and the pushback on this is it's  
4 way too simple to say all those container  
5 carriers are going to pay us eight billion  
6 dollars or more a year.

7 And much like the security programs,  
8 it's going to get spent in places like Wyoming,  
9 which you know I really wonder if there's a real  
10 terrorist threat there?

11 I'm from New York, you know, I was in  
12 the trade center. You know we kind of know what  
13 terrorism is about. We kind of wondering why  
14 we're spending money in Wyoming?

15 And we're just afraid that  
16 infrastructure's saddled on a very narrow segment  
17 of the total supply chain. It's probably either  
18 disproportional or somewhat unfair.

19 We're in favor of what you're trying to  
20 do, I think we're just somewhat suspect of the  
21 way it's supposed to be paid for, and who is  
22 going to pay for it?

1           Most of these international carriers at  
2 this point, are foreign entities that do not  
3 vote, and do not lobby, et cetera. And as we  
4 say, we've gotten so good at what we do, people  
5 don't even know we do it. They think they're  
6 goods from China come from Walmart or Target.

7           So I think we really need to revisit the  
8 issue with perhaps a broader base as far as  
9 contribution towards this. And that there's a  
10 tremendous number of questions regarding state  
11 DOTs and infrastructure, projects, local,  
12 municipal, et cetera, and just how this money  
13 would be used?

14           Because as I said, no one trusts anybody  
15 who uses the word, "trust fund". Because we've  
16 never seen that where we have been assessed these  
17 monies, that they've been properly expended. So  
18 just a couple of pushbacks.

19           The other side of the table, we agree  
20 entirely with what needs to be done. We just  
21 significantly question how it should be funded  
22 and by whom?

1           MR. CHRISTENSEN: Good point. Well  
2           you're preaching to the choir on the trust thing.  
3           I've been trucking to Washington with Bill for  
4           how long? How many years Bill, on trying to get  
5           HMT? And get the trust put back in that trust,  
6           and we're still not there yet. And we certainly,  
7           we're finding we're seeing that there's a little  
8           back sliding going on that.

9           But one of the things that was  
10          encouraging and my first question when I heard  
11          about the Congressman's legislation, is there a  
12          lock box? The answer's yes.

13          And our definition of a lock box is when  
14          that revenue comes in, it does not go out to any  
15          other use. So the devil will be in the details.  
16          We know the liner shipping companies, I think the  
17          last time I saw something like 80 percent are  
18          still going to show a loss this year.

19          That is the big reason behind the move  
20          to the big ships, the slot costs and the Trans-  
21          Pacific Trade on a 14,000 TEU ship are  
22          considerably less. We've seen moves to the

1 alliances as the alliances are formed. That's  
2 all to try to get back into the black on the  
3 liner shipping companies.

4 Unfortunately, that's causing ripples  
5 through other parts of the supply chain that's  
6 caused some impacts on the MTOs, the terminal  
7 operators.

8 There is, the concept behind this bill,  
9 is that it goes to the BCOs. When you do look at  
10 the very end of that supply chain, you know these  
11 added costs are a penny or a fraction of a penny  
12 on the cost of that pair of tennis shoes, or that  
13 pair of underwear that is going to be used in  
14 Topeka.

15 But the dialogue is starting. We need  
16 to hear more from those stakeholders. One of the  
17 things we did in this joint port, L.A./Long  
18 Beach, as we did our kickoff meeting, is we setup  
19 a stakeholder forum. On the 22nd of this month  
20 we're going to hear from about 70 of the key  
21 stakeholders, including the liner shipping  
22 companies.

1           We also are looking at a bridge  
2 agreement with some of the other organizations  
3 like OCEMA. And we're looking at being able to  
4 have direct dialogue on all kinds of issues  
5 including this one.

6           So we're looking for the sustainable, we  
7 think this is the best we've seen so far.  
8 Certainly a lot of red flags out there. And  
9 we're anxious and very welcome to hear of your  
10 concerns and we'll work those concerns until we  
11 get them solved.

12           MEMBER KELLY: Mike, let you in on a  
13 secret. Ocean carriers lose money because they  
14 don't control their pricing. It's their own  
15 fault.

16           MR. CHRISTENSEN: It's true, and this  
17 whole manufacture to distribution center supply  
18 chain, which is you know my day job now, is  
19 somewhat fractured. And there are all of the  
20 elements of this supply chain that are leveraging  
21 against each other.

22           And it's caused some real problems as

1 we've seen in the disruption and the supply chain  
2 this year and the congestion. So we're working  
3 this issue pretty hard.

4 And as a Port Authority, we are finding  
5 that in this day and age, we can no longer be --  
6 as you probably may or may not understand  
7 governance here in the San Pedro Bay ports -- we  
8 are parts of the municipal government. We're  
9 departments of the cities that we report to.

10 And as such we have all the  
11 responsibilities of a local governmental entity  
12 but we're given our property and trust from the  
13 states. So under the trust doctrine, which we  
14 operate under, we have been basically rent  
15 collectors. We've been landlords.

16 But as Port Authorities -- and I think  
17 New Jersey's a little different -- but as a Port  
18 Authority here in the west, we're having to take  
19 on a different role.

20 And one of the things we're doing right  
21 now is trying to determine what that roles is  
22 going to be, to try to fix the supply chain. And

1 to find ways we can become, we can leverage our  
2 positions into helping these elements of the  
3 supply chain, both the liner shipping companies,  
4 and the terminal operators, and the dredge, and  
5 the rail, and the state DOTs along with the  
6 national transportation interests. Those are all  
7 things we're trying to coordinate to fix the  
8 supply chain.

9 And then back to what you're job here  
10 is, and what you're doing here, a critical  
11 element on the water side. We're not probably on  
12 the front burner as far as the media, and as far  
13 as the politics of these congestion issues that  
14 we have, but you could easily be if it wasn't for  
15 the good work you're doing. And we would support  
16 that you continue.

17 CHAIR PERKINS: Great. Thank you, Mike.  
18 Appreciate that.

19 Our next speaker is Captain Jennifer  
20 Williams. Captain Williams, is the Commanding  
21 Officer for the Port, US Coast Guard Sector, Los  
22 Angeles in Long Beach.

1           Captain Williams is a graduate from the  
2 US Merchant Marine Academy in Kings Point, New  
3 York. And she also has a Master's degree in  
4 Quality Systems and Management. And with that I  
5 will turn it over to Captain Williams.

6           CPTN. WILLIAMS: Thank you, and I just  
7 moved because I couldn't see this side of the  
8 room. And I didn't think it was right to talk  
9 from the corner.

10           Welcome to the, and I'll say, LA/LB, Los  
11 Angeles/Long Beach, I don't think Mike could say  
12 that because he's in Long Beach now. But you  
13 know the Port of L.A. it's considered the busiest  
14 U.S. container port complex. There's 4300 acres,  
15 43 miles of waterfront, 270 berths, and 71 post-  
16 Panamax gantry cranes.

17           And I think that actually that went up  
18 because I recall about two months ago, they  
19 shipped in a couple new cranes.

20           And Long Beach is the second busiest  
21 container port in the U.S., 3200 acres, 25 miles  
22 of waterfront property, 80 berths, and 66

1 post-Panamax cranes. Is that right? I'm not  
2 sure -- that's about right.

3 And they're also building new facilities  
4 that are completely automated, the Middle Harbor  
5 Project, so there's lots of new technologies  
6 being implemented in both ports.

7 The combined port complex, and that's  
8 how I look at it from the Coast Guard  
9 perspective, I don't see L.A. and I don't see  
10 Long Beach, I see it as a combined port complex  
11 that we work with on a day-to-day basis.

12 And internationally, it's ranked way up  
13 there for container ports. And I think it's like  
14 Number 8 or 9 in the world after a couple Chinese  
15 ports, and a couple of Korean ports that sort of  
16 thing.

17 So it's really busy and both the  
18 Congressman and Mike had mentioned, I think over  
19 50 -- well 40 to 50 percent of the nation's  
20 containerized cargo comes through this port  
21 complex alone, L.A., Long Beach.

22 And 50 percent of California's oil comes

1 to this port complex. And that's surprising as  
2 well because you know, you don't think of this  
3 area as really like a petrochemical. You think  
4 Houston, or you know down in the gulf. But 50  
5 percent of California's oil comes through this  
6 port complex. It's really important.

7 I also wanted to mention Port Hueneme,  
8 it's a relatively small port, a little north of  
9 here. It's still in my area of responsibility.  
10 It's up near, well Port Hueneme/Oxnard, it's --  
11 there's a Navy port up there but it's also a  
12 commercial port.

13 And they do a lot of fruit, and they do  
14 a lot of cars, you know, high-end cars, that sort  
15 of thing get shipped in there. And it's actually  
16 on par with the Port of San Diego as far as the  
17 business they bring in.

18 So I try to remind people, don't forget  
19 about Port Hueneme. It's a pretty important port  
20 up there. I mean it pales in comparison to  
21 LA/LB, but it's very important for the nation.

22 I do want to thank you all for sitting

1 on the Advisory Committee. My work in the Coast  
2 Guard, we have a number of advisory committees  
3 that we rely on for individual expertise in your  
4 fields to help the government, to help NOAA,  
5 design policies and regulations.

6 And sometimes the government is a little  
7 bit behind the curve on technology and  
8 everything. We spend a lot of time catching up.  
9 And it's just the nature of the beast, I mean the  
10 industry is always going to be a little bit a  
11 step ahead of what's going on in the real world.  
12 And the government's catching up with the  
13 regulations and policies that we have to  
14 implement.

15 So that's where your role is so critical  
16 in making sure that NOAA or the Coast Guard, or  
17 any other government agency is doing what they  
18 need to do to ensure you know, the integrity of  
19 the Maritime Transportation System that we have.

20 So I represent the Coast Guard  
21 obviously. I'm the Captain of the port here, and  
22 my area of responsibility basically goes from the

1 San Diego county line, up to the Monterey county  
2 line. So there's a couple counties there.

3 I had mentioned the three main port  
4 complexes that we have here, my area. It's a 350  
5 mile coast line and my AOR also extends 200 miles  
6 out, which includes the Channel Islands out  
7 there.

8 There's a number of sectors in the Coast  
9 Guard 35, that basically situate around major  
10 ports. So they all have similar types of  
11 missions that I do here. And some of them have  
12 more, because we don't do ice-breaking here in  
13 the Los Angeles, Long Beach, but we do everything  
14 else from search and rescue, drug interdiction,  
15 marine safety.

16 Essentially, our missions focus around  
17 safety, marine safety, marine security and  
18 environmental protection or stewardship. So  
19 those are the basic, you know, that's what drives  
20 us to do what we do.

21 But there's eleven statutory missions  
22 the Coast Guard has. You know some are less

1 known than others. Ice-breaking was big this  
2 year on the east coast, and I'm sure up in New  
3 York, or the northeast, it was very important  
4 with all the weather that you had. Thankfully  
5 here, I'm not doing that.

6 But so I have about 500 active duty,  
7 reserve, and civilians that work for me in the  
8 whole entire AOR. I have nine subunits that help  
9 me do, to accomplish the missions, including four  
10 patrol boats. I have three small boat stations.  
11 One of them is a surf station up in Morro Bay.

12 And I have a marine safety detachment in  
13 Santa Barbara, and an Aids Navigation Team, you  
14 know that puts the buoys out and the markers,  
15 that sort of thing.

16 And finally we have a vessel traffic  
17 system. It's not a federally run, VTS system  
18 that we have. It's actually in a private  
19 partnership with the Marine Exchange. So we're  
20 co-located with them and we help to manage some  
21 of the traffic that goes in and out.

22 My whole AOR, it's probably important

1 for you guys to know, since you guys focus on  
2 coastline and everything, obviously Port of  
3 LA/LB, very congestive. You know it's very high  
4 density, there's a lot of housing and buildings  
5 and that sort of thing in this port.

6 But if you go up north of Port Hueneme,  
7 it's a little bit less populated, and then if you  
8 go north of Point Conception, there's nothing up,  
9 it's basically nothing up there. It's just  
10 beautiful coastline, very environmentally  
11 sensitive areas that we have.

12 So you know, when I look at the AOR, we  
13 have three distinct type of terrain, I would say.  
14 You know, you've got the big city. And then  
15 you've got the little city. And then you got  
16 absolutely nothing up there but very, very  
17 important to the environment.

18 Obviously with that big AOR, I have also  
19 a lot of Congressional Districts. Obviously,  
20 Congressman Rohrabacher is one of the ones that  
21 we work with. Congresswoman Hahn, she's in San  
22 Pedro, we work closely with her. And then

1 Brownley, up there in Oxnard area. So we do a  
2 lot of work with our Congressional folks up  
3 there.

4 In addition, the traditional Coast Guard  
5 missions that we do, like search and rescue. We  
6 do have our fair share down here and, believe it  
7 or not, counterdrug and migrant interdiction.

8 I think many times people think the  
9 Coast Guard does that, you think about Miami, or  
10 Key West, down there in the Florida ports. They  
11 have a big drug problem.

12 But here we're so close to the Mexican  
13 border, and it was not really an issue up until a  
14 couple years ago, because it really was the issue  
15 for the sector down in San Diego, because they  
16 literally share the border with Mexico.

17 People were bringing drugs over on  
18 little personal water crafts, the waverunners,  
19 but they also used these boats called, Pangas.  
20 And the Pangas are just open boat, they're just  
21 open boats with a couple of outboards on the back  
22 of them.

1 San Diego was getting so good at  
2 catching these migrant or drug runners, that the  
3 Panga operators decided to go a little bit  
4 further north. So that of course affected this  
5 area of responsibility, in the L.A. area.

6 So we're finding you know, unfortunately  
7 we really even don't even know how big the  
8 problem is. We were finding boats on the shore  
9 where they successfully landed the boats and  
10 there were remnants of you know, maybe one bale  
11 or something like that, or pocket litter and just  
12 proof that they were smuggling into our AOR.

13 But you know, we kind of band together  
14 here in this AOR with our local law enforcement  
15 and other partners that we had. And we got good  
16 at catching these guys. But really all that did  
17 was just, it's like squeezing a balloon. They  
18 just decided to go further out, off shore and  
19 further north.

20 So now they're going into San  
21 Francisco's zone. And let me remind you, these  
22 are small, maybe 30 foot boats that are

1 completely open. And they're going 200 miles off  
2 shore, and sometime further than what my patrol  
3 boats normally patrol in. So these guys are  
4 getting good, but they do dangerous stuff out  
5 there.

6 The Captain of the Port, I think maybe  
7 many of you have heard that terminology before.  
8 That's the designation, the authorities that I'm  
9 given as a Sector Commander. And as our other  
10 sector commanders, the Captain of the Ports  
11 authorities are pretty, they're very broad and  
12 very powerful in a way.

13 And some people recognize it, some  
14 people don't because we don't exercise our  
15 authorities very often because when we do, it's  
16 going to create a lot of problems. But  
17 essentially, I have the authority to basically  
18 stop a ship from coming in, or stop a ship from  
19 leaving port, or shutting down a cargo facility.

20 There's other branches of the  
21 government, or agencies in the government that  
22 also have these broad authorities like, Customs

1 Border Protection. They have similar authorities  
2 but they can stop cargo from moving, and they  
3 stop people from moving. So it's funny, because  
4 together we create like this really powerful  
5 team. And I work closely with Customs and Border  
6 Protection as well.

7 But again, I say, I don't really  
8 exercise those authorities to stop a ship from  
9 coming in, or not letting it leave, unless it's  
10 under the worst circumstances. It's got to be  
11 some major safety concern, or a security concern,  
12 or an environmental concern that would drive me  
13 to do that because it has ripple effects down the  
14 road that really you can't undo.

15 So you don't just use that authority  
16 everyday just because you want to. You really  
17 have to have, you have to think about it and you  
18 have to maybe come up with alternatives to figure  
19 out a way to keep the ships moving, because  
20 that's really my goal, is continue to facilitate  
21 Maritime Commerce, and it really should be the  
22 goal of the whole government, which I think it

1 is.

2 So you know, we talk about how, what I  
3 do here in the Coast Guard, my staff, my sector,  
4 subunits, what we do. How do we interact with  
5 NOAA? And how does it interact with the work  
6 that you guys are tasked with doing?

7 You know I'm going to talk about one of  
8 our, we have a Harbor Safety Committee, and  
9 actually NOAA is part of that committee, comes  
10 every, we have a local, Jeff's here. And he goes  
11 to the meetings that we have quarterly. And then  
12 we have subcommittees.

13 But essentially, the Harbor Safety  
14 Committee is responsible for planning the safe  
15 navigation and operation of tankers, barges, and  
16 other vessels in San Pedro Bay, and the  
17 approaches.

18 So we work with the local, state, and  
19 federal level working together to ensure  
20 continued safety of the port and the environment.  
21 It's a really interesting meeting, and we have  
22 representatives, not unlike this Advisory

1 Committee.

2 We'll have representatives from pilots,  
3 from our Marine Exchange, you know, different  
4 agencies, different types of operators, the tug  
5 boat operators, and the barge operators, and so  
6 forth. And they bring forth issues that might be  
7 going on in the port.

8 It might be, we don't think the aids in  
9 navigations are working; or we continue to have  
10 loss of propulsions due to the type of fuel  
11 switching that's going on; or the pilots might  
12 have issues that they see from time to time on  
13 various ships that they may bring in.

14 So that's a really important thing. So  
15 when you do your work and you kind of recommend  
16 policies, you know, you can always think about  
17 these things that we do with the industry.

18 Obviously the Weather Service, that's  
19 important. I had mentioned that we do search and  
20 rescue all the time. And we actually use NOAA's  
21 weather to factor into how we execute a search  
22 and rescue case. Whether it be weather,

1 currents, anything like that, it's critical to  
2 how we dispatch our units and how long we keep  
3 them out there.

4 I'll mention two that we had, we  
5 recently had a big, big win back in September  
6 with the person who fell off a boat. And he was  
7 with his brother, his brother was driving the  
8 boat. And when his brother came into port at  
9 Marina del Ray, he noticed that his brother  
10 wasn't in the boat anymore.

11 So he realized, oh my gosh, he must have  
12 gone overboard. But he had no idea where. But  
13 he just turned the boat around and kind of went  
14 in the opposite direction and called the Coast  
15 Guard. We have computer systems that design  
16 search and rescue patterns based on information  
17 that's provided to us.

18 Of course we input weather, and  
19 currents, and all that, wave height, and all that  
20 stuff. To make a long story short, this man who  
21 fell overboard actually treaded water for seven  
22 hours, but we successfully found him. It was

1 such a great case. We found him at literally, it  
2 was two minutes before midnight.

3 You know really bad conditions, the  
4 weather wasn't great, it was September, but I  
5 remember the weather was bad. We didn't have a  
6 full moon. This guy was one lucky guy, I'm  
7 telling you. He was extremely lucky.

8 But you know you probably didn't think  
9 that what you do affects what we do when it comes  
10 to search and rescue. And I'm here to say that  
11 it does. What you do counts. Everything that  
12 you do counts.

13 We also have an Area Contingency Plan  
14 which is after Exxon Valdez and the Oil Pollution  
15 Act, it required us to have Area Contingency  
16 Plans for how we're going to respond to a big oil  
17 spill. And NOAA is the trustee in our Area  
18 Contingency Plan. You assist us all the time  
19 when we have incidents.

20 We, whether it be scientific  
21 coordination, like trying to figure out where the  
22 oil's going to drift off to? Or what's going to

1 happen if we burn it? Or what's going to happen  
2 if we use chemicals on it to disperse it? That's  
3 something that we utilize NOAA for, with the  
4 scientists and that sort of thing.

5 Mike talked about resiliency. We have  
6 a Maritime Transportation System Recovery Unit.  
7 And also kind of, it's connected with our ACP, or  
8 Area Contingency Plan. But basically what that  
9 is, is what are we going to do after a big event,  
10 like an earthquake, or a hurricane, like Sandy?  
11 Or a tsunami or any other disaster that might  
12 happen in the port? What are we going to do to  
13 make sure, to help us get back into business?

14 You know, do we need dredging? Do we  
15 need to take hazards out of the water? How are  
16 we going to do that? And that's something that  
17 we all have to come together -- and it's not just  
18 a Coast Guard thing. We cannot do it alone.  
19 NOAA cannot do it alone. Government really can't  
20 do it alone.

21 We have to call in the Port Authorities,  
22 ask for their help. We ask the industry to help

1 as well. Everybody kind of bands together.  
2 That's something that we work on constantly. My  
3 staff has meetings on that monthly, and we have  
4 exercises, we have a big exercise that's going on  
5 this summer as well.

6 The fact that ships are changing,  
7 they're getting bigger, and you know wider. And  
8 then we have bridges here in the Port of Long  
9 Beach that are being reconstructed to allow for  
10 you know, higher air draft to come under the  
11 bridge.

12 And you know we're thinking about all  
13 these things just to compete with other ports.  
14 And it will continue as the Panama Canal's  
15 widened, and there's other opportunities the east  
16 coast ports might see. But it really affects  
17 what we do here, and everywhere.

18 Climate change, or the Arctic, you know  
19 the opening of the Arctic, how's that going to  
20 affect shipping routes? How's that going to  
21 affect what comes here, or what goes to Maine,  
22 for that matter? You know, if they created a new

1 route that, that maybe found a different path to  
2 go to the east coast of the United States. How's  
3 that affect us?

4 And the port congestion, I think that  
5 was an interesting one. The Coast Guard for the  
6 most part, when they were going through the labor  
7 negotiation of their contract, and we experienced  
8 the backlog of ships, and we had many, many ships  
9 at anchor.

10 I think at the worst point this year, we  
11 had approximately 50 ships at anchor off shore.  
12 That's not normal for this port. It's normal for  
13 maybe the Port of Houston. They usually have 50  
14 a day.

15 For here we have maybe 10 to 15 on a  
16 heavy day. But you know, so we had 50. So we  
17 had to create new anchorages, contingency  
18 anchorages off shore. I know Oakland had to do  
19 the same thing. They did more of like drift  
20 boxes outside the Golden Gate Bridge, you know.

21 The whole west coast was experiencing  
22 this, and although the Coast Guard's neutral when

1 it comes to the business side of things and how  
2 they are negotiating. In the back of my mind, I  
3 was you know, it was very stressful time in the  
4 port for everybody. That's all anybody was  
5 talking about here.

6 And of course I'm thinking, okay now  
7 we've got all these extra ships out there. Are  
8 their anchors going to hold? What happens when  
9 we have really bad weather? Are they sitting  
10 targets for maybe a security incident?

11 All these things were -- or an  
12 environmental incident, we could have a risk of a  
13 collision and then we'd have a bigger, you know  
14 maybe environmental incident.

15 All these things were going through my  
16 head. So it was a stressful time despite the  
17 fact that really the Coast Guard had no say into  
18 like the negotiation parts of it. It was  
19 weighing heavily on everybody's mind.

20 Finally, you know one of the things that  
21 also weighing heavily and competing for my time,  
22 is cyber security. Cyber security is becoming

1 more and more important. And you're probably  
2 thinking, why is she talking about cyber security  
3 to us, you know?

4 But really anything electronic, and we  
5 have electronic charts now, and the ships are  
6 using a lot of equipment, a lot of technology  
7 that could be infiltrated by any kind of cyber  
8 attack. It really could impact the whole port,  
9 the whole nation really. All the ports.

10 They shut down, or maybe they got in an  
11 accident, this is something that you guys need to  
12 factor into the work that you do. It's really  
13 become very important for our President to focus  
14 on this. And thereby everybody's working on it.

15 Just last week, I was out of the office  
16 but we had a research and development team come  
17 down, actually they visited a number of ports  
18 which included L.A. and Long Beach. And they  
19 rigged their car up with all sorts of antennas  
20 and equipment and fancy doodad things.

21 And they drove around the port to see,  
22 is our port vulnerable to some type of cyber

1 attack? They gave a brief-out and I really can't  
2 get into all the details, but what I can say, is  
3 yes, it's a problem.

4 There's a lot of people that aren't  
5 protecting their technologies that they  
6 implement. Whether it be for the cranes, or for  
7 the radars, or you know for anything that uses  
8 computers. People aren't adequately, or ports  
9 and facilities are not adequately you know  
10 protecting these things. So we really could have  
11 a major incident.

12 And they were driving by, actually, they  
13 actually got on boat as it well and took all the  
14 equipment out to the anchorage areas to find out  
15 if those ships were protecting themselves  
16 adequately. So now we've got an international  
17 problem.

18 So it's not just our U.S. facility  
19 operators, it's also the international, the ships  
20 that are foreign-flagged. How do you regulate  
21 them? How do you mandate something to make sure  
22 that they're safe and they're not going to create

1 a new risk for us here, and in our ports?

2 But essentially that's what we do. I  
3 just wanted to give you kind of a snapshot of  
4 what the Coast Guard does here, and hopefully I  
5 did that.

6 Again, I thank you for serving on the  
7 Advisory Committee. I know it's, you're taking  
8 time out of your valuable, your busy schedules,  
9 to help us, the government, you know come up with  
10 better policies and regulations that kind of make  
11 sense. And good luck to all the work that you  
12 have this week.

13 (Applause)

14 CHAIR PERKINS: Well thank you, Captain  
15 Williams. I have a couple questions, do you  
16 directly work with, or do you have -- do you  
17 attend or participate in the Coast Guard FACA  
18 meetings, the NAVSAC and the others?

19 CPTN. WILLIAMS: Well, when I was at  
20 headquarters, I did. But right -- we haven't had  
21 any Advisory Committee meetings here, in the Port  
22 of L.A. If they did, I would probably attend,

1 but generally I don't participate in those.

2 CHAIR PERKINS: Okay, and then I have a  
3 question for you. You described the large  
4 extent, you know of your geographic area of  
5 responsibility. So going 200 miles off shore and  
6 near 300 miles you know, north, south. And the  
7 challenge right with both search and rescue, and  
8 with patrol or interdiction there.

9 How is the Coast Guard looking at  
10 utilizing new technology, as in the unmanned  
11 aerial vehicle platforms to, you know, do you  
12 have, or does the Coast Guard, or do you as the  
13 Commander here, do you have a strategy to  
14 implement that technology into be -- will it  
15 allow you to be effective in executing your  
16 mission?

17 CPTN. WILLIAMS: Yes, absolutely. I  
18 think that would, obviously using new  
19 technologies would make me more effective in  
20 executing my mission. I'm an operational  
21 commander, and those types of decisions are  
22 generally made at the more senior levels, maybe

1 the headquarters level.

2 They would decide whether or not they're  
3 going to you know, purchase or design new  
4 aircraft or unmanned type of vehicles like that.  
5 I know with the counterdrug and migrant  
6 interdiction operations, they have employed  
7 different types of technologies.

8 But more than that though, what we've  
9 done -- because we're actually an arm of the  
10 Department of Homeland Security. We've actually  
11 combined efforts. You know, they call it Unity  
12 of Effort.

13 The Unity of Effort with other agencies,  
14 so Border Patrol is their major team. They've  
15 got a lot of equipment. They have the remote  
16 technologies where they can send something out.  
17 We employ those and they provide us the  
18 information.

19 So instead of us you know, purchasing,  
20 and designing, and you know buying new equipment,  
21 we ask other agencies whether it be you know the  
22 Navy, or the Air Force, or the Border Patrol, we

1 ask to use their equipment and we know where  
2 they're patrolling. We ask them to do certain  
3 things. We try to coordinate that way.

4 That's done at a much higher level  
5 though. That's not even at my level, it's more,  
6 it's got be at a specific area. So the Pacific  
7 area controls like the whole west coast,  
8 coastline ports and the headquarters level.

9 There's a lot of intel feeds that go  
10 into that as well. And again we share not only,  
11 it's not only Coast Guard intelligence, it's all  
12 different agencies' intelligence. Because we  
13 couldn't afford to do it otherwise.

14 The Coast Guard's a small agency, small  
15 budget. My budget is even smaller locally. But  
16 you know they tell me what to do, and I execute  
17 the operations. That's how I do it here. I have  
18 very limited resources though.

19 Joyce Miller.

20 MEMBER MILLER: We've seen in other  
21 regions that, especially after disasters you  
22 know, everybody works well together, very good

1 regional coordination.

2 But one issue we've seen in other  
3 regions is the inability for various agencies,  
4 Coast Guard, EPA, NOAA, DoD, in general, to  
5 quickly and efficiently get funds back and forth.  
6 Let's say you need a NOAA resource to do  
7 something for you, survey your harbor, let's say.

8 And you know, there's, and NOAA will  
9 come in and do it, but there's an inability to  
10 cost share in some areas. How does that work  
11 here?

12 CPTN. WILLIAMS: Well, I mean it's the  
13 same way here as it is everywhere. So you had  
14 mentioned the breach in the breakwall. We had an  
15 unexpected storm, it was the end of September  
16 last year.

17 And the breakwater there, we had  
18 numerous breaches in the you know huge, these  
19 huge boulders, they're like one ton. You know  
20 like one or five tons, you know like they're that  
21 huge. The waves moved the breakwater and created  
22 some holes and everything.

1           We just immediately worked with our  
2 partners here that we could, so Army Corps of  
3 Engineers, Colonel Colloton is over there in the  
4 L.A. District. And she knew how important it was  
5 and many times it's you know, you just kind of  
6 hold your breath and hope that you can get  
7 emergency funding. And that's exactly what they  
8 did. They worked really hard. They got  
9 emergency funding. And they were able to start  
10 work on that pretty quickly.

11           But yes, it's the same everywhere. The  
12 funding issue is always kind of a rubbing point.  
13 You might fall under a certain type of act where  
14 you can get money right away, and sometimes you  
15 can't. You know we have Pollution Funds Center  
16 that we can draw upon, but there's only so much  
17 you can take from that.

18           Generally though, I mean if it's a  
19 natural disaster, we can get that type of  
20 funding. If it's something that's manmade, and  
21 there's a responsible party, we really have to  
22 look to the source of you know, the responsible

1 party. Ask them, you need to pay. You've got  
2 insurance, that sort of thing.

3 We had a port fire here in September as  
4 well, early September in the Port of L.A. and I  
5 mean it was a welding torch. Somebody left a  
6 welding torch on, underneath the wharf and  
7 created a huge fire. So it was on a facility,  
8 and the Port of L.A. even though it was, said  
9 they had a tenant, it was basically the tenant's  
10 facility that caught on fire.

11 But the Port of L.A. basically came to  
12 the incident and really stepped forward even  
13 when, I don't think they had to, but they paid  
14 for everything. You know, like okay we need to  
15 get the boom out, and make sure that you know  
16 this pollution is not going to go over into this  
17 area. Yes, all right. We'll hire the oil spill  
18 response vessel, and they were out there.

19 Well we need to get an excavator, and we  
20 need a barge that can destroy this remnant of the  
21 pier so it doesn't continue to burn. Oh, yes,  
22 they hired the barge. They were the ones who

1 stepped forward right away. And without them, I  
2 think we probably wouldn't have had better  
3 results, you know.

4 Because really it's the money that helps  
5 get the equipment to really attack the problem,  
6 and that's what happened in that situation. But  
7 that's what we'll just continue to do.

8 I mean when we have these big events,  
9 it's usually what they call, a Unified Command.  
10 They have different elements of people in there  
11 and we say, well, this is the problem, this is  
12 what we need to fix. Okay, how are we going to  
13 do it?

14 And we just kind of brainstorm, or  
15 somebody says, all right, I'll step up and we'll  
16 pay for that. But, yeah, when you're talking  
17 about the U.S. government, it's not easy to get  
18 money sometimes. Some of the things we can get  
19 back-paid on and, you know, we give them IOUs  
20 type of thing and just hope that all the bills  
21 get paid. Yeah, it's not easy.

22 MEMBER BARBOR: Ken Barbor. Three

1 questions. One, I'll jump ahead of Susan and get  
2 this in. Obviously, as you look out there, an  
3 awful lot of recreational boaters. Clearly that  
4 plays heavily into your SAR issues. But what  
5 about, you know, navigation, hydrographic sorts  
6 of things? How does that play in and are there  
7 inadequacies that need to be addressed?

8 Second question is, you know, there's a  
9 port you didn't mention. Seal Beach. How does  
10 that play? Are there inadequacies or things in  
11 terms of water levels, aids to navigation or the  
12 like that we might need to focus on?

13 And then the third is we have frequently  
14 in these panels, as we go around the country, the  
15 topic of virtual aids to navigation come up. And  
16 I don't know whether that is an issue here that  
17 is raising its head, or is something that we've  
18 got well in hand? Thank you.

19 CPTN. WILLIAMS: Thanks, Admiral. For  
20 the recreational vessels inadequacies to be  
21 addressed, I've not heard of recreational vessel  
22 complaining. They haven't come to the Coast

1 Guard.

2 I mean, I think, do we have a  
3 representative of, like -- so we have  
4 recreational boating rep? Okay. And then I  
5 would imagine they would probably voice those  
6 concerns to their local harbormasters.

7 I have not -- I could always bring it  
8 back to my waterways staff, and just you know  
9 scout that out. But, off the top of my head, I  
10 would say that I've not heard of any issues with  
11 recreational craft.

12 And then for Seal Beach, same thing with  
13 that. I mean, that's the Navy. The Navy  
14 probably would be the one voicing that to either  
15 the Army Corps, or that sort of thing.

16 With the virtual aids in navigation,  
17 that's really a very hot topic in San Francisco  
18 right now, because they've been able to kind of  
19 pilot, or beta test, some of the virtual aids.  
20 The eNAV system that they're doing up there.

21 From what I understand, it's been very  
22 successful. And I would say the mariners from

1 the deep draft vessels like it. And probably  
2 from the recreational side, they probably don't  
3 like it as much.

4 And I know that there was one public  
5 meeting not too long ago, I'm not sure if we had  
6 good participation from the recreational boaters,  
7 but it was a listening session I think it was for  
8 them to discuss eNaviagation.

9 I think in general, the recreational  
10 boaters, they like to have their lighthouse.  
11 They like to have something that they can see.  
12 And frankly, I do too. I think it's good to have  
13 a mix or a balance of both. Because not  
14 everybody's going to have, you know, a  
15 sophisticated GPS system on their boat. They  
16 might just be, you know, a simple sailor that,  
17 you know, maybe dead reckons and needs the visual  
18 aids. I think that's still important.

19 But it costs the Coast Guard money to  
20 maintain all of these aids. And, you know, we  
21 have a budget that we're focusing on, you know,  
22 getting new cutters. And that's where a lot of

1 our money is being focused, so we're looking at  
2 places to reduce in other areas.

3 And aids to navigation is always one of  
4 those ones, for the Coast Guard, that if we can  
5 reduce aids, we will. You know, we have, you  
6 know, years ago a lot of things were privatized  
7 and that helped a lot. And so now we're in the  
8 same boat. We've changed a couple things, couple  
9 buoys, even in the LA area, in the recent number  
10 of years.

11 And I don't think it has affected  
12 casualty rates by reducing them. And that's  
13 something that we would always look at. Number  
14 one concern would be, you know, the safety of the  
15 navigation. Making sure that we're not creating  
16 a bigger problem.

17 If we can use eNAV without, you know,  
18 elevating casualty rates, I think that's the way  
19 to go. But I think you're always going to have a  
20 population that's going to need the visual aids  
21 as well. So I really think there needs to be  
22 balance.

1                   CHAIR PERKINS: Great. Thank you. Go  
2 ahead, Captain.

3                   MEMBER RASSELLO: Captain Williams, yes.  
4 I'm very interested in the safety of navigation.  
5 You mentioned that we are going through this  
6 transition now from the old traditional way of  
7 navigation into e-navigation. What's the role of  
8 the Coast Guard into this transition, which I  
9 think is very sensitive for the shipping industry  
10 as well as for safety for Coast Guard?

11                  CPTN. WILLIAMS: So, again, at the local  
12 level, the Los Angeles level, I don't really have  
13 much impact into developing those polices. But  
14 at our Washington D.C. office, we have a  
15 waterways directorate. It's run by -- oh gosh  
16 what's his name? Gary Rasicot. Mr. Gary  
17 Rasicot. And he's active with International  
18 Maritime Organization. And the e-navigation  
19 system is something that would fall under his  
20 program.

21                   But it's definitely something that  
22 they're considering and pushing and testing

1 throughout various parts of the country. One of  
2 the places is San Francisco, that they've  
3 employed some of the e-navigation, the virtual  
4 aids, I guess is what they're calling it, Virtual  
5 Aids Navigation. So the big ships can see it.  
6 The ones that have the sophisticated radars, they  
7 can see it. And they love it.

8           You know, the other thing that I think  
9 you have worry about, and I mentioned it just  
10 briefly, was the cyber part of it. So, what  
11 happens if we have a cyber attack and you have no  
12 more aids? You know, does that affect the safe  
13 navigation of those ships getting into port?  
14 Inside a port, I would say probably not, because  
15 we require our pilots to bring the ships in --

16           MEMBER RASSELLO: That's what I want to  
17 get the point. We are end users as navigators,  
18 so we end up with an electronic navigation when  
19 we pick up the pilot, that's finished the  
20 electronic, and we are in the hand of the harbor  
21 pilot, which has no clue of electronic navigation  
22 whatsoever.

1           Those pilots, when they renew the  
2           licenses, do they go through certain courses in  
3           training to update to electronic navigation?  
4           Because we need to continue and finish our voyage  
5           in electronic format. And then we shutdown the  
6           system, we stop the ship outside if we have no  
7           visual, right?

8           CPTN. WILLIAMS: Right.

9           MEMBER RASSELLO: And we have a bit of  
10          problems with Houston and Galveston, because the  
11          fog, right?

12          CPTN. WILLIAMS: Right.

13          MEMBER RASSELLO: Which causes the ship  
14          to sit outside sometimes for days. Well, if you  
15          sit a cargo ship outside for days, it's not a  
16          major problem. But if it's a cruise ship outside  
17          with thousands of people on board, it's a concern  
18          for the ships and for the people and for the  
19          airports, everything. Everything shut down  
20          because there are over 3,000 people waiting to  
21          get on the boat, on the ship.

22          CPTN. WILLIAMS: Yes, that's right.

1 Well, I don't control when the Port of Houston is  
2 shutdown due to fog, but based on a couple of the  
3 incidents that have happened over the past couple  
4 months, that's a prudent thing to do at times.

5 But I know the pilots here, they have  
6 continuing education all the time. You know, I  
7 think Jacobsen Pilot is going to be here today,  
8 right? Or tomorrow it's on the agenda.

9 You know, and they're a different  
10 organization, so they kind of pilot ships,  
11 actually in the entire port complex of both Long  
12 Beach and LA. And then they also have another  
13 smaller group of pilots over in the Port of LA  
14 and they only pilot ships in the Port of LA. I  
15 know that they have continuing education as well  
16 when they renew their licenses.

17 MEMBER RASSELLO: The same issue.

18 CPTN. WILLIAMS: Right. You know, the  
19 Port of Long Beach, I've actually underway with  
20 Jacobsen Pilot for one of their morning runs.  
21 And they bring their own equipment on board,  
22 their own computers and their antennas, and they

1 set up the antennas on the bridge wings.

2 But I believe, too, that even if they  
3 didn't have those computers with them, they're  
4 still well versed in the port. I mean, when they  
5 take their examination, they know every depth,  
6 every nuance about the port that's necessary so  
7 they could safely bring the ship in. Same is  
8 true up there in San Francisco. But, yeah, it's  
9 always a concern and now --

10 CHAIR PERKINS: Jennifer, I apologize  
11 but to keep us on schedule --

12 CPTN. WILLIAMS: I went over time, huh?  
13 What a surprise.

14 CHAIR PERKINS: Well, I think it's  
15 Michael. I'm the one who's supposed to keep  
16 better track of that.

17 CPTN. WILLIAMS: Okay.

18 CHAIR PERKINS: This is the exact type  
19 of dialogue that we'd hoped to have in these  
20 meetings. And so I invite you, if you can, to  
21 participate with us throughout the next two days.  
22 There are breakout sessions and other

1 opportunities where we can continue this  
2 dialogue.

3 But in respect to the rest of the  
4 agenda, we have gone through our break. So, if  
5 we can hold the break to five minutes, because I  
6 realize we had coffee and had a short recess  
7 before we convened the session. So, if we can be  
8 back here and reconvene at 10:15, you know,  
9 great.

10 CPTN. WILLIAMS: So, I just wanted to  
11 say one thing, though. I won't be able to stay,  
12 but Lieutenant Commander Brandon Link is on my  
13 staff, and he will be staying for the duration of  
14 your committee meetings. And his focus is in  
15 waterways, and so, Captain, if you wanted to talk  
16 to him and ask him questions or task him with  
17 something, go right ahead.

18 CHAIR PERKINS: Great. Thank you very  
19 much.

20 (Whereupon, the above-entitled matter  
21 went off the record at 10:07 a.m. and resumed at  
22 10:19 a.m.)

1           MR. STONE: We'll officially reconvene  
2 the meeting. And it's my pleasure to welcome Dr.  
3 Callender.

4           DR. CALLENDER: Thanks, Scott. So, once  
5 again, I really do appreciate the opportunity to  
6 be here today. It's always good to connect with  
7 the Panel and I learn a lot every time I come and  
8 interact with you.

9           My remarks today really are about  
10 focusing on continuing the dialogue about where  
11 NOAA seeks your analysis and your advice and to  
12 spend some time to respond to your efforts so  
13 far.

14           And, frankly, a big reason why I wanted  
15 to be here today was to once again say thank you.  
16 You've heard that several times this morning, but  
17 I really do appreciate your time, your expertise,  
18 your passion for the work. And we really do  
19 appreciate what you're doing. And I think we've  
20 made a lot of progress on multiple fronts since  
21 our conversation in Charleston.

22           So, my goal for the time we have today

1 is to really start the conversation for the rest  
2 of the time that we have here over the next few  
3 days to build on the strong recommendations you  
4 gave to us last time.

5 It's not my expectation that you will  
6 provide a new set of strategic level  
7 recommendations every time we meet. We can't  
8 realistically do that every six months. That  
9 would be, as Admiral Glang told me, a heart over  
10 rudder command that I think it's worthwhile to  
11 avoid. But instead I think it's going to be  
12 really useful to spend our time digging in a  
13 little bit deeper into the high quality  
14 recommendations that you gave us the last time.

15 And so my conversation today, my  
16 presentation, will explore with you our strategy  
17 for moving forward and outline some of these  
18 areas, kind of tee up the conversation.

19 Today I'll start by sharing some  
20 thoughts about where NOS, the National Ocean  
21 Service, is headed with respect to coastal  
22 resilience.

1            Glenn Boledovich, chief policy advisor  
2            for the Ocean Service, will talk about the FY16  
3            budget in a fair bit of detail. So I'm not  
4            really going to dive into that too much. But one  
5            piece that I will mention is that it was very  
6            clear in the '16 budget request from the  
7            President this year that resilience was a very  
8            large priority. And so we'll talk about how we  
9            can better integrate what we do in terms of  
10            foundational information with these priorities in  
11            resilience.

12            I'll also talk a little bit about the  
13            data and needs for work in the Arctic. And  
14            finally I'll tee up some questions that I think  
15            can help drive the focus over the next couple of  
16            days.

17            So, one of the fundamental messages I  
18            want to get across is really pretty simple. And  
19            we heard about it this morning. Scott teed up  
20            the question for Representative Lowenthal. And  
21            fundamentally I want to get the message across  
22            that the foundational data that we produce is

1 critical to inform and build and support  
2 community resilience.

3 What do we mean when we say resilience?  
4 There's tons of definitions out there. We tend  
5 to use one that the President has put out, but  
6 I'll paraphrase it. Basically, resilience is  
7 defined as the ability to prepare, respond,  
8 recover, and adapt to some kind of disruption due  
9 to challenging conditions, be it major storm  
10 events, be it chronic flooding, what have you.

11 At NOAA we think about resilience in  
12 three fundamental dimensions. An ecological  
13 dimension, a social dimension, and the economic  
14 aspects of resilience. And the latter is, I  
15 think, really where the HSRP could provide us  
16 some good advice.

17 Community resilience is dynamic and  
18 coastal decision-makers are requesting our  
19 support for monitoring and tracking changing  
20 conditions through resilience indicators and  
21 climate outlooks. On the West Coast, the  
22 challenges are somewhat unique. Communities face

1 threats from earthquakes. Tsunamis. Although  
2 tsunamis are not a huge issue in Southern  
3 California as I understand it, but certainly  
4 further up the coast. Challenges of drought,  
5 challenges of sea level rise.

6 When a community looks to examine and  
7 understand the challenges around sea level rise,  
8 some of the core coastal intelligence that the  
9 Ocean Service provides gives them the information  
10 that they need to make decisions, such as water  
11 level information, the coastal bathymetry, LIDAR  
12 data, topographic and land elevation data, and  
13 aerial photography.

14 Clearly, then, navigation observations  
15 and positioning programs provide coastal  
16 intelligence that supports the resilience of  
17 coastal communities as well as the resilience of  
18 marine transportation infrastructure.

19 You've heard me talk about coastal  
20 intelligence before. Essentially what I'm  
21 referring to is information that allows  
22 communities, businesses, and individuals to make

1 more informed decisions. Fundamentally, we can't  
2 improve resilience without foundational  
3 information that informs our decision-making  
4 tools, et cetera.

5 By foundational data, it's really about  
6 the framework data that we need to build tools  
7 for making decisions, which includes datums,  
8 water levels, water level information, land  
9 elevations, bathymetry, et cetera.

10 I'll use the clean version of the  
11 shorthand from Admiral Glang. Great quote, I  
12 thought. He says, "We can't make smart decisions  
13 about resilience without coastal intelligence."  
14 And he can tell you about the slightly less clean  
15 version later.

16 So, let me talk a little more about  
17 foundational data as a starting point for coastal  
18 resilience. One of the challenges that we have -  
19 - and we really do the need the help and feedback  
20 and thoughts from the Panel -- is how to do a  
21 better job communicating that connection between  
22 the coastal intelligence, the foundational

1 information that we provide, and resilience?

2 If resilience is a high priority for the  
3 administration, it's gaining momentum in Congress  
4 as well, we've got to make the connections with  
5 the foundational information. I heard that over  
6 and over when I was on the Hill pitching the '16  
7 President's budget request, when I met with a  
8 variety of constituents.

9 Over the last month or so I had probably  
10 20 presentations. And I heard over and over on  
11 the Hill, you know, we need to make sure that we  
12 don't support resilience at the expense of the  
13 core missions that have.

14 And so making that connection more  
15 effectively between foundational information and  
16 resilience, and messaging that, is where I think  
17 it would be really useful to have some of your  
18 thoughts.

19 If you recall, in Charleston, Margaret  
20 Davidson keyed up the comments about the need for  
21 enhanced shallow water bathymetry and tying that  
22 to resilience. And so I think , you know, we

1 heard that loud and clear, your recommendations,  
2 as well.

3 I also want to note that I had the  
4 privilege of meeting with Lieutenant General  
5 Bostick, the Army Corps' Commanding General,  
6 about a month ago. And I was frankly a little  
7 bit surprised that he was really interested in  
8 making additional connections with NOAA on the  
9 resilience front. And so clearly providing the  
10 foundational data, the datums, water levels is  
11 critical to the Corps.

12 And there's been a committee by NOAA  
13 leadership and General Bostick to continue that  
14 dialogue on a more routine basis. And so I think  
15 we've got an opportunity there to help influence  
16 and have that conversation with the Army Corps as  
17 well.

18 Let me continue on with a little bit  
19 more about some examples of foundational data.  
20 And, Juliana, just wave your hands if I butcher  
21 all of this. She gives me stuff that I  
22 marginally understand, so we'll see how well I do

1 here.

2 So, one of the areas that you've heard  
3 about that the National Geodetic Survey is  
4 focusing on is Gravity for the Redefinition of  
5 the American Vertical Datum, or GRAV-D. When the  
6 GRAV-D project is completed, the airborne gravity  
7 data will be used to develop a new American  
8 vertical datum in 2022. And I'd be willing to  
9 bet that we're be talking about this at every  
10 HSRP meeting between now and then.

11 As many of you know, the current  
12 vertical datum that we have contains errors of 16  
13 inches to six feet relative to sea level.  
14 Completion of the GRAV-D project will allow  
15 surveyors, scientists, and others to employ GPS  
16 to determine more accurate and precise elevations  
17 than are currently possible with less time and  
18 less effort.

19 Estimated economic benefits of this  
20 project are pretty high, ranging from an  
21 estimated \$522 million in annual economic  
22 benefits, with approximately \$240 million saved

1 from an improved flood plain mapping alone.

2 NGS plans to release the new vertical  
3 datum, called the geopotential datum, and also a  
4 new horizontal data datum, called the geometric  
5 datum, also in 2022. These datums will provide  
6 an accurate geospatial reference frame from which  
7 all mapping activities will be derived. These  
8 datums will replace the NAD 83 and the NAVD 88  
9 with more accurate positioning and a lower error  
10 rate.

11 One of the other types of foundational  
12 data that we've seen some improvements on is in  
13 topobathy LIDAR. And there's a topobathy LIDAR  
14 imagine on the left side from Cape Charles,  
15 Virginia.

16 NGS was able to upgrade its LIDAR  
17 capacity and capability to the topobathy system  
18 with the Sandy supplemental funding. And also  
19 allowed for contracting of some of this data  
20 collection as well.

21 This provides seamless coverage between  
22 the shoreline and shallow water. And NGS will

1 continue to do the hard work to coordinate  
2 topobathy and LIDAR collection activities with  
3 the Army Corps, the Geological Survey, the  
4 Interagency Committee on Ocean and Coastal  
5 Mapping, and the Interagency National Digital  
6 Elevation Program.

7 Part of the rational for the  
8 coordination, clearly, is to save time and  
9 effort. But it's also to ensure that the data  
10 meets shared standards for multiple uses. And if  
11 you look at the image on the left, you can see  
12 the little square rectangular shapes. Those are  
13 clam aquaculture beds. So these kind of data are  
14 really useful for things like, not only the  
15 navigation requirement, coastal zone permitting,  
16 commerce, as well as benthic habitat mapping. So  
17 it's a lot of information you can get from these  
18 kinds of data.

19 The other thing I'd like to mention is  
20 foundational CORS. CORS are Continuously  
21 Operating Reference Station in the bottom right.  
22 These foundation CORS are needed to better

1 connect the National Spatial Reference System to  
2 the International Terrestrial Reference Frame.

3 To support future requirements and to  
4 prepare for the transition to this new datums  
5 that I mentioned, NGS is establishing a small  
6 number of ultra-stabile foundation CORS. They'll  
7 expect to establish one to two foundation CORS  
8 per year and oversee the installation of a  
9 minimum of eighth of these foundational CORS  
10 stations in the Continental US, with additional  
11 sites constructed in Alaska, Hawaii, US  
12 territories and select foreign countries.

13 And, finally, I want to make a quick  
14 pitch for the 2015 Geospatial Summit, which will  
15 be held next week in Crystal City. During the  
16 summit, NGS will be briefing stakeholders on the  
17 current projects and future plans, including the  
18 release and transition of the new datums in 2022.  
19 And the last Geospatial Summit was held in 2010.

20 So, let me switch gears a little bit and  
21 transition to how some of our regional work shows  
22 the connection between coastal resilience and

1 coastal intelligence. This is an image from the  
2 Port of Los Angeles.

3 There's a great need, as we've heard and  
4 I think you're all aware, for more comprehensive  
5 and up-to-date navigational services, such as  
6 charts, water levels, wave conditions, to help  
7 larger and larger ships safely and efficiently  
8 enter ports like LA-Long Beach and deliver their  
9 cargo.

10 We heard from Captain Williams this  
11 morning about the impact of these two ports,  
12 being the two busiest ports in the United States,  
13 and combined being the eight or ninth busiest  
14 port complex by container volume around the  
15 world.

16 One effort that I want to at least tee  
17 up and share with you is the Precise Navigation  
18 project that's underway now focused on the LA  
19 Long Beach area. What is Precise Navigation?  
20 Basically, it's the ability and the desire to  
21 improve navigation in four dimensions: X, Y, Z  
22 coordinates as well as time.

1           So, fundamentally, we're trying to prove  
2 more accurate, more timely information to these  
3 larger ships. They need additional information  
4 to be able to get into these ports with tighter  
5 and tighter clearances.

6           For this project, which was part of the  
7 National Ocean Service Priorities Roadmap,  
8 ultimately this is going to help us understand  
9 the decisions that mariners are trying to make,  
10 how they're accessing NOAA navigation and  
11 positioning information, and frankly whether this  
12 information is meeting their needs or not. It's  
13 a great example of partnering at multiple levels,  
14 leveraging data and expertise.

15           In this case, great partnerships between  
16 the Weather Service, between the Ocean Service,  
17 between Southern California IOOS and the US IOOS  
18 program, and between our internal family, between  
19 CO-OPS and NGS. Also key partnerships with the  
20 Port of Long Beach and with the Jacobsen pilots.

21           So, the development of the data stream,  
22 such as the Nearshore Wave Prediction System or

1 wave model, water levels, and high resolution  
2 bathymetry, is going to fuel an underkeel  
3 decision support tool and improve the decision  
4 context of the Precise Navigation systems. Both  
5 the underkeel clearance tool development and the  
6 precise pilot systems are products of commercial  
7 companies.

8 Let me move on to a little bit about our  
9 work in the Arctic. I like this image. This is  
10 an image of the Chukchi Sea from a small NOAA  
11 survey vessel taken in 2013. It's kind of a  
12 lonely picture.

13 Clearly, the Arctic is a priority for  
14 this administration. And we're faced with a very  
15 difficult challenge of balancing the needs for  
16 enhanced Arctic navigation, and other activities  
17 in the Arctic, and competing priorities in the  
18 rest of the US.

19 For the Ocean Service, there's growing  
20 demand for surveys and new modern charts in the  
21 Arctic. We're doing this much as we can with the  
22 limited resources that we can and we're working

1 very carefully to prioritize the work.

2           There's also demand for enhanced water  
3 level information in the Arctic. Through a  
4 partnership with the Weather Service, we're  
5 adding one gauge. One gauge. I talked to my  
6 colleagues in Alaska and, you know, they beg us  
7 for more water level information. But it's a  
8 start.

9           You know, we're also looking to develop  
10 and deploy new technologies, such as GPS tide  
11 buoys, to better inform hydro surveys in Arctic  
12 waters.

13           In FY15, in this year, NOAA ships  
14 Fairweather and Rainier will be coordinating with  
15 the coast guard to start a multi-year project  
16 that will survey areas for the planned Arctic  
17 Transfer Route. And these ships are scheduled,  
18 knock on wood, to depart Kodiak, Alaska on June  
19 8th.

20           So, let me transition to the Panel's  
21 most recent recommendations and touch on some of  
22 those aspects and where NOS is heading with

1 respect to our priorities. Before I do that,  
2 again, I want to thank you for the input, the  
3 time and effort on the last report and offer some  
4 thoughts and questions from NOAA on your input.

5 I'll also highlight the challenge that  
6 I know you're working through. And that's to be  
7 able to continually synthesize and learn about  
8 issues on a regional scale, and really how to  
9 translate that into recommendations that we  
10 cannot also use regionally, but we can also use  
11 nationally. I know that's difficult, but I think  
12 that's important for a program like the Ocean  
13 Service who does have that national footprint.

14 So, there's a few areas where we do want  
15 your advice. First of all, there's  
16 prioritization and development of criteria on  
17 bathymetry and other data needs. You've called  
18 out the needs for shallow water coastal  
19 bathymetry to support inundation modeling in  
20 coastal resilience.

21 Again, our Nav, Obs and Positioning  
22 programs are national programs with national

1 mandates, and their missions span all US coastal  
2 waters. In the case of the NGS, all of the  
3 United States lands and waters. And clearly our  
4 priority is serving maritime users. The question  
5 I want to tee up for the Panel is, what are the  
6 criteria that we should consider in determining  
7 national charting priorities in balancing the  
8 needs of maritime users with the needs for  
9 enhanced coastal bathymetry to support  
10 resilience?

11 Our program serves both needs, but your  
12 views would be very useful and valuable about how  
13 we can balance those needs with our limited  
14 resources.

15 For US Arctic charting, we've heard your  
16 comments and your concerns regarding Arctic  
17 charting and we're going to be asking the Panel  
18 for your view on what criteria we should consider  
19 to determine charting priorities within the US  
20 Arctic, and what criteria might be balanced among  
21 our priorities in Alaska and the other US regions  
22 that our programs serve.

1           As I've noted in the presentation, and  
2 we heard this morning, we recognize that improved  
3 coastal resilience depends on foundational data,  
4 observations and products produced by NGS, CO-OPS  
5 and Coast Survey.

6           We're asking your view on how we can  
7 better tell that story, how we can better  
8 communicate what we provide in terms of coastal  
9 intelligence, the foundational information that  
10 supports coastal resilience.

11           A couple more issues I'd like to tee up.  
12 We're looking to you, the Panel, as one key  
13 avenue to help us better understand the needs of  
14 our regional and national stakeholders. I have  
15 two questions for you, specifically, to better  
16 understand our stakeholder needs.

17           What are the ways in which our programs  
18 good at engaging stakeholders? What are the best  
19 practices that you see? Candidly, I think the  
20 Nav Managers are one of the national treasures  
21 that we have because they make a lot of those  
22 connections. But I'd certainly like to hear your

1 input in terms of what do we do well.

2 And secondly, how can we better connect  
3 and strengthen our relationships with these  
4 stakeholders?

5 And I do have one area, one final ask,  
6 if you will, for feedback from the Panel. We're  
7 looking for additional counsel on the next steps  
8 for our Precise Navigation efforts. Again, what  
9 kind of criteria do we need to consider to select  
10 the next ports where we focus our attentions in  
11 terms of Precise Navigation? Criteria in the  
12 past has been focused on tonnage or nature of  
13 material or navigation challenges. What are the  
14 busiest ports? What are those ports that are at  
15 greatest risk and where can we see the greatest risk  
16 reduction and efficiency gains by enhancing and  
17 employing Precise Navigation? Fundamentally, how  
18 do we prioritize those questions.

19 So, in conclusion, I do want to say that  
20 I think we're making progress. This is my third  
21 HSRP. I've seen a lot of interesting  
22 conversations, a lot of passionate conversations.

1 And, you know, I think we're tightening up how we  
2 operate. I think we're trying to tighten up at  
3 least how we work with the Panel, how we solicit  
4 your feedback, and how we actually respond to  
5 your feedback.

6 And, again, I want to thank you for all  
7 of that effort that you've put out there. You  
8 know, in addition, I want to note that, you know,  
9 we've asked for "higher level, more strategic  
10 recommendations." And you responded. And it's  
11 been great. What this means, though, is it takes  
12 more time and effort on our side to be able to  
13 respond and to produce sort of a thoughtful  
14 dialogue back and forth with you to deal with  
15 these strategic recommendations. It's harder.

16 So if we're not responding quickly it's  
17 not that we're not interested, it's just that,  
18 you know, we're struggling, too, to be able to  
19 respond in a way that really furthers the  
20 dialogue. And that's why I wanted to dig a  
21 little bit deeper in terms of some of the  
22 recommendations you've provided, certainly, since

1 the Charleston meeting. And how can we dig  
2 deeper into those.

3 So, let me summarize very quickly those  
4 questions that I put out there. Six questions.  
5 How does coastal intelligence enhance and make  
6 coastal resilience better? How do we leverage  
7 Ocean Service foundational data moving forward  
8 supporting resilience?

9 The third question. What criteria  
10 should we consider in determining national  
11 charting priorities and balancing the needs of  
12 maritime users with the needs for coastal  
13 bathymetry?

14 The next question. What criteria should  
15 we consider to determine charting priorities with  
16 the US Arctic and how do we balance those needs  
17 with our other charting priorities in the US?

18 Next question. What are the ways that  
19 we are good at engaging stakeholders and how can  
20 we better connect with those stakeholders?

21 And finally, what are the criteria we  
22 need to consider when we select the next ports

1 for precise navigation efforts? How do we  
2 prioritize that?

3 So, I was actually hoping to be able to  
4 circle back and hear the end of the conversations  
5 on Friday. But I actually do have to get back.  
6 But I will be calling Admiral Glang on Saturday  
7 and harassing him to try to get a better sense of  
8 how this went. So, fair warning Gerd.

9 So I'm looking forward to the meeting.  
10 I'm looking forward to the dialogue and the  
11 conversations. I think the breakout sessions  
12 look like they're going to help us address these  
13 questions. And, you know, I hope this a  
14 rewarding experience for you on the Panel. It  
15 certainly is for me to be able to learn and  
16 engage with you. And, frankly, this helps me to  
17 do a better job representing the Nav, Obs and  
18 Positioning programs on the Hill and with  
19 constituents. So, with that, I say thank you.

20 So do you want to do questions or do you  
21 want to go to Glenn? Or how do you want to do  
22 this now?

1 CHAIR PERKINS: I think we should do  
2 questions. We have a little luxury, I believe,  
3 in this schedule.

4 DR. CALLENDER: Okay.

5 CHAIR PERKINS: We've got 90 minutes,  
6 you know, scheduled for lunch. So I think we are  
7 probably all willing to try to do lunch in less  
8 than that 90-minute time block so that we can  
9 spend the time here. Which is, you know, why we  
10 have you here.

11 DR. CALLENDER: I'll be here all today,  
12 I'll be here through, I think, at least half of  
13 tomorrow.

14 CHAIR PERKINS: Great. You know, very  
15 encouraging remarks. And thank you for the  
16 feedback. And I'm sure I can speak for the rest  
17 of the Panel, drafting those Charleston  
18 recommendations, you know, was quite a process on  
19 this and getting the feedback, you know, on that.  
20 So, that's good. I mean, I'm glad that we're  
21 providing a meaningful and beneficial service  
22 there.

1           You mentioned having an opportunity to  
2 engage with General Bostick.

3           DR. CALLENDER:   Yes.

4           CHAIR PERKINS:   And, you know, this  
5 issue of the lingering, now approaching two full  
6 calendar years to get a new MOA in place, you  
7 know, with the Army Corps.  This Panel has spoken  
8 to that in our recommendations.

9           What can we collectively do, Dr.  
10 Callender, to improve on that?  You know, taking  
11 two years, right, to get that contractual  
12 arrangement in place is unacceptable for both  
13 sides of the table.

14           You know, there's actually a real survey  
15 need not being met by that agreement not being in  
16 place.  Maritime Administration just went through  
17 a procurement for hydrographic surveys of a lay-  
18 berth in Orange, Texas.  So we've got Maritime  
19 Administration going out to the marketplace  
20 trying to procure bathymetric surveys, when both  
21 Army Corps and NOAA have hydrographic survey  
22 contracts already in place to provide that exact

1 service. So there's a disconnect there.

2 When we engage Maritime Administration  
3 about that, you know, it's impossible for them to  
4 do a simple money transfer and access the  
5 existing hydrographic survey contracts that the  
6 taxpayers have already put in place. And so this  
7 is a real problem impacting, you know, real  
8 agencies and real people.

9 And two years is, you know, I mean, I  
10 guess, you know, we have to renew the charter  
11 every two years. I would certainly think and MOA  
12 could get executed in that timeframe. So we're  
13 not going to, you know, I guess, as a Panel,  
14 right, we're going to keep asking.

15 DR. CALLENDER: I think that's a  
16 reasonable question. Two years is too long. I  
17 agree with you completely. You know, and frankly  
18 doing MOAs is painful to get through. You know,  
19 what I got out of the meeting -- General Bostick,  
20 General Peabody was there as well. One of the  
21 issues that was teed up was the interest in  
22 getting this MOA done.

1           So, I think it's something that it is  
2 certainly on his radar screen now as a result of  
3 that conversation. There was a desire to  
4 continue that high level dialogue on a routine  
5 basis. I'm not sure when the last time we  
6 actually had that level of conversation.  
7 Clearly, what we did talk about is that there is  
8 that enhanced need for better coordination across  
9 the agencies.

10           We both realize, although we think  
11 they're rolling in money, you know, neither one  
12 of us frankly really is. And so I think there's  
13 a good opportunity to leverage and push and get  
14 this moving.

15           I can't promise how long something like  
16 that's going to take, but it's at least in the  
17 conversation at those senior levels. And you  
18 certainly have my commitment to continue to push  
19 and do what I can to move this through.

20           CHAIR PERKINS: Yes, Joyce.

21           MEMBER MILLER: Yes, Joyce Miller. I  
22 have a related question. I noted I sat in Dr.

1 Sullivan's budget briefing.

2 DR. CALLENDER: Yes.

3 MEMBER MILLER: And she got to what she  
4 called Appendix 1. And there's some very  
5 interesting, and I'd say encouraging, NOAA cost  
6 recovery language in that. And I don't want to  
7 read it, it's relatively long, but in order to  
8 carry out responsibilities, NOAA is authorized to  
9 enter into grants and cooperative agreements  
10 with, use on a non-reimbursable basis, land  
11 services, equipment, receive and expend funds  
12 made available on a consensual basis, a federal  
13 agency, state or subdivision, local government,  
14 tribal government, territory, et cetera. Can you  
15 explain what this is?

16 And there was also under there, I will  
17 say, a paragraph about availability for new  
18 vessel construction funds. And I thought that  
19 also was encouraging. And she addressed it  
20 briefly but, perhaps, are you familiar with this  
21 appendix?

22 DR. CALLENDER: I'm actually not. Is

1 that part of a proposal or is that something that  
2 was --

3 MEMBER MILLER: No, that's the Blue  
4 Book. That's the '16 Blue Book.

5 DR. CALLENDER: I'll see if Glenn could  
6 maybe answer this.

7 MR. BOLEDOVICH: So, the appropriations  
8 committee the past several years has provided  
9 language to NOAA. Many of our statutes for many  
10 of our programs have language about who we can  
11 talk to, who we can take money from or give money  
12 to. And it's been kind of hit or miss. This  
13 kind of the magic language that, in terms of  
14 agreements that we have, it authorizes the scope  
15 of those, for us to receive funds and to give  
16 funds, and it broadens it across the entire  
17 agency instead of program by program. And  
18 appropriators have inserted that language into  
19 our appropriations bill for the past several  
20 years. And it's been a great help in terms of  
21 our ability to enter into agreements with other  
22 entities.

1           MEMBER MILLER: So that's going into the  
2 bill now or it's --

3           MR. BOLEDOVICH: No, it's been. We've  
4 been given that authority, broad authority, into  
5 our appropriations bill.

6           MEMBER MILLER: How does that affect  
7 regional partnerships and such, then?

8           MR. BOLEDOVICH: It means we have clear  
9 authority to enter into those agreements and to  
10 exchange resources. And whether it's sharing of  
11 a building, in concrete sources or others. So it  
12 broadens what are pretty strict rules about what  
13 a federal agency can do in terms of working with  
14 others. And it says clearly, NOAA, you have some  
15 pretty broad authority here to work with others.

16          DR. CALLENDER: So, Glenn's a lawyer.  
17 I'm not, so maybe I can explain it in terms at  
18 least I would get. What we've basically got is  
19 language that we would then put into a funding  
20 instrument that gives us that approval to do it.  
21 It doesn't speed up an MOU, it provides  
22 additional authority versus the Economy Act,

1 which is what we typically use, which is frankly  
2 tenuous in a lot of these instruments to move  
3 money back and forth. It just gives us a little  
4 bit better authorization. It doesn't make it any  
5 faster, it doesn't make MOUs get put together  
6 quicker or money move fast. It just gives us  
7 that legal authority to do it.

8 MR. BOLEDOVICH: That's correct.

9 DR. CALLENDER: Because, you know, I've  
10 been in places where I've tried to get money from  
11 other agencies. You know, I've tried to do this  
12 back and forth. And I recognize it's painful.  
13 And it's something that we are trying to push  
14 hard to NOAA. But we don't have a solution to  
15 make it easy at this point yet. This helps.

16 CHAIR PERKINS: Carol.

17 MEMBER LOCKHART: Carol Lockhart. This  
18 may be less of a question, more of a comment. I  
19 really appreciate the directness of the six  
20 questions you've given us to think over. And I'm  
21 hoping that it can help us focus the Panel over  
22 the next few days. And I'm sure that's your

1 intention with those.

2 With that said, it may be useful to have  
3 those six questions directly in our face for most  
4 of the week.

5 DR. CALLENDER: We can do that.

6 MEMBER LOCKHART: So I'm wondering if we  
7 can either write them on the white board or write  
8 them when we have blank time in between  
9 presentations and at the breaks have them on the  
10 power point so that we can focus our attentions  
11 specifically on those questions.

12 I know some of them, or almost all of  
13 them, were captured in some of the documentation  
14 we were given to read ahead of time, but I think  
15 having that stuff constantly as a reminder of  
16 where to focus our attention during the meetings  
17 might be very useful.

18 DR. CALLENDER: Sure, Carol, happy to do  
19 that. We can do that right after this  
20 conversation.

21 CHAIR PERKINS: Gary.

22 MEMBER JEFFRESS: Gary Jeffress.

1 Russell, I really appreciate the feedback you're  
2 giving us from the administration of NOS. I  
3 encourage you to do more of that.

4 I want to try answer those first two  
5 questions you asked from my point of view. Just  
6 to kick off the dialogue.

7 DR. CALLENDER: Sure.

8 MEMBER JEFFRESS: You asked, what is the  
9 good stuff that you do, right? And I think that  
10 the core of what NOAA does, and the National  
11 Ocean Service in particular, is you provide great  
12 data and information which is scientifically  
13 rigorous to the point where it's totally accepted  
14 by the public, and more importantly, is accepted  
15 by the courts. It's accurate and it's dependable  
16 and reliable.

17 And I especially like the way that a lot  
18 of it now is in real time. Because that's the  
19 way society is going is like instantaneous  
20 gratification and instantaneous data and  
21 information.

22 And so that leads me into, how can you

1 get even closer to your users. And I think the  
2 way to go right now, and we've done a bit of a  
3 research on the data that we've been collected in  
4 Texas with the Texas Coastal Ocean Observation  
5 Network, which is following your example in terms  
6 of the science and the real-time data and the  
7 quality of it.

8 Is to integrate that in smartphone apps.  
9 Which means you actually got to use the same high  
10 integrity of scientific data, but integrate it  
11 and display it in a really simple format so that  
12 the public can understand.

13 And for example, just a couple weeks ago  
14 I downloaded a new app that's free. It's called  
15 Waze. It's for navigation on land. It's for  
16 directions.

17 And this software is just like a  
18 navigation software, but it's got a social  
19 component where you can actually provide  
20 information. Like what speed you're going. And  
21 sort of ways gives an indication of what the  
22 traffic conditions are where you are.

1           You can actually report incidents. Like  
2 traffic problems or there's a police presence in  
3 a certain area. You can report that directly  
4 back.

5           But have that sort of system for coastal  
6 navigation. Where boaters can use this to figure  
7 out where they are.

8           But they can also report back in real  
9 time, what's happening where they are. If  
10 there's an incident or an oil spill.

11           It's like a social media for navigation.  
12 It already exists for the land base navigation.

13           So there's one way you can really get  
14 back to your users in a very significant way.

15           DR. CALLENDER: I mean essentially every  
16 smartphone user out there is a data point, data  
17 collection, et cetera.

18           One of the challenges that we, not  
19 challenges, one of the opportunities I think we  
20 have in NOAA is there's what's called a NOAA  
21 partnership policy. This was originally put in  
22 place to deal with the growth of the weather

1 industry.

2 So there's, you know, trying to find  
3 that balance between the authoritative data that  
4 we do provide to those rigorous standards to a  
5 smartphone application or a commercial  
6 application. You know, trying to find that  
7 balance is really key.

8 And, you know, that policy is -- it's  
9 not just a weather policy, it's across the board.  
10 And so I think we're going towards those kind of  
11 systems, but we've got to do it in a smart way.

12 No pun to the smartphone. We've got to  
13 do it in a smart way. And we've got to do it in  
14 such a way that essentially stipulates private  
15 industry versus competing for it potentially.

16 So we're kind of working through that.  
17 I think the weather service, we can learn a lot  
18 from them in terms of how they did that. And  
19 their interactions with industry.

20 But I think that's, you know, that's a  
21 way, no pun intended again, of the future.

22 CHAIR PERKINS: Lawson.

1           MEMBER BRIGHAM: Yes. Thank you, Russ,  
2 for including Arctic in the dialogue. I chair  
3 this Arctic and Emerging Priorities working group  
4 here.

5           And of course the challenge for us, and  
6 for you all, is how do we take our national  
7 arctic documents and translate that into a  
8 reality in the budget. But the documents, all of  
9 them, mention charting the Arctic as a high  
10 priority.

11           Now when I mention ice breakers, they  
12 don't mention observing systems, they don't  
13 mention a lot of stuff.

14           DR. CALLENDER: Right.

15           MEMBER BRIGHAM: But they do mention  
16 who's charting the Arctic and all of the data  
17 that's necessary. Geospatial data.

18           So how do we, the HSRP and how do you  
19 all, translate that very definite and direct  
20 national priority to the budget? So it has to be  
21 done internal.

22           But it's very obvious to all of us that

1 work in Arctic, that none of this can be done  
2 with no new money. You're already teasing out  
3 possibilities and actually surveying, but how  
4 does the Arctic compare with LA and Charleston  
5 and New York, et cetera?

6 So huge issues. We'll try to give you  
7 our best advice. But probably one will be to, it  
8 has to be new money, for some of this frontier.

9 DR. CALLENDER: Absolutely. I mean  
10 that's the fundamental challenge. I mean as you  
11 guys all know, it's hugely difficult majestically  
12 and expensive to operate up there. And to get  
13 ships up there.

14 And, you know, if you'll look at, and  
15 Glenn will walk through this a little bit in  
16 detail, you look at the '16 budget requests,  
17 there's \$1.3 million of a request for the Arctic.  
18 And it's about spill response. It's not about  
19 the charting side of the House, if you will.

20 It's literally a drop in the bucket in  
21 terms of what's needed. And, you know, we've,  
22 you know, I think there's been some level of

1 frustration with national level priorities. You  
2 know, clearly pointing towards the Arctic.

3 And the fact that moving requests to the  
4 President's budget process doesn't yield requests  
5 for the Arctic.

6 So it's, you know, what I've seen, and  
7 you guys have probably seen this for years as  
8 well, is you got to keep banging away at it.  
9 You've got to, you know, after you put a proposal  
10 together that goes, try to work through the  
11 President's budget and the Hill, it might take  
12 five or six years of constant attention before  
13 you actually going to get results out of the  
14 other end.

15 You know, clearly with the pressure that  
16 congress is facing now as well, I mean even I've  
17 heard from democrats and senator probe saying  
18 that all new proposals are suspect. You know,  
19 how do we fund our current activities.

20 So there's no easy way to do it. We've  
21 got to get new funds and we've got to make some  
22 hard decisions, absent those new funds.

1           So no good answer, but we'll, you know,  
2 work together on it.

3           MEMBER BRIGHAM: I'm sorry, can --

4           CHAIR PERKINS: Yes, you can respond.

5           MEMBER BRIGHAM: Yes, I think also  
6 there's this myth and reality of whether we're  
7 talking about global trade routes or the reality  
8 that we're offshore today and have leases and a  
9 great US Government investment and return on it.  
10 And that investment in leases in areas that are  
11 marine.

12           So I think it gets confused that we're  
13 talking about global trade routes decades from  
14 now, rather than the reality that it's today  
15 we're operating and in the near term decade.

16           So we have to make this -- cut through  
17 the myths of the new Arctic and say what we have  
18 now and what we're doing now and what are our  
19 needs now for observing systems, charting, et  
20 cetera.

21           CHAIR PERKINS: Okay. Ken.

22           MEMBER BARBOR: Yes, I -- when I look

1 back over the recommendations we've had, again  
2 Susan has complied pretty well, yes, we can look  
3 back to, I think it was a Boston meeting or a  
4 Portland meeting when there was some rock in  
5 Scot's Bay that the Panel highlighted and it got  
6 surveyed.

7 You know, so that's an immediate  
8 gratification. And now we're, you know, rightly  
9 so shifting. Because that's a Nav manager issue,  
10 it's not a Panel issue.

11 Rightly shifting to a strategic view.  
12 But we are wrestling, internally, with how we  
13 manage those sorts of recommendations. And as  
14 you say, us giving them to you complicates your  
15 business because they are big.

16 But us trying to figure out what the  
17 heck's going on also. How are you responding  
18 other than, you know, a feel good thank you very  
19 much, that is an important issue for us too.

20 You know, what progress is being made  
21 and how is that being directed. And whether  
22 that's an internal issue we need to really, well

1 it is an internal issue the Panel needs to come  
2 to grips with. But it's also an external issue  
3 that we need to, you know, be on the same sheet.

4 DR. CALLENDER: Yes, I agree. I think  
5 it just points out the need for a continual  
6 feedback loop.

7 You know, so that, you know, it's not  
8 just letters and responses going back and forth,  
9 but it's more of a continual engagement. And I,  
10 you know, I think from talking to Admiral Glang,  
11 I think that's the intent.

12 But yes, clearly the challenge of us  
13 asking you harder questions means that it's  
14 harder for us. But I think that's the point of  
15 working together on these.

16 CHAIR PERKINS: Thank you. Joyce, last  
17 question and then we'll move on to the budget  
18 briefing --

19 MEMBER MILLER: Joyce Miller. I noticed  
20 that you said, when you saying the ships going  
21 into the Arctic this year, knock on wood.

22 DR. CALLENDER: Yes.

1           MEMBER MILLER: And I note that Admiral  
2 Glang last year told us that the Fairweather and  
3 the Rainier didn't survey last year.

4           I was talking with a young Lieutenant JG  
5 NOAA Officer who had been on the Fairweather, she  
6 was very, very concerned that she felt she got no  
7 hydrographic training in two years because the  
8 Fairweather didn't sail.

9           Now this isn't future money, this is  
10 money you've got. And I've been NOAA, worked  
11 with NOAA a longtime and I understand the NMAO  
12 and all, and certainly not the intricacies, but  
13 how can NOS get its ships out reliably so that --  
14 I mean we're missing surveying in the Arctic  
15 again this year, the ships are delayed.

16           How can you guys push this to get the  
17 ships out? Because it doesn't happen just there,  
18 it happens out in Hawaii and, you know, there's  
19 lack of a lot of resources.

20           (Off microphone comment)

21           MEMBER MILLER: No, no. This has been  
22 my topic for a long time.

1 DR. CALLENDER: So we lost approximately  
2 40 percent of our hydrodays this year. Is that  
3 number right? Admiral, close?

4 RDML GLANG: That sounds about right.

5 DR. CALLENDER: And, you know, the  
6 challenge that, and I'm, you know, I'm not -- I  
7 want to be very careful, and I'm not speaking for  
8 NMAO on this, but one of the fundamental  
9 challenges they had was simply the inability to  
10 keep engineers onboard the ships. Ships were  
11 ready to go, they didn't have the engineers.

12 Because you could get better pay, better  
13 berth, better hours, better schedules in the  
14 private sector. And, you know, we even tried to  
15 work with Admiral Lopez and Admiral Score on some  
16 solutions for that, but, you know, that's  
17 something that we can't control in NOS.

18 We can certainly push it and influence  
19 it, but that's one of the challenges of operating  
20 this fleet. Is basically getting the ships out  
21 there to do the work.

22 You know, the training aspects, we can

1 absolutely work on that. I hear you. We can  
2 take that back for an action.

3 MEMBER MILLER: Well is this something  
4 that we should consider, you know, putting in a  
5 recommendation to the administrator. Because  
6 it's NOAA. It's not an NOS issue, it's an  
7 overall NOAA issue.

8 DR. CALLENDER: I don't want to put  
9 words in the Panel's mouth, but certainly  
10 expressing, you know, concerns for the inability  
11 to maintain the hydrodays that we have, much less  
12 increase them, I think it's worth certainly  
13 bringing up.

14 CHAIR PERKINS: Very good. Good  
15 dialogue. Thank you, Dr. Callender.

16 DR. CALLENDER: We're going to switch  
17 places so he's more in the center here. Or in  
18 the hot seat.

19 MR. BOLEDOVICH: Yes, switching to the  
20 hot seat.

21 DR. CALLENDER: So our next speaker is  
22 Glenn Boledovich. He's policy director for the

1 National Ocean Service.

2 And Glenn is a familiar face to the  
3 HSRP. And we're glad to see you and excited to  
4 hear about what is and isn't possible in the  
5 upcoming budget.

6 MR. BOLEDOVICH: Okay. Yes, we're going  
7 to talk about a few things today. So I'm glad to  
8 be here.

9 In case you're wondering, in recent  
10 meetings of the Panel, it would have been one of  
11 my staffers here. Paul Bradley's been staffed to  
12 this Panel for several years.

13 We've had some change in staffing. And  
14 prior to Paul, and prior to me being the director  
15 of the policy group in NOS headquarters, the  
16 navigation portfolio is bailiwick.

17 So I do know when I was there when the  
18 HSRP was created and it's my pleasure to be back  
19 talking to you folks again today. We are working  
20 on a permanent replacement for Paul. Just so you  
21 know. But meanwhile we're kind of spreading the  
22 work around a little bit.

1           But anyways, it's my pleasure to be here  
2 today. I'd like to add my thanks to everyone  
3 else's for your fine work as well.

4           I know we have several new members and  
5 I know members have varying degrees of expertise  
6 regarding the budget process in congress. So for  
7 those of you who know most of this kind of stuff  
8 already, bear with me a little bit as I try to  
9 maybe bring some other folks up to speed in some  
10 of the remarks that I make.

11           So let me kind of get started here. So  
12 these are the things I'm going to talk about  
13 today.

14           There was an election, we have a new  
15 Congress. A 114th Congress. So people often  
16 refer to it as the Congress in generic terms, but  
17 actually they sit for two years at a time.

18           Every time the House representative  
19 comes up for election, every two years, there's a  
20 new House elected and that's called the Congress.  
21 That two year period.

22           So it just kicked off in January, and

1 they have two years. And that's kind of their  
2 clock for moving legislation.

3 They do appropriations and funding every  
4 year. But in terms of moving legislation,  
5 anything not passed in two years dies and has to  
6 be started anew. So that's how kind of the  
7 process works up there on the Hill.

8 I'm going to talk a little bit about  
9 some of the changes that happened on the Hill.  
10 Just -- and some background just on our statutory  
11 authorities, things that are under the prevue of  
12 this Panel.

13 And then kind of just a real point  
14 overview of our strategy. And then a little bit  
15 about the budget. A little bit of work that I've  
16 been working on with FEMA.

17 The issue of responding to disasters has  
18 come up already this morning. I was charged,  
19 sometime ago, to pursue the idea of Pre-Scripted  
20 Mission Assignments with FEMA. I'll gladly give  
21 you an update on that.

22 And then just briefly on the charter

1 renewal, which I think we're going to discuss  
2 later actually in the administrative section.  
3 But I'll touch on that briefly.

4 So going to Congress. So a new action.  
5 The big thing to happen was the senate flip.

6 The Republicans took the majority. And  
7 the Republicans also bolstered their majority in  
8 the House.

9 I always start with appropriations  
10 committees because these are the people who give  
11 us our money as opposed to authorizing  
12 committees. Which pass laws, like the HSIA and  
13 such.

14 These people actually say how much  
15 you're going to get to run those programs each  
16 year.

17 And in the House, at the top, there  
18 wasn't much change. And at the subcommittee  
19 level, the only change is John Culberson, is  
20 another chair of our subcommittee. So the  
21 Commerce, Justice, Science and Related Agencies  
22 Subcommittee is our subcommittee.

1           And by the way, just so you know, the  
2 House and the Senate isn't the only committees  
3 that are parallel. They're the exact same in  
4 each chamber.

5           Is the appropriation committee and its  
6 subcommittees. The authorizing committees vary  
7 quite a bit. But here they match up one for one,  
8 so they can negotiate those funding levels.

9           So John Culberson, he's from the Houston  
10 area, he's the new chair of our subcommittee.

11           On the Senate side, Senator Cochran is  
12 back to chair. The Senate appropriations  
13 committee.

14           You may have heard that Senator Mikulski  
15 is retiring end of this Congress. But meanwhile  
16 she holds the chair or ranking member of the full  
17 committee and our subcommittee. She continues to  
18 have a strong interest.

19           And Senator Shelby from Alabama is,  
20 again, our subcommittee chair. So that's not --  
21 he's very familiar with our programs. We're very  
22 familiar with the staff on the Hill and

1 everything. So we're hopeful those relationships  
2 will go well.

3 That's about it on that. So these are  
4 kind of the changes that are authorized in our  
5 appropriations committee.

6 And our authorizing committees, this is  
7 where the bigger change has been in the House.  
8 Most of NOAA's wet side program, including these  
9 programs, fall under the nature resources  
10 committee. And there's obviously a change of  
11 leadership there.

12 With representative official from Utah  
13 having the full chair. And the few changes  
14 there.

15 But the bigger changes that happened  
16 with the committee was in the subcommittee  
17 structure. And this is kind of historical  
18 observation I would make.

19 When I first came to Washington DC, in  
20 the House of Representatives, there was a full  
21 committee. The Merchant Marine and Fisheries  
22 Committee was dedicated the ocean issues.

1           In 1994 that changed. And there was an  
2           Ocean and Fisheries Subcommittee under the  
3           Natural Resources Committee. But now that  
4           committee has been abolished.

5           And now oceans have been put under Water  
6           and Power. Under the new Congress that just  
7           started in January.

8           And this is more the, you know, water  
9           power type folks. You know, long standing  
10          committee. Subcommittee of the House. So I'm  
11          not quite sure how that's going to work.

12          And furthermore, not quite all of our  
13          programs were put under there. Our Coastal Zone  
14          Management programs were put under the Energy and  
15          Mineral Resources program.

16          So the HSIA is under the Water and Power  
17          subcommittee. That's a committee with  
18          jurisdiction.

19          The other big change in the House. The  
20          Nature Resources committee has created a separate  
21          new subcommittee that doesn't have jurisdictions  
22          over subject matter, just oversight in

1 investigations. So this is kind of a common  
2 pattern with several committees in the House.

3 The House of Science committee did the  
4 same thing. So these would be providing some  
5 oversight.

6 And some of the issues are going to be  
7 interested in investigating, based on the  
8 releases they've provided. Is the Coastal Zone  
9 Management Act and its relationship to energy  
10 development, offshore energy development.

11 Federal mapping programs was raised.  
12 Kind of the assumption, the overlap between  
13 programs across agencies is pretty persistent in  
14 Congress. And it's back again. And we'll expect  
15 to see some legislation reintroduce this section.

16 And of course the President's National  
17 Ocean Policy continues to be of interest. It was  
18 an interest of the committee of last Congress and  
19 again this Congress. So this is some of the  
20 topics here.

21 So anyway, the main point here is our  
22 programs fall under the Water, Power and Ocean

1 subcommittee. You can see the Chairman, John  
2 Fleming, from Arizona there.

3 The Ranking Member Jared Huffman from  
4 California and Northern California. Just north  
5 of the Bay area up to the Oregon border. So  
6 we'll see what this Congress brings.

7 There hasn't been a lot of interest  
8 expressed specifically in the programs. Or the  
9 reauthorization of the Hydrographic Service  
10 Improvement Act. In the past, you know, they  
11 acted, its authorization needs should be  
12 reauthorized since 2012.

13 Congressman Young has been champion for  
14 this legislation since its conception. Don Young  
15 of Alaska. And typically he will submit a bill.  
16 But so far he has not.

17 By the way, Representative Lowenthal is  
18 on the Water, Power and subcommittee that has  
19 jurisdiction over these programs. So he's a  
20 member of that subcommittee as well as a full  
21 committee.

22 Just for a point of interest. There's

1 other NOAA programs that are under the House  
2 Science committee, but it's mostly the weather  
3 side.

4 But it's always struck me as interesting  
5 that the House Transportation and Infrastructure  
6 Committee, and specifically the committee on  
7 Coast Guard and Marine Transportation, always has  
8 an interest in these programs, but has no  
9 jurisdiction. Has no official jurisdiction.

10 The jurisdiction of the House  
11 Transportation committee over at NOAA, they have  
12 jurisdictions over water and oil pollution. So  
13 our Office of Response and Restoration and the  
14 Oil Pollution Act has some jurisdiction.

15 But they're -- there's a lot of staff  
16 there that we talk to, but technically they have  
17 no jurisdiction. So there would never be a  
18 hearing in front of this committee, specifically  
19 about these programs.

20 Our Senate committee has been, of course  
21 the change in the leadership. So Senator Thune  
22 is on the chair of the full committee. Senator

1 Bill Nelson of Florida is the ranking member.

2 And then the subcommittee that has  
3 jurisdiction over our programs, Senator Rubio  
4 from Florida and Senator Booker from New Jersey  
5 is the ranking member. Senator Rubio is the  
6 chair. So that's the big change on the Senate  
7 side.

8 What I have sent out to the Panel is a  
9 much more detailed document telling you who all  
10 the members are on all these subcommittees.

11 That's a document that NOAA produces  
12 that tracks every year. It's about a 26 page  
13 document. So I didn't print it out. But we can  
14 make that information available.

15 So I think I sent it. It should have  
16 been put on at least the Google site or the site  
17 you guys share. As well as some of the basic  
18 authorities for the programs here.

19 So we're not quite sure where the Senate  
20 subcommittee is going, but one area they're  
21 showing interest in is vessel discharge  
22 legislation and not directly on point with the

1 jurisdiction of this Panel.

2 And a couple other topics there.  
3 Weather legislation in fisheries, the National  
4 Fisheries Act, the Magnuson-Stevens Act is always  
5 a hot topic. And it's due to be reauthorized.

6 As well weather legislation. Both in  
7 the House and Senate has been of interest lately.  
8 So that seems to be where their focus is right  
9 now.

10 So this slide just kind of outlines  
11 there, especially for maybe the new Panel  
12 members, but kind of what the laws that covers,  
13 has the govern, and provide the jurisdiction for  
14 this Panel.

15 The Coast and Geodetic Survey Act is  
16 kind of the long standing organic authority for  
17 these programs. Goes back to the 1940's.

18 And in 1998, rather than messing with  
19 that law or tampering with that law, Congress  
20 passed a new law called the Hydrographic Services  
21 Improvement Act, which references back to this  
22 earlier law. But kind of leaves that law intact.

1                   And it's the Hydrographic Services  
2 Improvement Act, specifically the amendments of  
3 2002, that created this Panel and created the  
4 jurisdiction and the prevue of this Panel. And  
5 it's outlined in that act.

6                   So it basically says, this section  
7 creates the hydrographic services review panel  
8 and the stuff you have jurisdictions over is  
9 section so and so of this act. And those are the  
10 things that fall under the prevue of the Panel's  
11 review and consideration.

12                   And no surprise, it's basically about  
13 the programs and activities of the three offices  
14 that are represented here from NOAA.

15                   So the Ocean and Coastal Mapping  
16 Integration Act is a law that was passed in 2008.  
17 It's part of the much larger piece of legislation  
18 on various land-use laws and stuff and natural  
19 resources laws.

20                   This act basically says, federal  
21 agencies, you should coordinate together on ocean  
22 and coastal mapping. And NOAA, you should do so

1 as well internally.

2 And this is the whole integrated ocean  
3 and coastal mapping program that Ashley will be  
4 talking to you about.

5 And in my view, it's been quite a  
6 success. When these ideas come up that the  
7 federal mapping efforts are very uncoordinated, I  
8 would say because of, not just this law, but  
9 because of interagency efforts that even preceded  
10 this law.

11 The Sandy response was a perfect example  
12 of how well agencies worked together. And I  
13 think the wet side, or the ocean and coastal  
14 side, some other folks who maybe learned from  
15 that.

16 Because I thought the cooperation was  
17 actually very well done. The coordination for  
18 all the shoreline mapping between FEMA, the Army  
19 Corps and NOAA was exemplary.

20 Certainly way ahead of some of what the  
21 perception is, I think, in the public. Or at  
22 least in other areas.

1           In terms of the legislation that may  
2           come up this Congress, you know, you guys could  
3           also let me know areas of freight transportation  
4           and freight movement and supply chain. Because  
5           that's something that my office would cover a  
6           lot.

7           But if you folks have an interest in  
8           that, let me know. We can certainly kind of keep  
9           tabs on that.

10          There was a geospatial data act  
11          introduced in March. A little bit more relevant  
12          to the work of this committee.

13          It's -- we don't know that this  
14          legislation is going to move very far, but it  
15          basically is about management of datum and datums  
16          for the federal geographic data committee.

17          It doesn't go program by program. It  
18          just kind of re-authorizes how agencies cooperate  
19          and work together through the Federal Geographic  
20          Data Committee.

21          The Digital Coast Act was a legislation  
22          that was introduced last Congress that did not

1 pass. We expect it to be introduced again.

2 But that's kind of the extent of the  
3 kind of interest that we've seen in programs  
4 related to this Panel at this point.

5 So in terms of our legislative strategy,  
6 our outreach strategy for Congress, it's noting  
7 very surprising here. We want to strengthen the  
8 good relationships we have, we want to build new  
9 ones.

10 Our kind of approach for that is greater  
11 in-district opportunities. For example, the tour  
12 that we did with Representative Lowenthal in the  
13 vessel with the pilots, with a constituent and a  
14 partner, way more effect than going to his office  
15 and meeting with him and talking about our  
16 programs.

17 When Jacobsen Pilots talk about the  
18 value of our programs, it's very impactful.

19 And so that was kind of the  
20 opportunities of what we're looking for and to  
21 build upon this year.

22 In addition to funding opportunities,

1 that would be maybe some contracts for these  
2 programs, but also grants. We give away a lot of  
3 money. About a quarter of our budget is given  
4 away in grants for the Ocean Service.

5 And again, just trying to highlight that  
6 and the impact on the districts and the members a  
7 little bit better. And then of course continuing  
8 to build one-on-one relationships.

9 So now I'd like to segue over into a  
10 little bit of budget. So this is the overall  
11 NOAA budget.

12 You see the National Ocean Service  
13 there. Basically about ten percent of the NOAA  
14 budget. Hasn't been a big shift there this year.

15 And overall the President's request had  
16 quite a few inquiries. And this is kind of the  
17 dilemma that Congress is having, is that the  
18 President made some conscious decisions to  
19 increase investments in areas that exceeded some  
20 existing caps. And Congress is still working  
21 within those caps.

22 So when all -- when Russell said all

1 increases are suspect, said anything over those  
2 caps is like, well, they should be the view of  
3 many Congress offset. And the president did not,  
4 he exceeded the caps. He went over and above.

5 So here's the NOS budget trends over the  
6 past several years. You can see a rather large  
7 jump in this year.

8 That jump did not translate directly to  
9 the programs under this group. And this is our  
10 primary reason why Russell, well it's a primary  
11 reason I won't speak for my boss, but why the  
12 resiliency question is so important for this  
13 Panel. Because those increases, as you'll see,  
14 are very relevant to resilience.

15 More specifically, for these programs,  
16 similar kind of projection. Except the swell is  
17 not quite as high on the far side.

18 The blue bar in the middle, that's the  
19 Sandy supplemental money that we got. We got  
20 quite a few resources there for our Navigation,  
21 Observations and Positioning programs. And those  
22 funds have been expended.

1           So the trends are kind of similar. In  
2           2013 was the big sequester year. And then '14  
3           and '15 Congress, they passed the law forgiving  
4           them from the sequester for two years. For two  
5           years. So it's over.

6           So in '16 technically the sequester is  
7           back. So it means no matter what Congress does,  
8           there's going to be an additional whack taken off  
9           the top of that.

10          Unless there's some relief provided from  
11          the sequester. So we'll see where that goes in  
12          this Congress.

13          Nobody is quite sure, but frankly many  
14          of the appropriations are saying, you know, these  
15          budget things are a bit ambitious and it's going  
16          to be a tough year. They're expecting,  
17          especially with a new majority in the Senate,  
18          they don't expect the fiscal noose to get looser  
19          this year. If anything, potentially tighter.

20          So the investments in the National Ocean  
21          Service are, almost virtually all in the area of  
22          resilience. And this is kind of the game in town

1 right now.

2 The President's budget made a deliberate  
3 investment in these areas, consistent with kind  
4 of the White House's Climate Adaptation  
5 Strategies and Climate Action Program.

6 And the big chunk of the money, \$45  
7 million, was put into our budget for grants.  
8 This is grants through coastal states. For them  
9 to develop and implement resilience plans.

10 Now this would be including communities  
11 like Long Beach. We met with the major  
12 yesterday. He was very interested in this idea.

13 And the notion is that these grants  
14 would be regional and very much partnership  
15 based. And that port a maritime communities,  
16 whether large or small, are certainly open to be  
17 a partner in proposing these grants.

18 So the notion is people would come  
19 together across the region, whether it's several  
20 states, through their coastal zone programs,  
21 maybe with sea grant programs and others, to kind  
22 of come together with a proposal that's kind of

1 dynamic and innovative for how, that we can kind  
2 of get some seed money into supporting coastal  
3 resilience.

4 Because ultimately, you know, the  
5 decisions are made. What to develop and what to  
6 do on the coast is not a federal decision. It's  
7 a local land-use law. Local and state land-use  
8 law. So that's where that investment is.

9 The ecosystem-based solutions for  
10 resilience of \$5 million there is this idea of  
11 nature based infrastructure that we can't build a  
12 seawall everywhere, as communities are  
13 threatened.

14 We're going to need some alternatives.  
15 Some natural solutions for communities. And  
16 there's not a lot of good science on that, and  
17 this investment is to kind of trigger that and  
18 move that along.

19 It's a lot of work with the Army Corps  
20 in this area. The Army Corps has an effort  
21 called SAGE, Systems Approach to Geomorphic  
22 Engineering, that they're just kind of getting up

1 online. And it's the same kind of a notion.

2 That, you know, from really hard  
3 infrastructure to totally green infrastructure.  
4 There's things that are in between and we need to  
5 start looking at those. And most of importantly,  
6 the value of those and whether they work or not.

7 The investment for capacity to respond  
8 to extreme events. That is more of an internal  
9 investment to increase our capacity to support  
10 coastal communities.

11 So this is basically the internal  
12 funding of the coastal resilience grants. This  
13 is to provide us some infrastructure to continue  
14 to provide tools and services in support of  
15 coastal service resilience. Including some  
16 coastal intelligence tools.

17 The AmeriCorps Community Resilience  
18 Initiative Training, built on an activity that  
19 was started in California. And it was some good  
20 success and they put that into our budget for  
21 that.

22 The rest, the competitive research, this

1 is mostly for harmful algae blooms, our coastal  
2 science centers. And then Russell already talked  
3 about the Arctic spill preparedness.

4 So this is mostly for Office of Response  
5 and Restoration to work with the coast guard and  
6 others, on Arctic spill preparedness. In light  
7 of proposed development up there.

8 So kind of the biggest takeaway here is  
9 where's the money going? It's going to the  
10 resilience. And so it's no surprise at all.

11 We're concerned that we need to better  
12 articulate how these programs can promote  
13 resilience. Because they didn't get funded here.  
14 That's the message.

15 And I think there's a strong argument to  
16 be made. And I don't -- what would be really  
17 useful is for somebody, like this Panel, not so  
18 much to make a strong recommendation, but to  
19 articulate how these programs can advance these  
20 national goals of increasing the resilience of  
21 communities.

22 So it's basically a second mission,

1 beyond our traditional navigation and positioning  
2 mission, to support this idea. And, you know,  
3 when I walk around and talk to folks, it's  
4 amazing how many local communities want this same  
5 kind of data.

6 Mayors now want to know what an inch of  
7 water looks like. Or what two inches of water  
8 look like.

9 The accuracy of these programs is now  
10 all of a sudden high in demand. Maybe ten years  
11 ago they want kind of pretty pictures of land  
12 cover and stuff along their coast, but now with  
13 these flooding issues and these reoccurring  
14 flooding issues, it's become important. And I  
15 think these programs have a lot to offer.

16 And it would kind of help, I think us a  
17 lot, if an independent panel could help explain  
18 that. So, Russell, can I talk to you about?

19 So that's kind of my two cents on that.  
20 It would be, I think it would be really useful to  
21 us as we rollout a budget and talk to people and  
22 say, well our panel said these are the five ways

1 that these programs can support resilience in the  
2 coast. Or elsewhere for that matter.

3 So we talked about FEMA Pre-Scripted  
4 Mission Assignments. So this has been a bit of a  
5 struggle.

6 We talked a little bit about how long it  
7 takes to get an agreement with the Army Corps of  
8 Engineers. Well apparently it takes like two  
9 years to get a Pre-Scripted Mission Assignment  
10 from FEMA. Because this has been a tough go.

11 A Pre-Scripted Mission Assignment, just  
12 so to give you guys an idea what's going on here,  
13 you know, a mission assignment is a formal  
14 document issued by FEMA to direct other federal  
15 agencies to complete specific tasks in response  
16 to a Stafford Act Declaration by the President.  
17 When disasters happen.

18 So excuse me while I read some of this  
19 little introductory material here. Because this  
20 is kind of terms of art here.

21 Mission assignments can be provided in  
22 anticipation of or in response to a Presidential

1 declaration. Agencies can be directed to perform  
2 work with or without reimbursement.

3 The mission assignment identifies  
4 basically the statement of work, the funds, the  
5 points of contact and the projected completion or  
6 end date. Once a mission assignment is approved,  
7 it becomes the actually obligating document.

8 So the idea of post Sandy world that we  
9 are living in, is FEMA also has these things  
10 called Pre-Scripted Mission Assignments. And  
11 these are kind of designed in order for FEMA and  
12 other agencies who have developed, to facilitate  
13 rapid response in standardized statements work.

14 So in areas where you might provide  
15 services in response, let's not recreate the  
16 wheel every time by having to do a brand new  
17 mission assignment. Let's have a Pre-Scripted  
18 one in the library kind of ready to go and then  
19 all you have to do is add what the location is.  
20 And so a specific clause for that.

21 So it's basically meant to grease the  
22 skids and to facilitate that. And FEMA keeps

1 kind of a library of these.

2 And the National Weather Service in NOAA  
3 has some of these. And we did not at the Ocean  
4 Service.

5 So we went to FEMA, we talked to them  
6 and we had a mixed success. We took a series of  
7 them to FEMA, one was fairly close to advisor.  
8 What are the things that we already have FEMA  
9 concerning an event. The weather service will  
10 immediately dispatch a meteorologist under a  
11 mission assignment.

12 And we thought maybe a similar thing for  
13 a coastal advisor would be helpful for a coastal  
14 event. Kind of that person to kind of advice in  
15 the suite of program to cross NOAA that the  
16 weather service -- that are not in the weather  
17 service.

18 Five others that we had were initially  
19 denied. And those are mostly the programs under  
20 the prevue of this Panel. You know, hydrography,  
21 LIDAR and aerial mapping, geodesy and then oil  
22 spill science and marine debris.

1           FEMA declined these Pre-Scripted Mission  
2 Assignments saying it's not really your job to do  
3 this. We're not going to fund you to do it,  
4 there's no double-dipping allowed here is  
5 basically the reply that we got.

6           And of course our response was, you  
7 know, they said it's already a mission, you  
8 already have expertise. I said, well of course  
9 we do.

10           But our mission isn't to respond to your  
11 Stafford Act Declaration of disasters. I got to  
12 haul my people off surveying whether it's in the  
13 Arctic or California, to respond to this disaster  
14 in the Gulf and there's a cost there.

15           It's not a lot of cost. It's a cost of  
16 moving some people and some equipment and housing  
17 them while they do this mission for maybe up to a  
18 week to help get a port reopened, right.

19           So we went back and forth with FEMA for  
20 some time. Fortunately, in the mass  
21 Reauthorization of the Hydrographic Services  
22 Improvement Act, Congress actually provided

1 authority for these programs.

2 So where appropriate, these programs  
3 that are before the Panel, may acquire  
4 hydrographic data and hydrographic services to  
5 save and protect life and property and support  
6 the resumption of commerce in response to  
7 emergencies, natural and man-made disasters and  
8 homeland security and maritime demand and  
9 awareness needs.

10 Which will seem to fall right into FEMAs  
11 hands. They are already authorized to do this.  
12 But it says, including obtaining mission  
13 assignments.

14 Congress added those words in its great  
15 wisdom and we use them to the max. And was the  
16 cornerstone of our appeal.

17 And so now I'm happy to report that we  
18 have this one approved and the five have been  
19 resubmitted and FEMA is reviewing them. We're  
20 anticipating approval.

21 The only final catch in this is when  
22 FEMA said, okay, we'll reconsider for these other

1 five. Is that they limited them to what they  
2 call BFA. Which basically means the state has to  
3 ask for the assistance and the state has to be  
4 willing to provide a cost share.

5 In other words, FEMAs not quite  
6 foreseeing the situation where fed to fed support  
7 would be provided for these. We have some  
8 concerns with that, but we're going to take what  
9 we can take.

10 If we can get these out of FEMA right  
11 now. But the idea that they couldn't imagine a  
12 circumstance where FEMA and other federal agency,  
13 like the coast guard, might need a port survey so  
14 they can reopen it, they just wouldn't go there  
15 with us on this, so.

16 And we're continuing to work with them  
17 and negotiate these. Our goal is to have these  
18 five, even with the state restriction in place by  
19 hurricane season this year, our goal was to have  
20 these in place by last hurricane season just so  
21 you're aware of the timeline we've been working  
22 on here.

1           But meanwhile, we're trying to establish  
2 a relationship with FEMA as well. So it's been  
3 kind of tough, there's been some bumps in the  
4 road.

5           And we're trying to make for a healthier  
6 long-term relationship there as best we can. So  
7 that's kind of the update and the status of that  
8 effort.

9           And finally I want to talk a little bit  
10 about the charter renewal since that will be  
11 coming through my office for approval and we're  
12 on kind of a tight timeline. It expires here  
13 coming up in September.

14           Review is required at the department  
15 level. So we need to kind of get this moving.  
16 As you folks know we've -- these things can take  
17 some time.

18           So it's an administrative process  
19 primary lead by Admiral Glang in the DFO. My  
20 group will provide lead on policy support.

21           There's no formal role articulated for  
22 the charter and for the Panel. It's an

1 opportunity for the Panel to review and provide  
2 its views to the DFO.

3 And that's exactly what talked about  
4 this morning. That we're going to talk about in  
5 the administrative section, what those might be  
6 and what we might do about it.

7 And then of course one of the areas  
8 that's come up, is the issue of subcommittees and  
9 subcommittee jurisdiction and that kind of stuff.  
10 So I think we're going to reserve that  
11 conversation for the administrative session when  
12 we talk about that.

13 So that's about the extent of my  
14 remarks. I'm happy to entertain any questions.  
15 And I know we're running a little bit late. So  
16 we can entertain those questions perhaps over  
17 lunch as well. Be happy to answer any of them  
18 now.

19 CHAIR PERKINS: Thank you, Glenn. And  
20 congratulations on the small progress with FEMA  
21 on the Pre-Scripted Mission Assignments. That's  
22 really good news. Don't let up.

1           MR. BOLEDOVICH: I have no intentions of  
2 backing down.

3           (Off microphone comment)

4           MR. BOLEDOVICH: -- just went all the  
5 way up. So this final status, we had a briefing  
6 with Dr. Sullivan on this matter. And there's  
7 been issues.

8           She has some meetings coming up with  
9 FEMA and there will be a lot of interacting with  
10 FEMA leading up to hurricane season. And so we  
11 have support all the way up the chain there. And  
12 they're going to continue to work that.

13           So I think we -- we just had a briefing  
14 with her and Holly last week. We got a lot of  
15 good support from leadership to exert leaders.

16           We're sending some top down pressure on  
17 the bureaucrats in FEMA they're giving us because  
18 the folks at the very top are talking the same  
19 language. The head of FEMA saying we love you  
20 guys at NOAA, we want your services. We should  
21 mission assign you. And then we got into the  
22 trenches here going, bureaucrat to bureaucrat and

1 we kind of got bumpier.

2 CHAIR PERKINS: Yes.

3 MR. BOLEDOVICH: We're trying to iron  
4 those out.

5 CHAIR PERKINS: It's more than  
6 hurricanes though. You know --

7 MR. BOLEDOVICH: Absolutely.

8 CHAIR PERKINS: -- it's the seasonal  
9 flooding, it's the tornado responses. There's a  
10 variety of other stakeholders, you know, in that.

11 So the strategy, how do we get support  
12 from weather service, you know, and how do we get  
13 support from FEMA at the regional level or from  
14 the state emergency response, you know, or the  
15 Adjutant General National Guard side of the  
16 House?

17 MR. BOLEDOVICH: Well so the strategy --

18 CHAIR PERKINS: It just seems --

19 MR. BOLEDOVICH: Our strategy was to get  
20 these Pre-Scripted Mission Assignments in place  
21 and then go through out navigation managers and  
22 other.

1           And we talked to the regional FEMA  
2 people saying, hey, look at these cool things we  
3 have in place now. We can provide all these  
4 services to you. But the struggle has been  
5 getting them in place initially.

6           But so the whole outreach plan to how  
7 sell these and make people aware of them, is kind  
8 of the next phase. Which has been put off by how  
9 long it's taking to get these in place.

10           But we've thought about. Because most  
11 of the action is at the regional level. They  
12 have a right to declare, to trigger a mission  
13 assignment at the local and regional level. FEMA  
14 does. It does not have to be done in Washington.

15           CHAIR PERKINS: Yes. Thank you.

16           VICE-CHAIR HANSON: Glenn, if I could.  
17 Because both you and Dr. Callender mentioned  
18 outreach and one of your last comments you  
19 mentioned states. And certainly states, in terms  
20 of FEMA, haven't declared their need for it.

21           We have approached the states on a lot  
22 of different levels recently to challenge

1       governors that they do have a role in research  
2       and infrastructure investment, all that. Even on  
3       federal projects. Because it's their economies  
4       that get impacted and it's their votes that  
5       really come into play.

6                Can you talk a little bit about how you,  
7       how NOS, relates to states? How do you -- have  
8       any outreach with them and whether it's through  
9       NGA or coastal states organization or --

10               MR. BOLEDOVICH: Yes.

11               VICE-CHAIR HANSON: -- are there  
12       opportunities there?

13               MR. BOLEDOVICH: I was afraid of my boss  
14       a little bit, but I think me and Russell had 19  
15       meetings in a two and a half week period during a  
16       budget rollout. And that included talking to  
17       many of these organizations.

18               And including the coastal state  
19       organization. It's a key outreach for us. Those  
20       are all the coastal states that are part of the  
21       coastal zone management program. As well as  
22       others.

1 DR. CALLENDER: Yes. And we've been  
2 trying really hard to build that relationship  
3 with coastal states organization. Also with the  
4 NERRS Association, which also has representation  
5 at the state level.

6 As well as enhancing our relationship  
7 with the sea grant program, which isn't in the  
8 Ocean Service, but certainly partners with us in  
9 many areas on the ground.

10 And so that's kind of been our focus, is  
11 hitting these major associations that have  
12 representation. Not only at the state level, but  
13 in DC.

14 VICE-CHAIR HANSON: Yes, I just -- if I  
15 can just add two cents worth there. Because  
16 there's two organizations I would maybe put on  
17 the list there and maybe we can help with that.

18 Obviously American Shore and Beach.  
19 Glenn, we talked about this morning. A new  
20 direction, new executive director. I think we  
21 are going to see a different chance of dynamics  
22 there.

1                   But also the National Governors  
2 Association has proven to have some interest in  
3 infrastructure. They're very bureaucratic, but  
4 at the same time they do have a big voice.

5                   And they're kind of sponges right. So  
6 when it comes to issues like this, I think they  
7 would be good partners.

8                   DR. CALLENDER: Those are great  
9 suggestions. I mean really what we're trying to  
10 do is enhance the relationships across the board.

11                   It's a more of the relevant kinds of  
12 associations that have that larger  
13 representation, that we hit the better. Thank  
14 you.

15                   CHAIR PERKINS: Yes, Frank.

16                   MEMBER KUDRNA: Glenn, that was very  
17 good. Thank you. Here is a Panel, any federal  
18 advisory panel.

19                   Most of what we hear is, you need to  
20 spend more money on this. And various topics  
21 come in and there's always a greater need for a  
22 whole series of things that are presented to us

1 along the way.

2 And, you know, where you described the  
3 President's budget and the sequester side of the  
4 congressional guidelines. The likelihood it is  
5 something in the middle or numbers might be  
6 smaller before it's all over with the next  
7 budget.

8 And Russ asked us for priorities, but it  
9 might be priorities with a smaller number in the  
10 future that show up. And one of the things we  
11 discussed was, you presented to us and discussed  
12 outreach.

13 Early in the HSRP's history, a most  
14 wanted top ten list was developed that was not an  
15 individual view of a member, but a product  
16 developed outlining the needs and benefits of  
17 HSRP activities. That was enormously effective  
18 with congress.

19 And we're going to discuss further  
20 subcommittees. And one of them that was proposed  
21 at the last meeting was an engagement committee  
22 that would discuss such a topic. Maybe revising

1 something like that or some product that would  
2 specifically address the issues of HSRP.

3 Rather than -- I know you're restricted  
4 to talk about the big picture budget as opposed  
5 to the details at HSRP, can you comment on  
6 whether that would be effective or useful to be  
7 able to communicate a document like that?

8 MR. BOLEDOVICH: I agree the ten most  
9 wanted was a very valuable tool. I read such  
10 much that we actually did a second version 2, 2.0  
11 of it.

12 And this is kind of what I was referring  
13 to earlier. That having something like that from  
14 the Panel to take out and say, what, this isn't  
15 us talking, this is our Panel, let's recommend  
16 these things.

17 And have that document from you folks is  
18 a very powerful tool. It's as powerful as having  
19 Tom Jacobsen talk to Representative Lowenthal  
20 about the value of our programs, when our Panel  
21 says those type of things and articulates. And  
22 prioritizes. And say, if you can make these

1 investments.

2 And I think those are some of the things  
3 that Russell has kind of highlighted in the six  
4 questions. As I kind of, for round two, there's  
5 some areas where we think that these programs can  
6 contribute and maybe need investment that are  
7 kind of out there for your consideration.

8 And so instead of more of a straight  
9 recommendation, it's like, well we've done this  
10 work and we've found these things, these are the  
11 greatest needs in these programs. If someone is  
12 going to invest in these, this is what we think  
13 should be done.

14 It was very helpful. It's an arrow in  
15 the quiver for sure for our outreach.

16 CHAIR PERKINS: Thank you.

17 MR. BOLEDOVICH: That's different than  
18 the question of the Panel. I didn't throw an  
19 outreach we've -- I think the attorneys have to  
20 talk to you about and how much can you guys do.

21 As individuals, of course you're free to  
22 talk to anybody. But in terms of wearing the

1 panel's banner and going to march onto the Hill  
2 or something, that always raises big concerns  
3 with all them lawyers.

4 CHAIR PERKINS: Susan.

5 MEMBER SHINGLEDECKER: That gets exactly  
6 at my question. I clearly see. And what you  
7 pointed out with the funding with resilience and  
8 funding is going to resilience and how can we  
9 better make the case for how these programs  
10 contribute to resilience and how can we message  
11 that.

12 And I guess my question is, help me  
13 understand who we need to be messaging that to.  
14 It seems it needs to be more than just the  
15 administrator in our letter, so who do we need to  
16 and who do you want us to message to and who can  
17 we message to. And then in what form is that  
18 messaging going to be most effective.

19 I've heard mixed signals on -- I've  
20 heard no, we don't want another ten most wanted  
21 and then I've heard that the ten most wanted was  
22 effective. Maybe we need to just to call it

1 something else, I don't know.

2 But, so who are we talking to and what  
3 mechanism would be most effective so that we can  
4 target our efforts that way?

5 MR. BOLEDOVICH: So my first kind of  
6 request would be to get that information out  
7 there. Because whether it's done in -- and leave  
8 some of the messaging to us to find those  
9 audiences, you know.

10 This is what our advisory committee  
11 recommended. Do you really want to know what's  
12 needed in these programs, we can promote those  
13 when we go to the Congress, which we did. And  
14 like I said, it was very helpful.

15 In terms of the role with the Panel and  
16 doing the outreach directly to those groups or  
17 what those groups are, I would have to go back to  
18 the lawyers. In terms of the Panel taking an  
19 active role in conducting outreach, I think it's  
20 a totally different question.

21 But, in terms of those Panel's  
22 recommendations to NOAA being used in effective

1 outreach by the Agency, that is something I can  
2 solicit and ask you for right now. And it would  
3 be very helpful.

4 Because it's very helpful to have a  
5 group of independent esteemed scientists and  
6 experts articulate the needs of our agency.  
7 There's a lot more than me talking.

8 Like I say, this is what the Panel said,  
9 you know. And it helps us in the budgeting  
10 process through the department, through OMB, all  
11 along the way.

12 I can say, here's another, you know,  
13 letter. Or, you know, we get other letters. The  
14 American Association of Port Authorities writes a  
15 letter every year on behalf of these programs for  
16 their budget.

17 You know, but I think we need to be a  
18 little bit careful and I'll need to get the  
19 lawyers involved if we're talking about an active  
20 role for the Panel in, especially on the budget  
21 side of things where everyone gets really, really  
22 sensitive. Trust me.

1 MEMBER SHINGLEDECKER: Okay.

2 CHAIR PERKINS: Cool.

3 MR. BOLEDOVICH: I'm willing to  
4 investigate that and look into it some, but I  
5 think people are really leery in that.

6 CHAIR PERKINS: Glenn, would it, you  
7 know, top ten list version one, version two,  
8 would it be possible to get an assessment of  
9 which of those recommendations in those top ten  
10 lists, were ever enacted?

11 Can you, you know, I mean if we're going  
12 to take on that task and we're going to do it  
13 again, before we engage in it I would like to  
14 have that data. So if there have been 20 things  
15 put in that report, which of them were actually  
16 successful and able to be enacted? So that we  
17 can look at that as the best practices.

18 MR. BOLEDOVICH: I would -- I can  
19 certainly take a look at that. But I would, you  
20 know, I work in the policy shop, you're kind of  
21 like a policy advisory committee.

22 It's really hard to trace back the

1 actions that you do to a result sometimes. It's  
2 pretty gentle. It goes through a lot of things.

3 But I can tell those recommendations.  
4 Certainly, at least sustains support for certain  
5 programs whether, I can probably give an example  
6 with the PORTS system that had helped us to  
7 expand those and justify those programs.

8 Did it get us full funding for them, no.  
9 But it helped at least garner some support.

10 But like I said, I've been in the policy  
11 world a long time. And it's just hard sometimes.

12 I wouldn't measure yourself by such  
13 direct outcomes of your -- your recommendations  
14 can live for a long, long time. And I don't  
15 know.

16 I guess for me it's really hard to say,  
17 well it's because of this action. Because I  
18 talked to this congressman or made this statement  
19 or I wrote this White Paper that something  
20 ultimately happened. But five years later, well  
21 there's been some progress in this area, in this  
22 field.

1           And I think without that voice, there's  
2 going to be no progress. And I think the voice  
3 of this Panel just contributes and bolsters that.  
4 And it's another voice that kind of helps move an  
5 issue along, no matter what it might be.

6           The Arctic's a key one. I mean we  
7 basically have a whole new coast opening up with  
8 no funding. And it's not just NOAA. It's the  
9 Army Corps, it's the coast guard.

10           We're all sitting here going, you know,  
11 we can't abandon our missions in the lower 48,  
12 and yet what are we going to do.

13           So just articulating the need and the  
14 urgency of it and continuing to be a voice in  
15 that, you know, together with others. The coast  
16 guard advisory committees are hopefully doing the  
17 same thing and we're going to move this rock  
18 along over some period of years.

19           So I'm kind of an incrementalist when it  
20 comes to Washington and inside the beltway  
21 itself. So that's kind of my approach.

22           Because it's really, I would have no ego

1 left if I had to try to draw a connection between  
2 everything I've tried to work for in an  
3 accomplishment. It's really hard.

4 CHAIR PERKINS: Great, thank you. We  
5 have 30 minutes until the scheduled public  
6 comment period. So I just want to say that we  
7 will take the public comment period on time, on  
8 schedule. Out of courtesy to our public  
9 attendees.

10 Lunch will be served at 12:30, because  
11 that is a contractual arrangement that was made  
12 with the facility. So what that means is we have  
13 three presentations in 30 minutes in front of us.

14 So with that, thank you, Dr. Callender,  
15 thank you, Glenn.

16 (Pause)

17 CHAIR PERKINS: Yes. Yes. And we can  
18 engage in discussion with the Tri-Service  
19 representatives throughout lunch as well.

20 MR. STONE: Okay, good morning. I'm  
21 Peter Stone with CO-OPS. I'd like to -- first  
22 thing I'll do is I'd like to send a message from

1 Rich Edwing, our director, who sends his regrets  
2 for not being here. And he's looking forward to  
3 hearing the output from the group.

4 I know I'm already going to meet with  
5 him first thing Monday morning to go through the  
6 activities that happened these three days.

7 So saying that, my presentation was  
8 going to be on, was going to be on CO-OPS  
9 strategic view and how it relates to NOS's  
10 strategic view. I'm going to cut that down to  
11 basically just talking about some of the  
12 activities that we have going on in this year  
13 going forward.

14 So I'm going to be missing some slides,  
15 so please bear with me on this. I'm going to be  
16 here the whole time, so please --

17 Okay, so that's the -- this is the NOS  
18 priorities from their plan. From their strategic  
19 plan.

20 This was done slightly after the CO-OPS  
21 strategic plan was done. This is the CO-OPS  
22 strategic plan.

1           We have four strategic goals in it.  
2           Customer service, integrated observing systems,  
3           advance products and services, human capital  
4           infrastructure.

5           And I'm just -- those are them. I'm  
6           going to just talk about our activities in each  
7           one of those goals this year coming up.

8           So the first one was customer service.  
9           This is, again, some of the objectives. The  
10          presentation that's in your briefing and some of  
11          the projects we've had in the past years.

12          But going forward, this is what we have  
13          on tap right now. One of the things that we're  
14          looking at right now is the website. Our website  
15          review.

16          We've contracted with a company 4C  
17          Survey and Analytics. We are actively looking  
18          through that data to see how we can improve  
19          bringing our data products to the customer.

20          We get very high scores in customer  
21          satisfaction. One of the things we're kind of  
22          looking at is navigation of our site. Making

1       sure that when people come on the site, the first  
2       timer users, can get the information that they  
3       need.

4               I think that's one of the things that  
5       we're finding out from these analyticals. So  
6       we're actually actively using that.

7               Second thing we're using -- another  
8       thing is water level training. One of the themes  
9       you're going to have through here is, in the CO-  
10      OPS, is working more and more with partners.

11              All right. One of that is providing  
12      training, scaling up our training, providing new  
13      training modules for that.

14              The other thing, the last one on here is  
15      the expansion of the collaboration of NOAA data  
16      centers. All right.

17              NOAA -- CO-OPS hasn't traditionally  
18      archived its data with the NOAA data centers.  
19      We're going to start doing that later this year  
20      into next year. And hope they'll provide another  
21      source of dissemination for products on that.

22              So we're helping to shed the load a

1 little bit in terms of not everybody having to  
2 come to us. They can come to the NOAA data  
3 centers and they will help provide some of the  
4 products, especially when it comes down to  
5 coastal resilience.

6 All right. So this is the second one.  
7 Again, the objectives I'm not going to go  
8 through. But some of the projects we have coming  
9 up with integrated observing system, we have four  
10 new ports coming online this year. Or early next  
11 year.

12 Port Fouchon, Morgan City, Savannah,  
13 Matagorda Bay. We have several enhancements  
14 coming on online.

15 Houston-Galveston has an additional  
16 meter coming on. Narragansett Bay and Chesapeake  
17 Bay. We hope to get visibility sensors in.

18 We also, and Dr. Callender addressed  
19 this, we have a number of partnerships coming in.  
20 Our weather service partnership.

21 We're actually installing two gauges for  
22 the weather service. One in Alaska, one in

1 Louisiana.

2 We have a big partnership with the  
3 National Estuarine Research Reserve, which Audra  
4 can talk to you. That's a resilience work.

5 And then we're starting a partnership  
6 with the US Geological Survey. And that's a huge  
7 -- that potentially has a huge way that we can  
8 multiply our observing system. They have a  
9 number of observation systems in the coastal  
10 environment.

11 We're working with them to bring them up  
12 to our standards. Coordinate together and  
13 hopefully down the road we'll start working very  
14 closely with them.

15 The National Park Service is another  
16 partnership that we're working on. Again, that  
17 gets into the kind of conservation based --  
18 placed-based conservation and resilience work  
19 that we do.

20 Also this year we're starting the  
21 infusion of the next generation of water level  
22 sensors. The microwave water level sensors.

1           This year we're scheduled to get ten out  
2 of the 150 odd sensors in place. And we're  
3 actively working on the Arctic bottom-mounted  
4 pressure gauge.

5           Which we, again, with all the talk of  
6 the Arctic, we're trying to figure out what's the  
7 best way to, you know, install systems.  
8 Observing systems in the Arctic for the long-  
9 term.

10           So advanced products and services.  
11 Again, some of the -- under that goal this year  
12 we have going on, we have upgrades to our  
13 hydrogen modeling up in Lake Erie.

14           And another thing of modeling is a very  
15 rapidly increasing area of focus of CO-OPS. But  
16 we're also looking at the expertise out in the  
17 community.

18           The academic community especially has a  
19 lot of expertise running the hydrodynamic models.  
20 And we've developed a policy of how we can work  
21 with our partners, take their model data on an  
22 operational level and display it.

1           And we've already started initial  
2           discussions with Alan Blumberg of Stevens  
3           Institute to look at taking his model, from the  
4           New York Harbor and Long Island Sound and Hudson  
5           River, and bringing that into our operational  
6           environment. And that way we can retire our  
7           model of the same area.

8           Another project we have coming on is in  
9           the Tampa Bay Marine Channel. It's a partnership  
10          with the weather service.

11          We're really excited about this one.  
12          Trying to integrate the weather service forecast  
13          information and the CO-OPS information, other  
14          partner information, into single display.

15          So that people don't have to have -- to  
16          check the weather service site, they don't have  
17          to check CO-OPS, they don't have to check  
18          multiple sites. This is kind of, again, and what  
19          we kind of see in a Precision Navigation portion  
20          of this.

21          We are working on the NOAA rip tide  
22          forecasts. Which I won't go into since that's

1 not purview to this.

2 We're also working on coastal inundation  
3 dashboard. We've talked about resilience.

4 We're developing a website product that  
5 will be integrating a lot of our real time  
6 systems and a lot of other people's systems and  
7 focus at the inundation. Coastal inundation both  
8 in real time and we see this as kind of a next  
9 follow on generation to our Storm Quicklook  
10 Product.

11 And we're increasing the work we're  
12 doing in Landmark Inundation Network. Which is  
13 basically providing information to global  
14 communities that they can understand in terms of  
15 storm.

16 So when we they say that there's going  
17 to be three to five feet of flooding, what does  
18 that mean. What does that mean for my property,  
19 my piece of land right there. And so we're  
20 trying to change that technical jargon into real  
21 actionable information.

22 All right. So the last one is human

1 capital and infrastructure. One of the things,  
2 the hallmark of this is that we know, at least  
3 for CO-OPS, all right, we can't get good title  
4 oceanographers and datums experts in the  
5 community, okay.

6 We do have to do -- what we do is not --  
7 there's not a huge market. We have to bring  
8 those people onboard and train them. And so  
9 we've spent a lot of time building training  
10 modules, in-house training, to bring those people  
11 up to speed.

12 So we're doing work on that. We also,  
13 the improvements, the reliable operating systems,  
14 our internal product management system. So every  
15 project that we do, we look at ways to improve  
16 that project the next time we come around to do  
17 that. So we're always in the self-improvement  
18 technology.

19 And then the last couple of this, R&D  
20 sandbox. Again, that's an R&D thing. We are  
21 trying to -- did I, no.

22 Did I miss one? Yes. Okay. Okay, so

1 we are working on improving our R&D function.

2 Okay.

3 And then we're also working on the web  
4 services. And we're using -- kind of building  
5 our web services in such a way that they're  
6 actually a service oriented architecture.

7 And then we're providing services to  
8 other computers and we're receiving services. So  
9 again, integrating with other partners to deliver  
10 effective data.

11 And I'm probably using more than my ten  
12 minutes of time and I apologize.

13 MEMBER BLACKWELL: You're right on.

14 MR. STONE: I'm right on, okay.

15 MEMBER BLACKWELL: No time for  
16 questions.

17 MR. STONE: No time for questions, but  
18 I will be here.

19 MEMBER BLACKWELL: Okay, Juliana  
20 Blackwell. I'm going to run through this quickly  
21 also.

22 The idea is to give you a glimpse of

1 where we're going with some of the activities in  
2 support of the NGS ten year strategic plan, touch  
3 upon some of the past HSRP recommendations and  
4 some of the efforts that we've accomplished in  
5 responding to those recommendations. And also  
6 highlight some of the activities that are ongoing  
7 in the California region.

8 First, just a refresher that the NGS ten  
9 year plan, which we adopted at the beginning of  
10 2013, has five term goals. Four of them are  
11 programmatic in a sense and one is more of an  
12 enterprise goal.

13 First one is support the users of the  
14 National Spatial Reference System. This is  
15 maintaining what we have.

16 This is if things were cut or if things  
17 were, you know, in really bad shape, budgeting,  
18 we would want to make sure that we are at least  
19 maintaining the programs of data and the products  
20 that we have currently.

21 Ideally we want to continue to focus  
22 more on modernizing. Goal two, modernize and

1 improve the National Spatial Reference Systems.

2 So a lot of the activities I'm going to  
3 touch upon are how we're making it better and  
4 then how do we maintain that in the future. As  
5 we continue to adopt new technologies and better  
6 ways of doing business.

7 Third one is expand the NSRS stakeholder  
8 base for develop and enable our workforce with a  
9 supportive environment. And again, the  
10 enterprise goal.

11 Just improving organizational and  
12 administrative functionality. Which is always a  
13 -- something that we want to keep foremost.

14 All right, one of the major signature  
15 outcomes of the NGS ten year plan is the release  
16 of the two new datums in 2022. Russell talked  
17 about this earlier.

18 And this is where a lot of our effort is  
19 ongoing right now. We'll continue to be both on  
20 an outreach side as well as on the scientific  
21 geodesy side to get this accomplished.

22 Both of these datums will replace NAD 83

1 and NAVD 88. The bottom line is, that with GPS  
2 today, everybody's using that for positioning  
3 everything.

4 And we want to be able to provide the  
5 most accurate framework possible for all  
6 geospatial positioning. And to be able to  
7 utilize the datums and apply GPS technology so  
8 that you can get the best position, and  
9 elevation.

10 And really it's the elevation component  
11 that is most challenging at this point because  
12 it's elevation relative to local mean sea level.  
13 And where is water going to flow. And that's the  
14 challenge here.

15 The GNSS that's up here, that is GPS  
16 plus other systems that other countries have  
17 adopted for positioning. Galileo, GLONASS. All  
18 these things that are internationally being used  
19 for positioning.

20 So we're thinking not just from the US  
21 based GPS system, but how are we going to  
22 continue to adopt information from other

1 satellite systems that are available.

2 The key thing that we've heard from our  
3 stakeholders is, just, you know, make sure that  
4 you have tools available that will help us  
5 transform between new and old datums and be able  
6 to take our old information and put it into, you  
7 know, what is equal to in the new datums in the  
8 future.

9 So that is a key objective of providing  
10 the datums and ensuring that our stakeholders  
11 come with us. Not get left behind.

12 What's the big impact here? The new  
13 datums are going to change latitude and longitude  
14 and ellipsoid height, which is what you get out  
15 of GPS, by one to two meters.

16 Okay, so there is a change. Is it  
17 significant, it depends. It depends on what your  
18 application is and what you're looking to  
19 accomplish with your work.

20 So we have a variety of stakeholders  
21 trying to address those who are very concerned at  
22 this. As well as just educate those who are not

1 quite so aware but need to be aware that things  
2 are changing.

3 From the vertical perspective, the  
4 heights that a lot of surveying engineering  
5 communities are using are going to change.

6 Anywhere, you know, from zero change to, you  
7 know, one meter.

8 And in Alaska I would say we're going to  
9 have two meter change. But they know they've  
10 been off for awhile anyway.

11 So I think everybody is looking forward  
12 to having more accurate information to do their  
13 positioning from. But making sure that folks  
14 are, you know, preparing for that and not  
15 surprised by it is one of our big outreach goals  
16 for the next several years.

17 The next slide shows what we're  
18 currently doing from an outreach perspective.  
19 We've got a number of YouTube videos that we've  
20 created in the past year talking about geodetic  
21 datums.

22 We recommend that everyone from our

1 acting AA to our kids at home watch these datums.

2 DR. CALLENDER: And I did and I finally  
3 got it.

4 MEMBER BLACKWELL: And watch them over  
5 and over. They're very short, three to four  
6 minutes.

7 We also have a new web page that's out  
8 that talks about the new datums. And has  
9 frequently asked questions available.

10 We're having the Geospatial Summit next  
11 week. As Russell pointed out, that's going to be  
12 in Crystal City, Virginia.

13 So a lot of inside the beltway folks.  
14 As well as a lot of surveyors who will be  
15 attending the National Society of Professional  
16 Surveyors meeting will be present. And so we  
17 invite you to take a look at the information that  
18 we have available there.

19 In addition, some of the other  
20 activities that we continue to support in  
21 advance, are having regular meetings. We  
22 currently have a monthly Height Mod meeting where

1 we have guest speakers.

2 We're going to change that into a NGS  
3 web, monthly webinar. Where we focus on  
4 different subject topics and have a guest speaker  
5 and invite the public to call in and to listen  
6 in.

7 That would be something I think that  
8 would be ideal to communicate to the HSRP  
9 members. Tell them what's coming up so that they  
10 can dial in if they want to and hear more about a  
11 particular topic related to NGS.

12 We're working through the federal  
13 geographic data committee. And as I mentioned,  
14 the National Society of Professional Surveyors.  
15 Holding regular meetings, updating them, getting  
16 other feds particular onboard with the changes  
17 that are coming.

18 A lot of the things that we're doing, as  
19 far as presentations, such as this presentation  
20 and others that we're giving all across the  
21 country, are made available on our website. So  
22 there's a link here, that you probably can't see

1 very well.

2 But on the NGS website we've got a  
3 number of presentations in our library. And we  
4 are posting a lot of online learning modules and  
5 webinars that we keep, after we have them we post  
6 them online. So if you're not able to make them  
7 real time, you can follow-up and check them out  
8 later.

9 Social media, I'm not going to say much  
10 about other than we are playing in the NOS social  
11 media activities. But we do not have anything  
12 currently for NGS. But that's something that  
13 will come in the future.

14 From a scientific geodesy perspective,  
15 the work that's being done to enable us to have  
16 these new datums revolves, particular around the  
17 GRAV-D project, airborne gravity collection,  
18 collecting all across the country, using that to  
19 create a new model which will become the new geo  
20 potential datum.

21 The idea is that in most places in the  
22 United States we will be able to achieve a two

1 centimeter accuracy, relative to sea level with  
2 that new model/datum that will come out of that.

3 For us right now in the collection  
4 phase, the green boxes have all been collected  
5 and processed and released for a lot of other  
6 scientists that want to take a look at that data.

7 Areas that are in blue are under  
8 processing right now. Will be released soon.

9 Yellow is that it's a partial collect.  
10 Which means we've got to continue in that area to  
11 finish that block.

12 And then another number of projects are  
13 planned. We will be doing some work in Alaska  
14 this year.

15 We missed that last year because of  
16 issues that we had with getting aircraft in the  
17 right time of the year to do that work. But  
18 we're at 40 percent, little over 40 percent  
19 completion right now and on track to have this  
20 done so that we can rollout the datums in 2022.

21 Just briefly, what are -- so once we get  
22 some of that data collected we're providing

1 experimental geoid models to start to give the  
2 surveying and the scientific community an  
3 opportunity to see what the changes are in those  
4 areas that we've already collected. So they can  
5 start to see, you know, what the impact is going  
6 to be.

7 It's an estimate, but it is something  
8 that will allow people not to be surprised, you  
9 know, in seven years. But to say, okay, I see  
10 where the changes or what the magnitude of the  
11 change is going to be. And this is primarily on  
12 the vertical side for the geoid model.

13 CORS, Russell also mentioned this. NGS  
14 manages over 1,900 -- manages the data from over  
15 1,900 CORS.

16 Many of these are owned by the 200  
17 partnering agencies, government, academic and  
18 private organizations. But these become the  
19 framework of the NSRS. That give the constant  
20 positioning information that the people can use  
21 for their surveying and mapping projects.

22 The picture on the left here is the CORS

1 that are available in California. I don't have  
2 time to go into a lot of details but I'd be happy  
3 to talk to you about that more later.

4 Foundation CORS is a little bit  
5 different. That is something that is much more  
6 specific to the geodesy side.

7 Not just necessarily the users of CORS  
8 data in general, but something that would be NGS  
9 owned and operated that would tie into the  
10 international community and make sure that as we  
11 do things more and more on a global basis, that  
12 we are relative and tied into the international  
13 global geodetic reference frame.

14 So the picture on the bottom here is one  
15 of our prototype, big ant. Big antennas that  
16 we've established as the first one of its kind  
17 here in the US.

18 It's three meters across and it's the  
19 biggest antenna yet. It's not portable  
20 obviously, but it's something that we are testing  
21 out to see if that is going to give us the kind  
22 of results that we want for our foundation CORS

1 station.

2 Let's see, time check. All right, so  
3 what I'm going to do is mention a few other  
4 things related to the work that we're doing with  
5 CO-OPS here for the International Great Lakes  
6 datum.

7 We are working on this together so that  
8 we can produce a new Great Lakes datum. And  
9 somewhere in the 20, I think it's called 2020 is  
10 the datum name, but it probably will not be  
11 released until 2023 or a little bit after that.

12 There are a number of slides I have on  
13 coastal mapping, which I don't have time to go  
14 through. But I do want to say, California's  
15 shoreline is in pretty good shape. There are  
16 details here.

17 There are a number of other specifics  
18 that Mike Aslaksen provided. And he is going to  
19 have an opportunity tomorrow to speak to you and  
20 give you some more details on the Sandy contract  
21 update, where the data is for that.

22 And also talk about some of the other

1 areas that we're investigating as far as  
2 topobathy and satellite-derived bathymetry data  
3 and how we're using that for the future.

4 And quickly, VDatum. A lot of you have  
5 heard about the VDatum tool. This is something  
6 we continue to modernize and update.

7 And we want to be able to say that we  
8 are currently updating areas here. We're going  
9 to expect that we're going to have a update for  
10 the entire West Coast in 2019.

11 We've got a number of partnerships that  
12 I can be happy to talk to you about at lunchtime  
13 so that you can see how we are making progress.  
14 And we do have some MOAs in place.

15 I also want to mention that I am the  
16 NOAA representative on the FEMA Technical Mapping  
17 Advisory Council. I'd be happy to talk to you  
18 about that offline. That's another federal  
19 advisory group that meets every two months.

20 And last of the slides, an update on the  
21 NGS workforces. This is something that the Panel  
22 was very interested in hearing about the decline

1 in the number of geodesists that we had onboard  
2 and the inability to hire.

3 Since July of last year we've hired six  
4 geodesists. We've got ten more geodesists  
5 recruitment in progress. Which means we expect  
6 to have them onboard in the next few months.

7 And we're also going through a training  
8 opportunity to send current employees back to  
9 school to get a non-thesis Master of Science  
10 Degree in Geodetic Science at Ohio State  
11 University.

12 I'm pleased to say that we have one of  
13 our new hires here with us. Dana Caccamise, who  
14 is the new Pacific Southwest Regional Geodetic  
15 Advisor. If you haven't had a chance to meet  
16 him, please do so in the next couple of days.  
17 Dana, happy that you're here.

18 And lastly, we are transitioning to a  
19 regional advisor program. So if you're in a  
20 state that does not currently have an advisor, by  
21 2017 you will have an advisor assigned to you.

22 Because we're going forward with making

1 sure that we have an advisor that we can continue  
2 to do outreach and education for all states. Not  
3 just those that were previously cost shared from  
4 the state's perspective. Thank you.

5 CHAIR PERKINS: Thank you, Juliana. And  
6 thank you for consolidating and compressing the  
7 information. My apologies on losing control of  
8 the schedule.

9 RDML GLANG: I didn't think I'd be doing  
10 a lightning talk, but I am. So I'm up here in my  
11 capacity as the director of the Office of coast  
12 survey. And that concludes my presentation.

13 (Laughter)

14 So coast survey has also developed a new  
15 strategic plan, but I've given you a hard copy so  
16 I can skip about 68 of my slides.

17 Lynne, can you jump me to Slide 17? Oh,  
18 Rick can. Somebody.

19 17. So if you go through our strategic  
20 plan you'll see my four priority focus areas are  
21 on, be the experts, transform our charting  
22 program, innovate hydrography and change

1 navigation.

2 And I'm happy to talk with you more  
3 about that, but for each of those objectives  
4 there's a detailed implementation plan. And we  
5 have a long series of activities.

6 What I'm going to do is talk about  
7 what's going on in FY15, to whet your appetite.  
8 At the high level we have performance measures,  
9 as do all the programs in NOS. And, Russell, I  
10 believe these are part of your scorecard.

11 So at the high level we have also a GPRA  
12 goal, which is the Government Performance and  
13 Results Act. And that's to reduce the  
14 hydrographic survey backlog in navigationally  
15 significant areas.

16 So we're about 2,500 there as our  
17 target. It's a little bit reduced from last year  
18 where we had planned on 2,800, but for a variety  
19 of reasons we only reached about 78 percent of  
20 our goal.

21 A subset of that is what we plan to  
22 acquire, accomplish in the Arctic this coming

1 year. And then we'll plan to process a 110  
2 surveys coming through our pipeline.

3 Last year we got about 116 of a planned  
4 goal of 120 surveys done. And chart validation  
5 last year was also 11. And we were able to get  
6 all 11 of those done.

7 New for this year is all of our  
8 hydrographic survey plans are available to the  
9 public in what's called an Esri story map. So I  
10 invite you to look at that. The URL's on the  
11 slide.

12 And this tells a little bit of a story  
13 of why we're surveying and who's doing the survey  
14 work. It's a much more convenient format to  
15 share the story.

16 In Charleston, I talked to you about our  
17 transition to ENC First and the significant  
18 impact that's having. We're basically turning  
19 our production line around frontwards to  
20 backwards.

21 We're putting our development of ENCs,  
22 Electronic Navigational Charts, first. And part

1 of that effort is keyed around building out our  
2 database for our chart products.

3 So we've got the Pacific Region done.  
4 We're moving through the California Region. I  
5 think that's done. Next up is Alaska Region.

6 So bottom line, is by the end of the  
7 year we should have all new ENC's for Alaska new  
8 additions and Puerto Rico. And those will all be  
9 loaded into the database and published as they  
10 come available.

11 Publishing the ENC's is tied closely to  
12 then, afterwards publishing the raster nautical  
13 charts and the keys to keep those as synchronized  
14 as carefully as possible.

15 And then what you don't know is there's  
16 a lot of retraining of personnel going on. So  
17 all those folks who specialized in raster charts,  
18 are being retrained in ENC's.

19 When we rebuilt our production teams  
20 they're now geographically based. So we have  
21 both -- each team is responsible for both types  
22 of products. So a lot of the raster folks are

1 new to ENC compilation.

2 We've got two new boats for the  
3 navigation response teams that we're expecting to  
4 be delivered in early May and going through  
5 delivery and field testing by June and July. So  
6 we're pretty excited about that.

7 Internationally, it's been a really good  
8 year for us. As most of you know we're very  
9 active in our leadership role through the  
10 International Hydrographic Organization. That's  
11 a collaborative effort where we lead with NGA and  
12 Navy.

13 But for this year we had the opportunity  
14 that came up, and we've been putting this in for  
15 multiple years, to actually engage in a bilateral  
16 discussion with Cuba. So we sent a delegation to  
17 Cuba for the first time in 50 years. And that  
18 was very successful.

19 Of course we've had relationships with  
20 the Cuban hydrographer through our regional  
21 hydrographic commission down there, but here is a  
22 chance to sort of, in a sanctioned discussion,

1 focus on some specifics about improving  
2 navigation between -- in the waters between the  
3 US and Cuba. So we're pretty excited about this.

4 Autonomous technologies, we've got a  
5 variety of efforts, but we have a multi-year  
6 effort to integrate our REMUS 600 AUV into the  
7 operations of our SWATH vessel, the Ferdinand  
8 Hassler, based out of Newcastle.

9 This year we're really -- so last year  
10 we kind of ran the traps on operationalizing.  
11 How do you get this things on and off the ship  
12 safety, what's our concept of operations.

13 This year the focus really is on getting  
14 the data to be certified to meet the hydrographic  
15 standards coming out of that AUV. A lot of work  
16 has gone into that.

17 We're working with UNH. And the  
18 exciting part was that the researchers at UNH,  
19 and in collaboration with LEIDOS, one of our  
20 other contractors, were able to present a paper  
21 that showed the data we're collecting from this  
22 handmade charting standards. So that's pretty

1 exciting.

2 External partnerships. Our navigation  
3 managers do a tremendous job now with knowing  
4 that this is a focus. So we have a most recent  
5 example where we're collaborating with Coastal  
6 Carolina University.

7 Basically we're providing them with our  
8 standards and with some sort of high level  
9 guidance. They're going to go do some mapping  
10 work, which is being funded by BOEM.

11 We stand to get about 138 square  
12 nautical miles for this year of chart quality  
13 hydrographic data. So we're pretty excited about  
14 that.

15 It's not necessarily in a place where we  
16 have navigationally critical requirements, but  
17 nevertheless it does add to our total effort to  
18 improve the charts.

19 And then lastly we've already talked  
20 about the memorandum of agreement with the Army  
21 Corps. So we actually have this thing drafted.  
22 We've had a variety of meetings with the Army

1 Corps.

2 My goal for coast survey is to have this  
3 in place by the summer. And for bureaucratic  
4 reasons we have to have our memorandum of  
5 agreement submitted to NOS by the end of May, in  
6 order to have it -- the window closes for the  
7 year. The fiscal year.

8 So we're pretty motivated. I've got one  
9 person who's doing this. And he's motivated to  
10 get it done because he's being taken away from me  
11 and has to go back to sea. So we're going to  
12 keep chipping away at this.

13 We're at the same time working with  
14 other NOS programs to identify their  
15 opportunities.

16 You know, at the high level the Army  
17 Corps is interested in a NOAA Army Corps  
18 memorandum of agreement. I don't really care  
19 about that. I can't move the whole damn NOAA  
20 organization to do an MOA. What I care about is  
21 me, so that's my focus. But we'll bring along  
22 the other programs.

1                   So there you go. Lightning talk.

2                   CHAIR PERKINS: Thank you, Admiral.

3 Well we are right at the scheduled start time for  
4 public comment period. So if we can defer  
5 questions for the Tri-Service directors.

6                   And I will turn around and look to the  
7 public gallery and see if there is anyone  
8 interested in making public comment at this  
9 point.

10                  MR. COWAN: Okay. My name is Jeff  
11 Cowan. I work for the State of California. The  
12 Office of Oil Spill Prevention and Response.

13                  And I'm here -- I became interested in  
14 the prevention aspect that comes out in your  
15 thing. And I'm somewhat interested in.

16                  But first I'd like to thank NOAA for all  
17 the charts that I used over the years. And  
18 especially the NWS, National Weather Service.

19                  I literally lived by those charts. They  
20 helped me quite extensively going across the  
21 pond.

22                  My typical -- I stay in the Pacific, so

1 I'm very familiar with the Japanese Coast, the  
2 Chinese Coast and the West Coast of North  
3 America.

4 Anyways, with my experience bringing  
5 ships into California, Oregon, Washington,  
6 Alaska, I am particularly interested or alerted  
7 or concerned with the over reliance upon GPS. I  
8 think Admiral Gerd and I went over this at the  
9 Transport Research Board.

10 But my concern is that the GPS system  
11 can be compromised. And we have no backup in the  
12 United States.

13 A lot of things depend on the GPS system  
14 here. Not just for ships offshore but for  
15 timing. The automated ATMs you use. That timing  
16 comes from the GPS or the GNSS.

17 And another thing I think about is that,  
18 okay, let's say our GPS satellite system is  
19 compromised, do you think the Russians, do you  
20 think they're going to let us get a hold of that  
21 or maybe the Chinese? They're our good friends,  
22 right.

1           Now the answer is, is eLORAN. I don't  
2 know why somebody doesn't come up with this. The  
3 coast guard, they kind of shied away. But they  
4 have a system where they could put in, what is  
5 it, 14 stations around this country.

6           This could be a co-primary system to  
7 GPS. The datum. You can't pick up GPS under the  
8 water. You can't pick up GPS underground and you  
9 can't pick it up in an urban canyons.

10          Now GPS goes out, these virtual aids to  
11 navigation are going to be totally worthless.  
12 Which kind of goes hand in hand with the physical  
13 aids to navigation.

14          That the coast guard -- oh, I'm on the  
15 Navigation Safety Advisory Council by the way.  
16 And we just passed a resolution on physical aids  
17 to navigation.

18          But they're going to be using this  
19 virtual aids to navigation to supplant the  
20 physical aids. And they're going to be using GPS  
21 datum or GPS signals, to put the virtual aids out  
22 or synthetic aids.

1           The NAVSAC came out and we endorse the  
2           synthetic aids as an enhancement to physical  
3           aids. But the placement of those, AISS and  
4           everything, is going to be based on GPS.

5           Now I know you guys can't afford it, the  
6           coast guard doesn't want to afford it. I've  
7           heard several different programs.

8           One guy said, oh, \$14 million to  
9           establish eLORAN. \$10 million a year thereafter  
10          to keep it going. Or another fellow said, \$200  
11          million over 20 years.

12          Well there's another pundit that came  
13          out says, well that is too cheap. That doesn't  
14          cost enough so it must not be important.

15          So where does NOAA stand on eLORAN? I'm  
16          sorry for the long diatribe, but I believe it's  
17          important.

18          CHAIR PERKINS: Great, thank you Jeff.  
19          And I'll just, as background, both Admiral Glang  
20          and I attended and provided testimony to the  
21          House subcommittee on transportation, Congressman  
22          Duncan Hunter from California's hearing.

1           And eLORAN and the funding of it was a  
2           significant part of that congressional hearing.  
3           And Congressman Hunter has put in an  
4           appropriations request.

5           Last I read and saw in the public space  
6           was in the neighborhood of \$1.5 million to try  
7           and jumpstart, you know, an eLORAN continuity  
8           program. Admiral, do you have any more current  
9           information than that?

10          RDML GLANG: So I'm sorry, I don't have  
11          an update on that. But for NOAA I think it's  
12          important that for safe navigation purposes that  
13          we do have alternatives to GPS.

14          As we all know, mariners should not rely  
15          on one positioning source alone. And I think I  
16          may have said that at that TRB meeting.

17          So I totally get you. It is a bit out  
18          of my ballpark, but maybe Juliana would like to  
19          comment on the robustness of GPS. Am I putting  
20          you on the spot or --

21          MEMBER BLACKWELL: Yes. Yes to you  
22          putting me on the spot, but that's okay, I'll

1 comment anyway.

2 I think there's a lot of concern by  
3 stakeholders and the federal government about,  
4 you know, not having a backup system, okay. It's  
5 been discussed at very high levels.

6 There is an office called the Space-  
7 Based Positioning Navigation and Timing. There's  
8 a national executive committee for that office.  
9 There's a national coordination office.

10 If you go to [gps.gov](http://gps.gov) you will find out  
11 a lot of detailed information about what's being  
12 done at the federal level in support of GPS and  
13 the things that are happening across the federal  
14 agencies.

15 I can't comment specifically on NOAA's  
16 opinion on eLORAN and the funding and things like  
17 that, but I can say that NGS and the offices  
18 supported by NOS and under NOAA, have an  
19 opportunity to provide our feedback to issues  
20 that are, and questions that are asked by this  
21 P&T Office, to all federal agencies.

22 And we participate. And NGS actually

1 has had individuals on staff at the National  
2 Coordination Office. We have a representative  
3 from NOAA who's staffed on there right now. But  
4 not from NOS.

5 And we stay engaged in the variety of  
6 issues that come up related to GPS. And  
7 alternate systems.

8 But it is something that is getting a  
9 lot of attention. I know there are complementary  
10 systems that are being looked at, just from the  
11 meeting and stuff that I've been engaged.

12 But we're really not the organization to  
13 comment on the questions that you've posed. I  
14 think that's at a much higher level.

15 And even commenting from NOAA  
16 perspective I think is not quite appropriate.  
17 Because I don't think we have, you know, I don't  
18 think we have that available to us today to  
19 answer that question.

20 CHAIR PERKINS: Yes, Jeff, you know,  
21 it's not the domain of the HSRP to advise  
22 specifically on eLORAN. But, you know, there's,

1 you know, with a simple Goggle search, Duncan  
2 Hunter from California in February of 2015 is on  
3 record of asking for a fast track solution to  
4 eLORAN implementation.

5 So I would advise -- okay. But, you  
6 know, we appreciate your comments. We can't  
7 advise on it directly.

8 MR. COWAN: I was also on Garamendi's  
9 Maritime Advisory Board too.

10 CHAIR PERKINS: Great. Are there others  
11 in the gallery for public comment? Okay, great.

12 Well I believe then that would conclude  
13 --

14 MEMBER ARMSTRONG: Anyone online?

15 CHAIR PERKINS: Oh, thank you, Andy. Is  
16 there anyone online that has called in via the  
17 online phone bridge?

18 Okay. Great, hearing none it is exactly  
19 12:30 p.m. So I think I've got us back on  
20 schedule. Lawson, did --

21 MEMBER BRIGHAM: Oh, just this morning  
22 when Representative Lowenthal, he opened the door

1 for us to interact with he and his staff. So  
2 there's an opportunity there.

3 I know that NOAA has, yesterday,  
4 obviously met with him in continuously, but maybe  
5 we can interact with him.

6 CHAIR PERKINS: Yes, good suggestion.  
7 We should plot a strategy to engage with  
8 Representative Lowenthal's staff.

9 Great. With that, we will break for  
10 lunch.

11 (Whereupon, the above-entitled matter  
12 went off the record at 12:31 p.m.)  
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This is to certify that the foregoing transcript

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Before: US DOC/NOAA

Date: 04-08-15

Place: Long Beach, CA

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Court Reporter

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