

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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FRIDAY
SEPTEMBER 18, 2015

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The Hydrographic Services Review Panel met in the Pinnacle Grand Ballroom, Doubletree Hotel, 8727 Colesville Road, Silver Spring, Maryland, at 9:00 a.m., Scott Perkins, HSRP Chair, presiding.

MEMBERS PRESENT

SCOTT R. PERKINS, HSRP Chair
DR. LARRY ATKINSON
RADM KENNETH BARBOR
DR. LAWSON W. BRIGHAM
RADM EVELYN FIELDS
ED J. KELLY
DR. FRANK KUDRNA
DR. GARY JEFFRESS
DR. DAVID MAUNE
JOYCE E. MILLER
CAPT. SALVATORE RASSELLO
SUSAN SHINGLEDECKER

NON-VOTING MEMBERS

**ANDY ARMSTRONG, Co-Director, NOAA/University of
New Hampshire Joint Hydrographic Center
JULIANA BLACKWELL, Director, NOAA/NGS
RICH EDWING, Director, CO-OPS, NOAA**

STAFF PRESENT

**RADM GERD F. GLANG, HSRP Designated Federal
Official
W. RUSSELL CALLENDER, Ph.D., Acting Assistant
Administrator, NOAA/NOS (participating
telephonically)
ASHLEY CHAPPELL, NOAA/OCS
TIFFANY HOUSE, NOAA/NGS
CHRISTA JOHNSTON, NOAA
CAROL KAVANAGH, NOAA/NOS
GARY MAGNUSON, NOAA
LYNNE MERSELDER-LEWIS, HSRP Coordinator
RUSS PROCTOR, Chief, Navigation Services
Division, NOAA/OCS
ADAM REED, NOAA/IOCM**

ALSO PRESENT

**J. ANTHONY CAVELL, NSPS
GERHARD KUSKA, Ph.D., MARACOOS
TODD MITCHELL, Fugro**

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

(8:12 a.m.)

CHAIR PERKINS: Good morning, welcome to day 3 of the hydrographic services review panel. We'll now get started with the public meeting portion, if you could please rise and join me once again in the Pledge of Allegiance.

(Pledge of Allegiance.)

Thank you, please be seated. A short recap from yesterday we had a very informative panel presentation from government stakeholders yesterday chaired by Dr. Maune, excellent Q&A session afterwards. Yesterday afternoon we had a very educational field trip up to Maryland to visit the MITAGS Institution, we got to take a look at their facility and spend some time on their large ship simulator. So for those of us that haven't spent time on the water in that environment it is an amazing facility so compliments to the Admiral and to staff for putting that on the agenda. I think it was very beneficial in broadening our understanding and

1 awareness of what life is like on the bridge of
2 these ships in today's environment. So the
3 simulation showed a near real-time virtual view
4 of Boston Harbor under daytime, nighttime --
5 pardon? Baltimore, I'm sorry, thank you.

6 Baltimore Harbor, yeah, the B's. An amazing
7 facility daytime, nighttime view of the harbor,
8 you know, on the bridge, multiple scenarios so
9 excellent activity for the evening.

10 Task at hand for us now is to work
11 towards conclusion and outcome from the
12 information that we received from our working
13 groups and from the information that's been
14 presented by the panelists here over the last 48
15 hours. So one of our housekeeping items is to do
16 a quick vote on both geographic location and
17 tentative date for the next meeting so both in
18 the public session and in our informal breakfast
19 meetings we've kind of kicked this around so I
20 will make the proposal that we put the Houston,
21 Texas geographic location in the week of March
22 14th as the next place and time for our HSRP

1 meeting, so I'll open that up to any discussion.
2 All right. Hearing none, we don't follow
3 Robert's Rules of Order so I don't think we need
4 a motion and a second but let's do the customary
5 all in favor say aye.

6 (Chorus of aye.)

7 Great. Any opposed like sign. Okay.
8 I look forward to seeing you and our public
9 counterparts and we'll try to get that date
10 published and circulated as soon as procedurally
11 we can do that after the administrative process
12 takes place so thank you very much for that.

13 The next item that we'd like to talk
14 this morning is an adoption in some form of
15 consent for the Emerging Arctic Priorities
16 Working Group Report. So it has been suggested
17 that we distribute the Emerging Arctic Priorities
18 Working Group Report in concert or concurrently
19 with the Report Out Letter that will be produced
20 from this. There has been some discussion about
21 some additional modifications and not to say
22 corrections but there's some temporal aspects to

1 that report that we may want to wordsmith based
2 on the testimony that we've heard at the meetings
3 and other events but the intent is to get that,
4 you know, distributed with the recommendation
5 letter, so. Dr. Brigham.

6 MEMBER BRIGHAM: Do you want to go
7 through some of the recommendations? I think one
8 where we need the consensus are the eight or ten
9 recommendations we have. We can wordsmith the
10 narrative and the answers to the questions but we
11 really need to have a consensus to make this as
12 an HSRP report for the recommendations anyway.

13 CHAIR PERKINS: All right. Thank you
14 for the clarification. The intent is that it
15 goes forward as an HSRP report, not as a working
16 group report. So that it signifies that it's
17 embodied by the full panel so prepared by the
18 working group and embraced by the full panel.
19 Does the panel feel it's necessary to review the
20 recommendations individually or can we take them
21 as a slate? We have the luxury of time, you
22 know, this morning sessions up until lunch time

1 is for us to work through exactly this type of
2 information.

3 MEMBER BRIGHAM: I think we should go
4 through just quickly each of the recommendations
5 and get an idea.

6 CHAIR PERKINS: Okay, great. So I'll
7 take you up on the quickly part because I've
8 learned that a schedule can evaporate before my
9 very eyes. Okay. Do you want to cue them up on
10 the projector or do you want to do them orally?

11 MEMBER BRIGHAM: I don't care.

12 CHAIR PERKINS: Okay, great. The
13 floor is yours.

14 MEMBER BRIGHAM: Everyone has them
15 before them.

16 CHAIR PERKINS: Yes, that's true,
17 everyone has them in your packet as well. Yes,
18 it should be in the left-hand pocket of the blue
19 folder. While you're doing that, one reminder,
20 please complete your clerical sheet and turn that
21 into Tiffany -- actually to Russell who is
22 filling in for Tiffany this morning. So if you

1 haven't completed your, and signed your sheets,
2 please do so.

3 MEMBER BRIGHAM: Lawson Brigham, so
4 maybe I'll lead us through this little discussion
5 of the recommendations. The first two respond to
6 the first question and the question again was
7 related to attempting to prioritize Alaska with
8 the rest of the nation, and the answer to the
9 question is that it's very difficult if not
10 impossible to do for a variety of reasons. So
11 while NOAA itself might not be able to say this
12 or would not say that we need a line item budget
13 we can say that with HSRP and I think this is one
14 of the most important recommendations we could
15 ever have. Where it goes and whether it
16 evaporates is somebody else's business but I
17 think we should ask for a line item budget for
18 this new emerging activity of which the President
19 himself has talked about. And it might move the
20 President to put it in his budget but we don't
21 know. So that one I think is -- and then the
22 second recommendation is internally in NOAA it's

1 to place a bit more emphasis, a lot more emphasis
2 perhaps in their Arctic strategic documents on
3 this very same subject of charting and
4 hydrography.

5 Well, internally we can say this but
6 internally they might have a different answer but
7 we can say it, they asked, so those two. Are
8 people comfortable, are all the members
9 comfortable with those two?

10 MEMBER MAUNE: I agree with that, Dave
11 Maune speaking here. Dr. Callender asked for
12 guidance from us on prioritization and I think
13 that's exactly what we're doing.

14 MEMBER BRIGHAM: And I did speak with
15 Bill at some great length so he is supportive of
16 these two.

17 CHAIR PERKINS: Thank you, I failed to
18 mention panel members Lockhart and panel member
19 Hanson both have prior working engagements so
20 Vice-Chair Hanson is not able to be here with us
21 today, we knew that ahead of time and he did pass
22 his proxy and consent on the working group

1 report, you know, to both Lawson and I prior to
2 his departure last evening.

3 MEMBER BRIGHAM: The second question
4 that NOS gave us was related to internal
5 prioritizing the hydrographic needs within Alaska
6 or within the United States Maritime Arctic and
7 we don't necessarily answer the question directly
8 but I think we added some refinement to what are
9 the marine uses in the area. So I went through
10 those, looked at the AIS and there are a number
11 of important, perhaps equally important marine
12 uses, national security, resupply of coastal
13 communities, resupply of the North Slope and you
14 can segregate out these in a package. But we
15 don't have maybe the expertise to give the
16 priority to each one and I think that priority
17 comes from CMTS or whatever analysis NOAA does
18 itself. So the recommendations are three, from
19 our look at this it is unclear that the National
20 Security requirements are integrated with this
21 effort. Pretty straightforward.

22 People don't have to agree with us but

1 from our essence that's what we're saying and we
2 do say in this recommendation that CMTS might be
3 the facilitator of trying to gain some integrated
4 national hydrographic plan, not planned but
5 including these National Security requirements
6 so.

7 The second recommendation deals more
8 specifically with analyzing, have the NOS staff
9 analyze and take a closer look at the coastal
10 barge traffic and operations that deal with
11 resupply of coastal communities and also resupply
12 of the North Slope and how does that fit in to
13 this picture of traffic in the US Maritime
14 Arctic. And the third one is we have offshore
15 leases and what are the requirements from DOI and
16 the requirements of the commercial world both
17 inside and outside the lease sites. And I am
18 pretty certain that those requirements are not
19 clear to anyone so our recommendations are these
20 three that deal with three different marine uses
21 that it's unclear to us as a recommending to NOAA
22 with some expertise here that it's not clear that

1 those three requirements have been analyzed
2 enough.

3 MEMBER MILLER: Since you're talking
4 about National Security here, this is Joyce
5 Miller, and yesterday Lawson and I both asked the
6 NGA representative if data were available, could
7 we in some way in this section since National
8 Security, could we in some way include in either
9 the explanatory paragraph or the requirements to
10 investigate what other data. And it's not just
11 government data, I mean the oil and gas companies
12 certainly have some data out there and since
13 charting is such a high requirement, you know,
14 whatever data is available it gives you some
15 guideline as to, and whether it's feasible to get
16 that or not I don't know but maybe in this one
17 isolated instance where, you know, the Arctic has
18 become such an issue perhaps we could have some
19 leverage, Lawson.

20 MEMBER BRIGHAM: It may be just the
21 language in the narrative. This particular
22 recommendation was in fact focused on the DOD

1 intelligence agencies and what knowledge they
2 have but we didn't actually specify, it's just
3 the relationship of the organizations and their
4 contribution and an integrated whole government
5 approach where we don't have a lot of data and we
6 know they have some. I know personally they have
7 some so and you do to, so two of us on the
8 committee know, and I think Andy does, enough of
9 us know that they have data and the question is
10 how are they going to share it with us all for
11 this remote and challenging area where we don't
12 have a lot of information so we can massage that
13 recommendation if you'd like slightly to say it a
14 bit harder on that. A consensus on those three I
15 guess.

16 CHAIR PERKINS: Yes, I think, it's my
17 opinion, Dr. Miller, that what you're suggesting
18 might fit better under 3A, the alternative
19 strategies for Arctic coverage, you know. And I
20 think that maybe the concise way to state that is
21 that we recommend full release of all bathymetric
22 data collected by other agencies into the NOAA

1 stream for consideration into our production. It
2 may not be worded perfectly but because it's not
3 just NGA or the Navy's data, any data that's
4 being collected by any federal agencies should be
5 considered part of the chart, it should be
6 considered in the process of available data that
7 goes into the chart process.

8 MEMBER MILLER: I would agree that I
9 hadn't really thought of that but yeah, wherever
10 the recommendation fits I just think this is a
11 chance to include the knowledge of other data
12 that exists.

13 CHAIR PERKINS: Okay. So I think that
14 means that you and Dr. Brigham have a window of
15 about 14 days to get that penned so we can have
16 it included when the recommendation letter goes
17 forward if we stay on schedule with their
18 standing operating procedures.

19 MEMBER MILLER: That's doable. Do you
20 want me to draft something, Brigham, or do you
21 want to do it?

22 MEMBER BRIGHAM: I like it better in

1 the alternative strategies. Actually there are
2 some synergism, we have it here and then we
3 mentioned it again in --

4 CHAIR PERKINS: Yes, I think it fits
5 better in the strategy question than it does in
6 the prioritization questions.

7 MEMBER BRIGHAM: I reordered and
8 retooled these questions, we had 3(d), 2(b), I
9 forgot what they are. We had actually, the
10 number one question was about the Coast Guard
11 routes but that time passed for our input so we
12 didn't address that one directly. But I think
13 it's six questions in question one, two, three
14 just to make it a bit more 101 and simple for
15 everyone. But okay, we'll work together on that
16 one.

17 The next question deals with tide
18 gauges and CORS and the recommendation is, it's
19 fairly soft but it's direct in one area, it says
20 we must improve access to the National Spatial
21 Reference System and fundamental ocean graph
22 data, tides, currents in the whole of the US

1 Maritime Arctic but with the caveat that
2 additional tide gauges and co-located CORS
3 Stations are urgently required, essentially it's
4 in the lease site area but we say Bering Strait,
5 Chukchi Sea and Beaufort Sea, where there are
6 leases across all the area so is that specific
7 enough or is it -- I don't think we wanted to say
8 that Rich had to have X number or Juliana, we
9 just wanted to say it's important and it's really
10 important in this one area where we don't have
11 essentially the triangulation capability to do
12 the surveys adequately.

13 The next one is what Captain Armstrong
14 was working on with us and giving us some advice
15 on recognizing the shorter seasons and the effort
16 that's required, what might we recommend for an
17 annual survey. Of course NOS also asked for what
18 percentage and not knowing what the box says it's
19 difficult to know what the percentage is so but
20 we recommended 500 square nautical mile minimum
21 per annual but I think this year or maybe last
22 year you have more than that, right Admiral?

1 Maybe this year is 800 or something?

2 RADM GLANG: Gerd Glang, Coast Survey.
3 Because we had both the Rainier and the
4 Fairweather operating in the Arctic and we had
5 one of our contractors we were able to exceed the
6 500 square.

7 MEMBER BRIGHAM: But of course this is
8 based upon current funding, current technology,
9 you've reprogrammed money to do some of this so
10 it's not an extrapolation, it was what are we
11 doing now and can we continue to do it, but our
12 recommendation also says as a second part of it
13 that NOS or NOAA should develop a strategy, in
14 fact should have it already underway in case
15 there is new money, in case we are successful and
16 so and have a plan that they can roll out. This
17 percentage thing, people ask me how much do we do
18 in a year and I can't tell because if it's the
19 whole of the US Maritime Arctic by law, it
20 includes the Aleutian chain all the way to the
21 Canadian US border, that's a very big chunk of
22 the Bering Sea, the Beaufort Sea and the Chukchi.

1 I think we're talking about north of the Bering
2 Strait and all of the Chukchi Sea and Beaufort
3 Sea is the box maybe. But to come up with this
4 percentage we all should be talking the same
5 language, it's just an artifact of the discussion
6 and the question.

7 RADM GLANG: Gerd Glang, thanks

8 Lawson. I think the intent was in the US Arctic
9 as it's defined in the Act, so it would include
10 the Aleutians. And so for instance for us Dutch
11 Harbor and Unalaska area are a priority for next
12 year's so we're going to account that certainly
13 as part of our Arctic effort next year.

14 MEMBER BRIGHAM: I'm smiling because
15 one wonders why because of the Fennica of course.
16 So but that makes sense because I think being
17 consistent with the United States law, there are
18 lots of definitions of the Arctic and I hear them
19 all the time spouted out by various agencies
20 including the State Department and I always bring
21 them back when I'm there saying wait a minute, we
22 have a federal definition in the US law, it's the

1 Arctic Research and Policy Act 1984. So anyway,
2 we should use it but then the percentage of
3 course, 500 square nautical miles, I don't know
4 but a couple of percent --

5 MR. ARMSTRONG: No, not even.

6 MEMBER BRIGHAM: Okay, point something
7 percent. So it doesn't sound like much and it
8 isn't much.

9 MR. ARMSTRONG: Right, I mean I agree
10 that when we include that whole area, if we
11 recommend that NOAA do one half of one percent a
12 year, that's a non-starting recommendation.

13 MEMBER BARBOR: Yes, Ken Barbor. Do
14 we have that broken down into significant areas
15 like we do --

16 MR. ARMSTRONG: That's right, I think
17 that's the first step and I think that's what Dr.
18 Brigham has said is that the first step in order
19 to get to percentage is actually to identify sort
20 of an Arctic critical area that needs to be
21 attacked.

22 MEMBER BRIGHAM: I mean, in the

1 narrative we split it out to saying we're going
2 to cover some of this 500 square nautical miles
3 is devoted to the corridor and the axis which the
4 Coast Guard wants to have this route. Some
5 surveying is done for the approaches to the lease
6 areas and some is for the approaches to the end,
7 the survey of the refuge area so we've identified
8 that there are components to this annual that
9 have to be worked out. And of course things
10 happen and so more time will be devoted to Dutch
11 Harbor but eventually more time will be devoted
12 to Nome perhaps as a new Arctic port and we don't
13 know how that's going to play out but we know
14 that the 500 square nautical miles, how small it
15 is still won't be devoted to specific areas over
16 a 10 or 11 year period.

17 And it may take a century to chart
18 this area but anyway so it's kind of a swag, this
19 one, but it's minimum so if we want to do a lot
20 more like what was done this sheer that's great.
21 Is everyone comfortable with that short analysis?
22 I mean, we could actually say, you know, 2000 but

1 that might be unrealistic, well it would be
2 unrealistic in terms of the federal funding today
3 and, you know, there are lots of issues. So we
4 didn't stretch out there.

5 MEMBER BARBOR: Ken Barbor.

6 MEMBER BRIGHAM: Yes, sir.

7 MEMBER BARBOR: I think we serve two
8 purposes here, one is to establish a level of
9 effort and yes, it should not be disjointed with
10 what the expectation is but, you know, it should
11 push that expectation to its fullest, I would
12 think, in order that, you know, if to allow Gerd
13 to take up his chain to say our advisors believe
14 that this is the minimum level, you know,
15 acceptable and I need more resources to try and
16 meet that, you know, but obviously to the point
17 where it is realizable in some, you know, sense
18 but I don't think we should say well, they
19 managed to get 500 so let's keep it at 500. If
20 there is an ability to raise it but now again
21 that is a difficult question I know you've
22 wrestled. Thank you.

1 CHAIR PERKINS: Dr. Maune.

2 MEMBER MAUNE: Dave Maune, is it
3 possible that this 500 number might be used
4 against us when we say well, we only need --
5 well, it's a minimum but somebody could say HSRP
6 recommends 500 and therefore if you get 501 we're
7 fine but 0.5 percent to me sounds like an
8 attainable number and I just wonder that number
9 is too low for a political reason?

10 MEMBER BRIGHAM: Well, I think the
11 number is based upon how many ships we have in
12 the US inventory to do this and the short
13 navigation season on through the centuries so
14 lots of constraints besides just budget
15 constraints that even physically you might not be
16 able to do a couple thousand square nautical
17 miles because we don't have the ships and they
18 might not be operating well, it might be only one
19 ship so I think there's lots of factors in this.

20 MEMBER MAUNE: Oh, I agree from a
21 realistic perspective 500 is a good number, I'm
22 just wondering from a political perspective

1 though.

2 MEMBER JEFFRESS: Scott, I was
3 wondering if we should put in a parenthetical
4 statement saying that at this rate the Arctic
5 will be surveyed in over 200 years' time.

6 CHAIR PERKINS: Your point is well
7 taken, I'm not sure that we know how to actually
8 state it. I am inclined to agree with Dr. Maune
9 though that what we should be recommending is a
10 plan that address a much higher number than the
11 reality of what we've been accomplishing. You
12 know, the plan we should be recommending that we
13 plan for a thousand and put the challenge
14 forward, you know, to both the administration and
15 to the US Congress, you know, to implement and
16 authorize the level of funding that it would take
17 the accomplish the President's directive of chart
18 the Arctic, you know, 500 square miles is not the
19 right number to accomplish that.

20 MEMBER KELLY: Scott, Ed Kelly here.
21 I would also agree that we need to aim for a much
22 higher number. Realistically we have a limited

1 window of public opportunity where NOAA can make
2 a statement they want to comply with this
3 presidential, you know, directive and that we
4 need to move at a much faster pace to get it
5 done. If that's accepted as a concept that also
6 helps us as far as pushing NOAA to increase their
7 fleet assets and their operational times so it
8 adds to that.

9 Dave, I agree operationally and
10 realistically right now with the tools we have in
11 hand that might even be a stretch to get that
12 done but we have now had the opportunity of a
13 publicized presidential, you know, objective to
14 chart the Arctic and I think it's our opportunity
15 to aim high to get this done and enthusiastically
16 and aggressively seek to be a lead agency in this
17 and if we say we should be doing it at a much
18 higher rate which will require additional money
19 let's see what we get in that may also help us to
20 put the spotlight on the need to increase the
21 asset base of the NOAA vessel fleet and
22 operations. So I think it serves really several

1 purposes, all of them good for what we're looking
2 to do.

3 CHAIR PERKINS: Admiral Barbor.

4 MEMBER BARBOR: Yes, in taking the
5 words that exist there rather than should plan
6 for I think that is the plan, you know, and a
7 less plan is a minimal annual survey rate of 500
8 square miles. And then you hit it with the next
9 sentence that, you know, they should develop
10 alternative plans that, you know, that bring
11 those numbers up. So our recommendation is you
12 need to have alternative plans and execute those.

13 CHAIR PERKINS: Dr. Miller.

14 MEMBER MILLER: I would suggest that
15 since they were able to accomplish 800 square
16 nautical miles this year that perhaps, you know,
17 a 50 percent up here 750 which is still, you
18 know, some percentage of 1 percent, you know,
19 it's a 50 percent increase over what's planned
20 and that might be a realistic number perhaps.

21 MEMBER KELLY: I think it's our
22 opportunity to go beyond trying to deal with the

1 cards that we have in our hand. We know that
2 NOAA is challenged with their vessel fleet and
3 this could be an opportunity where we've been
4 given a presidential directive to do something
5 and we as a panel should say yes, we want to do
6 that, it needs to be done, we can't wait 200
7 years to chart the Arctic, we need to up the game
8 here. And I think, you know, make that
9 statement. When people come back to us and say
10 well how are you going to do it, say well we need
11 to invest in the vessel fleet, we have a new
12 objective, a new mission, we need to up the ante
13 here to be able to enable NOAA who is the proper
14 lead agency for this to do what the President and
15 what the country wants done.

16 I think, you know, we were told to be
17 edgy, I mean is there anybody that doesn't agree
18 that NOAA needs additional assets and they should
19 be the lead agency doing this job? Is there
20 anybody that's comfortable that it's going to
21 take 200 years or longer because the ships are on
22 the verge of just breaking down and sinking and

1 killing people. I mean, is there anybody that's
2 out there that really feels that that's what we
3 want to be recommending as this panel?

4 MEMBER BRIGHAM: I disagree with the
5 whole discussion because I'm going to go back to
6 the question that was asked by the NOAA staff,
7 given the realities of shorter survey seasons and
8 mobilization costs what are the realistic annual
9 targets and percentage surveyed and realistic
10 means in my mind the current budget level and
11 what's the potential for deep draft ports and all
12 the rest of that. I agree with everything that
13 is said but it's not said to answer this question
14 and the recommendation, I think we were asked to
15 give something realistic and so we are trying to
16 do that but the realistic part is what are the
17 components that make up that 500 square nautical
18 mile thing. Sure, we can say it should be 10,000
19 a year but that would be unrealistic,
20 implausible.

21 MEMBER KELLY: I believe in gravity
22 and realistic things but I think we should give a

1 realistic target with an existing asset base but
2 make the statement that we should be doing a lot
3 more with this and that it should be done at a
4 much faster rate and that will require additional
5 assets for a new mission of critical security and
6 economic importance to the nation as espoused by
7 the President. I'm not saying that we don't get
8 realistic at the end of the day but I think we
9 need to plant our flag as far as the
10 recommendation of this group that we should be
11 doing it at a much faster pace.

12 MEMBER BRIGHAM: Well we can say that
13 we had the first question. We're the only body
14 that has ever going to say has a line item, we
15 need a line item in the federal budget so there
16 we can, I would say amplify the words this is
17 critical for the United States and the reasons
18 why. I just don't see having to load all of that
19 into this particular answer to the one question,
20 I don't know. But the second part of the
21 question I think the Admiral mentioned we do say
22 we need another battle plan so may be in that

1 second part of the recommendation, this plan
2 needs to take into account what we've been
3 talking about, I don't know.

4 MEMBER BARBOR: We should put more
5 emphasis on that second part.

6 MEMBER BRIGHAM: Second part, okay.

7 MEMBER BARBOR: Yes, this exists but,
8 yes, as opposed to they should also, you know,
9 they should go forth.

10 MEMBER BRIGHAM: Probably you need a
11 few words from somebody to tease that out so I
12 don't miss the bubble here on that one.

13 CHAIR PERKINS: Susan.

14 MEMBER SHINGLEDECKER: I would just
15 say that I know that the panel has struggled with
16 the concept of coastal intelligence, coastal
17 resiliency and how to bridge those two. I think
18 we know that when it comes to the Arctic, it's a
19 matter of when not if some sort of disaster
20 happens, some sort of accident happens and I
21 think this actually is a place where we can make
22 the link that coastal intelligence, this key

1 hydrographic data will lead to a more resilient
2 Arctic but the thought of the Arctic being
3 resilient right now is laughable. And I think
4 that when that accident happens, are we going to
5 be able to say at least we told you so. Did we
6 at least make a strong enough statement that says
7 you need to chart these key areas, this is where
8 the risk is and there needs to be more of an
9 effort. If it's ignored at least we can know we
10 tried.

11 CHAIR PERKINS: I would suggest that
12 we word this in the context of plan for a 1,000
13 square miles of Arctic critical areas, then the
14 alternative plan could be the structural beyond
15 that. This is the plan.

16 MEMBER BRIGHAM: What basis do you
17 give that swag, sir? I'm challenging you because
18 I think it's not realistic to me. With the
19 current technology, the number of ships we have.

20 CHAIR PERKINS: The number of ships we
21 have --

22 MEMBER BRIGHAM: We can contract it

1 all out maybe.

2 CHAIR PERKINS: Right. And in the
3 business world you don't plan next year's
4 activities based off of last year's performance,
5 you base your plan on what your return on
6 investment needs to be on what your mission is,
7 on what your customer demand is. I think we have
8 to approach it in that same regards. If we
9 accomplished 800 this year, then a plan for a 20
10 percent up to 1,000 does not seem unrealistic.
11 There is more capacity to accomplish charting
12 than with inside the federal fleet. We've talked
13 about that before, there's contractor capacity,
14 there's potentially ship time from other agencies
15 that we've discussed so the plan should be more
16 robust than based on two ships.

17 MEMBER BRIGHAM: I'd like to know what
18 the average number of square kilometers -- square
19 nautical miles has been done over the years and I
20 put money on that it's less than 500 but that's
21 for the Admiral to answer. There may be some
22 years where it's much less but I don't know maybe

1 we shouldn't fixate on a particular number, I
2 don't know. If you want to have a thousand we
3 can make it a thousand.

4 CHAIR PERKINS: Well, I think this is
5 why the question was originally put in terms of
6 percentage because there's a lot of difficulty
7 with putting the number, the geographic area.

8 MR. ARMSTRONG: So it seems to me
9 there's a couple of things we're saying here, as
10 we know, the NOAA hydrographic capacity is pulled
11 in many different directions. If we add 500 to
12 the Arctic, we're taking 500 away from someplace
13 else in Alaska which also needs to be surveyed.
14 I mean, there's an existing resource, there's a
15 finite number of ships and contract dollars and
16 we all know that, you know, we can't ignore
17 Charleston and New York and so 500 is a number I
18 think that's an adequate, it's not adequate,
19 we're way short of adequate but it's a reasonable
20 approach given the existing resources today.

21 And I think one of the things we want
22 to say is that okay, you've got 500 plus this

1 year, you know, don't stop going to the Arctic.
2 In other words keep going every year because we
3 don't know for sure that there's a plan to go
4 back for 500 more next year or next year or next
5 year or next year. I think one of the things
6 this says is don't take the 500 in the Arctic out
7 of the plan to go down to some other part of
8 Alaska because our perception is that the Arctic
9 needs to at least get in the game. That's how I
10 would perceive this.

11 MEMBER BRIGHAM: That's what Captain
12 Armstrong was talking about is southeast, where
13 you have a million passengers a season coming up
14 on the largest cruise ships on the planet so that
15 would get my attention and number one priority.
16 And even compared to the frontier so I don't
17 know, I focused on or I think we all focused on
18 the word realistic of what NOAA and NOS was
19 asking us. But we can do whatever the consensus
20 is. If we want to elevate it and give it more
21 robustness, it's still a very small percentage of
22 the United States Maritime Arctic and we should

1 figure that out and be honest and transparent on
2 what that number is, I think it's less than a
3 percent, so okay, it sounds like a big number but
4 it's still inadequate.

5 MEMBER JEFFRESS: Gary Jeffress. I
6 think somewhere in the recommendation should be
7 the total square nautical miles of the Arctic
8 that we're talking about because anybody who
9 reads this document won't know that, to give them
10 some idea of the vastness of the project.

11 MEMBER BRIGHAM: But again, I agree
12 but vast area of the Arctic in the US Maritime
13 Arctic won't be traversed by ships, and so for
14 the whole of the Arctic Ocean the number is about
15 8 percent is charted international navigation
16 standards, 8 percent leaves 92 percent that most
17 of the area doesn't have charts. Now the numbers
18 may be different in IHO by when we did the Arctic
19 Marine Shipping Assessment we have a council and
20 we try to figure out this number and 8 percent is
21 still pretty small but some of the routes of the
22 Northern Sea Route, Northwest Passage and a few

1 around Alaska robustly surveyed.

2 But nonetheless this number game is
3 interesting but I agree with Gary that we should
4 give that number and show its smallness even at
5 this level or even modest increase in the federal
6 budget for this. On a line item budget item
7 we'll still be pretty small because of, one of
8 the major things is this navigation season and
9 the survey season I guess you could contract out
10 to 15 vessels maybe. There's probably not 15
11 vessels in America to do this kind of work but so
12 what would you like to do, Mr. Chairman, on this
13 one? What's the consensus, we'll do whatever.

14 CHAIR PERKINS: Well, we've certainly
15 not done this quickly but it's important. I'll
16 be willing to concede to the recommendation of
17 the 500 and I think that's a good suggestion that
18 the report be expanded to include what we think
19 the overall number is.

20 MEMBER JEFFRESS: It doesn't have to
21 be in this particular recommendation, just
22 somewhere in the beginning of the document like

1 this is what the challenge is.

2 MEMBER BRIGHAM: And maybe enhance the
3 second part of that recommendation, add some more
4 robustness to it, to what Ed was talking about
5 and the Admiral.

6 MEMBER SHINGLEDECKER: Potentially you
7 could in that part put under, you know, with
8 current resources and current funding to state
9 that we're striving to hit that realistic but
10 like you said somewhere else have something that
11 certainly to hit what we need to do is going to
12 have to be beyond that.

13 MEMBER BRIGHAM: Let's keep going and
14 see if we can get through these last couple.

15 CHAIR PERKINS: Yes, please.

16 MEMBER BRIGHAM: Number 5 was the use
17 of different technologies and the integration of
18 the federal fleet so to speak. Now, we heard
19 yesterday from the Admiral that NOAA has done
20 some crowd source work so we should probably
21 adjust the recommendation to say -- we did say
22 further explore but maybe it needs some continue

1 to explore and implement or whatever. We'll
2 adjust that to make sure that we know that things
3 are ongoing. But the second one is integrating
4 the rest of the federal fleet to do at least
5 surveying that is not to international standards
6 but is surveying for information to be used. And
7 so meeting with NSF and integrating the Sikuliaq.
8 I mean, the Sikuliaq has the right equipment to
9 do, Drew, I think, Captain Armstrong, to do this
10 kind of work but not to the level that we're
11 talking about for --

12 MR. ARMSTRONG: Right. I think first
13 in Sikuliaq's case it's not a question of whether
14 they have the equipment or the technology, they
15 do. The question is, you know, do they have the
16 staffing, the expertise, the mission time to do
17 that.

18 MEMBER BRIGHAM: But can't NSF and
19 NOAA work that out with the university, and the
20 same with the Coast Guard but already NOAA, NOS
21 has worked to integrate the buoy tenders and the
22 Healy.

1 MR. ARMSTRONG: Right. So perhaps the
2 Admiral would be a little bit more comfortable if
3 we didn't use the word hydrographic survey in
4 there, we used something more like hydrographic
5 data or sounding data or something along those
6 lines.

7 MEMBER BRIGHAM: And the third part of
8 it was to slip in, if we're going to have this
9 new billion dollar icebreaker it better have the
10 equipment at least to take some soundings.

11 MEMBER MILLER: I would add just from
12 experience not directly in Alaska doing
13 hydrographic surveying but other places,
14 generally most of NOAA's priority areas are in
15 what for a large ship is considered very shallow
16 water and so there's a lot of restrictions on
17 what a larger ship such as the Sikuliaq or an
18 icebreaker can realistically bring to NOAA in
19 terms of safety and navigation because the
20 launches are what generally really do the shallow
21 survey. And secondly is this where were we
22 should add either a separate recommendation or an

1 addendum about other sources of data in the
2 Arctic?

3 MEMBER BRIGHAM: I'm not sure I can
4 answer that part but I can answer the Sikuliaq is
5 a shallow draft icebreaking ship and that the
6 deep draft ships, the Healy and the new
7 icebreaker won't be able to go to most of the
8 places around the coast of Alaska but the
9 Sikuliaq can actually. So I think they can go
10 places where may be the Rainier can't. But of
11 course again you have your launches that can go
12 everywhere so. But the Sikuliaq can do some
13 areas. Now, the other data I think, Joyce, that
14 comes in answers to other questions but we have
15 to integrate it, maybe not here.

16 MEMBER MILLER: I thought Scott's
17 recommendation was to put it here and other
18 alternate strategies.

19 MEMBER BRIGHAM: The next question.

20 CHAIR PERKINS: No, you're correct,
21 this item 3(a) is in alternate strategies, you
22 know, opening access to the other data sets for

1 an alternate strategy.

2 MEMBER BRIGHAM: Maybe write it up and
3 I'm sure we can put it in as a fourth
4 recommendation.

5 MEMBER MILLER: I'll take that as an
6 action item.

7 MEMBER BRIGHAM: Sure. Sure. And
8 then the six question is how might NOAA think
9 differently about -- oh, excuse me, let me go
10 back to question 5. The other recommendation is
11 to explore this public private partnership with
12 the commercial operators of the tug-barge
13 companies. And maybe that is under way or you
14 have spoken with, Admiral, or spoken with these
15 operators to maybe explore crowd sourcing?

16 RADM GLANG: We have not spoken with
17 the operators yet. We've done a proof of concept
18 with a commercial software package and that's the
19 direction we want to pursue it is to enable the
20 software first.

21 MEMBER BRIGHAM: So our general
22 recommendation is to explore a higher order of

1 potential partnership?

2 RADM GLANG: Yes.

3 MEMBER BRIGHAM: Finally the last
4 question, how might NOAA think about this region
5 differently? Well, we can go in all kinds of
6 different directions but I think in general as an
7 organization, at the highest level of government,
8 it's not just NOAA, but it's the CMTS and this
9 Arctic Steering Executive Committee, need to
10 expand the interagency private sector
11 relationship, I mean, I think that should come
12 from us as HSRP because we have private sector
13 with us but I don't know if it's expressed quite
14 the way we want to say it but that's the intent.

15 And then the other recommendation is
16 that NOS should request this new executive
17 steering committee coordinated by the White House
18 for this integrated charting requirements and
19 there is where maybe DOD and the intelligence
20 agencies can be brought in to this if asked by
21 the White House and the steering committee at the
22 deputy secretary level, it's pretty high maybe

1 that's where that could be forced or requested I
2 guess is the right word, the data issue. Well,
3 it's question 6 and it's the second
4 recommendation.

5 MEMBER MILLER: So it's 3(b), okay.

6 MEMBER BRIGHAM: And we worded it in
7 particular bringing clarity to those critical
8 requirements of DOD, the Navy, Coast Guard and
9 DHA, I mean well anyway so those are the
10 recommendations and we can adjust a couple but
11 there's general consensus I guess, Mr. Chairman?
12 Sorry it took so long but important to do.

13 CHAIR PERKINS: I do believe we have
14 general consensus to move forward with these
15 revisions as we've discussed. Is there anyone
16 who feels differently? Great. Dr. Jeffress.

17 MEMBER JEFFRESS: Can I recommend that
18 as soon as we have this wordsmith the way we want
19 it that you email it to Admiral Brown as soon as
20 possible.

21 CHAIR PERKINS: 10-4. Thank you,
22 that's a lot of work, your working group is, you

1 know, hit the mark. A good healthy discussion so
2 I thank everyone for your input. What we have
3 next is our report from the Coastal Intelligence
4 and Resilience Working Group. What I would like
5 to do before that is allow us to take a quick
6 look at the three and a half, four minute video
7 that we weren't able to watch when Dr. Callender
8 was with us, I think that will be a nice -- it
9 will kind of set the table for the CI/CR
10 discussion.

11 (Video played.)

12 CHAIR PERKINS: That is actually a
13 very well done short video segment, so.

14 MS. BLACKWELL: Send it to your
15 friends and family.

16 CHAIR PERKINS: I think you're going
17 to have to -- do we have the podium wired up or
18 do we need to use -- great, thank you very much.

19 MEMBER ATKINSON: Is it on, okay.
20 Anyway, the Long Beach meeting I really felt like
21 a deer in the headlights but after we've had
22 conversations since then I guess I wasn't the

1 only one. So I came up with some ideas about how
2 we might go forward which we will see in a
3 minute. And to read Lynne's email, so a little
4 humor. It says Spaghetti Junction, fork in the
5 road ahead so I don't know which fork were going
6 to take but we'll talk about it. Okay, next
7 slide. So I just tried to write down some
8 realities, this is based on a phone call we had
9 and a lot of sidebar conversations and it's just
10 trying to get down some of the realities. You
11 know, we found that hard to get our arms around
12 this whole CI/CR issue in the context that we
13 were given and that may have been naivety on my
14 part or others but anyway, that's where we are.

15 The other realities as a group, a
16 group may not have the appropriate expertise to
17 address a specific topic, the expertise may be in
18 another group or not at HSRP at all. And then a
19 reality, your question, you know, should we form,
20 you know, temporary or ad hoc groups to address
21 specific topics filling in the appropriate HSRP
22 members or people from the outside and it was

1 hard to express it but it would be a lot easier
2 if we attacked specific topics which I'm going to
3 list here and as part of that, you know, the
4 assignment would be how does that fit in to the
5 CR/CI contacts.

6 So let's go to the next slide. These
7 all were topics that that just kind of flew out
8 as I was listening over the last couple of days
9 and we're going to focus on the second one. And
10 we also need champions and I think, you know, the
11 Arctic was a classic. You know we had a person
12 that was passionate about it so we also need to
13 take topics if somebody is enthusiastic enough to
14 spend some time on it and understand it. Some of
15 those are more explanatory than others, I'm sorry
16 about well even GRAC-D, I got it wrong, so GRAV-
17 D. Anyway, there's something there but I don't
18 know what it is. Anyway, there's all these
19 topics that we could address and to pick one off
20 and let's just hear from the Captain on a topic
21 that, you know, we may want to think about, this
22 is an example of something.

1 MEMBER RASSELLO: Sal Rassello, I
2 apologize for the tone of my voice, I'll do my
3 best.

4 MEMBER ATKINSON: Sure, perfect.

5 MEMBER RASSELLO: Okay, the challenge
6 we have with navigating larger vessel in ports
7 nowadays is connected with the under-keel
8 clearance most of all. Vessel of 1,300 feet, the
9 weight of 160 feet, they need a good 20 percent
10 of under-keel clearance where in some ports these
11 charts are not assessed adequately. They're not
12 adequate to be safely navigated with the larger
13 vessel. Nowadays we navigate with ECDIS. ECDIS
14 is in our system. ECDIS and precise navigation
15 goes hand to hand.

16 Charts are electronic and ECDIS reads
17 only electronic charts. ECDIS does not read the
18 paper chart. So therefore if we are going to
19 accomplish the meaning of navigating with ECDIS
20 we need to have more adequate charts that means
21 detailed survey and details of the sea bottom and
22 all the changes that the ecosystem will produce

1 during the time, so continue survey.

2 MEMBER ATKINSON: You know, I think
3 yesterday we heard from him that there will be
4 ships carrying 7,000 people, life boats with 450
5 people.

6 MEMBER RASSELLO: Yes, I have more
7 numbers. Our next ship will have 8,200 in total,
8 6,500 guest and the rest is crew, 18 life boat
9 with capacity of 440 person each, so imagine the
10 impact I don't even think about though an
11 incident with all these people involved. So the
12 charting and the surveys are vital for us to
13 continue safe navigating the ports and the
14 coastal waters.

15 MEMBER ATKINSON: So I think a lot of
16 these, you know we had discussions; non-
17 navigational uses may not be phrased quite right.
18 But I think we know what we're talking about.
19 You know I've talked to people that have certain
20 modeling for FEMA. You know there's a real need
21 for better surveys in shallow water outside of
22 channels and so on. There's just a lot of

1 topics; so what I would suggest is that as a path
2 forward that we think about forming groups that
3 are I don't know, temporary, ad hoc, call them
4 whatever you want, that can work on a specific
5 manageable topic like that. Also one that's got
6 a person passionate about it that can be
7 reproduced, maybe one page. A couple of quotes
8 from somebody, the heads of the cruise lines and
9 from Navigation World, some bullets, maybe a
10 couple of sentences about how this can accent CR
11 and CI and that's it. You know, you get a page
12 out. And I'd talked to the admiral a bit; but
13 sort out how this fits in to the, how the FACA
14 works and DFO. I don't understand all that; but
15 this may be a way to go forward, I suggest. So
16 if you had a little comments and -- sure.

17 MEMBER BRIGHAM: I think that you need
18 something iconic to take the subject forward; and
19 I think it's these mega-ships.

20 MEMBER ATKINSON: Yes.

21 MEMBER BRIGHAM: And then the
22 relationship of all of this intelligence to those

1 ships. I think what Captain Rassello just showed
2 us.

3 MEMBER ATKINSON: Yes.

4 MEMBER BRIGHAM: But there are the LNG
5 ships and then the mega Maersk Line, Costco 1,200
6 foot ships. They're all in the same boat so to
7 speak; and it's errorless. It can't have a
8 mistake; and the world doesn't work that way of
9 course, the immensity. So I think we could
10 frame, at least one topic could be these mega-
11 ships.

12 MEMBER ATKINSON: Yes.

13 MEMBER BRIGHAM: And then how does the
14 new world of e-navigation and intelligence, how
15 we will frame this subject could be framed around
16 this particular new technology so to speak.

17 MEMBER ATKINSON: Yes. Yes, Joyce.

18 MEMBER MILLER: Yes, Joyce Miller.

19 Two comments, can you go back two slides?

20 MEMBER ATKINSON: Sure, maybe.

21 MEMBER MILLER: No, the next one.

22 Okay, potential emerging topics, for instance

1 precise navigation, which port next. This is
2 kind of a question for Admiral Glang. In the
3 coastal intelligence session, primarily because
4 of Ed Kelly's expertise, we were able to come up
5 with a partial answer to that, the PAWSA system
6 and the Army Corps of Engineers and so forth. We
7 put that in the notes from the coastal
8 intelligence session. And we assumed that
9 coastal intelligence, coastal resilience would
10 incorporate that into the questions we got.

11 MEMBER ATKINSON: Yes.

12 MEMBER MILLER: Okay. So you were at
13 the discussion and so forth and you got that
14 information. How formal do we have to be in
15 capturing that information? It's already in a
16 report of what happened in the working session.
17 Do we need to formalize that? Do we need to put
18 -- I mean I thought maybe it could go in with the
19 Arctic report because that also answered some of
20 those six questions, which were about coastal
21 intelligence, coastal resilience. You know there
22 was at least a partial answer provided during the

1 session.

2 MEMBER ATKINSON: Yes. Yes.

3 MEMBER MILLER: Do we need to go
4 further? Was that enough? Do you need more? Do
5 you need it more formally?

6 RADM GLANG: Gerd Glang. Good point,
7 Joyce. I think in that specific example where
8 the panel discussed and at least during the Long
9 Beach meeting suggested we take into account the
10 PAWSA studies from the U.S. Coast Guard, the Port
11 Access Waterway Study Areas. The answer is yes
12 we did take those into account; and we are using
13 those as part of our risk-based methodology for
14 coming up with our survey requirement and
15 prioritization scheme for the coming years.

16 MEMBER MILLER: So that was a question
17 answered or at least partially so. So I was a
18 bit confused with all the coastal intelligence
19 resilience about you know exactly what did we
20 need to do with that?

21 MEMBER KELLY: Yes. I mean I felt, in
22 fact I've got a document where I took our

1 assignments, who was at which, and then the two
2 reports that came out of the two breakouts. It
3 hasn't been cleaned up; but that could be cleaned
4 up a bit. At least something could get as a
5 report to turn in. But that's all the further it
6 went. I hate to see the work wasted.

7 MEMBER MILLER: Yes.

8 MEMBER KELLY: Yes. Maybe it wasn't
9 wasted.

10 MEMBER MILLER: Yes. In thinking
11 about this, and I've talked a little bit to Frank
12 about this. We've been talking about engagement
13 documents; and I'm the next report up.

14 MEMBER KELLY: Right.

15 MEMBER MILLER: And as part of that I
16 was thinking of engagement documents. And I've
17 been listening carefully to what Dr. Sullivan
18 said what Dr. Bamford said and Mr. Leveson, et
19 cetera. And they all pointed toward needing to
20 talk to individual groups about their needs and
21 be very succinct. And I was awake a lot last
22 night thinking about it, you know, exactly your

1 ideas. Could we maybe have a series of
2 documents, one or two of which were produced
3 before the next meeting. Something like cruise
4 ships and NOAA Navigation Services or National
5 Security and NOAA Navigation Services or Port
6 Complexes and NOAA National Services. You know
7 specific topics that we have expertise on. Have
8 a template and a guideline, and make those sorts
9 of outcomes of our working group. And then at
10 the end state what additional needs there are or
11 how can you help NOAA. I don't know exactly what
12 would be appropriate. And I'm sort of jumping;
13 but it's exactly what you're talking about.

14 MEMBER ATKINSON: Okay. So if we hear
15 from you and others this may all make sense. Can
16 we just quickly go around and make sure we get
17 opinions from everybody about this? Silence
18 can't be approval.

19 MR. ARMSTRONG: I think this is a very
20 good framework, having the CICR group as an
21 umbrella-type group that picks up these specific
22 topics to work on. And I think your list of

1 topics is certainly approved.

2 MEMBER ATKINSON: You know what, that
3 was a brain dump really as we went along.

4 MR. ARMSTRONG: Right. But I think
5 that conceptually I really like the idea of the
6 approach for the group.

7 MEMBER ATKINSON: Okay.

8 MEMBER KUDRNA: And I would add this
9 is good stuff I think. And agree with much of
10 what Joyce said. I think we may when we get to
11 this engagement discussion a little later I think
12 we may be able to roll some of these together.

13 MEMBER ATKINSON: Good. Good.
14 Anything else? Better get back on schedule.

15 CHAIR PERKINS: I agree. I think we
16 have an opportunity here with the coming increase
17 in the size of the vessels. Maybe whether it's
18 on the entertainment/recreation side or whether
19 it's on the cargo side it seems like our
20 Engagement Working Group, we should be reaching
21 out to the Coast Guard NAVSAC FACA. It feels
22 like we should have a common interest here. You

1 know the importance of precision navigation
2 should be on the radar screen on the NAVSAC FACA;
3 and I think that we, our engagement group should
4 be communicated to that FACA in a letter of
5 support from HSRP to NAVSAC when they put that on
6 their agenda and when they start speaking about
7 it. And then if we can get that cross
8 communication if they are so inclined, put pen in
9 hand and support precision navigation as an
10 improvement or as a tool for improving the safety
11 as these vessels come into our waterways and
12 enter our exclusive sound.

13 MEMBER ATKINSON: Thank you.

14 CHAIR PERKINS: It feels like that
15 should be a challenge for our engagement group to
16 reach out to NAVSAC.

17 MEMBER ATKINSON: Yes, Captain.

18 MR. EDWING: Rich Edwing. So two
19 weeks ago I was an invited speaker at the Coastal
20 Engineering Research Board, which is the board
21 that advises the Corp. of Engineers under their
22 research needs. And Bill Hanson is a member of

1 that board as well; but we were able to talk a
2 little bit about precision navigation at that
3 meeting. And talked about how we're kind of
4 figuring out what are the next ports to go to.
5 There were actually a number of comments received
6 from the audience there about that NOAA should be
7 working closely with the Corp. in terms of
8 utilizing a lot of the economic information they
9 have amassed, a vast store of data and tools that
10 can maybe help with that effort. So I just
11 wanted to pass that along.

12 CHAIR PERKINS: Thank you. I didn't
13 mean to overlook the Army Corp. And when the
14 Admiral and I did our testimony to Congressman
15 Hunter and his subcommittee, that was one of the
16 challenges that he put forward was increasing
17 communication among those three agencies. So I
18 think this topic does create an opportunity for
19 that.

20 MEMBER RASSELLO: I would like to
21 include in this context also the VTS, the Port
22 Authority and the Pilot Association. All these

1 need to be addressed in the safety, in the
2 precision navigation context because they are
3 part also XXX-09:22:26. These three entities are
4 vital. The presence of the three entities in the
5 discussion is very important to get somewhere.

6 MEMBER BRIGHAM: I guess that the
7 Marine Board at the National Academy has done
8 some work in this area too. So we could roll it
9 in. I think wherever our next meeting is, in
10 Houston or wherever, we could have a session on
11 this mega-ship e-Nav coastal intelligence issue
12 and invite the Coast Guard, respond and they come
13 and other entities and invite them to the meeting
14 and help us flesh out this topic. And of course
15 we have one of our own members who can handle the
16 mega cruise ship side of the house.

17 CHAIR PERKINS: Dr. Maune, I think we
18 have just outlined our next panel of our next
19 meeting that could use your tender love and care.
20 You know the phrase good work leads to more.
21 Thank you, doctor.

22 MEMBER MAUNE: Yes. We need to have

1 a recording of everything that's been said.

2 RADM GLANG: Gerd Glang. So I don't
3 want to lose sight of the fact that, so broadly
4 the questions that NOS posed to the panel at the
5 Long Beach meeting were about how the coastal
6 intelligence, the three programs within the
7 domain of this FACA, how they contribute to
8 resilience. And I wouldn't want to lose that
9 thread. I fully appreciate Captain Rassello's
10 point on certainly the special case of paying
11 attention to the requirements of these larger and
12 ever increasing in size cruise ships; but the
13 coastal resilience piece is important to NOS.
14 And perhaps the panel could single up a bit on a
15 focus area. For instance, on that list, maybe
16 Adam you can jump back to that list, you had
17 Hampton Road's flooding federal project, which
18 there's a considerable effort across the federal
19 government I believe, and Larry you're involved
20 with that as well. It might be interesting for
21 the panel to understand broadly what the
22 questions are that that panel is trying to, in

1 that project what they're trying to resolve and
2 then to identify what are the products and
3 services that CO-OPS, NGS and Coast Survey
4 already have or are providing or are being used
5 that underpin what the requirements of that
6 project are. It seems to be water level is kind
7 of a key component there. So is there a
8 requirement to do more or is what they have
9 adequate? Is there a requirement to improve our
10 models, for instance, the Operational Forecast
11 System models, do they play a role in that? I
12 don't know. I don't have enough insight into
13 that. It would be good to understand; and
14 perhaps it's just simply a story that our
15 products and services are important to that
16 project and here's how.

17 MEMBER ATKINSON: Actually we're doing
18 a science road map or framework for the December
19 10th gathering of all the pilot projects in the
20 U.S. And that will address some of that. I
21 don't know if you all know, every other Monday at
22 9:00 a.m. we have a phone call between all the

1 federal agencies involved in this and all the
2 city academic groups. There's between 10 and 30
3 people on the call going over all the subsidence
4 issues, the water level, the projections from
5 tomorrow to a hundred years. There's a lot of
6 action right now, all volunteer. So actually we
7 could come up with a, you know, a statement like
8 that for this.

9 MEMBER KELLY: Just to help build on
10 this a little bit and perhaps building an agenda
11 for the next meeting, certainly precision
12 navigation and that aspect of it has far-
13 reaching, you know, ramifications to most of the
14 major ports in the United States. And I think we
15 could certainly build a pretty good panel to talk
16 about that. As far as municipal or coastal
17 resiliency, the big project is down in Hampton
18 Roads; but New York City post Sandy has initiated
19 an awfully large effort. And they have a
20 distinct separate New York City Office of
21 Resiliency. Dan Zarrilli up there runs that; and
22 we've dealt with him extensively in our local

1 community. It might also make a good panel to
2 pull together certainly from the Hampton Roads
3 area, possibly from other cities that are in the
4 process of looking at resiliency and how we can
5 best feed and work with them. That might be
6 something we something we'd look at as well
7 because I think there are efforts moving that
8 would be very helpful for us as NOAA, making them
9 totally aware if they're not already of the
10 possible collaboration that can be had with the
11 NOAA products. And on the flip side, it does
12 give NOAA the reconfirmation that it's doing the
13 right thing, and raises the public profile
14 because resiliency is a big thing. Also, not to
15 be purely pecuniary, but you know New York City
16 among others are throwing millions and millions
17 and millions of dollars at this. If you can
18 somehow get resiliency tattooed on your forehead
19 they will just throw hundred dollar bills at you.
20 So I think it's certainly a valid, current topic
21 that has public appeal as well. So it might be a
22 good thing for us to pursue a bit further.

1 MEMBER SHINGLEDECKER: I would just
2 state I know that we as a panel have struggled
3 with the issue of outside expertise and using
4 outside expertise. I think on the community
5 resilience side of things, I think thrilled that
6 we do have Larry now with his expertise in the
7 Hampton Roads project. But I would say as we
8 look to build a panel, if we're going to need to
9 have a product that comes out of this or anything
10 we're going to need to look for some people that
11 could advise a working group informally or
12 however we do that because I don't know that the
13 panel as a whole -- I mean NOAA has the expertise
14 on staff in various places of NOAA; but the panel
15 as a whole I don't think has a real robust
16 understanding of it.

17 MR. EDWING: Rich Edwing. So I was
18 just going to go back reinforce what Ed just said
19 and also Larry in terms of, you know, back at the
20 big kickoff meeting for the Hampton Roads effort
21 in June of 2014. The White House was there. I
22 think it was -- right. And there are other areas

1 where similar efforts are going on around the
2 country that the White House is interested in;
3 and I think it's through the National Security
4 Council. I think the rep was from this -- yes.
5 Right. So I guess what my point is, we're
6 looking for pathways to emphasize the national
7 security aspects in connections of what the
8 navigation services do; and this is, you know,
9 one potential pathway.

10 MEMBER MAUNE: Dave Maune speaking.

11 The Houston-Galveston area not only has to worry
12 about the sea level rise but subsidence is a
13 major issue down there. And I think NGS can
14 validate that how that area's been subsided for
15 such a long time. And it seems to me as though
16 or I didn't realize I was going to be doing some
17 planning for the next meeting. I mean I
18 volunteered to help plan this one. I didn't
19 realize it was continued. But subsidence is a
20 big issue there; and it seems as though when we
21 were Houston we ought to, if we're talking about
22 resiliency, we certainly should include the

1 special problems they have from that area.

2 MEMBER ATKINSON: Yes. Just to point
3 out, I guess half of our sea level rise is
4 subsidence. We've bought our own CORS stations
5 you know; and we have a working group on
6 subsidence with NGS.

7 MEMBER JEFFRESS: On that topic, Dave,
8 this is Gary Jeffress, we are working on a
9 project which is funded through an earmark in
10 NGS. It's called Geospatial Modeling for the
11 Gulf of Mexico. That's what it's all about; but
12 in the past couple of years what we have focused
13 on, co-locating CORS stations with tide gauges.
14 And we have about ten of them already in Texas.
15 And we've been working with CO-OPS to put all
16 this in place as well. It's funded through an
17 earmark from Mississippi through NGS.

18 MS. BLACKWELL: It's congressionally
19 directed in a sense; but it is something that has
20 been in the budget from the past and it's
21 definitely focused in one particular area. So
22 there are a number of states that are involved in

1 this. And as Gary mentioned, we are working
2 closely with them as part of what was previously
3 the Height Modernization Program, trying to make
4 better connections with what's happening
5 geospatially in the Gulf of Mexico. And also,
6 just to point back to what Larry was saying
7 regarding the work in the Hampton Roads, NGS is
8 part of the team and working as technical
9 advisors and looking at the subsidence issues and
10 things that can be done in order to get more
11 detailed information about what's happening in
12 the Hampton Roads area, bringing that and tying
13 that into our CORS Network or providing guidance
14 on how to best do that as well as looking at it
15 from a remote-sensing perspective and maybe other
16 opportunities using other technologies to try to
17 get a better understanding of what's happening, a
18 snapshot of what's happening in Hampton Roads.
19 So we can apply that information and what we
20 learn to other parts of the country as well.
21 Thanks.

22 CHAIR PERKINS: Great. Good

1 discussion. I do want to acknowledge that we did
2 receive an online question, pardon me, from one
3 of our virtual participants. I would like to
4 take a little bit of time to contemplate that and
5 address an answer to that after our lunch break.

6 MS. BLACKWELL: During the public
7 session?

8 CHAIR PERKINS: Yes, during the public
9 session. So we appreciate the input from Mr.
10 Harrison; and we will try to formulate a response
11 at approximately 13:00 hours during the public
12 comment period. So Joyce are you ready to move
13 forward?

14 MEMBER MILLER: Yes. I don't have a
15 PowerPoint. What I do have is something you all
16 got about two weeks ago. My Legislative and
17 Policy Working Group report, September 2015. I
18 want to go through the first portions of it very
19 quickly. The working group, we agreed upon three
20 action items between the L.A. Long Beach work
21 meeting and this finalization of the HSRP
22 Charter, which is reviewed every two years. We

1 were told I believe on Wednesday that that
2 charter has been renewed. So that's kind of
3 check.

4 Recommendations for standard operating
5 procedures for the HSRP, they were attached to
6 this. I want to point out we consider this a
7 dynamic document that as we refine it, as we
8 discover different things that we will, it's a
9 dynamic document; and it's not something that we
10 have to necessarily officially vote on but
11 perhaps just get consensus. There are four parts
12 to it: recommendation letter, meeting notes and
13 summary, working groups and planning. I believe
14 everyone, we have discussed it earlier in
15 administrative meetings with one minor addition
16 that the number and missions of working groups
17 will be reviewed and modified as necessary. Is
18 there any discussion or comments and can we get
19 consensus that as of this HSRP meeting these will
20 be our guidelines as to standard operating
21 procedures? Comments?

22 MEMBER KUDRNA: Sounds good. And I

1 think we had informal discussion of the ability
2 to amend working committees later on. So I think
3 it looks fine to me.

4 MEMBER MILLER: Okay. Thank you. All
5 right. Just shall we say "Aye" that we're agreed
6 that these will be our standard operating
7 procedures?

8 (Chorus of aye.)

9 MEMBER MILLER: Opposed? Okay. Hit
10 your gavel or something.

11 CHAIR PERKINS: Okay. Thank you. And
12 I just want to say I really, this seems like busy
13 work. It looks like another list of items; but I
14 think for future panel members this will really
15 beneficial. For new panel members coming in, if
16 they read this, if they embrace it and get up to
17 speed on it, they'll have a much easier path.
18 And maybe we can avoid the deer in the headlights
19 look that new panel members get about how and
20 what is it that we're doing here and what are the
21 mechanisms, you know, that make it happen. So I
22 appreciate your efforts Joyce.

1 MEMBER MILLER: Thank you. Lastly,
2 the most important item since we are the
3 legislative and policy working group, the
4 Hydrographic Services Improvement Act was enacted
5 1998. It was amended in 2002 and 2008; and
6 reauthorization legislation has been proposed
7 both in last year's congress and this year's.
8 There was some unclarity about what the HSRP as a
9 working group can do in terms of either
10 encouraging reauthorization or reviewing
11 reauthorization bills. And Mr. Boledovich, I
12 hope that's the right pronunciation, gave us two
13 different briefings, and I very much appreciated
14 them that helped clarify in my mind what it is we
15 can and can't do. And in particular he made it
16 clear that we cannot directly engage as a working
17 group as the HSRP with congress. We can do it as
18 individuals but not representing ourselves as
19 members of the HSRP. And so there is a
20 reauthorization in congress. It was introduced
21 by Representative Young of Alaska, HR2743; and
22 the questions that we were asking, this was

1 before our legal briefings, are there any changes
2 that HSRP would suggest if/when reauthorization
3 is underway? How important is it to the HSRP to
4 have the bill reauthorized? If there are or not
5 changes we would recommend; if the HSRP decides
6 to recommend reauthorization what can/should HSRP
7 do as a panel to make it happen? Can/should we
8 as individuals take actions to get
9 reauthorization? And how would any changes that
10 we propose affect NOAA Navigation Services?

11 Many of these questions were answered
12 by Mr. Boledovich; and so what we decided to do
13 as the legislative panel was to look at the HSIA
14 and the proposed reauthorization and focus on any
15 areas we thought to be important. One of the
16 parts of the proposed reauthorization was an
17 additional five million dollars for survey in
18 Alaska. And we certainly would agree with that;
19 but many of the other proposed changes, for
20 instance, additional funding for Law of the Sea
21 surveys or extended economic zone surveys in
22 Alaska, that surveying has already largely been

1 done and not directly through NOAA Hydro or NOAA
2 Navigation Services. It was done more through
3 Department of State. Is that correct Andy?

4 MR. ARMSTRONG: For the last few years
5 ocean exploration has been the source of funding.
6 I'm sorry, Andy Armstrong. So for the last few
7 years NOAA's office of Ocean Exploration has been
8 the source of funding for mapping surveys in the
9 Arctic; although the execution has been done
10 through the Office of Coast Survey.

11 MEMBER MILLER: Okay. Additionally,
12 there was a recommendation for cost comparison
13 survey. And as we've seen so well here, there
14 have already been many cost comparison surveys
15 done by NOAA. Whether the panel should, this was
16 not considered by the working group, but should
17 the panel perhaps recommend that additional or
18 augmenting economic surveys be done. We didn't
19 really address that. And there was also in the
20 HSIA there is discussion user fees. That was
21 discussed back in 2011, 2012. And we just pretty
22 much decided that advocating for increased user

1 fees, given how NOAA operates and how successful
2 their free access to charts has been, that that
3 doesn't make sense either.

4 In the latest actual reauthorization
5 in 2008, there was an authorization for a ship, a
6 hydrographic ship in particular. And so that was
7 the area that we decided to focus on. We had
8 extensive discussions with Admiral Lopez
9 yesterday at lunch. And will say that many of
10 the topics about how the ships are operating,
11 what the challenges are and so forth were
12 discussed at that time. In my report there is a
13 brief discussion of that; and this year's budget,
14 160 million dollars was requested to build a
15 general purpose NOAA vessel. And that did not
16 appear in either the House or the Senate mark.
17 Actually, I have a question for Admiral Glang,
18 something that I learned in sort of sidebar
19 conversations yesterday. I understand that one
20 of the reasons that the Appropriations Committee
21 would not even consider the ship was that they
22 needed a fleet augmentation plan,

1 recapitalization plan, which NOAA has completed;
2 but that was not released by OMB. Can you
3 enlighten us on that?

4 RADM GLANG: So that's exactly right.
5 I think Jeremy Weirich actually said that during
6 his comments that in order for the congress to
7 understand the context of NOAA's request for a
8 new ship they really wanted to see that report.
9 And that report was still at OMB and had not been
10 released. And that was straight from Jeremy
11 Weirich.

12 MEMBER MILLER: Yes. So that was
13 something I noted as a possible issue. I mean
14 the entire issue of hydrographic survey
15 efficiency we expressed in our letter last time,
16 perhaps in too negative a manner. I heard from
17 Dr. Sullivan. But I think it's still a great
18 concern. And one of the things that we discussed
19 as a working group was how can we help Navigation
20 Services NOAA, NOAA at large actually, think out
21 of the box about increasing fleet capability, or
22 I won't say fleet capability, but hydrographic

1 survey capabilities and just throwing some things
2 out, you know, kind of in the middle of the
3 floor?

4 Through contacts in NAVOCEANO I
5 understand that one of the NAVOCEANO vessels, the
6 Sumner, which is one of the 320-foot ships; so
7 much larger than NOAA usually handles. Very
8 expensive to operate, however it's a U.S.
9 government vessel. It is now laid up in Mobile.
10 I don't know whether NOAA got an offer on it.
11 But I have been on several of that class.
12 They're highly capable survey platforms, probably
13 noting that NAVOCEANO probably took off every
14 scrap of equipment they could for other ships;
15 but if NOAA can't get a vessel -- Anita Lopez
16 yesterday mentioned increased used of launches.
17 We suggested increased possible keeping on a
18 couple of the older NRTs and thus increasing the
19 survey capability perhaps only in the lower 48.
20 Or you know perhaps sending an NRT up to Alaska,
21 which was requested in the Alaska meeting.

22 I was on the Okeanos Explorer. She

1 does not have full sea days this year. Is there
2 any way that Hydro could use, you know, the
3 Explorer or another ship, basically throwing out
4 some ideas just trying to encourage a
5 conversation about what's realistic, what can be
6 done, what can't be done. And I personally would
7 recommend that we reiterate our concern about
8 hydrographic survey capabilities whether to
9 Admiral Brown or again in a letter or whatever.
10 So I'll leave it at that. Would any of my
11 committee, Admiral Fields, Admiral Barbor, Gary
12 Jeffress, would any of you like to add anything
13 or comment?

14 MEMBER FIELDS: My only comment is
15 that one of the other things that we talked about
16 a little bit was about the expertise.

17 MEMBER MILLER: Yes. We also said we
18 should consider more contracting, possible
19 contracting for only a vessel, possible
20 contracting for a vessel and the survey. You
21 know, basically thinking on a broader scale; but
22 the a caveat with that that Admiral Fields

1 mentioned is that the working group considered it
2 just as critical to maintain survey expertise
3 within NOAA as it is to just flat out get the
4 surveying done. So that was the second part of
5 our recommendation was that we have to, NOAA has
6 to maintain its survey expertise in order to have
7 credibility, especially with the liability issues
8 in charting. Admiral Barbor do you have
9 anything?

10 MEMBER BARBOR: No. Again a lot of
11 our discussion could be you know better informed
12 with dialogue between NOS and the other; but yes
13 I think you've captured everything pretty well.

14 MEMBER KUDRNA: Joyce, very good
15 report. Two comments, you are correct that Glen
16 said that we didn't have the authority to go
17 directly to the hill with recommendations on a
18 reauthorization. That doesn't preclude us from
19 recommending to the administrator things we think
20 should be included in the next revision of the
21 reauthorization. And I think Susan hit on one
22 that's at least a gray area whether we could have

1 outside experts working with our working
2 committees. Maybe we ought to clarify that
3 within our reauthorization. Or there may be some
4 other things. If we put that in some sort of
5 recommendation that goes forward to the
6 administrator, then it's a public document that
7 could be carried forward individually too. So
8 I'd suggest we don't just abandon the topic of
9 reauthorization. We see if there are some issues
10 we want to bring forward as a panel to the
11 administration.

12 MEMBER MILLER: I hear you but as a
13 panel, I mean for instance this reauthorization
14 that's in congress right now and has really
15 gotten no traction it appears was introduced by
16 Representative Young of Alaska.

17 MEMBER KUDRNA: Right.

18 MEMBER MILLER: And we cannot say,
19 unless there is either a senator or a
20 representative who wants to introduce a bill, we
21 can't say that NOAA should, I mean it has to come
22 from the congress. And since we're limited in

1 our interaction with the congress, now I don't
2 know if NOAA can or should say oh we need a
3 reauthorization bill; but there's a disconnect
4 there.

5 MEMBER KUDRNA: That's true.

6 MEMBER MILLER: You know I don't know
7 how much the administrator can really influence
8 that. It really has to come from the congress.

9 MEMBER KUDRNA: Not necessarily,
10 reauthorizations drafts on various topics have
11 come from the administration many times. So I
12 don't think it hurts to put on record with the
13 administration any items we think should be in a
14 future reauthorization bill because the
15 reauthorization is up. It will continue of
16 course until a reauthorization occurs; but I
17 don't think that's hurtful. And if it starts
18 moving in some way we meet twice a year and have
19 to develop something; so it's at least clearly on
20 record.

21 MEMBER MILLER: Yes. Let's see, you
22 said Susan's recommendation about what was the

1 topic?

2 MEMBER KUDRNA: Susan mentioned the
3 question of our being able to have some outside
4 experts.

5 MEMBER MILLER: Oh outside okay.

6 MEMBER KUDRNA: And that's the
7 challenge.

8 MEMBER SHINGLEDECKER: Well I should
9 clarify that statement. I was fine to work
10 within the confines we'd been given; but
11 suggesting that that was a topic where we might
12 really need to look to find some individuals and
13 engage them in the appropriate way. I don't
14 know. I feel we beat that one a lot; and I'd
15 rather just see us try and move forward within
16 the means that we have.

17 MEMBER MILLER: And we'd have to, you
18 know, the working group would have to reconsider
19 that. What we really found the compelling issues
20 were hydrographic, you know, maintaining and/or
21 increasing both hydrographic survey assets and
22 hydrographic survey expertise. That's what the

1 working group came down to. That's what we
2 thought in the reauthorization was important.

3 MEMBER SHINGLEDECKER: Yes. And I
4 think in terms of levels of importance, resources
5 for the fleet and capabilities rise, you know,
6 way above the workings of our panel.

7 MEMBER KUDRNA: Second point is you're
8 topic of the congress' reluctance to move without
9 the recapitalization plan. That's a topic to
10 push up to Admiral Brown.

11 MEMBER MILLER: Yes. I wondered about
12 that. I have no idea how OMB et cetera works.
13 You know, shaking that report out of OMB would be
14 important for the next cycle. Admiral Glang do
15 you have any thoughts? I mean how does that
16 work?

17 RADM GLANG: Gerd Glang, I don't
18 believe I have any more insight into it than what
19 we heard from Mr. Weirich on Wednesday. So but
20 let me, since I have the microphone for a moment,
21 I believe we did settle that working groups are
22 certainly welcome to seek outside expertise, the

1 views of outsiders. The restriction is that we
2 cannot call them members because that's what's
3 defined in the HSIA. So if that is important to
4 the panel then certainly a recommendation about
5 what a next HSIA reauthorization might contain,
6 certainly the views of the panel to the
7 administrator could be appropriate. I would
8 leave that to the panel though.

9 MEMBER MILLER: I think that's more in
10 the bylaws and the charter than in the actual
11 reauthorization. I believe that is.

12 RADM GLANG: So it was the HSIA
13 reauthorization of 2002 which authorized the
14 formation of this panel; and in that language, in
15 that statute then it defined what a member was.

16 MEMBER MILLER: Oh okay.

17 RADM GLANG: And then from that the
18 bylaws were derived.

19 MEMBER MILLER: Okay. Actually since
20 you're on the microphone, the sort of grab bag of
21 options for increasing survey efficiency maybe
22 not now but offline, or whenever perhaps the rest

1 of the panel would like to hear your thoughts on
2 practicality or are there things we should
3 advocate for or

4 RADM GLANG: So the fact is that the
5 ships, the entire fleet, the 16 ships operate
6 from a budget line that OMAO manages, the Office
7 of Marine and Aviation Operations. It's a budget
8 line that I have no control over. And then I
9 think you heard from Admiral Lopez. She touched
10 on the Fleet Council. And there is an allocation
11 process. And so those ships that serve our
12 hydrographic survey mission are part of that
13 allocation process. So a portion of the budget
14 for sea days, the operating budget, is then
15 allocated to NOS; and then a portion of that goes
16 to the hydrographic ships. And that's by
17 agreement within the Fleet Council fixed at a
18 certain percentage. Keep in mind it's one jar of
19 peanut butter they're trying to spread across 16
20 ships. And that same budget, as I understand it,
21 that same budget line also is balanced by their
22 maintenance costs and repair costs. So if the

1 panel wanted more insight into that allocation
2 process we could certainly provide that
3 information.

4 MEMBER MILLER: What about the NRT's,
5 which as I believe are coast survey.

6 RADM GLANG: That's right.

7 MEMBER MILLER: And you have a limited
8 budget. I totally understand.

9 RADM GLANG: The navigation response
10 teams are funded through coast survey's base
11 budget for mapping and charting. I wasn't sure
12 where you were going with that Joyce.

13 MEMBER MILLER: Well you're limited by
14 the fact that OMAO has the budget for the ships;
15 but NOS has the budget for the NRTS's. Is that
16 correct?

17 RADM GLANG: Yes, generally.

18 MEMBER MILLER: Generally.

19 RADM GLANG: So within NOS it's in
20 that Navigations, Observations and Positioning
21 budget line that was described on Wednesday. A
22 portion of that comes to coast survey and then

1 within coast survey we use that portion of those
2 base funds to operate the navigation response
3 teams.

4 MEMBER MILLER: So I mean the real
5 question Bill and Andy have said, you know, you
6 want to look higher. You don't want to look at
7 individual things. The real question is
8 maintaining hydrographic survey efficiency or
9 production capacity both in assets and in
10 personnel. And so I think you've already
11 probably been incredibly creative; but in a no-
12 increase budget situation as Anita Lopez says,
13 you've got to think out of the box. And part of
14 it is you're using the small ROV's and autonomous
15 vehicles too. Can we, how can we help you? I
16 mean that's what we're here for. Lawson has had
17 a comment for a while.

18 MEMBER BRIGHAM: Back to the
19 authorization of the hydrographic ship and that
20 study being bound by OMB. There is an
21 opportunity now when the president talked about
22 hydrographic and charting, hydrography and

1 charting, although it specifically focused on
2 arctic he has mentioned the topic. So the
3 president himself or his lieutenants can actually
4 make that happen with some suggestions from
5 wherever. It could happen attached to that
6 statement about what we just talked about for
7 arctic.

8 MEMBER MILLER: Good point.

9 CHAIR PERKINS: Joyce, I'm going to
10 ask for just a little clarity in an earlier
11 comment you made. And if my recollection is
12 correct it was, you know, our last recommendation
13 letter perhaps was soft or dish-watery; but I
14 thought I heard you make a contrasting remark
15 about it was too direct?

16 MEMBER MILLER: No. I think it was we
17 should have probably given recognition to the
18 difficulties rather than just saying this is
19 something NOAA is not doing well. However, I
20 have to say I took Margaret Davidson's comments
21 three or four meetings ago to heart that our job
22 is to look at what NOAA is doing and telling them

1 what they're doing well and what they're not. So
2 that was what I took from Doctor Sullivan. I
3 mean but she also gave us some very good advice
4 about talking to individuals and what they need
5 and so forth. So, you know, I listened and
6 that's what I heard.

7 CHAIR PERKINS: Okay. Thank you. My
8 listening ability is challenged when trying to
9 conduct the meeting at times; so I appreciate
10 that. On that note though, at the last HSRP
11 meeting the ship's engineers, if I heard it
12 correctly, the lack of ship's engineers was a
13 contributing factor to the inability to maximize
14 the number of days at sea. And we wrote a
15 recommendation in early May that went forward,
16 took nearly 100 days, you know, to work through
17 the administrative process. So I just would like
18 you to take a look at the screen and see on
19 there. This is federal business opportunity;
20 it's the FedBizOpp.gov
21 advertisement in mid-May for three licensed
22 engineers. And if you can scroll that down a

1 little bit. Yes, if you'll keep going. Okay.
2 You'll see, my eyesight's not what it used to be
3 but that looks like the most recent change to
4 that solicitation for three ships engineers was
5 September 16th, this week, still trying to get
6 them hired. I just want to bring that to the
7 panel's attention that, you know, it takes a long
8 time to hire these ships engineers.

9 MEMBER MILLER: Yes. And having been
10 on one of the ships recently, they are offering
11 signing bonuses for certain ships.

12 CHAIR PERKINS: And this is not a
13 hiring request. This is a solicitation for
14 services going out to the private sector for the
15 private sector to provide three ships engineers
16 on a contract basis. So I just thought it was
17 relevant that we put that in the recommendation
18 that action on the part of OMAO, who we heard
19 from at our lunch yesterday, addressed it. You
20 know, the bureaucratic process that they're
21 involved with, it takes a hundred days and I
22 don't know how many changes to the advertisement.

1 You can see them for yourself. I won't read the
2 dates of them to you. There has to be a more
3 efficient matter. I think that the panel needs
4 to advocate for a more efficient manner. You
5 can't hire them quickly. You can't on-board them
6 as staff quickly. You can't even hire them as
7 contractors quickly. And how many days at sea do
8 we have in that region? How many days in the
9 north? How many ship days? It's a limited
10 window of opportunity to get these people on the
11 vessels and accomplish the mission. Andy --

12 MR. ARMSTRONG: If I may counter the
13 chairman a bit, it is important that when the
14 government advertises contracting opportunities
15 that they follow the process and insure complete
16 competition. And so I would instead of objecting
17 to this note that perhaps our concern prompted
18 some action that's being taken.

19 MEMBER FIELDS: This is Evelyn Fields.
20 I was going to say that I think that listening to
21 Lopez yesterday, that it is apparent, whether
22 it's enough or not I don't know, but it is

1 apparent that they are thinking outside of the
2 box; and that they are doing some things to try
3 to staff the ships. So the staffing issue is not
4 the problem, not one of the problems is what I
5 heard. And I think, you know, we said that in
6 our letter that this was a concern. And I think
7 we should acknowledge that it sounds like they
8 are at least trying to move forward in their
9 thinking and keeping the ships underway, the
10 hydro ships underway.

11 MEMBER BRIGHAM: Lawson Brigham. I
12 don't know the relative compensation for what
13 Captain Rassello pays his engineers to advise to
14 the government; but I would presume that there's
15 a vast difference and that maybe we have to have
16 special employees in the government that are
17 engineers on these specific ships. I mean
18 thinking out of the box probably means it's going
19 to cost more money even at the junior levels; but
20 I mean that's got to be one of the issues. If
21 I'm going to sea for a couple of months in a
22 government ship I want to be compensated like the

1 commercial world or else I'll go with the
2 commercial world. Unless you're a lieutenant in
3 the Coast Guard or at NOAA COR you're locked in
4 but not in the engineer. Well of course in the
5 Coast Guard we have our own engineering officers
6 as similar to the Navy. So why you have contract
7 engineers is probably a long history; but if you
8 had officers that were paid at the officer level
9 you order them to a ship. But there's a long
10 history. I don't need to know that; but I think
11 it's a compensation issue isn't it?

12 CHAIR PERKINS: Susan.

13 MEMBER SHINGLEDECKER: I was just
14 going to go with what Evelyn said. I mean I took
15 some short notes yesterday and it sounded like
16 they'd made some progress on the engineer
17 situation. Now if the situation changes with the
18 price of oil and how that impacts the market, we
19 may be back in the situation again; but I had a
20 note that they've hired 40 engineers and they've
21 worked to increase their retention rate. So it
22 seemed to me that the biggest limitation in the

1 most recent history had been unscheduled
2 maintenance, not necessarily the staffing. But
3 that was what I heard. I don't know if I
4 misheard what she said.

5 RADM GLANG: So let me offer some
6 observations. As you know Dr. Sullivan wants to
7 encourage FACAs to keep the broader view to be
8 more strategic; and where we're going in this
9 conversation, although it's, you know, it's of
10 interest to us, we may be in the weeds too much.
11 I think if the broad concern, if the panel were
12 to broadly express their concern for instance
13 that the panel may be unsure to the NOAA
14 administrator that the panel is not clear on
15 hydrographic surveying is prioritized, perhaps
16 that would be a better direction to go. In other
17 words, the panel could express their concern that
18 for instance in the arctic given that the survey
19 season is so short, that the priority of insuring
20 the sea days are there, that the ships are
21 operating and that they're appropriately staffed
22 for that short window given the panel's

1 expressing the arctic as being important. That
2 might be a more fruitful recommendation. So I
3 would encourage you to aim high; but express your
4 concern that hey this is a priority and we think
5 NOAA needs to make sure that it executes
6 consistent with that priority. I'm deeply in the
7 gray zone here in my role as DFO; but thank the
8 panel for its indulgence.

9 MEMBER MILLER: That's pretty much all
10 from the legislative; and I don't envision,
11 unless we put a follow-up recommendation in the
12 letter to the administrator or to Admiral Brown,
13 I don't envision really doing anything further
14 than this report. Oh, the one last thing was I
15 would be willing to propose, given that we've
16 pretty much accomplished the task we have, and
17 given the legal advice we've gotten, that you
18 know the legislative and policy working group
19 could take a pause here. We know in two years
20 the charter will be due again.

21 If there were another reauthorization
22 next year, depending upon what happens with this

1 year's, you know we could reactivate. But I
2 don't see any immediate priorities; and that
3 would allow our members to perhaps spend more
4 time on say if we agree on an engagement document
5 or in the coastal intelligence and resilience
6 working group or wherever. So that, I guess
7 unless there's any objection, that's what I would
8 propose for the period between this meeting and
9 the next. And then we could take a look at it at
10 the next meeting to see if it needs to be
11 reactivated.

12 CHAIR PERKINS: Comments from the
13 panel? Okay. I think that's an acceptable --
14 we'll take that after we do the engagement
15 presentation. Okay. Great. I think we've got
16 consensus, Joyce that you've done a lot of work
17 and until there's a change in congress or the
18 will of congress to look at reauthorization of
19 HSIA, no further action required on the part of
20 the legislative and policy working group.

21 MEMBER MILLER: And, you know, I
22 intend to spend whatever, provide whatever

1 assistance I can to other working groups.

2 CHAIR PERKINS: Okay. Dr. Kudrna,
3 your presentation is up next; and we have eroded
4 10 minutes of your time. So my apology for that;
5 but --

6 MEMBER KUDRNA: Let me my time
7 following-up was finished 10 minutes ago. We're
8 40 minutes behind schedule. Right?

9 CHAIR PERKINS: You're right. I
10 thought it was beginning at 10 and it is now
11 10:10. So

12 MEMBER KUDRNA: So say 8:10.

13 CHAIR PERKINS: Yes. We've taken,
14 we're 40 minutes behind schedule.

15 MEMBER KUDRNA: Okay. So what do you
16 want to do now?

17 CHAIR PERKINS: Break.

18 MEMBER KUDRNA: You want to break now.
19 Okay.

20 CHAIR PERKINS: Let's try to keep the
21 break -- break is scheduled to go to 10:15. So
22 do your best to adhere to a compressed break.

1 (Whereupon, the above-entitled matter
2 went off the record at 10:12 a.m. and resumed at
3 10:35 a.m.)

4 CHAIR PERKINS: Okay, if we can
5 proceed with the Planning and Environmental
6 Working Group to reports and presentations.

7 MEMBER KUDRNA: Maybe I'll begin and
8 then turn it over to David. We had several calls
9 of the Planning and Engagement For Work
10 Committee. And one of the things we did you
11 began to discuss earlier, is we talked about
12 future meeting locations so that this wasn't held
13 to the last 15 minutes of a meeting when folks
14 are running, and came up with a suggestion of
15 Houston, the Houston-Galveston area, which is
16 what was adopted this morning. And the other two
17 sites we discussed were the Great Lakes,
18 following that potentially in September when the
19 ice is gone in a place, maybe even Cleveland.
20 And then the third was Seattle beyond that. So
21 we brought those forward and we'll continue to
22 help develop potential sites.

1 The second thing we intend to do in
2 this committee is to work with the Admiral in
3 fleshing out the agenda for the next meeting and
4 helping to develop that. The two new topics we
5 talked about were the topic David led, and I
6 should clear the public record. I was given
7 credit by David and Bill Hanson for those two
8 wonderful panels that took place. It was all
9 David; David did the yeoman work clearly on that.
10 And he's going to talk about that in a minute and
11 where we might go next. And we'll use our
12 committee to discuss that, and following that
13 when we go into the engagement discussion, we'll
14 talk about future engagement activities. David.

15 MEMBER MAUNE: Thank you, Dave Maune
16 here. Well, we wanted to engage with our users,
17 and I think we did that. I was looking to see
18 where there are areas in which NOAA needed to
19 change something. I don't recall seeing any
20 major recommended changes. I did see the plea
21 for more data or faster delivery of data. We
22 needed that sort of thing, but I didn't see

1 anything citing NOAA needs to change course. So
2 I guess that's good that you're basically on
3 course, but we need to go faster if it's possible
4 to do that.

5 One thing that came out of it -- and
6 Admiral Glang reminded me of that -- is that we
7 have the need to constantly track the benefits
8 from our customers, and how might we do that? I
9 asked a question the other day. I'm not sure if
10 I got an answer to it. Does NOAA currently track
11 the people -- the kinds of users who download
12 your data sets?

13 RADM GLANG: Gerd Glang. That's a
14 good question, Dave. So anecdotally we've gotten
15 reports about, these are sort of selected stories
16 that the National Center for Environmental
17 Intelligence, where our hydro surveys are
18 archived. We have gotten stories from them about
19 select individuals who responded positively that
20 we were able to use this hydro survey; and so we
21 didn't have to do our own. So we've got some
22 stories like that.

1 In general, I believe there are
2 restrictions to what you can ask folks because of
3 the restrictions on how you take surveys. So you
4 can't ask everyone, hey, before you download this
5 data what are you using it for, and what are you
6 going to do with it? I think there may be some
7 restrictions on that.

8 MEMBER MAUNE: Can you ask them, do
9 you represent federal, state, county government?
10 Do you represent private industry? What kind of
11 private industry, or anything like that? Are you
12 in the recreational business? Are you in the
13 commercial cargo business? Are you in whatever?

14 RADM GLANG: I'm not sure. I know
15 they do like IP analyses and things like that,
16 unless there's somebody in the room who can
17 answer those questions. But I did want to point
18 out that Coast Survey does a customer survey at
19 least every two years. We just completed one
20 most recently. In that customer survey we had
21 sort of a stock list of questions that we asked
22 every cycle, every cycle for the survey. And

1 that's done by an outside contractor. The same
2 company has been doing it for quite a while now.
3 We've briefed a panel on it, but it's been a
4 couple years.

5 We have a new report. We could
6 certainly turn that into an information session
7 to share with you what came out of our most
8 recent customer survey. I don't know if Rich or
9 Juliana want to respond to that customer survey.

10 MR. EDWING: So the survey that Coast
11 Survey conducts also includes questions about
12 tides and currents and maybe about some aspects
13 of their GS as well. So we use that, but then
14 kind of on top of that -- and I know NGS
15 subscribes to the service, I'm not sure about
16 Coast Survey -- but we have a company called 4C,
17 which kind of has that survey. You come into a
18 website and they ask you to take a survey. We've
19 been subscribing to that for a number of years
20 now. It provides a lot of useful information.
21 More about how people are using the website than
22 maybe the broader range of products and services.

1 And there is some information you can get, you
2 know, in terms of kind of where they're from.
3 You know kind of more generally, is it from
4 academia, because it looks at the URL. Is it EDU
5 or -

6 MEMBER MAUNE: Right.

7 MR. EDWING: You know but by giving
8 privacy protection probably not too much past
9 that. And I'll ask Juliana if you want to add
10 anything to that?

11 MS. BLACKWELL: Juliana Blackwell.

12 Yes. NGS also does use the 4C as Rich described.
13 We utilize the information that we gain from that
14 feedback -- again, from website visitors -- to
15 help improve our products and services and get a
16 better understanding of what people are looking
17 for and who they are based on what they provide
18 to us. So that's a volunteer type of thing. We
19 also do polling at our events.

20 So at the Geospatial Summit, we had an
21 idea of the individuals who were participating
22 and better understanding of some of their desires

1 and applications of our data, and what they're
2 looking for us to do in support of the
3 replacement of the DAT/EMs. Branching out from
4 there, the Transportation Research Board, or at
5 least a committee under the Transportation
6 Research Board, as well as the National Society
7 of Professional Surveyors sent out a
8 questionnaire on their own but relevant to what
9 NGS is doing.

10 So using these professional
11 organizations to help gather feedback and then
12 submit that back to us was something that they
13 asked if they could do, and we said sure, you
14 know, that they were free to do that. So we've
15 kind of branched out into different avenues
16 because of the stakeholder interest in learning
17 more about what their members are -- how they
18 feel about what we're doing.

19 So I think that there are a number of
20 ways that we have grown in getting that
21 stakeholder feedback, but it's hard to send
22 something out based on law, just what we can ask

1 people directly to provide feedback to our
2 organizations. So any way or any suggestions you
3 have on ways that we can do that better within
4 the laws that we're governed by I think would be
5 great recommendations.

6 MEMBER MAUNE: Thank you. Well of
7 course the reason I asked the question in the
8 first place was because we learn so much on who's
9 the user of LIDAR data when open Typography
10 Portal shared their user base statistics, and it
11 was very eye-opening for me.

12 We will review the transcript from
13 this week's meetings. I know there were some
14 good things said that were not on slides during
15 the user group presentations, and I need to
16 digest that better to see is there something in
17 there that I can perhaps pick up on. But I don't
18 recall any major changes in the direction that
19 anybody was advocating for NOAA other than to
20 accelerate things if possible.

21 That's pretty much my review of this
22 week's session. Would you like to move on to

1 planning for the next one? Or do you want to
2 continue on this week's session -- reviewing what
3 we heard this week?

4 MEMBER MILLER: I wondered if one
5 thing from Dr. Leveson's presentation was this
6 may not be high level enough but it might be
7 something we might have mentioned. It seemed
8 like the surveys -- you had talked about cost
9 benefit surveys, and it seems like Doctor Leveson
10 had already done a number of them. Are there any
11 further cost benefit surveys? I mean it seems
12 like these things need to be redone at a certain
13 interval. So I guess my question to you, are
14 there any of the surveys that he's done that you
15 think need a re-look, or are there any additional
16 cost benefit surveys you think might be
17 beneficial to NOAA?

18 MEMBER MAUNE: Well the one I'm most
19 familiar with NOAA already knows about and
20 participated in -- the National Enhanced
21 Elevation and Assessment. There is an ongoing
22 national hydrography requirements and benefits

1 study, but that's run out of U.S. Yes and has
2 more of a focus on river rain hydrography than
3 coastal. That would have some relevance to NOAA,
4 but not as much as if it had a coastal focus to
5 it.

6 If other people have ideas I'd love to
7 know about it. I'd also personally like to know
8 more about the other FACAs. We talked about how
9 do we interact with other FACAs, and I don't know
10 anything about the other FACAs. And I wonder if
11 there's something we might all benefit from if we
12 knew what the other FACAs have done and what the
13 things they're working on relevant to us.

14 CHAIR PERKINS: I think that's a good
15 suggestion. I think it's useful both for new
16 members like yourself, Dave, and just you know
17 for existing panel members too. I wonder if we
18 could accomplish that you know with a WebEx type
19 presentation by staff? Vice Admiral Brown, if I
20 remember correctly, mentioned that he has an
21 interest or is overseeing in somewhere near 20
22 FACAs. So getting some transparency on that then

1 and seeing that list.

2 Yes, I'm sure there's a FACA website.
3 You know there is a public facing FACA website,
4 and I think it's over 1,600 FACAs on there. So
5 trying to accomplish it through that mechanism of
6 self-learning, I don't advocate that; I've tried
7 that. But I think that's a good suggestion, and
8 it's something we should ask for.

9 MEMBER MAUNE: Gary back there had
10 some comment he wanted to add if he can.

11 MR. MAGNUSON: Gary Magnuson, NOAA.
12 Good. Thank you. If you recall when Dr. Bamford
13 met with you yesterday morning she mentioned a
14 CMTS network of DFO's for NTS-related federal
15 advisory committees. That network is healthy.
16 There's about a dozen or so who are more active
17 than others. The CMTS did a compilation of the
18 Marine Transportation-Related Federal Advisory
19 Committees. It is dozens, and I'd be glad to
20 provide that to the staff and make it part of
21 your minutes if you like.

22 There has been discussion; HSRP is

1 represented in the network by Russ and Admiral
2 Glang. There have been a number of talks about
3 referencing each other in each other's charters,
4 about leveraging each other's recommendations,
5 particularly about the Marine Transportation
6 System. So I'd be glad to assist the panel on
7 this if you want to pursue it.

8 RADM GLANG: Gerd Glang. So let me
9 recap this. We're going to take an action at
10 NOAA to provide the panel with more information
11 about FACAs within NOAA. There are the FACAs
12 that Admiral Brown identified that he would be
13 involved with, not all within NOAA. And then
14 there are the FACAs under the Committee of the
15 Marine Transportation System through this network
16 that Gary just described. So we can bundle all
17 this together and make it intelligible and
18 provide that as information to the panel.

19 MEMBER MAUNE: That would be helpful.
20 Thank you. Lawson?

21 MEMBER BRIGHAM: And you can be sure
22 that the word "arctic" will be taken up by some

1 of the other FACAs. We don't want them to
2 reinvent some of the wheel here. So we maybe
3 provide if they're dealing with arctic issues
4 this mini report we have.

5 CHAIR PERKINS: I think that's a very
6 good suggestion that we should be proactive in
7 our engagement and outreach on the results that
8 we produce here. Good idea. Dr. Kudrna?

9 MEMBER KUDRNA: Thank you. In
10 following-up on Admiral Brown's suggestion I
11 think my Secret Service handle will be edgy
12 today. What I'm going to do is I'm going be very
13 candid on the topic of an engagement document to
14 spur some discussion here. The Planning
15 Committee chose two topics to push toward the
16 series of meetings, the first David did a really
17 fine job on looking at users and the benefit cost
18 ratio. The second is a new engagement document.
19 And I circulated some lengthy reports to you. I
20 don't know if you had a chance to go through
21 them, but I'm going to fill in between the lines.
22 The first was the Science Advisory

1 Board's engagement report. And the full title of
2 that was "Engaging NOAA's Constituents: Putting
3 the Pieces Together to Create Impact." And this
4 was done in 2008. I chaired that. It was a
5 whole series. Most of the folks were outside
6 folks, experts that worked on that committee.
7 There were a whole series of meetings that ran
8 over a year, year and a half. It was adopted by
9 NOAA. And the report has a series of 33
10 recommendations. But I'm going to give you a
11 little background before that. It was the
12 discovery of engagement by NOAA by this
13 committee.

14 One of the things that happened that
15 was really revealing -- I'll give you three or
16 four examples of what the state of affairs is.
17 One of the things is Jerry Schubel, who runs the
18 Aquarium of the Pacific out of Long Beach, while
19 we were at one of the meetings one of the members
20 googled "public perception of NOAA." And it came
21 back, "Do you mean NASA?" And that tells you a
22 lot.

1 Another thing that we did is we put
2 together a survey. And Jerry, who's very
3 influential with the other Aquarium directors,
4 had that survey prepared in I think it was the
5 summer of 2007 at the Shedd in Chicago, at the
6 Aquarium of the Pacific in Long Beach, at Point
7 Defiance Aquarium at Point Defiance Zoo. And
8 when we set this up to get an idea of what the
9 public perception and understanding of NOAA is we
10 thought, well we're going to be a little biased
11 here because folks who go to the Aquarium
12 probably are more knowledgeable in NOAA than the
13 average folk that you might find in the grocery
14 store or from a blind survey.

15 One of the questions asked, or one of
16 the responses that came out in the conclusions is
17 more people think NOAA is part of The Weather
18 Service than The Weather Service is part of NOAA.
19 A high percentage of people had no idea what NOAA
20 was, or thought it was something associated with
21 an ark. So that was enormously telling
22 information.

1 And then we started to delve into
2 NOAA. And there are perceived restrictions on
3 engagement by various pieces of NOAA. To give
4 you an example, the Joint Institutes believe in
5 any of their work products that are funded in
6 part by NOAA, but also in part by other parts of
7 their organizations or universities. They are
8 not allowed to cite credit on any of their
9 research or products for NOAA. And we said this
10 is outrageous. Many times NOAA is paying two-
11 thirds or the work. You're passing up an
12 enormously effective way of identifying the work,
13 you know. And in theory that's been fixed, but
14 it's a continuing problem.

15 The other thing that came out is that
16 scientific and technical individuals do not
17 communicate well, and when they do they
18 communicate in scientific and technical ways.
19 And as we heard, plain language, talking in
20 understandable ways, crisp identification of
21 issues, those kinds of things that generally if
22 you ask not only NOAA but no one in particular,

1 but other scientific organizations give me an
2 elevator speech. If you got a Congressman going
3 up the elevator you're going to pitch something.
4 He'll never get it out because it would have to
5 be the Sears Tower in order to get something
6 identified as clear and crisp.

7 So all of those things came out, and
8 there were a series of recommendations on a big
9 problem, identified big problem in NOAA across
10 the board. I mean it's aggravated by the subject
11 you don't have a clear, crisp-defined
12 organization that has one authorizing committee
13 to work through. You've got an executive order
14 organization that's spread over all kinds of
15 authorizing committees that may deal with a
16 little piece of NOAA but a series of pieces of
17 other things that make it all that more
18 complicated. So the ability to communicate an
19 engagement message for NOAA is not good. The 31
20 recommendations that went forward, some of them
21 started out making a little traction.

22 One of those supposedly implemented

1 was in the performance evaluation of NOAA
2 employees there would be an engagement element
3 added so that when folks are looked at they would
4 understand part of their responsibility within
5 NOAA if you have to do something for engagement.
6 I don't know how far that's going. They set up
7 an Engagement Council. Jim Murray of Sea Grant
8 headed that. Jim retired, budget concerns, it
9 was also everyone that sat on an Engagement
10 Council was dual-tasked with other things. They
11 had more than enough to do. So that went away.

12 So there hasn't been an enormous
13 amount of progress on engagement within NOAA even
14 though it was broadly agreed that there's a huge,
15 massive need here within NOAA to communicate. So
16 given that suggestion we need to deal with
17 communications. And Joyce and I have had some
18 conversations; and she makes a very good point.
19 Who do you need to communicate with? Who is the
20 purpose of communicating? Where is the central
21 location we need to communicate? Well that
22 happens to be the Congress. I mean NOAA and HSRP

1 does a lot of good stuff in a lot of places.
2 Virtually everything we talked about is dollar-
3 restrained and restricted.

4 We also circulated, there were two
5 versions of a 10 most wanted list. The last one,
6 2010, Rear Admiral West, Dick's a good friend of
7 mine. We've had several conversations, and he
8 told me that that document generated over \$50
9 million dollars of additional funding for HSRP in
10 terms of mapping. And if you looked at the
11 charts that were presented by Jeremy the other
12 day, you saw that big bump in the 10 area. And
13 that was a direct result of that document. And
14 what happened is that's when shovel-ready
15 projects were available. And because that report
16 identified the need there, there was funding that
17 moved in that direction. And it's the same kind
18 of thing. That kind of document, there was a
19 Supplemental Sandy Funding. If you have clearly
20 identified needs and the benefits that would be
21 achieved by a portion of NOAA, and that's
22 communicated to the Hill, that can be used to be

1 a piece of a supplemental appropriation if, you
2 know, there's going to be another disaster.
3 There's going to be another supplemental funding
4 at some time. Budgets are tight.

5 You heard the story, there's a mark
6 for the particular Senate division that we deal
7 with, and the likelihood is it's going to be a
8 smaller number than we had last year. So, you
9 know, we're going to struggle to maintain the
10 kind of resources that are here, but there may be
11 opportunities in the future with additional funds
12 or another category of funds or funds following a
13 disaster. And if the groundwork is laid to allow
14 that to be funded, you're prepared for it. So I
15 think that's the important case.

16 Now the audience eventually is the
17 Congress. We don't talk directly to the
18 Congress, but we can certainly generate a report.
19 And that report can be viewed by the Congress.
20 That report can be carried forward by individuals
21 or organizations along the way to say these are
22 the kinds of needs that take place. These are

1 the kinds of needs of safety that need to take
2 place for the cruising industry. These are the
3 kind of needs that take place in terms of Alaska
4 for charting. These are the kinds of needs that
5 take place for commercial shipping and ports.
6 The pilot systems that need to be installed,
7 there's not enough resources, and there's a
8 waiting list of folks to do that. They can
9 identify those so they're able to be carried
10 forward by members of Congress when resources
11 come forward.

12 There is also a Defense Against
13 Reduction budget. If there's a push to cut
14 budgets or there's not, you know, every year if
15 you have a flat budget you know there's cost of
16 living and salary increases, and you'll get
17 passed down from OMB and commerce a smaller
18 number you have to deal with. Well this helps
19 you defend against that if there's an
20 understanding of the needs of NOAA. So I think
21 there's a great opportunity. The discussions we
22 had with the administrator and we had with Russ,

1 we've heard many of the things plain language,
2 clearly identifying needs, dealing with
3 stakeholders. We heard the ability to tell the
4 story. And I think we can do all of those within
5 an engagement document.

6 And I like the 2010 document. Two
7 things I would suggest I heard from the first two
8 days of meetings. One of them the administrator
9 made a very good point. She said you don't want
10 a document that's going to be used against NOAA
11 and HSRP. You know, you show some huge numbers
12 that you're not effectively using the resources
13 you have. So I think the document has to talk
14 about your effectively using what you have and
15 doing as much as you can looking for
16 efficiencies; however, there's a huge gap in what
17 needs to be done for the country. So it isn't
18 perceived as something negative toward NOAA.

19 And Joyce makes a good point too. I
20 think if you had a document that had several
21 sections it would be useful to be able to
22 separate pieces that could go to individual

1 organizations. You could take a piece on a
2 particular section that goes with a particular
3 interest group and separate that individual item
4 to go forward.

5 I belong to the biggest sailing club
6 in Florida -- the Punta Gorda Sailing Club. It's
7 huge, really active, and one of them mentioned
8 that I sit on his board. And I said well I don't
9 speak for the board. And they said can you tell
10 us a couple of things that are going on, and I
11 said I'll just give you an observation. I said
12 the resources are such that for recreational
13 boating waters, to get them re-charted if that's
14 their principle purpose, they don't make the
15 list. They don't make the list at all. We don't
16 even have resources to do it.

17 However, the average person who buys
18 a boat and goes over to West Marine and picks up
19 a Garmin or a Raymarine GPS and plugs it in on
20 their boat and bought it in 2015 assumes
21 everything on there in the chart is 2015 charts.
22 Basically, if they're in Western Florida they

1 assume, new boater, they assume everything on
2 that document is 2015. Little do they know that
3 Brigham has told us that Captain Cook has done
4 some of the early work for Alaska. And many of
5 these things are very old; many of these are
6 shallow waters. And there's not an understanding
7 of that.

8 It certainly is not the fault of HSRP
9 because clearly if you got PANNA MANGA vessels
10 coming into ports, that's a huge priority. And
11 if you've got massive cruise ships coming in
12 that's a massive priority. However, that's a
13 need, and that's completely un-understood by the
14 public. So I think there's an opportunity to put
15 together a document that talks in plain English,
16 that talks about the kinds of needs that need to
17 take place. I think it could be separated into
18 categories that could be individually carried to
19 individual groups and in plain English and also
20 satisfy the administrator's requirement of not
21 being something negative toward the existing
22 investments of NOAA.

1 So that's what I would see as a future
2 document, and whether it's a top 10 or a
3 variation or something else, but I think the
4 thing it has to do, it has to have an ask. And
5 I've been on the Hill in other capacities many
6 times; and what happens is when you meet with a
7 Congressman or senator or a staffer, the thing
8 they love is when someone comes to see them and
9 goes away and hasn't asked for anything. I mean
10 that's wonderful. You know you don't have
11 anything to do for.

12 If you have a very direct and pointed
13 ask and you ask them if they can reply to it,
14 you're either going to get a yes, very rarely a
15 no or a staff member you're going to work with
16 that you can follow-up with. But I think it's an
17 opportunity that we can convey some of these
18 issues and convey the needs of HSRP. We'd
19 produce a document. It would of course be
20 carried forward by other constituents or
21 ourselves individually; but it would depict the
22 needs. And they virtually all go back to

1 financial. Everything we talked about doing
2 there's not enough money to do this, there's not
3 enough money to do that, along the way in a very
4 tough budget year. And we'd be prepared for
5 opportunities like a shovel-ready series of
6 funding that took place at one time, like a
7 supplemental for a disaster that would give us an
8 opportunity to roll that out and use some of
9 those resources.

10 So that's my concept to develop an
11 engagement document that would meet that form.
12 And I think that's consistent with what our
13 speakers told us. And let me stop there. Go
14 ahead Joyce.

15 MEMBER MILLER: Yes. Frank has
16 obviously heard what I was thinking. We didn't
17 really have time to talk in detail. So you know
18 I was listening to, particularly Dr. Sullivan
19 when she advised us to talk to individual groups
20 or people that have individual needs, and one of
21 the things that I've learned is that okay first
22 of all you identify your audience. Then you

1 identify your story.

2 And Frank's right. You've got to have
3 an ask, but our groups are very, very different.
4 Talking to a surveyor who needs CORS and GRAV-D
5 and that is very different than talking to a
6 recreational boater. Maybe they need CORS and
7 GRAV-D, but they don't know it. And the language
8 has to be very different and especially with all
9 these kind of national security, coastal
10 resilience. So what I've been thinking about
11 over the last two days and nights was yes we
12 definitely need an engagement document. I think
13 it's a very valuable idea. Honestly, I know from
14 experience that even something this long, most
15 people look at the executive summary and then
16 they go away. That's just my experience. I
17 think it would be effective and we could
18 incorporate the 10 most wanted into these, but
19 let's say a most wanted about GRAV-D or CORS
20 would go to a certain constituency -- the
21 surveyors, the geodesy community.

22 And I've been thinking of them as

1 certain of writ large, Coastal Management or
2 Coastal Resilience, and then in smaller letters
3 and NOAA Navigation Services. You describe what
4 this group needs at the level they need. You
5 show them what benefits they get from NOS
6 Navigation Services, and then you perhaps tell
7 them what they could do to or what they need more
8 or find out what they need more. And then say
9 this is how you can help.

10 Now perhaps the Congress is one of our
11 audiences, but I don't think it's our only
12 audience. I think we need to look at a variety
13 of audiences. Also this could be done in an
14 incremental fashion. We could pick out one or
15 two important audiences, and I'm sure there would
16 be an arctic advocate and a recreational boating
17 advocate and a port complex advocate. But we
18 could do this one or two a session rather than --
19 I know from Lynne and Gerd that resources are
20 very limited. So the HSRP has to do this not
21 NOAA NAV Services.

22 So let's also look at what's

1 manageable. You know a multi-chapter document I
2 think is biting off more than we can perhaps
3 chew. I've got time to spend. I just retired,
4 but most of you guys are working day jobs. So at
5 any rate, you know, I agree with Frank totally
6 that we need an engagement document. I just have
7 a little bit different perspective on how it
8 might be accomplished, particularly given
9 peoples' time constraints and what we can do.

10 We could have experts on one, you
11 know. Ed could help with one. We would produce
12 a template you know with some examples. Lawson
13 could focus on one that did the arctic. Susan
14 could focus on one. It's a two-sided, one-page
15 document I'm thinking of with some nice pictures
16 and so forth, but again I stress at the level
17 that that community needs it because most people
18 you start in with the NOAA acronyms and their
19 eyes are going to cross in a lot of communities.

20 So that's just an alternate
21 possibility that I'm presenting, and you know I
22 think we can all work together. And if we decide

1 to do a document like this, I'll certainly
2 contribute to it.

3 MEMBER KUDRNA: Joyce, the only thing
4 I would disagree is that I think support from
5 NOAA certainly is on the table. I mean for Rich,
6 Gerd and Juliana, this is support of their future
7 funding. And they certainly should have an
8 interest in providing the technical information
9 we need for this.

10 Now I don't think they should write
11 it, and I don't think we should write it. Maybe
12 Susan has the skill to write a document like
13 this, and we said at the Science Advisory -- I'm
14 not really going to bust some -- at the Science
15 Advisory Board, we said NOAA shouldn't write
16 documents. You should go to a place that knows
17 how to write them and a place like I know there
18 are different parts of NOAA. I would use Sea
19 Grant Engagement.

20 I'd get one of the really good
21 communicators from a program. Find a small
22 stipend to bring them involved doing the writing

1 so we don't get technical details; and we get
2 something in plain language and clear language
3 that would go forward. We'd guide them on the
4 topics. We'd guide them on the stressors, and
5 we'd let the technical data come from NOAA.

6 I'll give you an example. And I
7 really believe money is the issue when it comes
8 to Congress. Now it's going to have to have
9 people that influence Congress take those
10 subjects forward if there's going to be more
11 resource, and I'll give you an example. American
12 Society of Civil Engineers, big organization,
13 probably 70-80 thousand members right now; very
14 interested in highway fund, water supply funding,
15 infrastructure funding, ports and harbors
16 funding, those kinds of topics. That's really
17 important to their membership.

18 What they do is whenever there's one
19 of those bills they have structured a fly-in, and
20 they have identified in every state two
21 individuals from every individual state. One of
22 those is a major government employer, someone

1 that runs an engineering company that might have
2 20, 30, 50,000 employees in it that has enormous
3 presence in that state or a massive contractor
4 that has huge numbers of employees in it.

5 They also would identify a government
6 figure, the Secretary of Transportation from a
7 state. And they bring of these folks in from
8 every one of those states; and then they don't
9 let them go on the Hill alone. They require them
10 to be there for a training session so they
11 understand the message. And they're told the
12 Highway Bill is up.

13 So we've set up these meetings with
14 your Representatives and Senators to talk about
15 the Highway Bill. And they go in and they really
16 meet with them. And it's not the kind of thing
17 where you get three staff members down the path
18 in the spring season. You get the actual member
19 there. And they're told this is the pitch.
20 Here's the list of benefits that have taken place
21 in your district; here are the benefits that will
22 take place under this. And they're also told to

1 ask. I've done this before.

2 They're asked will you support the
3 bill, and they're either going to get -- and they
4 never get a no. They're either going to get a
5 yes, in which they'll report that back, or
6 they'll get you know I'll certainly consider it.
7 If they're considering it, you ask them for who
8 is your chief of staff who's going to work on
9 this subject we can follow-up with? And then
10 they would follow-up more.

11 And they are enormously effective of
12 getting more research. Now I'm not advocating as
13 a federal group we do that, but we have to
14 provide the information that will enable the
15 constituent users to take that forward to
16 Congress to get consideration for additional
17 resources.

18 MEMBER MAUNE: Dave Maune. It seems
19 to me as though Joyce was proposing that we
20 develop a strategy document rather than the
21 document itself that outlines ideas on how we go
22 about promoting the value of NOAA as a whole and

1 what those strategies might be, how we go about
2 doing that. Am I reading you right?

3 MEMBER MILLER: No. Actually, let me
4 put it this way. I probably have written a dozen
5 or more one-pagers. I've also written -- I had
6 somebody contact me who I'd known back in the
7 60's who said I was looking for your name in the
8 internet and they said, "Are you that
9 oceanographer chick who has written so much?"
10 And so I personally have written these things,
11 one-pagers. I mean we have to have consensus on
12 what's in them. We have to be careful and pass
13 everything through NAV Services to make sure, and
14 we need to certainly use Juliana and Gerd and
15 Rich as resources. But I think it's within the
16 scope of things that the HSRP could do.

17 Maybe looking at it as a strategy is
18 you know the first step in it, but because we've
19 got such experts, Lawson on the arctic, Susan on
20 the recreational boaters, Ed on port concerns,
21 you would obviously put precision navigation in
22 ports as one of the this is important, we need to

1 support it more. Now we'd have to be careful
2 about how to phrase that. You know I would see
3 this as a document that maybe down in the corner
4 it says "produced by the Hydrographic Services
5 Review Panel." But we're not front and center on
6 this. What NOAA does and needs is really the
7 important thing. I mean that's what I see. You
8 know and having somebody else do it that doesn't
9 know the field, we're supposed to be the experts.
10 I don't know. I certainly would be willing to
11 look at it as a template, a first cut.

12 CHAIR PERKINS: I'd like to take this
13 opportunity to let Carol Kavanagh from NOAA make
14 comments.

15 MS. KAVANAGH: Hi. I'm Carol
16 Kavanagh, and I'm the Communications Director for
17 National Ocean Service. So thanks for the
18 opportunity to provide some input. This is
19 highly interesting discussion for me. We
20 struggle with these topics every day. A couple
21 of things that I'd like to add to the discussion
22 or for consideration; first, I think just moving

1 back a little bit to the ask from Dr. Callender
2 back at the last meeting. I know that he was
3 specifically looking for engagement. There was
4 an engagement element. Maybe going back to kind
5 of what was he asking the group to do just as a
6 bigger picture, and maybe consider that. And I
7 think that there's a place that would be very
8 helpful in terms of the input that you have --
9 not just how the HSRP might help engage
10 stakeholders, but how we at NOAA could continue
11 to improve the way that we do it.

12 Second, I think that the type of
13 document that you're talking about and the
14 approach sounds absolutely great. The context of
15 that, because a document like that is a tool, and
16 it's one tool in the toolbox. So then the
17 question is -- and I think this goes back to the
18 comment about kind of the strategic discussion --
19 is what do you want to happen because you're
20 going to engage more or engage differently? What
21 do you want to happen as a result of these
22 communications efforts and start there? I think

1 the inference, one of the underlying themes is
2 definitely we want to insure and shore up an
3 increase funding. So what does that mean? It
4 means translating what we do, increasing the
5 understanding, awareness of the value of what we
6 do.

7 And when you're talking about
8 individual tools or individual documents, it's
9 got to kind of fit into that bigger picture. And
10 that will really help I think save you all a lot
11 of time in terms of what you want to put out. In
12 addition, I appreciate the emphasis on
13 identifying the audience and identifying what the
14 story is. I would say in between the step is
15 identify what that audience wants, because if
16 you're not speaking to that, and you know,
17 because you have a lot of noise thrown at you.
18 And I always think of it in terms of my eighth
19 grade, when my daughter was in eighth grade and
20 she wanted to be able to go out not just on
21 Saturday nights, but she wanted to go out on
22 Friday and Saturday nights. So she created a

1 PowerPoint presentation because she had just
2 learned how to do that.

3 So her presentation was not about this
4 would be more fun for me. It was about me, mom.
5 This will help me, your daughter, develop
6 responsibility. It will help me prove my
7 trustworthiness. And I thought this is exactly
8 what we are always trying to do. It is always --
9 every communication that you have is always about
10 the audience, not about you. It's always about
11 what is of interest to them.

12 So I think that we get a lot of
13 communication thrown at us every day about what's
14 important to somebody else. And the thing that
15 really strikes you personally is probably the
16 thing where somebody communicating with you
17 understands what your needs are. So I think just
18 thinking about who we're reaching, whether it's
19 directly Congress or a stakeholder that might be
20 able to ultimately advocate on our behalf to a
21 member of Congress, it's always about what they
22 need. So I appreciate the chance to share those

1 thoughts with you, and I'm happy to continue to
2 sit in the session and work with Admiral Glang in
3 terms of next steps.

4 CHAIR PERKINS: Thank you, Carol.
5 Yeah, this is where the panel gets to say what
6 they think.

7 MEMBER SHINGLEDECKER: To me I think
8 we're still really stuck on audience. I think
9 we're not sure who exactly we want to talk to, or
10 can talk to, or how we can talk to them. I think
11 we know who we want to talk to, and I'm afraid
12 without a very narrowly-defined audience, we're
13 going to develop a document or a set of documents
14 that doesn't achieve its purpose. Now by saying
15 that I'm not saying I don't think we need
16 something, but I think we have to figure out that
17 audience piece and think pretty carefully about
18 that.

19 MEMBER ATKINSON: I thought our
20 audience was some Hill staff or something. We
21 produce something that they take, not necessarily
22 us take to some decision maker. I mean we're not

1 writing something for the cruise industry. We're
2 trying to represent their issues or whoever.

3 MEMBER SHINGLEDECKER: I agree that
4 that's I think the audience we would like, but I
5 don't know that we necessarily have the mechanism
6 to get this piece to that audience. Am I
7 incorrect?

8 MEMBER ATKINSON: It may be indirect,
9 you know, not direct.

10 MEMBER MILLER: But if it's indirect,
11 you have to talk to who that indirect person or
12 persons are or organization is. I mean if we
13 can't -- and not all of you were on both of the
14 legal advice phone calls. I got the message loud
15 and clear that the HSRP advises the NOAA
16 administrator.

17 If we can, we help get NOAA's message
18 out, but we don't go to Congress. So thinking we
19 want to go to Congress but we want this to get to
20 Congress. And talking in congressional terms to
21 the average stakeholder is not going to work. So
22 I agree with you -- defining the audience is

1 always the first thing you do, but I think we
2 have many audiences. And if they can help us, if
3 a nonprofit or a citizen could help us get the
4 message of NOAA's need for resources to their
5 Senator or through their lobbying organization
6 then - if you don't agree then I'm fine with
7 that; but I mean I just don't know how we can
8 target this to Congress.

9 MEMBER KUDRNA: Joyce, I think it was
10 clear that we can't go directly to Congress.
11 There's no question about that. However, we can
12 produce documents that become publicly available
13 that others can take forward to Congress.

14 MR. ARMSTRONG: Andy Armstrong. It
15 seems to me that the role of the panel is to give
16 advice to NOAA. And so if we make a document, it
17 seems like the document ought to be from the
18 panel to NOAA. And I think that it needs to be
19 written in such a way that people of a variety of
20 constituencies can see it and use it.

21 And then NOAA really can choose -- I
22 hope they would -- to say in their process

1 whatever that might be. Our HSRP is telling us
2 this is what we need. And at the same time the
3 documents are publicly available and can be made
4 available to a variety of constituents. So I
5 would say the document is to NOAA, but it needs
6 to be written in such a way that says HSRP has
7 learned that the recreational boating community
8 needs this and this and this and this that's not
9 being provided. You know and we think it's of
10 urgent importance to do that and here's why; and
11 then that sort of lays out the message that
12 everyone can use in carrying that forward.

13 MEMBER KUDRNA: I agree with you. I
14 think that's a logical way to do it. But it has
15 to be pointed; it has to talk about the scale of
16 need, and it has to do what I said earlier that
17 the administrator suggested - not roll NOAA
18 under the bus that it's not doing enough. But I
19 think that can be done, and I think that can be
20 effective.

21 CHAIR PERKINS: So what would you
22 propose is the next steps, Frank?

1 MEMBER KUDRNA: Well I think it might
2 be useful to flesh out particular topics with
3 maybe a paragraph of description of what we might
4 want to talk about. And maybe do that through a
5 solicitation of the panel and let the Planning
6 and Engagement Committee do a first cut of that
7 and bring it back to the panel. I'd like to have
8 some sort of aggressive time table on this so we
9 get to a product before too long. But maybe the
10 first subject would be to take topics.

11 I think one of the things in the old
12 10 most wanted report that was very useful is it
13 spent the first piece showing the scale of use of
14 data. You know, the miles and users and cargo
15 and tons and all of that kind of thing and number
16 of recreational boaters and that. I think that
17 sets the stage for any report as a preface. So
18 my suggestion would be to charge the Planning and
19 Engagement Committee with developing a first cut
20 of some topics that might be contained in a brief
21 starter description.

22 CHAIR PERKINS: Going back to the

1 request for information on other FACAs, are
2 similar documents -- and maybe Carol I don't know
3 if you can answer this. Are any other FACAs
4 producing forward-facing, engagement-type
5 documents like we've described here? You know do
6 we have to invent the wheel here, or is there
7 something already being done successfully by a
8 similar advisory group that we can build on?
9 Does IOOS have something that is close enough
10 related?

11 MEMBER KUDRNA: I don't know but
12 Gerhardt will be here in a few minutes. We can
13 maybe talk to him. He sits on the Executive
14 Committee of that. But I think the Science
15 Advisory Board has, in terms of talking about
16 individual topics, they've not done it for a
17 collective group. The one other thing I'll say,
18 in my discussions with Admiral West, he told me
19 that the Science Advisory Board asked him to take
20 this 10 most wanted list to them and present it.
21 And he says they cited it as an example for what
22 FACAs should be doing when he took it forward to

1 the SAB.

2 MEMBER MILLER: Scott. I questioned
3 to Andy, I asked him is he looking for something
4 similar to the 10 most wanted, what he was
5 talking about with talking to NOAA. I think the
6 idea of NOAA as the audience, you know, kind of
7 what format. And what he said was no possibly a
8 series of one-pagers that takes an individual
9 group. Is that correct? To meet the needs of
10 group X here's what's needed. And so ports and
11 precision navigation might be covered in one and

12 -

13 CHAIR PERKINS: That report from 2010
14 I think predates -- does it predate everyone
15 sitting here at the table today?

16 MEMBER JEFFRESS: Not me.

17 CHAIR PERKINS: Not you. Well that's
18 a good segue. That should take this moment to
19 thank Gary, Dr. Jeffress for his eight years of
20 dedicated service to the Hydrographic Services
21 Review. Some data metrics might be helpful. You
22 know was there a budget number assigned? Was

1 this produced by the panel? Was it produced by
2 NOAA staff? Was there a budget number assigned
3 to it? What was the cost point? How many copies
4 were produced? And then the real question is:
5 was this effective?

6 MEMBER JEFFRESS: I can answer some of
7 that.

8 CHAIR PERKINS: Please.

9 MEMBER JEFFRESS: This one that we did
10 in 2010 was an update from the one we did in
11 2007, which was produced before I was on the
12 panel. The 2007 one appeared to be a very good
13 document because it was very comprehensive. It
14 was a new idea at the time, and I guess that all
15 of it wasn't actually put together. It
16 summarizes about everything that NOS needed at
17 the time. And, by the way, it still needs all
18 this stuff. So the actual, the latest one was to
19 update the numbers and bring that one more up to
20 date. And it follows pretty much the same format
21 as the first one.

22 I got the sense in the end it's a

1 little bit overwhelming to take to the Hill, for
2 example. But it does contain a lot of good
3 information. And I've used it on several
4 occasions trying to sell PORTS and trying to get
5 people more aware of the products and services
6 that NOS does. It's a good tool for that, but I
7 agree with Andy Armstrong is that if you are
8 going to go to the Hill, and this is a rule of
9 thumb that you probably already know, you have to
10 take one-page document. This is the issue. This
11 is what it's going to cost, and this is the
12 benefit, and this is how this is going to make
13 you look good. And that's what we need to do.
14 We need to break this down into one-pagers I
15 think as a more useful tool to take to the Hill.
16 And get our constituents like NSGS or the cruise
17 line industry to do that on our behalf because we
18 can't go to the Hill.

19 MEMBER MILLER: Gary, I believe from
20 what I was told when I joined the panel that the
21 first of this was written largely by the chairman
22 of the panel at the time but that it was a fair

1 amount of work on the NOAA staff part to produce
2 it. So you can comment on it.

3 MEMBER JEFFRESS: You're right. Yes
4 it was. I forget the guy's name. Do you
5 remember Annie? No it wasn't Tom, Scott or
6 something like that. Yes. Yes. And it was
7 almost his full time job for a couple of years, I
8 believe. He apparently had the time to put into
9 it. And he was very passionate about it.

10 MR. ARMSTRONG: Yes. He was actually
11 between positions when he did most of the
12 writing. So he did put a lot of effort into it.
13 It was almost a full time job for him.

14 MEMBER JEFFRESS: I'm not aware of the
15 cost or how many publications were made, quite a
16 few. I got a lot of them and handed them out
17 everywhere I went. And I found it a useful tool.
18 It's still relevant, so I think we could still
19 hand it out now.

20 CHAIR PERKINS: Yes. I think in
21 today's social media environment and the 140
22 character limitation on a lot of communication

1 that takes place nowadays, you know we need to do
2 something other than a printed, bound document.
3 So the one-page tear sheet concept. So is it the
4 consensus of the panel that we ask the working
5 group to come back with topics, you know,
6 identify the five topics that could be addressed
7 in this manner within the next 30 to 60 days so
8 we can try to maybe have a mock-up before the
9 March meeting? Does that seem like a reasonable
10 plan of action? Admiral Fields?

11 MEMBER FIELDS: Evelyn Fields.

12 Wouldn't some of those topics possibly be some of
13 the things that were put up earlier when Larry
14 did his presentation? I mean would that be the
15 kind of topical areas, not all of them but some
16 of them might be the kind of topical areas that I
17 think I've heard over the last three years. That
18 may be what you're looking for or what we -- I
19 say you, the generic you -- would be looking for
20 for these one-pagers or two-pagers or whatever
21 you want to call them?

22 MEMBER MILLER: Could it be something

1 like who benefits from some of those topics you
2 had up, Larry, you know CORS or - this was very
3 sort of topically-related, sort of NOAA topics.
4 That's the reason I was kind of focusing on what
5 do recreational boaters or whoever he used and
6 take two or three of these items to each one-
7 page. You're not going to cell CORS and GRAV-D
8 to recreational boaters.

9 You're going to sell charts to - and
10 no they aren't our - yes. But they're going to
11 -- I mean, if we're trying to phrase these in
12 terms of to meet the needs of group X -- whatever
13 that group is -- NOAA needs to provide these
14 services. I don't know. Larry, what do you -

15 MEMBER ATKINSON: Well actually I
16 mocked up a one-page already on mega cruise
17 ships. She's got it over there; but it's
18 basically a picture. One sentence about whatever
19 your message is, background, HSRP statements,
20 references to NRC reports, some authoritative
21 reports or professional societies, a little thing
22 at the end on HSRP, that's it and some quotes

1 from the captain or one of his colleagues,
2 somebody from the reinsurance industry. That's
3 it. That's the minimalist view, but we can do
4 that.

5 MEMBER KUDRNA: No. I think that's
6 good. Just we need to have ask in there though.

7 MEMBER ATKINSON: Oh yes, yes.

8 MEMBER KUDRNA: But I think this is
9 good. Scott, I would minimize the first cut to
10 five. Let everyone on the panel dish up topics
11 they think, and let's look at a list and then
12 prune it through a call or something.

13 MEMBER ATKINSON: We could get some
14 today.

15 MEMBER BARBOR: The other thing that
16 interests me is that part of our vision here is
17 that someone would bring this forward. And I
18 don't know. Obviously we have one association
19 rep in the audience, you know, and CLIA and the
20 like. If you had your shot at the appropriate
21 Congressman, where does this stuff rise to in
22 your pile of one-pagers? Yes. I don't know.

1 But that's an important aspect is what advocates
2 do we have that could carry this forward and get
3 the ultimate intent, which is in front of a
4 Congressman or staff, with sufficient clarity and
5 a sufficiently clearer ask that produces a
6 product or produces a result. I don't know; so I
7 would NSPS bring something like this for GRAV-D,
8 you know, point paper forward and say completing
9 this ahead of the 2020 schedule is the most
10 important thing that can transform survey in the
11 United States? I don't know.

12 Or CLIA go forward and say precision
13 navigation is the most important thing that the
14 U.S. budget can do for my cruise line. I don't
15 know.

16 MEMBER MAUNE: Dave Maune. I don't
17 know if we can do this or not, but the thought
18 occurred to me that the Management Association
19 for Professional Photogrammetric Surveyors,
20 MAPPS, has an annual meeting in which they send
21 people to visit their own Congressman. And they
22 have a series of handouts and one Congressman

1 this is a hot topic for him, for another
2 Congressman it would be different. And they have
3 a series of one page handouts. For this, you
4 talk about these hot topics and they just drop
5 them off for them to read and get back to them
6 later. I don't know how they come up with those
7 papers, if they develop those all in house or if
8 they use papers available from other people. I
9 don't know if there's any way to have that kind
10 of approach using other organizations that
11 benefit from our services.

12 CHAIR PERKINS: In that particular
13 group, they have a legislative affairs committee,
14 and they put forward a slate of topics,
15 legislative topics or issues to membership and
16 then membership you know speaks and they narrow
17 down, and then those position papers are
18 prepared. And those are very much political acts
19 in that case, and as some of the people in the
20 room know, this particular community is not
21 always pleased with what they advocate for.
22 There are two sides -- yes, there are two

1 viewpoints to many issues but that process, I
2 mean we don't have a membership body of 180
3 stakeholders to reach out to filter these
4 through. Right? We have 15 people sitting at a
5 table here. So it's, you know, we've got to come
6 up with a list of items and then we have to carry
7 the water, there's no full time staff, as Dave
8 mentioned there's full time staff there that
9 write and develop those papers. Their
10 stakeholder members also have their lobbyists and
11 their legislative affairs people that contribute
12 and vet those documents, and I don't think we
13 have the resources, you know, at our disposal.
14 Admiral Barbor?

15 MEMBER RASSELLO: Precise navigation,
16 I don't understand why we're struggling to prove
17 that precise navigation is needed. It's a
18 requirement of the practice. It's a requirement;
19 it's nothing good. We have ports, we have area
20 there's no assessment -- unassessed import.

21 CHAIR PERKINS: Yes, I agree. I agree
22 with you. It's a requirement that's a known

1 responsibility; the challenge is, you know,
2 getting the funding for it, that is the elephant
3 in the room.

4 MEMBER KELLY: Mr. Chairman, I think
5 there's a lot of good ideas if we were just
6 throwing things against the wall to see what
7 sticks, but I'm really starting to question
8 whether we're an advisory panel or an advocacy
9 group. And I think we're running down the path
10 right now of becoming an advocacy group, and
11 where that might be a minor by-product of some of
12 the stuff we do, I think we really can't and
13 shouldn't be - as significantly as this
14 discussion is leading -- moving into advocacy and
15 I think we need to be advisory.

16 CHAIR PERKINS: I think the word is
17 engagement and not advocacy. Right? What we're
18 working on are documents that help foster
19 engagement to a broader community, and that is
20 something that we have been tasked and that is a
21 working group that was approved by the DFO and
22 has been vetted by the NOAA Administration so our

1 focus is not advocacy; it's engagement. It's
2 semantics, but it's important to have that
3 distinction.

4 MEMBER BARBOR: Although the question
5 was: how can NOAA engage its stakeholders better?
6 Yes, so they were asking for advice on how they
7 can engage better.

8 CHAIR PERKINS: That's a good point.
9 Maybe our mission here isn't to prepare these
10 pieces; our mission is to identify the pieces
11 that would help foster NOAA engagement from other
12 stakeholders. We don't have to make the sausage;
13 we just need to say what size and color.

14 MEMBER KUDRNA: One point I think we
15 should make is there's a lot of information we
16 have that isn't understood by the stakeholders,
17 and we can assist with that. Now there's
18 different ways of telling various stories. You
19 can talk about what you're doing with your
20 individual budget or you can say for precise
21 navigation we don't have enough resources and we
22 have a waiting list of ports that are interested

1 in it. You don't have the ability to expand
2 entities because of resources. That's a very
3 different way of telling a story. You can say
4 we're mapping all of these areas, or you can say
5 we're falling behind in re-charting areas and we
6 have a backlog of x, y, z that takes place.
7 That's a very different story that lightens
8 people up. I mean, if we did a 200 year schedule
9 of our charting priorities and you told someone
10 they're in your 198, you might get their
11 attention to talk to the Congress. I'm not
12 advocating we do that, but I think it's important
13 that the stakeholders understand the limitation
14 of the resources and the degree of the issue.
15 Precise navigation is one; re-charting is
16 another; lack of anything for recreational
17 boating is another. There's a series of them out
18 there we could talk about that would be very
19 useful to communicate to the constituents.

20 MR. ARMSTRONG: It occurred to me that
21 one of things that we have heard with Admiral
22 Brown was that the Dr. Sullivan prepares an

1 annual guidance memorandum for the agency. It
2 seems to me that one of the roles of the HSRP
3 could be to provide some impetus for the Under
4 Secretary to include priorities for these
5 activities that the panel feel important, that
6 the annual guidance memorandum so we're as a
7 panel here to advise the administrator. So the
8 first step in getting forward is getting on
9 NOAA's priority list.

10 MEMBER BRIGHAM: Lawson Brigham here,
11 back to the Arctic, and I mean that's a topic we
12 can easily -- for guidance, whatever guidance,
13 whatever comes out and the next one doesn't say
14 that hydrography and charting of what the
15 President of the United States has said, then we
16 haven't done our job here or she hasn't done her
17 job I guess. So I think that we should remind
18 her of that whenever the timing is to maybe to
19 recommend that it be included in her guidance.
20 So she has gotten guidance from the President
21 seems like we should correlate that. That's a
22 kind of easy one because we have it in our

1 report, so we can just have somebody remind her
2 to do that.

3 MEMBER BARBOR: Okay and I've got it,
4 not since Thomas Jefferson had the President so
5 clearly enunciated a path.

6 CHAIR PERKINS: That's actually not a
7 bad quote. Was it FDR? Well I think the
8 engagement committee has a challenge in front of
9 them to identify the bullet points beyond the
10 Arctic, which has been clearly covered this
11 morning.

12 MEMBER BARBOR: A question to Rich,
13 was this a Charleston document or did we get that
14 in LA, I think Charleston, ports. New York,
15 okay. So, again, what mileage have you gotten and
16 comments or the like on not one page but
17 skillfully put together.

18 MR. EDWING: I think that is the Long
19 Beach Bridge, and that's the air gap sensor.
20 You're looking at the air gap sensor from the
21 bridge. Yes, you're up on the bridge, and that's
22 the data collection platform; the sensors are

1 underneath but yes, yes. So it certainly didn't
2 result in full federal funding, or hasn't
3 resulted, but it has gotten a lot of very
4 positive you know feedback on it. It has been
5 used a lot; certainly we use this on the hill a
6 lot. And it is a way of, I think, hopefully -
7 because behind this is a 600 page report that
8 backs up all the information in here -- but this
9 was the infographic or simple way to try to
10 present it. You know, along the lines of the
11 HSRP top five report going back a number of
12 years.

13 CHAIR PERKINS: Frank, did you have
14 anything else?

15 MEMBER KUDRNA: No, I think we've got
16 an approach, and we'll try to do this
17 aggressively - put together a request to the
18 membership, I think we should probably just
19 initiate that right now, say within the next two
20 weeks. Suggest potential topics for individual,
21 put those together, and then let our committee
22 get together and do some recommendations for the

1 group as to how to go forward from there. We'll
2 also be meeting to follow up on Dave's group,
3 too.

4 CHAIR PERKINS: Okay; great.

5 MEMBER MILLER: Larry, can you provide
6 that -- your template to the group, just what you
7 were thinking.

8 MEMBER ATKINSON: It's at home.

9 MEMBER MILLER: Oh, okay.

10 CHAIR PERKINS: So we have lunch; we
11 have a lunchtime speaker. Yesterday we were a
12 little late starting lunch, so I want to avoid
13 that today, so the other thing I'd like to ask, I
14 would like to give the public -- both online and
15 in the room -- an opportunity if there are any
16 questions based on the topics discussed this
17 morning, if they would like to put forward right
18 now. I want to remind everybody that we do have
19 the one question we agreed to discuss and respond
20 to at 1300 hours when we reconvene after lunch.

21 MR. CAVELL: I'm Tony Cavell; I'm
22 representing National Society of Professional

1 Surveyors, but I speak mostly for myself. I have
2 a few comments to make relevant to this morning's
3 discussion, mostly particularly to the coastal
4 intelligence and resilience. There are four
5 points, one is that bathymetric data is
6 necessary. Increased capacity is necessary.
7 CORS in the Arctic will play a very important
8 part. And is there a possibility of having
9 bathymetric data requirement of leasing? To
10 elaborate on the first one, to accomplish the
11 President's announcements regarding the Arctic,
12 bathymetric data is necessary; it's very simple
13 unavoidable fact that must be emphasized. As for
14 the increased capacity of NOAA to meet these
15 requirements, we've heard that it's less than 1
16 percent of the whole. We should not make plans
17 to fight a house fire with a garden hose. Recent
18 examples include the aftermath of Hurricanes
19 Katrina, Rita, Sandy, Deepwater Horizon and
20 currently there's wild fires that are
21 metaphorically we're fighting with a water hose.
22 Can you imagine where we'd be if the U.S. had

1 responded to President Kennedy's challenge to go
2 to the moon in a couple of centuries? Our
3 current capacity is woeful. NOAA needs to
4 leverage the urgency of safety of life and
5 Presidential priority to increase capacity to
6 more than a laughable amount. As for CORS in
7 Arctic, I'll start by saying that I'm familiar
8 with CORS at about 30 degrees latitude, so please
9 forgive any obvious misstatement. But I have
10 participated in creating a couple of CORS station
11 that are unique in that they are offshore.
12 They're on oil platforms. Now granted, by
13 comparison, I'm sure the Gulf of Mexico is a very
14 friendly place and there was in fact its
15 exceptional because if you go by the letter of
16 the rules they don't meet NOAA's specifications,
17 but they have been accepted into Dallas National
18 CORS network, and they have proven to be stable.
19 Perhaps, even if they work at a lower precision,
20 finding such stable platforms which imply some
21 form of maintenance as well nearby might prove a
22 place of opportunity to place CORS stations. And

1 as far as the leasing requirement of requiring
2 bidders to provide data they most certainly have
3 acquired to inform their bids, and later their
4 production from their leases, consider requiring
5 bidders - potential and successful -- to submit
6 their bathymetric data that's collected in
7 pursuit of the bid or the production. And I
8 prepared those very incomplete sentences because
9 I had a little bit of time, but hearing the last
10 bit of conversation today as for an audience for
11 your engagement documents -- your one pagers as
12 you've called them - consider organizations like
13 mine -- ASCE, Hydrographic Society of America, et
14 cetera. We participate with MAPPS, and in fact
15 NSPS does annually in the fall to engage our
16 members of Congress and Senate. Indeed, there's
17 four of the six points, and we select two or
18 three that are pertinent to that state or that
19 Congressman's interest, et cetera. And on the
20 flip side, I like the idea that I heard of
21 keeping it simple, very sparse data on the front
22 side, but consider - this might take a little

1 more creativity -- but consider on the flip side
2 to have a "did you know" aspect. Did you know
3 that there's - and then fill in the blank, about
4 whatever the topic and the point that you're
5 addressing. That's what I had to say; thank you.

6 CHAIR PERKINS: Thank you Mr. Cavell,
7 and thank you to NSPS for sending you here. Any
8 online -- any additional online input? Mr.
9 Mitchell.

10 MR. MITCHELL: I'm Todd Mitchell with
11 Fugro. I just had a sidebar conversation earlier,
12 but I just wanted to suggest -- back to the
13 Arctic priority issue - when discussing the
14 amounts that we want to put in a document to say
15 that this is perhaps what we think we can
16 realistically achieve, I think it's good maybe to
17 look at the historically what NOAA has been able
18 to achieve, what it has been thinking in terms of
19 its fiscal investment historically, and say we
20 have already been making some of these
21 investments; this has been a priority to some
22 degree, and if we want to make a significant dent

1 then this funding part we have been using is
2 still insufficient. And we need to - again, I'm
3 going to use this expression -- grow the pie. If
4 we actually use the numbers of not just this
5 contract is also invested with NOAA'S own
6 vessels, we can take those numbers and we can
7 actually extrapolate to say we're still not
8 meeting the adjective of what we would like to do
9 and that value needs to grow to a figure such as
10 this in order to meet whatever objective HSRB
11 thinks is the right target. Thank you.

12 CHAIR PERKINS: Thank you for that
13 input. We're at the point where we should
14 adjourn. The panel has a working lunch in front
15 of this with a presentation from Dr. Kuska,
16 Director of the MARACOOS Organization. So that
17 will take place across the hall in the room where
18 we were yesterday, with the goal of reconvening
19 back here at 1300 hours. At 1300m we'll give you
20 from 1300 to 1302, or do you want them now? If
21 you'll keep it to two minutes, okay.

22 MEMBER BRIGHAM: It's Lawson Brigham

1 again; I'm the architect report. I think we
2 don't have a preface, so in the preface, I'll
3 draft up a preface to cover the National Security
4 issues the totality of this. The President has
5 spoken, and I'll preface our report with that and
6 say something like how timely this is that we
7 have a working group at the same time the
8 President was speaking, and I'll try to roll
9 those in. And the second point is that on the
10 recommendation related to seeking additional
11 funding in a line item budget, there's a thought
12 to put a number in there like \$20 million a year,
13 so we should think about that. And then the
14 final point is more of an observation from the
15 international community; I have a pretty good
16 network and talk to people. I have had a couple
17 hydrographers of the various countries talk to
18 me, and this is for Admiral Glang and his team. I
19 mean we're really being represented at the
20 highest level; we're the proactive Arctic country
21 in the hydrography world from what I learned.
22 I've not been to IHO or the Arctic Regional

1 Hydrographic Commission, of which the Admiral was
2 a member, but I hear that we're pushing the
3 agenda, and it's all very positive. So that's a
4 congratulations to you Admiral and your team for
5 giving the United States high profile on the very
6 topic we're talking about Arctic today. So,
7 thank you.

8 CHAIR PERKINS: Very good we'll
9 adjourn to across the hall.

10 (Whereupon, the above-entitled matter
11 went off the record at 12:01 p.m. and resumed at
12 1:26 p.m.)

13 CHAIR PERKINS: Yes, we have two
14 online questions that we need to attend to, we
15 have a little internal panel matter then we have
16 our deliberations, we have many panel members
17 that have travel starting them you know in the
18 face later this afternoon so it has been asked
19 and I will concur with agreeing to a 1600, 4:00
20 p.m. Central -- excuse me, 4:00 p.m. Eastern,
21 1600 hours. And I guess it's our target you know
22 for conclusion of deliberations so that people

1 can make their evening travel obligations. And
2 we have Dr. Callender who I believe we're
3 scheduled at 3:15 will be able to join us via
4 audio so our goal is to try to get to good
5 talking points by 3:15 that we can receive
6 feedback and input with Dr. Callender. Mr.
7 Harrison's question is on the screen in front of
8 some of you behind the other half of you so if
9 you'll take a moment.

10 RADM GLANG: Do we know if Steve
11 Harrison is still online?

12 MS. HOUSE: He is.

13 RADM GLANG: Does he have the ability
14 to phone in?

15 MS. HOUSE: Is he on the phone already
16 -- he's not on the line. So he can speak -- okay,
17 just kidding.

18 RADM GLANG: So I'm going to take a
19 stab at trying to interpret Steve's question, I
20 think in the context of ellipsoidally referenced
21 surveys his question has to do with the quality
22 of positioning, I guess in the northern latitudes

1 and he's asking permanent differential stations
2 so in that -- just a moment on the science when
3 you do ellipsoidally referenced surveys you do
4 need some kind of differential service whether
5 it's from a base station on the ground or whether
6 it's a service that's coming to the user by
7 satellite.

8 So that's a good question, so I'm
9 going to answer it Steve this way. The way NOAA
10 hydrographic ships are surveying on the ellipsoid
11 in Alaska -- western Alaska is by setting up our
12 own flyaway differential stations and we're also
13 evaluating some commercial satellite services for
14 those differential correctors. There may be
15 other ways to tackle this but it's something
16 we're working on with NGS. We're kind of trying
17 different things seeing where we get the best
18 results, and offhand I think the satellite based
19 providers we're still seeing vertical uncertainty
20 of on the order of 20 centimeters -- don't quote
21 me on this, we can talk about this in a lot more
22 detail, which may be okay in some places but

1 maybe not everywhere.

2 Certainly not for higher resolution or
3 larger scale surveys that may not be quite good
4 enough so that's broadly how I would answer that.
5 Juliana, did you want -- any part of that you
6 want to tackle? She's shaking her head no.

7 MS. BLACKWELL: No, just -- well,
8 since you put me on the spot, Juliana Blackwell,
9 Director of NGS. We are as Gary mentioned
10 working with CORS survey to determine
11 opportunities even alternatives depending on
12 location and CORS sites available or not
13 available, different ways that surveying on the
14 ellipsoid can be accomplished and the positioning
15 aspect of that in referencing that to shore
16 stations, CORS Network etc. So it is a work in
17 progress and I think that is something that we
18 should look forward to talking more about with
19 the panel once we have more definitive ways of
20 how we're going to progress with this. Not just
21 in the northern latitudes but in multiple places
22 and how we're going to try to address that, thank

1 you.

2 RADM GLANG: More CORS stations will
3 definitely help.

4 MS. BLACKWELL: This is an aside,
5 Juliana Blackwell again. The question came up, I
6 don't know if it was during the official session
7 or not about the CORS in Alaska and a couple of
8 things to note -- and NOAA does not own any of
9 those CORS stations. There are a number of them
10 up there, you can go to our CORS webpage and see
11 where they are currently located. One thing to
12 point out that wasn't mentioned yesterday when we
13 had our federal stakeholder panel the FAA
14 actually owns seven, I believe, of those CORS
15 stations and one of them the very northern part I
16 think near Barrow. So FAA has seven stations up
17 there just for your awareness and a number of
18 stations that are owned and operated by UNAVCO
19 are of concern in the sense that National Science
20 Foundation I think only has funding through FY18
21 for a number of their plate boundary observatory
22 stations so throughout the community there is a

1 concern of what's going to happen with the
2 funding for the UNAVCO PBO stations after FY18 in
3 a big outreach effort to try to look for
4 opportunities for additional funds for that
5 network or for people to adopt those stations and
6 that's probably something we should talk a little
7 bit more about at our next meeting, thank you.

8 RADM GLANG: I think there was a
9 follow on from Steve on that, that we're trying
10 to get on the big screen. I think he's relaying
11 that when the Sumner was surveying in those high
12 latitudes they did have a challenge with a
13 sufficient number of satellites, agree with that,
14 I think we talked about that and then he mentions
15 additionally varying sound speeds throughout the
16 surveyor has plagued us. So that of course is
17 still an issue and we know that firsthand from
18 the Rainier and Fairweather's work in Kotzebue
19 Sound during this past year, this past summer
20 sound speed was a real challenge.

21 So what that impacted was how
22 productive we were going to be because originally

1 the plan was to achieve the multibeam bathymetry
2 and then use sidescan sonar to broaden our area
3 of coverage in order to meet our line -- our
4 object detection requirement. However, the sound
5 speed challenge in Kotzebue Sound was such that
6 the sidescan records were really unusable and in
7 order to meet our object detection coverage we
8 had to reduce the line spacing of the survey
9 launches and go to full multibeam coverage.

10 So that was one of the challenges we
11 were not as productive as we'd hoped to be. The
12 problem with the sound speed -- so you've got
13 layers of water that are in different
14 temperatures and they really distort the records,
15 especially in sidescan. That problem was less
16 just around the corner on the outside of Kotzebue
17 Sound where they were so in those areas they were
18 able to use sidescan but this was a question that
19 we had asked the panel and it's a bit in the
20 technical weeds about different approaches for
21 acquiring the survey data, maybe reducing some of
22 our requirements, not going to full bottom

1 coverage.

2 But because the way Kotzebue Sound is
3 used the types of vessels that we understand are
4 being used are going into that area. I ask that
5 we continue to use our full object detection
6 requirement, so it is, it's more work you know in
7 shallow flat places we like to use sidescan sonar
8 but if the record isn't readable because of
9 thermoclines and thermal layers that distort the
10 record then you really have to go with the
11 multibeam and just if you need to get the object
12 detection then it's that many more lines you got
13 to really tighten up on your line spacing so I
14 think I've addressed Steve's question. Okay do we
15 have another question, do you want to handle this
16 one Scott?

17 CHAIR PERKINS: Thank you Mr.
18 Harrison. Okay our next online question is from
19 Dr. Abdullah from Woolpert and he was with us
20 yesterday and the prior day as well so thank you
21 for the online question.

22 RADM GLANG: Just go to full screen

1 there.

2 CHAIR PERKINS: All right, I will read
3 the question. I gathered from the federal
4 agencies' discussions yesterday there may be a
5 need for better coordination between NOAA and
6 other agencies that are involved or in need of
7 hydrographical surveys such as the Army Corps of
8 Engineers and FEMA. As an outcome for such
9 coordination a ten year execution plan may be
10 needed based on common needs between
11 participating agencies.

12 This is important in a time of
13 shrinking federal budgets and support for NOAA's
14 activities. Such a plan will maximize the values
15 of the hydrographical surveys, assets and
16 expertise for the Arctic hydrographical and
17 bathymetric surveys it seems that we do not have
18 a sense of the current and future needs, let
19 alone the priorities. Suggest for the HSRP to
20 task a working group to develop a 15 year plan
21 for completing the survey of the American Arctic
22 territories.

1 Such a plan should consider the Sumner
2 navigation routes that Dr. Brigham presented
3 yesterday and consider these routes as
4 priorities. Human geography can provide
5 tremendous criteria for designing a successful 15
6 year surveying plan. The plan will be based to
7 request federal support and budget.

8 MEMBER BARBOR: That looks like
9 Lawson's line item.

10 CHAIR PERKINS: Yes, my apologies for
11 the discordantness in reading it, that's a
12 reflection of my ability to see anymore at my
13 age, not in Dr. Abdullah's comments. It is very
14 good input so one I want to thank Dr. Abdullah
15 for providing that. The thought of the HSRP being
16 responsible for drafting a 15 year plan concerns
17 me just because I know how hard it is to get a
18 letter with succinct recommendations produced.

19 MEMBER BRIGHAM: A 15 year plan
20 probably we do know the projections for the
21 offshore oil and gas industry. I mean their one
22 plausible thing is that they find something then

1 there are three companies probably out there, in
2 15 years there might be six to eight rigs
3 exploring so we probably have a handle on that
4 portion and that would mean there would be
5 attended increases in the coastal trade and other
6 sectors. So, we probably -- for 15 years that's
7 not too long a horizon, we probably would build -
8 - the Admiral and his team would be able to
9 develop a plan that could cover the new resources
10 that will come our way.

11 RADM GLANG: This is Gerd Glang from
12 CORS Survey, so it is a good question and a
13 couple of things I would like to draw Dr.
14 Abdullah's attention to. For the Arctic, we do
15 have our U.S. Arctic Nautical Charting Plan which
16 is out for public comment right now. As I
17 mentioned in my program update on Wednesday our
18 Arctic Nautical Charting Plan describes the
19 charts or the products that we believe need to be
20 created. Underlying those products, of course,
21 will be the need for new hydrographic surveys so
22 certainly we have a plan on what products we need

1 to build and we continuously seek input from the
2 users on that as well as we adapt and revise that
3 plan periodically at least once every two years
4 using input such as AIS data.

5 We also have a NOAA National
6 Hydrographic Survey Priorities document which in
7 its present form I think the most recent version
8 we have online is from 2012 although it is
9 somewhat dated it certainly give the rationale
10 for why we survey where and when and we're in the
11 process of revising that plan. Specific to the
12 suggestion of outlining a plan for ten years or
13 15 years, so a ten year or 15 year execution plan
14 is a function of you need to know the rate of
15 your resources. This being the federal government
16 -- and we've spent three days talking about this,
17 I have no assurances that I'll have the same
18 amount of funds or more or less next year versus
19 even ten years down the road.

20 So I think it is important that NOAA
21 identify its national requirements and that we
22 make an attempt to prioritize those requirements

1 based on the best information available, that we
2 adapt and periodically reprioritize based on the
3 changing world and we've talked about changes in
4 use and all the other kinds of drivers for
5 change. And really though our planning cycle in
6 the government is you know nominally three years
7 we can -- we have a three year budget planning
8 cycle, we can assume we'll have certain levels of
9 funding maybe five years out but I think it's a
10 real challenge to say we're going to knock out
11 the U.S. Arctic in 15 years.

12 I would invite the panel to take
13 advantage of the work that Lawson's working group
14 has done, Dr. Brigham's and make that suggestion
15 that in order to do the U.S. Arctic in a
16 reasonable amount of time, say 15 years these are
17 the level of resources that are going to have to
18 be assured and brought to that problem, thank
19 you.

20 CHAIR PERKINS: Very well said, any
21 other comments? Great, do we have any other
22 public comments?

1 MS. MERSFELDER-LEWIS: There is -- a
2 NOAA Fisheries group asked if we would share a
3 sign campaign that they are doing on Right whales
4 from Virginia to Canada so I'll send you a copy
5 of the picture explaining what that is but
6 they're just -- it's mainly for recreational
7 boaters I believe so I'll send that to you all so
8 that you can have a copy.

9 RADM GLANG: Lynne, when you say a
10 sign campaign are you talking about an
11 information campaign?

12 MS. MERSFELDER-LEWIS: Yes, it's
13 literally like a two by three foot sign that
14 they're putting in marinas and ports and other
15 places to remind people Right whales are there,
16 please slow down, if you see them please report
17 them. So it's literally a sign.

18 MEMBER SHINGLEDECKER: If I can get
19 that in electronic format we can push it out
20 electronically through social media and other
21 means.

22 MS. MERSFELDER-LEWIS: Okay.

1 MEMBER SHINGLEDECKER: Physically
2 would be difficult.

3 MS. MERSFELDER-LEWIS: Yes, so I'll
4 send that to you Susan but there's just a one
5 pager and I'll send you the contact information
6 for the scientist who's working on that, she may
7 want to give you different information than that
8 one pager.

9 CHAIR PERKINS: Great, that's good
10 information that you can choose to use or not use
11 as how you see individually. As a panel we don't
12 endorse or advocate you know that's a Marine
13 Fisheries issue not a HSRP issue. As we know
14 we've covered some of that ground before but
15 thank you very much Lynne for sharing that. I
16 think if we don't have any other online questions
17 and no public questions then we can move to
18 deliberations and other orders of business.

19 RADM GLANG: Gerd Glang from CORS
20 Survey, I do have one presentation, we do have a
21 panel member, Dr. Gary Jeffress who was appointed
22 for two terms to the Hydrographic Services Review

1 Panel and our statute does not allow us to
2 reappoint Gary as much as we'd like to do that so
3 I want to extend my personal appreciation to
4 Gary. I've learned a tremendous amount from him,
5 he's been a steadfast supporter of the panel,
6 he's always been here and I'll just read you a
7 quick note from myself to you Gary.

8 Thank you for your service and
9 dedication to the NOAA Hydrographic Services
10 Review Panel, your eight years of service to the
11 panel are a noteworthy achievement and your
12 expert contributions during that time are very
13 much appreciated. The Federal Advisory Committee
14 process which guides our panel is just one
15 mechanism through which citizens and experts such
16 as you can engage in our nation's democratic
17 processes.

18 Your willingness to take an active
19 role to make our nation's government more
20 effective is an outstanding example of
21 citizenship activism. I wish you well in your
22 future endeavors and hope our paths cross again,

1 I encourage your continued advocacy for NOAA's
2 missions and support of navigation safety,
3 coastal economies and coastal resilience. So
4 thank you Gary, thank you very much.

5 (Applause.)

6 CHAIR PERKINS: Let the deliberations
7 begin. We've had two and a half very full days
8 of information and the task at hand in less than
9 120 minutes is to try and summarize and capture
10 that into something real and tangible that I can
11 walk out of here with on paper and then put back
12 to you within our allotted timeframe in our
13 standard operating procedures for panel's review
14 and consideration and then we send it up the
15 administrative ladder. So what's the most
16 important thing that if we go around the horn I
17 think that may be a way to do it and try to
18 capture -- you know or have you share what it is
19 you would like individually to have considered
20 for our recommendation going forward subsequent
21 to the meeting and we'll start with Admiral
22 Barbor.

1 MEMBER BARBOR: All right a couple of
2 items. One, I'll be exceedingly brief on the one,
3 I assume there will be a nice boiler plate --
4 well, not boiler plate a very good introduction
5 paragraph on the appreciation for the level of
6 access we had, did wonders for our deliberations
7 and understanding. On the more recommendation
8 side I'll start it and I imagine it will get
9 massaged as it goes around. Again from the
10 standpoint of Admiral Lopez's presentation we
11 appreciate the challenges that she is facing,
12 however the importance or urgency of ship time
13 especially in the Arctic where the survey season
14 is short and requires that the hydrographic
15 mission be given top priority with an appropriate
16 level of effort, whatever, obviously you can
17 change appropriate or the like but that's my
18 first cut.

19 CHAIR PERKINS: We can come back to
20 Captain Rassello.

21 MEMBER SHINGLEDECKER: I am still
22 assembling my thoughts, I'm going to pass for

1 now.

2 MR. EDWING: Well I caught the fly,
3 he's been contained. So I guess I would just
4 encourage the panel I think maybe their biggest
5 challenge right now is kind of in the engagement
6 area. It's kind of really focusing down on who's
7 the audience and I think that Carol had a very
8 good point it's kind of what do they want, you
9 know what is it that they want that we can
10 provide and maybe if you think about it from that
11 perspective that might help but I think it's
12 narrowed the focus area down for what --
13 engagement's fresh, we might be helpful.

14 MR. MAUNE: Dave Maune, I liked our
15 focus on the users and what their requirements
16 are engaging with our customers to me that's an
17 important thing for every HSRP meeting. On this
18 particular one I also appreciate the fact of how
19 we came together on focusing on the Arctic
20 region. I think we were kind of unanimous that
21 it's a very high priority and that with President
22 Obama bringing it to the interest and stating his

1 personal desires in this area the time is right
2 for us to not dilly-dally around but to move
3 forward and I like the idea of not just going
4 with the 500 square miles but I kind of like the
5 idea of what can we do in the next ten to 15
6 years. He had 15 years to me that is a
7 reasonable period of time to try to solve this
8 problem and I hope we can move on that.

9 MEMBER MILLER: Sorry, I'm typing some
10 thoughts I had before. I'll continue Ken's
11 thoughts, I wrote up something last night the
12 HSRP appreciates the opportunity to meet with
13 Admiral Lopez which provided better understanding
14 of the challenges facing NOAA's Hydrographic
15 Survey Fleet and the NOAA Survey Fleet in
16 general. Aging ships, challenges in hiring and
17 retaining crew, the number of available survey
18 days and the need to maintain NOAA's in-house
19 hydrographic expertise. These are very difficult
20 tasks in today's challenging budget environment.
21 The HSRP would encourage NOAA leadership to
22 consider all options in order to maintain and

1 increase hydrographic survey capability. Arctic
2 hydrographic surveying should be among NOAA's
3 highest priorities in allocating vessel and
4 personnel resources particularly during the
5 extremely short arctic survey season.

6 I might also add that I don't know if
7 in the main recommendation letter, I think
8 highlighting the arctic hydrographic survey
9 capabilities and highlighting the fact that
10 there's a three month window and if they are
11 given the President's remarks as high priorities
12 as they are hydrographic survey resources should
13 not be taken away from such as personnel or ship
14 time should be allocated to hydrographic
15 surveying and then consider multiple elements,
16 consider all options in terms of increasing NOAA
17 fleet capacity. Some of which we talked about
18 other ships use of NOAA ship time, creative use
19 of both the Lawson's and the NRT's etc.

20 CHAIR PERKINS: Thank you.

21 MR. ARMSTRONG: Andy Armstrong, all
22 right. I thought Joyce's prepared statement

1 there was particularly well written and I would
2 second that.

3 CHAIR PERKINS: You are indeed a wise
4 man.

5 MEMBER BRIGHAM: Lawson Brigham and it
6 gets back to the fact that the timing was
7 impeccable for NOS in April to ask us a couple of
8 questions to help jumpstart the working group.
9 We had been working on arctic issues and briefing
10 out for four or five years now but we haven't had
11 a target so we had target with us answering these
12 questions which helped to elevate all of these
13 issues and again the timing was right for the
14 present visit and I think that this may be model
15 kind of showing how one of the working groups and
16 then with consensus of all the members we can
17 actually have some leverage on the system. So I
18 would urge in the letter somewhere that we say
19 directly that the NOAA has to be very proactive
20 in responding to the President's statement, thank
21 you.

22 CHAIR PERKINS: Thank you Lawson.

1 Just because you're retiring doesn't mean you're
2 off the hook, Gary.

3 MEMBER JEFFRESS: The thing that I'm
4 most impressed about this meeting was the fact
5 that Admiral Brown showed a big interest in what
6 we're doing and he's up there a deputy of the
7 administrator and prepared to take our message
8 right to the top and I think we need to take
9 advantage of that at every opportunity. It's
10 equally over the next 18 months which is the life
11 span of the current administration and I
12 encourage you to use email as much as you can.

13 MS. BLACKWELL: Scott's looking at me,
14 Juliana Blackwell. I think the big take away is
15 for me in this and I think there are a lot of
16 specific things that Dr. Atkinson had put up on
17 the screen earlier for specific areas we can
18 focus on but I think based on the charge from Dr.
19 Callender we should make sure that we reemphasize
20 the point that we need to invest and support
21 additional foundational data. Coastal
22 intelligence and environmental intelligence

1 however you want to frame it in order to make
2 this nation more resilient and economically
3 strong and I think that no matter which
4 recommendations come out of this that the
5 messaging and I think Susan did a great job
6 earlier expressing the coastal intelligence and
7 coastal resiliency in the fact you know we don't
8 really want to have to say we told you so but the
9 situation is in a lot of places already. We
10 don't have what we need to make good informed
11 decisions and I think however the recommendations
12 come out we need to continue to message the
13 importance of the foundational data sets as
14 coastal intelligence for resiliency efforts and
15 economic growth of this country, so just a
16 general statement, thank you.

17 MEMBER ATKINSON: Larry Atkinson, I
18 agree with everything said so far and that was I
19 guess specifically pleased that we could discuss
20 out and go forward with these topics and hope we
21 could maybe resolve more of it this afternoon
22 before we leave and I think we can you know

1 include the coastal resilience, coastal
2 intelligence weave that in there everything we
3 do. So I just hope we can go forth with what I
4 put up there.

5 MEMBER FIELDS: Evelyn Fields, I agree
6 with Joyce's statement that was my part of my big
7 take away from this meeting is the importance of
8 prioritizing or making a priority the shifts in
9 the Arctic and the data collection in the Arctic.
10 How they do it, I don't care but that's the
11 priority and I also agree with Juliana's comment
12 about the foundational pieces that we need. I
13 think it doesn't hurt to reinforce that because
14 that's important too.

15 MEMBER KELLY: Got a couple of notes,
16 it's kind of tough to be at the end of the thing
17 because a lot of it's already been thrown out so
18 I'm not really adding on a lot. I think Joyce is
19 a great wordsmith I liked a lot of what she said
20 in that.

21 A couple of my comments, I think to
22 look at a higher view of things in our

1 recommendation we have to say that they must be
2 increased operational efficiency in the fleet and
3 that the subset to that is that the requirement
4 for fleet replacement and the necessity to
5 maintain internal expertise in the field. I
6 think the Arctic is the big topic for us I would
7 put that in two pieces, one right now I think we
8 need to take advantage of Admiral Brown's offer
9 and we should send him a thank you for his time
10 and interest and ask about you know we presume
11 and expect the NOAA would take the opportunity of
12 the Presidential mandate to issue a press release
13 and that NOAA should take all actions necessary
14 to ensure that they become the lead agency in
15 this area.

16 Precision navigation, I'll grab that
17 because the Captain was out, the increase in
18 technology has resulted in increased electronic
19 capabilities of navigation and analysis that is
20 also coincide with the increase technology of
21 vessels. The vessels are the largest we have
22 ever seen on a magnitude that we have not seen

1 before, however the channels and the physical
2 shore lines have not changed.

3 That means to operate these much
4 larger vessels in the same constricted channels
5 require increased expertise and we should use our
6 electronic capabilities to roll out precision
7 navigation to as many ports as quickly as
8 possible and that there should be a
9 prioritization in a hierarchy of where to do that
10 based on the port's needs.

11 I think that we've got to make sure
12 that NOAA maximizes its ability to align and
13 emphasize that it provides data and services that
14 are essential for the security, the safety, and
15 the commerce of the United States. I think NOAA
16 takes a little bit of a back seat, because it's
17 viewed as science. I mean those of you who are
18 the science community love that. The rest of the
19 world doesn't buy it. Science is not sexy.
20 Security is recognized. Safety of human life is
21 recognized. The integrity and resilience of our
22 shoreline communities, and homes, and property

1 are important. Commerce is important. NOAA has
2 to be part of that branding, not part of; boy, we
3 know all sorts of acronyms about things that a
4 lot of us can't even figure out what it is.

5 It's all essential of science, but we
6 have to get that in a plain language message that
7 NOAA is delivering essential foundational blocks
8 that enable this nation to increase security,
9 safety, and commerce. And finally as you will
10 expect, we have to federally fund ports, because
11 that is part of the backbone of this, and the
12 current funding system is not actually fair. You
13 know, it's much like who pays for the army. The
14 federal government because there are too many.
15 It is a common good. Academia, recreational,
16 commerce, etc., there are so many users of the
17 port system, that it's just inherently unfair the
18 way the current formula is working. So, I'm
19 done.

20 MEMBER KUDRNA: I agree with much that
21 has been said around the table, and I'd just like
22 to build on one that Ed was the first to touch

1 on, and I think that this should be a primary
2 element in the letter. We have totally lost the
3 opportunity for congress to consider vessel
4 replacement, because the modernization plan is
5 tied up in OMB, and we ought to tell the
6 administrator that was a greatly missed
7 opportunity, and she ought to, in concert with
8 the Secretary of Commerce, press for that to be
9 released, so that this critical issue of fleet
10 modernization and replacement of vessels can be
11 considered by congress.

12 I also think it was terrific Admiral
13 Brown and his participation and commitment to
14 come here, and I think we ought to follow up with
15 him on that subject in addition, and we ought to
16 share with him the week of our next meeting,
17 scheduled for the Houston area, so that we can
18 try and get it on his agenda and block to attend.

19 MEMBER RASSELLO: Sal Rassello. I
20 want to just make a really short addition to the
21 comment from Ed Kelly. I fully agree with what
22 he said about the technology aboard the vessel.

1 I just wonder that this technology is mandated by
2 IMO resolutions. It's not the vessel choice to
3 upgrade the technology. It is the International
4 Maritime Organization that requires that the
5 vessel now are navigated with electronic
6 navigation. Therefore, we need to prepare the
7 port in align with the same standards. Thank
8 you.

9 MEMBER SHINGLEDECKER: I've got my
10 thoughts together now. I just have one thing
11 that I would add in terms of it hasn't already
12 been covered. Just the general recommendation
13 that we support the efficient use and flow of all
14 data sources, whether you are looking at the
15 arctic and it's; let's get the private data,
16 let's get Coast Guard data, let's get all the
17 data that is available in an efficient manner,
18 but also it goes back to something that we heard
19 at a past meeting, and I apologize if I missed an
20 update. But on the recreational side, you know,
21 hearing about E-Hydro with the Army Corp., and
22 that we support that concept at all levels,

1 whether it's at the arctic, or whether it's on
2 the ICW.

3 MEMBER BRIGHAM: You don't have to
4 quote me on this one. This is more of an
5 observation. It is useful in HSRP, of course,
6 and all the way up to the admiral that they were
7 dominated by people that have marine experience,
8 and our mariners, particularly our new member
9 here who gives us a new dimension. But, I'm
10 talking about almost everyone here has been to
11 see, and I know the vice admiral very well, the
12 reason he's interested in this stuff, he's been
13 on ships. He probably knows even about the
14 electronic, E-Navigation stuff now, but his
15 perspective is from being a sailor, and we have
16 some scientific sailors here too, with Joyce and
17 Larry. They've been on probably 50 cruises, but
18 I actually think that dimension, we need to have
19 a certain percentage of HSRP, the actual mariners
20 from the commercial world, whatever background,
21 Navy, whatever. At least some, because that
22 dimension is what we're talking about, I think,

1 that many other bureaucrats with their great
2 function and dedication in the government, don't
3 have.

4 I mean, we're talking about the roots
5 of this organization, and you have to understand
6 it better by being a mariner, biased completely,
7 but I think it is an issue here. Because when I
8 talked to Brown, I mean he's thinking Coast Guard
9 cutters, charts, navigating in waters where there
10 aren't charts, and that kind of thing. That's
11 his perspective. That's where he learned it all.
12 Just an observation, really.

13 MEMBER ATKINSON: I agree with you,
14 but then I disagree a little bit too, because
15 there are non-navigational uses of stuff. We
16 need a good mix.

17 CHAIR PERKINS: You know, it's a good
18 comment, and me sitting where I'm sitting at this
19 table, being a non-mariner, I learned a lot last
20 night when we went to MITAGS. It definitely
21 broadened my perspective, but I think the
22 balance, I think the mix is beneficial. I think

1 the structure of how NOAA has been handling the
2 appointments to the HSRP, and as we heard over, I
3 think, 33, 34 applicants applied for the one open
4 seat that was advertised in August, so we
5 certainly wouldn't want to have this panel be
6 full of non-mariners. But then Dr. Atkinson
7 makes a good point. A lot of this data that is
8 being collected under these programs is going to
9 be used for non-navigational purposes, for the
10 storm surge modeling, for the coastal
11 intelligence.

12 MEMBER BRIGHAM: I could add that the
13 country runs on the oceans and all of what Larry
14 is saying. But it runs on trade and
15 international trade, and it's all the mariners'
16 business, including the tourism industry, right?
17 So it's a huge economic security thing, right?

18 CHAIR PERKINS: This is good
19 conversation. This may be not helping us get to
20 the end of our deliberation, but the spatial
21 reference, that's the framework; our highways,
22 our railroads, our ports, right? That's the

1 bigger piece that ties it together.

2 MS. BLACKWELL: Juliana Blackwell.

3 But, we live on land, and we conduct a lot of
4 business and livelihood on land too, so we do
5 need to not alienate the non-maritime component
6 of the hydrographic services and the value to the
7 entire nation, because I think that that is
8 something that we need to keep that in our minds
9 as we make these recommendations and listen to,
10 you know, the impact of what maritime commerce
11 does, but we live on land. So, that's all I'm
12 going to say.

13 MEMBER BARBOR: Ken Barbor.

14 Continuing to kind of refine the dialogue on the
15 arctic survey. I see a number of items there
16 that we can link, most of which we've discussed a
17 bit, but clearly the prioritization within the
18 fleet allocation for hydrographic work in the
19 arctic, the emphasis on recapitalization, so you
20 have an available and an efficient fleet that is
21 ready for service, and the use of all available
22 innovation. There are all sorts of other

1 collection aspects that we can bring to bear.
2 They generally cost money, but that may be the
3 force multiplier that's necessary. So, that sort
4 of thing, you know; innovation, prioritization of
5 the existing fleet, recapitalization so we have a
6 fleet that is ready, and use of innovative
7 technologies to meet the requirements.

8 CHAIR PERKINS: Going back to the
9 precision approaches, precision navigation, it's
10 not clear to me whether we have established the
11 criteria for prioritization. We've seen slides.
12 There are 20 ports that need precision surveys.
13 But, our criteria or our recommendation on
14 criteria for the prioritization of those, can we
15 try to touch that while we have some time
16 remaining here, because it may be done on the
17 grass roots, but I think establishing or
18 contributing comments to what that criteria of
19 prioritization for precision navigation needs to
20 be. Is it volume of goods? Is it national
21 security? Go ahead, Captain.

22 MEMBER RASSELLO: I think precision

1 navigation will optimize the volume of traffic in
2 the port. Understanding what are the limits
3 whereas a captain can take to save battleship the
4 ship in the port, considering the dip draft,
5 considering the larger vessel, so there is an
6 under keel clearance that at the moment is judged
7 on presentation, 20 percent or 15 percent.

8 Having a more detailed charting of surveyed area,
9 you can minimize this presentation. You can
10 increase the traffic in the port. This can be a
11 plus for the commerce. And the safety of
12 navigation comes first before that, because
13 having a fully surveyed area will analyze all the
14 aspects of the safety of navigation, including
15 not just the under keel clearance, the squatting,
16 the currents, the tides.

17 There are reports where like St. John
18 in Newfoundland where a cruise ship can enter
19 only at a certain stage of the tide. Then the
20 tide goes down, she cannot get out. She has to
21 wait until the tide goes up again to get out.
22 This is staged on the data that the chart or the

1 provider, the sonographic surveys provides to the
2 mariner, and the more efficient and the more
3 exact this data, you can have two transits
4 instead of one in the tide excursion.

5 MEMBER BARBOR: Ken Barbor again.

6 Looking back at our recommendation from Long
7 Beach, HSRP fully supports the future
8 enhancements of this system, as presented, and a
9 nationwide build-up. The panel has provided
10 initial criteria on how NOS may prioritize future
11 efforts. At this point, I don't think it's our
12 job to say, do Houston next. I think that's a
13 pretty strong statement that says we support the
14 system. We support the nationwide build-up, and
15 we've given you some information to go forth.
16 What we probably should have gotten is a brief
17 that said, and here are the next ports we're
18 doing, and here is why. We didn't get that, but
19 of course, we didn't ask for it.

20 MEMBER MILLER: In the Coastal

21 Intelligence Breakout Session Summary, this
22 mostly came from Ed, Item 321I, whatever, how

1 should we choose the next locations for precision
2 navigation. Ed pointed out the U.S. Coast Guard
3 Ports and Waterways Safety Assessments
4 methodology, PAWSA, which has a matrix.

5 We also discussed, there is a U.S.
6 Army Corp of Engineers Cost Benefit Analysis, and
7 in the discussion, other factors that are not in
8 the PAWSA model; who is willing or ready to
9 partner, who needs it most, places at most risk,
10 which we could get from PAWSA, where is it
11 easiest to install, timing, is it seasonal, are
12 there recent disasters, what does existing
13 infrastructure look like, are observations and
14 models and high resolution bathymetry available,
15 and economic impacts, and under the who is
16 willing and ready to partner, it was whose
17 willing to cough up some bucks too. So, we
18 provided an answer to that in Long Beach. We can
19 more formalize it in this outline, and we
20 reflected that in the letter.

21 CHAIR PERKINS: So then, I guess,
22 what's not clear is whether that initial

1 criteria, since it wasn't attached to the
2 recommendation order, it's -

3 MEMBER MILLER: Well, Admiral Glang
4 was in the discussion as was Captain Brennan.
5 They both said; oh, that's really helpful. We
6 didn't think of the PAWSA model. I asked Admiral
7 Glang earlier today if that was enough, and he
8 said; yes, we've already been taking action on
9 that.

10 MEMBER FIELDS: That's why I think
11 that what Ken said as far as us already putting
12 out something at the last meeting, I won't say it
13 as well as he did, and I won't repeat it, but I
14 think we've already done that. What we do need
15 is what somebody said initially, is that an
16 update to see what's going on. I don't think we
17 need to put something else more in a letter. I
18 think we just need an update.

19 MEMBER BRIGHAM: Lawson Brigham. I
20 got from that, that matrix is risk, but I
21 actually think that we should identify the ports
22 where the largest ships of the world are going to

1 go, and that should be part of the decision
2 making criteria, and that should come sooner
3 rather than later.

4 So, I don't know what the situation is
5 for whatever ports, but it should be part of the
6 criteria, and because these ships are coming, and
7 they really add a new dimension to the e-Nav
8 challenge. Could I add something? I thought it
9 was an interesting brief that we had, one of the
10 most interesting to me, being a hydrographer, was
11 the one from NGA, and the little ball that was in
12 the middle of the center of the earth, and now we
13 are at resolutions that we have to know. That,
14 to me, I was thinking of charts and how that,
15 knowing where the center of the earth is kind of
16 ties in with what Juliana's business is all
17 about, ties in oceans and land, but now we really
18 have to know to within tremendous precision. So
19 that was enlightening to me that that, I don't
20 know. It's probably 101 kind of thing, but I
21 learned a lot from that.

22 CHAIR PERKINS: Is that right? Do we

1 know where the center of the Earth is within a
2 millimeter now?

3 MS. BLACKWELL: I mean it continues to
4 improve, our knowledge and the technology that we
5 have on a global sense continues to knock down
6 the accuracy to an even better or greater
7 accuracy than we've ever known before. When you
8 do that, then everything you know geospatially
9 can also be known more accurately, and certainly
10 that plays a big role in particular with sea
11 level change and wanting to know your exact
12 elevation so you know when things flood, or how
13 much under keel clearance you have.

14 So, the idea is all of these things
15 build on knowing things accurately to whatever
16 level you can get to, and if it's a millimeter,
17 than that's going to happen. I don't know when,
18 but you know, right know, we're not quite there,
19 but we certainly have improved on what we know
20 about global geodesy, as well as how that applies
21 to the nation, and the data that we have now is
22 not up to par to what it could be.

1 MR. MAGNUSON: I hope I'm not speaking
2 out of school. It's a wonderful conversation
3 here, but you need to know that with respect to
4 precision navigation, we're still gathering
5 information. Captain Rick Brennan, just
6 yesterday, appeared before the AAPA, American
7 Association of Port Authorities, Harbors and
8 Navigation Committee to brief them on precision
9 navigation.

10 We also met with AAPA staff, Jim
11 Walker, about the matter. He gave us some good
12 advice to particularly factor in port users, not
13 just the ports. I also want to remind you about
14 Dr. Bamford's comments about U.S. supply chain
15 and the role of precision navigation at play
16 there. The key there is Secretary Pritzker's
17 interest and her staff's interest. As you know,
18 we've had a difficult time on occasion getting
19 maritime matters up through the department. This
20 could be a breakthrough of sorts, getting the
21 department to embrace a navigation matter.

22 MR. ARMSTRONG: Andy Armstrong. I'd

1 like to step back a little bit from the issue of
2 which port next, or what port is most important,
3 and emphasize that, in my opinion, it's critical
4 to move the sort of national charting
5 infrastructure or underlying capability towards
6 building systems that will support precision
7 navigation as opposed to sort of picking the next
8 port to incrementally update. We need to be sure
9 that we put priority on developing the charting
10 system and the tools in that system to the point
11 that we can do that generally and nationwide.
12 This sort of idea of a nationwide build-up, it's
13 not just kind of going in and tinkering with this
14 port by port. We'll be most effective if we get
15 the system capable of doing this anywhere we
16 chose.

17 MEMBER BARBOR: Scott. Ken Barbor
18 again. I would offer that a paragraph of the
19 panel continues to be, you know, interested in
20 precision navigation as a whatever, high priority
21 effort, and look forward to future briefs on the
22 progression towards a nationwide system of

1 capability.

2 CHAIR PERKINS: Can you get Rick
3 Brennan's presentation distributed to the panel?

4 MEMBER MILLER: We agreed the last
5 time that we don't want to go in with a shopping
6 list, and we've been three. So, what are our
7 three high level points at this point? I mean
8 the arctic is obviously obvious.

9 MEMBER SHINGLEDECKER: From my notes,
10 I have reinforcement on arctic, something from
11 our conversation with Admiral Lopez on ships, and
12 I have something on precision navigation is what
13 I have it distilled to. If I'm missing something
14 -

15 MEMBER FIELDS: I think those first
16 two can kind of be wrapped up a little bit
17 together, because part of what we have said is
18 that the arctic is important. The ships are
19 important, and you can't do the arctic without
20 either the ships so contracting or however they
21 do it, that's important. So I think those two
22 should be wrapped up. It might get a couple of

1 paragraphs, but it should be wrapped up as one,
2 one topic.

3 MEMBER MILLER: I've heard several
4 people encourage us to talk about hydrographic
5 survey priorities, including the arctic, of
6 course, because it is one of the high priorities,
7 and kind of ships, and fleet enhancement, and
8 prioritization of you know what personnel and
9 resources. I don't know how that -

10 MEMBER FIELDS: I hear you, and yes,
11 they talked about survey priorities. But I think
12 the navigational services, hydrographic services,
13 I think they have a good handle on the
14 priorities. It's just that people may not
15 necessarily know, so I don't even know that we
16 need to talk with the administrator about
17 prioritizing surveys. I think we should talk
18 specifically about the arctic. I don't think we
19 should color it with a whole lot of other stuff,
20 because then I think it gets whitewashed.

21 MEMBER MILLER: Well no, what I meant
22 was making hydrographic survey a NOAA priority,

1 not which places to survey first, but making
2 hydrographic survey especially in the arctic, a
3 high priority and as part of that, you know,
4 point out use of the hydrographic fleet
5 effectively, particularly in the short high
6 arctic survey season. That type of thing, that's
7 what I was talking about.

8 MEMBER FIELDS: I'll agree with that.

9 CHAIR PERKINS: This is good, but our
10 last flutter after Long Beach, the number one
11 recommendation was on that same topic. Full
12 utilization of the NOAA hydrographic fleet. Then
13 we'd talked specifically about the ability to
14 deploy and use all of the allocated ship days in
15 the arctic. So, what I'm hearing is we want to
16 hit the reset button, reword this maybe a little
17 more succinctly?

18 MEMBER FIELDS: I think that that's a
19 great opportunity. Also, I think somebody said
20 it to talk about the recapitalization of,
21 essentially getting that report out of the way.
22 You don't have to say it that way, but that's

1 what you are trying to do is get that report out
2 of the way.

3 CHAIR PERKINS: Okay, so moving the
4 ball down the field, and not talking specifically
5 about ship days for a season, but setting it at a
6 broader level and talking about the vessel
7 recapitalization and the allocation of the 16
8 vessels.

9 MR. ARMSTRONG: Well, I think there
10 was a focus on making the hydrographic ship day
11 as a priority in the NOAA process, particularly
12 given the urgent need in the arctic.

13 MEMBER FIELDS: A priority and a newer
14 allocation process.

15 MEMBER BARBOR: Ken Barbor here. I
16 think the recapitalization is worthy of a bullet,
17 because eventually it doesn't matter how they
18 allocate it. If they can't get to sea, it's not
19 going. That's where we are headed. That
20 probably is, so if the three are arctic
21 priorities, whatever we append to that; ship
22 recapitalization and prevision nav. I think

1 those are powerful.

2 CHAIR PERKINS: This is where I'm
3 confused on the precision nav, because we've
4 already addressed precision nav. We've put
5 forward what we think the criteria for
6 prioritizing which ports should receive that.
7 We're going to expand on that. How do we move
8 from saying here's our criteria. Use this list.
9 Use this matrix. Use these wrist drivers. How
10 do we transition to the nationwide program?

11 MR. ARMSTRONG: I guess I would phrase
12 it as a reiteration of our strong feeling that
13 precision navigation needs to go forward. We've
14 addressed priorities, but we also encourage a
15 sort of systematic capability for supporting
16 precision navigation nationwide in the charting
17 system.

18 MEMBER BRIGHAM: I think the added
19 discussion was this time about the mega-ships,
20 and we should weave that into the issue that the
21 game has changed a bit. The importance of e-Nav
22 has increased with the size of the ships'

1 increasing, so, wherever they go, whatever ports.
2 The first bullet still is the funding issue. The
3 issue is that the president has spoken, and now
4 we are going to ask him to execute, whatever.
5 How do we do that, but it is truly the line item
6 budget issue, I think, and identifying this as a
7 separate security issue, however framed. We need
8 to weave the first bullet a little bit, business
9 money. We have some capacity to do it today, but
10 it's constrained by budget, right?

11 CHAIR PERKINS: In answer to your
12 question, no. I am not capable of capturing all
13 of that in formulating the thoughts, so I am
14 going to need help and follow up input here. I'm
15 struggling with what's the most beneficial use of
16 the time we have remaining. Should we engage in
17 the group wordsmithing?

18 MEMBER MILLER: I would say that we
19 talked about that in the letter from the
20 previous, not Long Beach, but we did talk about
21 ships. But, given the opportunity to talk to
22 Admiral Lopez, then we have a much clearer

1 understanding of what's going on.

2 MEMBER FIELDS: Well, also when
3 Jeremy, I mean to me, that's the reason why we
4 can bring it up and make it a little bit more in
5 your face than we did before, because he told us
6 that they don't have a report, and the report has
7 got to come from OMB. So, it's not like we're
8 trying to get -

9 MEMBER MILLER: I'll make this bigger,
10 so you guys can see it and help me.

11 CHAIR PERKINS: Okay. Lynne is
12 working on getting the graphic up on the screen
13 for us. The response received a week ago, two
14 weeks ago, NOAA welcomes and appreciates the
15 panel's support for this initiative, and any
16 suggestions you may have on how NOAA could
17 strategically target future precise navigation
18 products and services, how to leverage the
19 partnerships in order to optimize these efforts.
20 Any suggestions you may have on how NOAA could
21 strategically target future precise navigation
22 products and services, not geographies. So, I

1 think that's the point Andy was trying to make.

2 MR. ARMSTRONG: Yes, that's right.

3 That's what I'm saying, right.

4 MEMBER FIELDS: Scott, I think when we
5 start talking about the arctic, because I think
6 Lawson makes a good point, that we probably need
7 to preface our comments by; we understand that
8 there are budget limitations; however, you know,
9 or something along that line. Because, we
10 understand that it requires more money, and who
11 knows whether they are going to get it or not,
12 but the fact is, it's still a priority.

13 MR. ARMSTRONG: I think the
14 administrator, you know, we heard about the
15 budget role up to provide flexibility. The
16 administrator has some flexibility.

17 CHAIR PERKINS: That's exactly right.
18 The combining of the PPAs should create some
19 flexibility.

20 MR. ARMSTRONG: But it's not just
21 those PPAs, but it's the whole agency.

22 CHAIR PERKINS: Right, the whole.

1 Within all of annual newcomers.

2 MR. ARMSTRONG: You know, the Annual
3 Guidance Memorandum.

4 MEMBER BRIGHAM: Lawson Brigham. I
5 think we should say something like; we note that
6 the president's recent visit to Alaska, and his
7 issuing a fact sheet which we determined
8 announces new investments to enhance safety and
9 security in the changing arctic, specifically
10 mentions X, Y, Z, charting and geography. Then
11 something about taking action on that through the
12 funding process, through the federal budget
13 process. We can say we understand, of course,
14 constraint in times, but this a new frontier, new
15 initiative for America, and the president has
16 spoken. We want our language to be relatively
17 high level but reference the president,
18 specifically. Quote him in the fact sheet, so we
19 can work on the first one.

20 CHAIR PERKINS: I think it would be
21 wise for us to try and craft something that
22 speaks to the challenge put forward to the panel

1 to be thought partners. To be thought partners,
2 so Dr. Sullivan used that terminology looking for
3 the panel to become invested thought partners.
4 We've got some really clear, succinct, specific
5 things here about the arctic, right, and about
6 the fleet replacement, but I'd like to take a
7 little bit of time to think about how we can
8 respond to that challenge of thought partnership.

9 MEMBER BRIGHAM: Lawson Brigham. I
10 just have to have a little joke here. We just
11 had a discussion and left the room, Admiral,
12 about mariners and whatever. Most mariners are
13 not particularly thought of as thought leaders, I
14 have to add. We had a long good discussion about
15 ballast and navigation and charting. My point
16 was, just so you know, that Admiral Brown is
17 interested in all of this, because he is a
18 mariner, and he was on ships, and he used charts,
19 and then I commented a little bit about that.
20 But, thought leaders, even though we are. Of
21 course, the admiral and others around the table,
22 it's not -

1 CHAIR PERKINS: That's the difference
2 between surveyors and mariners. Some of us make
3 maps, and some of us follow them.

4 MR. ARMSTRONG: Some of us do both.

5 CHAIR PERKINS: Are we going to
6 display Joyce's document?

7 MEMBER MILLER: I'm still trying to
8 weave in the recapitalization.

9 CHAIR PERKINS: Okay.

10 MEMBER MAUNE: I would also like to
11 spend a little time this afternoon putting a
12 little more meat on what we are going to talk
13 about at our next meeting. Are there some major
14 things that we would like pursue at our next
15 meeting? For example, I think we had an offer
16 from Ed Kelly to talk about resiliency for New
17 York City. We have Larry Atkinson who could talk
18 about resiliency for Hampton Roads. Being in the
19 Galveston and Houston area, to me, it's
20 imperative for us to talk about resiliency in
21 that area. So, I sort of see a resiliency theme
22 here as one thing we could focus on while we are

1 in the Houston area. Also, there is a lot of
2 interest in mega-ships and maritime commerce, and
3 these huge ships and the cruise lines, for the
4 big tankers, for the big cargo ships, national
5 security, which flows into the hydrographic
6 surveying requirements where there are priorities
7 for the big mega-ships coming in. Those are just
8 two general themes that we might want to
9 consider, but I'd like to hear what other people
10 think we should cover at our session next March.

11 MEMBER MILLER: I would suggest that
12 we might request a briefing from NOAA on how
13 fleet allocation is done.

14 MEMBER MAUNE: NOAA on how fleet
15 allocation is done?

16 MEMBER MILLER: Yes.

17 RADM GLANG: Gerd Glang. I would
18 propose we do that as part of an information
19 session between now and then.

20 MEMBER MILLER: Oh, okay. Yes.

21 RADM GLANG: Sooner. It's pure, dry
22 information, Dave. I don't think we want to use

1 an in-person meeting time for that.

2 MEMBER MAUNE: Okay. Any ideas on
3 what you think we should talk about at the next
4 meeting?

5 MEMBER BRIGHAM: Lawson Brigham: Back
6 to the megaship, who should come, and who should
7 be involved? Well, obviously Sal, but maybe
8 somebody from Maersk? Maybe we could invite
9 Steve Carmel or one of his executives back.

10 MEMBER MAUNE: Someone from where?

11 MEMBER BRIGHAM: Maersk Line, because
12 they operate these large ships, and then somebody
13 from the LNG maritime world, but also Coast
14 Guard. I recommend having one session to just
15 give us a background on the size and scale of
16 what we're talking about. Then they can all talk
17 about how precision navigation is important to
18 the safety of these ships. Coast Guard and maybe
19 the National Academy, there are some people who
20 have worked on the issue. Maybe somebody that
21 focuses on human dimension, although you,
22 Captain, could give the human. What are we

1 talking about here in scale?

2 MEMBER MAUNE: Sal has even got a big
3 ship coming into port there that week, or several
4 of them it looks like. All of this in one week?

5 MEMBER RASSELLO: Sorry?

6 MEMBER MAUNE: You sent us an email.
7 I haven't read it in detail, but it looked like
8 you had a bunch of dates when you were going to
9 have Carnival in port.

10 MEMBER RASSELLO: I did send the
11 schedule to Lynne. So, there are three ships.
12 Yes, I did send the schedule of the ships in
13 March to Lynne. We have three ships Saturday,
14 Sunday, and Thursday in the month of March.
15 Every weekend.

16 MEMBER MAUNE: Oh, every weekend.

17 MEMBER RASSELLO: Yes, so we can plan
18 to have a last day or first day on the ship,
19 inviting also anyone. It's not the problem of a
20 number if we stay for the day, not for the night.

21 MEMBER BARBOR: I'm assuming you've
22 got a bang up Nav Manager down there, and

1 obviously they would have plenty of suggestions.
2 I think Gary gave us a good brief on the Texas
3 Water Level stuff last time that ties in well.
4 Obviously resiliency, and there's got to be a lot
5 of resiliency stuff going on a Galveston as they
6 dig out of Ike or whichever one it was.

7 MEMBER MAUNE: Well, maybe I can ask
8 people to send me an email on topics and names of
9 people to be invited. I don't know a lot of
10 these people you know, so it would help.

11 MEMBER SHINGLEDECKER: I suspect we
12 might be able to bring someone from, I think it's
13 Houston Yacht Club. They did a big post-
14 Hurricane Fran that went into their rebuilding,
15 so it would fit into the resiliency, but it also
16 would fit into the, I guess we'll call them the
17 micro ships, the smaller boats, but certainly
18 looking at water heights and the data that goes
19 into to helping waterfront marine operations
20 recover. I can find that.

21 MEMBER KELLY: Ed Kelly here. Captain
22 Bill Diehl is a retired Coast Guard captain. He

1 had been Captain of the Port in Houston. He
2 currently runs the Greater Houston Port Bureau,
3 which is like a sister organization of what I do.
4 He runs a very extensive AIS network, and he is
5 very well tied in down there. I see Russ', you
6 know him. Bill would be good, and he'd be a
7 local person that could discuss navigation with a
8 certain degree of expertise, having been the past
9 Captain of the Port for Coast Guard for Houston.
10 So he'd be a good one to talk to us for that
11 local flavor.

12 MEMBER MAUNE: Okay, thank you.

13 RADM GLANG: Ed, how do you spell his
14 last name?

15 MEMBER KELLY: D-I-E-H-L. Diehl.
16 Captain Bill Diehl.

17 RADM GLANG: We have a lot of
18 contacts. Gerd Glang. We have a lot of contacts
19 down in that region, so I don't think it will be
20 a problem to put together even a draft list of
21 speakers and get that in time to the members to
22 weigh in on, so I don't see that as being an

1 issue, Dave. We've got lots and lots of stuff.

2 MEMBER MAUNE: Okay.

3 MEMBER RASSELLO: So, I have a
4 contract with the VTS Director. I think that
5 that is a good key person who should be present.
6 They control the channel, the traffic in the
7 Houston channel and Galveston all together from
8 Houston. About the pilots, I'm not sure if it's
9 appropriate to get them on board, because we may
10 have a good conflict with them.

11 CHAIR PERKINS: We're about 30 minutes
12 until Dr. Callender will call in and ask us for
13 our recap. So, that gives Lawson and Joyce a
14 short window of opportunity to try and - I know.
15 I'm afraid I may not be able to verbalize
16 succinctly where we are at.

17 RADM GLANG: So, if I could, Mr.
18 Chair, this is Gerd Glang again. You'll be able
19 to recap for Russell what the panel would like to
20 articulate in the Outcomes letter, and then I
21 think I heard from the panel also the desire to
22 take advantage of Admiral Brown's offer to be the

1 political advocate and; therefore, you had a
2 suggestion to communicate with the him in the
3 nearer term, so I think he would be interested in
4 that. Then also, maybe recap for him the outcome
5 of the Arctic Working Group. I thought there was
6 a tremendous amount of work that was done there,
7 and I think I heard from the panel some clear
8 ideas on what they wanted to communicate to NOAA
9 specific to the arctic. I'm just trying to recap
10 here on what I think will be useful for Russell
11 to hear. I would invite anyone else to add or
12 subtract.

13 MEMBER FIELDS: Scott, we did agree
14 that the arctic report was going to be an
15 addendum to the letter. Is that correct? This
16 is Evelyn Fields.

17 CHAIR PERKINS: Yes, we did say that
18 we would have the Arctic Working Group report
19 accompany the letter that goes forward.

20 MEMBER FIELDS: Okay, so that would be
21 another point in the letter not to regurgitate
22 all of it, but to say it's attached.

1 CHAIR PERKINS: Right. We'll
2 reference the Arctic Working Group report in the
3 letter and then attach it as the addendum.

4 MEMBER SHINGLEDECKER: Do we need to
5 further talk about working group activities and
6 the emerging issues, and who's doing what moving
7 forward?

8 MEMBER KUDRNA: We're going to send out
9 a time table for two weeks. We're going to ask
10 for topic nominations and then work that into a
11 listening and a time table. Well, I don't know
12 if it would be five, but we will reduce the
13 number over a time and pass that back to the
14 group as a whole for fine-tuning.

15 MEMBER SHINGLEDECKER: Was that for
16 the engagement document or for the engagement
17 document and additional issues to work on?

18 MEMBER KUDRNA: Well, I thought we'd
19 put it together, but maybe I, yeah, that's what I
20 thought.

21 RADM GLANG: So, this is Gerd Glang.
22 You're going to have to recapitulate that for me.

1 For the Coastal Intelligence and Resilience
2 Working Group, is that what you were talking
3 about, Frank?

4 MEMBER KUDRNA: No, for the engagement
5 topic, we were going to receive nominations for
6 topics that could be contained in an overall
7 report or individual one pagers, plain English
8 business, and we were going to use as some of
9 those nominees the Coastal Intelligence
10 suggestions so that they would all role toward
11 this potential engagement document.

12 RADM GLANG: Okay. Thanks, Frank. Go
13 ahead, Larry.

14 MEMBER ATKINSON: So, we'll do our own
15 call for the topics like mega-ships and non-
16 navigational use.

17 MEMBER KUDRNA: I'm sorry. I thought
18 mega-ships was a perfect one for the engagement
19 document.

20 RADM GLANG: Could be both.

21 MEMBER ATKINSON: It doesn't matter to
22 me. I think we should do it at once, not have

1 two things going.

2 MEMBER KUDRNA: I agree. My thought
3 was that your listing would flush into the topics
4 we're looking at for one pagers.

5 MEMBER SHINGLEDECKER: So, how about I
6 propose then that people send, within the next
7 two weeks, ideas to Frank. It might be an idea
8 for a succinct engagement piece, or if you think
9 it is an idea that warrants further exploration
10 and additional effort, then that idea might get
11 moved to more of a working group topic. Is that
12 what I'm hearing? I just don't think that
13 everything that was listed as an emerging topic
14 is necessarily going to fit under engagement.

15 MEMBER ATKINSON: Right. Correct.

16 MEMBER SHINGLEDECKER: I want to make
17 sure it doesn't get lost and forgotten.

18 MEMBER ATKINSON: I think we talked
19 about the CRCI Group becoming an umbrella that
20 will take on different topics. The ones that
21 are called engagement, maybe I don't know what
22 engagement is.

1 MEMBER KUDRNA: I guess I'm viewing
2 the ones we'll narrow down for engagement as in
3 effect the marketing pieces for needs. Now that
4 may not encompass everything that makes the list.
5 Now after we go through that process on the
6 engagement side, what's left over, some of those
7 may need added study, added refinement, maybe a
8 second phase later on, and I think your committee
9 could continue on those or some. I thought the
10 one that was sent over on cruise ships was
11 perfect for an engagement one.

12 CHAIR PERKINS: We're going to take a
13 break from deliberations until 3:10 p.m. During
14 that time, please review the information on the
15 screen, and provide your input to Joyce for any
16 wordsmithing. So, we will reconvene at 3:10 p.m.

17 (Whereupon, the above-entitled matter
18 went off the record at 3:02 p.m. and resumed at
19 3:17 p.m.)

20 CHAIR PERKINS: If you could put your
21 attention to the screen, please, we've got the
22 draft of the statement regarding the arctic

1 priorities and the working group.

2 RADM GLANG: Since we're back in
3 session, Joyce, we still need to use a
4 microphone.

5 MEMBER MILLER: Okay. After
6 priorities, we should put in working group, and
7 then the last sentence, we are going to add NOAA
8 Leadership must take immediate action to plan for
9 and execute the President's direction. Okay. On
10 the first line after Priorities, just put WG
11 Working Group.

12 MEMBER BRIGHAM: I think, could I
13 weigh in a little bit?

14 MEMBER MILLER: Does anybody else see
15 anything wrong until the last sentence? On the
16 last sentence we need a subject. The NOAA
17 Leadership must take immediate action to plan for
18 and execute the President's direction.

19 MR. ARMSTRONG: We could just say
20 NOAA?

21 MEMBER BRIGHAM: This is Lawson
22 Brigham. The idea was to remind the leadership

1 that we actually had a working group and,
2 amazingly enough, it's simultaneous at the same
3 time that the President spoke about the issue. I
4 think reminding everyone that the President did
5 go to Alaska. He spoke directly on this issue,
6 and just for entertainment, we added that rarely
7 since the time of Thomas Jefferson, that's to
8 take into account that Woodrow Wilson and a
9 couple of other presidents probably said
10 something about charts, but we're just bringing
11 it back to the roots of the organization, and say
12 the presidents don't speak about this issue as a
13 strategic requirement. Then finally, NOAA take
14 action on it all, plan and execute the
15 President's direction, I think is the right
16 wording.

17 MEMBER MILLER: Should we add that the
18 NOAA Working Group, or the working group's report
19 is attached as appendix blah?

20 MEMBER BRIGHAM: Maybe at the end of
21 the letter or something.

22 MEMBER MILLER: Okay.

1 MEMBER BRIGHAM: Or, Scott, you can
2 put that in there somewhere. I don't know.
3 Sure, we should.

4 MEMBER MILLER: Okay, could you put at
5 the end of it, so the working group's report is
6 attached as an Appendix or as Appendix A. Great,
7 thanks.

8 CHAIR PERKINS: So our takeaways for
9 Dr. Callender, first is the improved level of
10 access to NOAA Leadership throughout the meeting.
11 We feel our working groups were both effective
12 and worked well, and that's evidenced by the
13 report from the EAP that will be attached to the
14 recommendation letter, that we have agreed upon
15 the location of Houston and the timeframe of
16 early March for the next meeting of the HSRP,
17 that we're going to engage in communication with
18 Vice Admiral Brown in the near term regarding the
19 importance of the release of the fleet
20 recapitalization report from OMB, so that that
21 information can be communicated to the
22 appropriate staffers and other --

1 MEMBER MILLER: And about NOAA's plan
2 for this. Aren't we going to talk to Admiral
3 Brown about that as well?

4 CHAIR PERKINS: Yes, that's my next
5 bullet. Yes, and then we are going to talk with
6 Vice Admiral Brown about the importance of a
7 response to the President's remarks on the arctic
8 charting priority in establishing NOAA in a
9 leadership role as that goes forward. Our
10 recommendation letter is going to talk about the
11 NOAA fleet time allocation to arctic priorities,
12 the importance of maintaining the strong core
13 competencies within NOS. We don't want to lose
14 that expertise in the research and development of
15 new technologies that can improve the operational
16 efficiencies of the hydrographic survey effort.

17 Is it up there now? Is that what you
18 are asking? I'm reading that off of my
19 handwritten, you know, these are the talking
20 points for Dr. Callender when he calls in. So
21 they will end up in the document at some point,
22 as long as I don't lose this one magic sheet of

1 paper.

2 MEMBER BRIGHAM: Lawson Brigham again.

3 Just a quick nuance. We could role in what I
4 think Admiral Fields was talking about is the
5 relationship of what the President said and the
6 hydrographic ship replacement. I mean somewhere
7 we can put in a half a sentence or so, or a
8 phrase that says that this relates also.

9 Because, we don't have any capacity in a few
10 years without replacement. We're not going to be
11 surveying the arctic. It doesn't have to be for
12 Dr. Callender, but maybe we want to tie that in a
13 little bit.

14 MEMBER FIELDS: This is Evelyn Fields.

15 After the arctic portion introducing your report,
16 maybe you could add this on, not add onto, but
17 kind of roll it into the next paragraph that,
18 with the arctic requirements that are coming up,
19 or that were just discussed, we find it very
20 important to prioritize ship time and so forth.
21 It becomes even more crucial to prioritize ship
22 time. Because, it really does need to be tied

1 back into, I think, the artic requirements. It
2 doesn't have to be, but I think it's a great
3 segue.

4 CHAIR PERKINS: The other item I had
5 was that it was suggested to the HSRP that a 15-
6 year plan to complete the critical artic areas be
7 developed and considered. Anything else that we
8 want to make sure we cover in our report out to
9 Dr. Callender? Okay, I think those are the main
10 things.

11 He'll be calling in at any time now, I
12 believe. So, a year from now, after Houston, I
13 think we had two things potentially on the table;
14 Great Lakes or Northwestern U.S. So, that would
15 be the Indians versus the Mariners in baseball
16 terms. We could use and take some input on those
17 topics, on those locations. Or we could always
18 come back.

19 Yes, coming back here to the D.C. area
20 as we saw. Definitely, we had extreme access to
21 NOAA Leadership when we put the meeting location
22 here. Yes, that is a little of the candid

1 feedback I've received is we bounce all around
2 the country. Although, probably participation
3 down in Building 3 was outstanding.

4 Go ahead, Lawson. We are in session,
5 so let's make sure we use our mics.

6 MEMBER BRIGHAM: Lawson Brigham again.
7 If we think about another meeting in this town,
8 it would be useful to have half a day or a day
9 maybe with a body like the U.S. Coast Guard
10 Marine Safety Council or some other body,
11 National Academy or whatever. But some of these;
12 the Marine Board of the National Academy does all
13 kinds of studies. I know it takes away time from
14 our duties here, but there is some synergism in
15 this town that we should hear about. Maybe the
16 Coast Guard Marine Safety Committee I think it's
17 called. I don't know if it's a council. They
18 are the ones that maybe we could meet with,
19 although you could invite them over, but it would
20 be fun to go there and break bread. Just an
21 idea. If we are going to do something in this
22 town, there's lots of other bodies doing stuff in

1 this town, including other FACAs, but I don't
2 know if we can talk to the other FACAs.

3 CHAIR PERKINS: Well, let's do a quick
4 show of hands. Who would like to come back to
5 D.C. one year from now? Raise your hand, versus
6 Cleveland or Seattle? So D.C. first? Cleveland
7 or Seattle? Not both, we probably can't do both
8 Cleveland and Seattle.

9 MEMBER BRIGHAM: This was pretty
10 productive coming here.

11 RADM GLANG: This is Gerd Glang. So,
12 we don't have to decide this now, although
13 certainly for purpose of contracting and
14 planning, it would be wonderful. But we don't
15 have to decide this now. We have some time, and
16 for the purpose of the panel interacting with
17 NOAA Leadership, we do have a new avenue now. So
18 as your opportunities to meet with Vice Admiral
19 Brown come along in the next few months, then in
20 the next half year, we will get a sense for what
21 the level of engagement is and whether it's
22 worthwhile, whether there is an expectation that

1 we come back to DC in a year. We can sort of
2 gauge this as we go. We don't need to make a
3 firm decision now.

4 MEMBER MAUNE: Dave Maune. The reason
5 I did not vote for DC one year from now is
6 because that's right next to the election, and we
7 are about to have a new administration, and I
8 wonder if we shouldn't wait until we get the new
9 administration before we meet back here.

10 RADM GLANG: Well, that's a good
11 reason to get out of town.

12 CHAIR PERKINS: Frank, I hope that
13 gave you some good input for the planning
14 committee.

15 MEMBER KUDRNA: While we are waiting,
16 can we go back to the letter, and I think the two
17 write ups are extremely good, but the concern I
18 have is, remember a couple of meetings ago when
19 we wanted a clean, crisp page and a half
20 recommendation, and we had about 15 different
21 topics, and one of them is a two-pager. How are
22 we going to get to something clean and crisp as a

1 recommendation letter should? Some of these
2 other things will be really attachments or
3 something? I guess I'm asking the question so it
4 doesn't become another huge shopping list on the
5 recommendation and disproportionate with some
6 topics being pages and others being paragraphs.

7 MEMBER MILLER: I note that that one
8 is 22 point font, so it's not two pages.

9 CHAIR PERKINS: Yes, I think I can
10 parse it down. Part of what we had on the screen
11 previously I think make better talking points for
12 engagement with Vice Admiral Brown. So we have
13 content in there that is beneficial for me, so I
14 don't forget it. So I can share it with Vice
15 Chair Hanson, but I agree, not everything you saw
16 in that draft will end up in the final.

17 RADM GLANG: Scott, did you want to
18 try and make that available through Google Docs
19 so the other members could -- I recall we had
20 mixed results with that. I'm just asking.

21 MEMBER MILLER: Yes, I added Evelyn's
22 suggestion on the back of that, and I corrected

1 the mistakes. I can send that out. I can send
2 the Alaska one out to the panel right now if you
3 want.

4 MEMBER BRIGHAM: Maybe just change the
5 word Alaska to arctic.

6 MEMBER FIELDS: I don't know about you
7 all, but as long as I can send my comments, other
8 than Google Docs, I'll be okay. Google Docs and
9 I don't get along very well. I can usually pull
10 it up and look at it, but trying to give you my
11 comments in that is going to be questionable at
12 best. But I can send them email or whatever, and
13 they can be incorporated.

14 CHAIR PERKINS: That's fine.

15 MEMBER FIELDS: Just so you know.

16 CHAIR PERKINS: Yes, I can live with
17 that. I'll do it just for you. Well, you've
18 earned it, sir.

19 All right. Two exceptions. Yes,
20 Joyce, I think if you - It can't hurt to
21 distribute both of those now. Under the premise
22 of keeping the letter as clear and succinct and

1 focused, I would say that we address Precision
2 Nav. We got a response on Precision Nav. We put
3 our criteria forward in the last letter. Okay.
4 I'll try to put you on speaker here. Let's see
5 if this will work.

6 MEMBER FIELDS: I agree. Yes, I
7 agree, Scott that we should let it go. Yes.

8 CHAIR PERKINS: Dr. Callender, good
9 afternoon.

10 DR. CALLENDER: Hey, Scott.

11 CHAIR PERKINS: Great. Well, we've
12 been hard at work today. I just want you to know
13 that.

14 DR. CALLENDER: I totally believe it.
15 Actually, I've been on the phone line. I've
16 listened in for maybe 10 minutes, but I was
17 apparently on listen only mode, so I've been
18 texting madly trying to figure out how to break
19 the code here.

20 CHAIR PERKINS: Well, technology is
21 both our friend and our nemesis at times.

22 DR. CALLENDER: But, I'm on now, so

1 that's great.

2 CHAIR PERKINS: Great, thank you, sir.
3 We'll start with, we have identified Houston,
4 Texas, and the second week of March as our
5 targets for both location and calendar for the
6 next HSRP meeting.

7 DR. CALLENDER: Okay. I think that
8 makes sense and also kind of fits in with some of
9 the, if you will, the marketing we're trying to
10 do internally in NOAA. We've listed that as a
11 possibility for the Precision Navigation if we
12 can push that forward, so I think that's a great,
13 at least from my perspective, I think that's the
14 choice.

15 CHAIR PERKINS: We spent a good deal
16 of time this morning going through the
17 recommendations from the emerging arctic working
18 group. We've reached agreement on those
19 recommendations, so our intention is to have
20 those attached to the recommendation letter as an
21 addendum or an appendix, so we can share those
22 with you in short order.

1 DR. CALLENDER: Okay. You know,
2 actually I've heard a little bit of the
3 conversation on that a minute ago, and I think in
4 terms of the offer that you got from Vice Admiral
5 Brown for engagement, an addendum or an appendix,
6 whatever is good, that maybe just for a more
7 extended conversation.

8 CHAIR PERKINS: Yes, that's a great
9 segue, because the next item that we wanted to
10 report to you is that, in the short term, Vice
11 Chair Hanson and I will engage with Vice Admiral
12 Brown at the earliest opportunity, and the two
13 things that we wanted to bring to his attention
14 first or converse with him on, are our response
15 to the President's remarks regarding the need for
16 charting in the arctic, and then also we would
17 like to bring to his attention to the importance
18 that we feel of getting that fleet
19 recapitalization report released by OMB. The
20 input we have received from Jeremy from the
21 Senate Science, Commerce, and Justice
22 Appropriations Subcommittee, it really feels like

1 we are being hamstrung without that report being
2 available for the appropriators to put their eyes
3 on.

4 DR. CALLENDER: So, I think Vice
5 Admiral Brown would like to be invited to the
6 next meeting. Part of the challenges at our
7 side, from my understanding, it's stuck at OMB.
8 But if putting a little bit of pressure and
9 making it known that it's important to the
10 broader community, I think maybe you should make
11 use of that.

12 CHAIR PERKINS: Yes, our hope is that
13 that message can resonate upward and maybe it
14 reaches at some level near the Secretary of
15 Commerce, and that may be what it takes.

16 DR. CALLENDER: Okay. Okay.

17 CHAIR PERKINS: You know, we want to
18 focus the recommendation letter on, we want to
19 try to keep it as clear and succinct as we can
20 with two driving factors. The importance of the
21 NOAA Fleet. So our preliminary wording on that
22 is along the lines of the importance of the NOAA

1 Fleet time allocation in relationship to the
2 arctic priorities.

3 DR. CALLENDER: What is your emphasis
4 on, to continue to push in terms of the arctic and
5 enhance that in the fleet plan or what? I didn't
6 quite get all that you were trying to say.

7 CHAIR PERKINS: Actually, I think two
8 parts: more time allocation from the present
9 fleet capabilities toward the arctic mission.

10 DR. CALLENDER: Got it. Okay.

11 CHAIR PERKINS: Then, the importance
12 of the fleet replacement going forward.

13 DR. CALLENDER: Okay. Got it.

14 CHAIR PERKINS: You know, we are going
15 to couple in with that some wording about the
16 importance of maintaining the strong core
17 technical competencies within NOS, because
18 maintaining that and continuing the research and
19 development done at UNH and in our research
20 community, that's what's going to drive the
21 operational efficiencies that we need to address
22 the large task ahead of us with charting the

1 arctic, and the other national priorities with
2 charting.

3 DR. CALLENDER: Did you have
4 recommendations for specific core competencies
5 that you thought we should focus on in the
6 future?

7 CHAIR PERKINS: We didn't get that
8 deep into it. That's something though that I
9 think we can all think about and we'll take that
10 input.

11 DR. CALLENDER: Okay.

12 CHAIR PERKINS: In the letter, a
13 statement regarding working towards full
14 utilization of all available non-NOAA data that
15 can be contributed to the charting process in the
16 arctic. So that's the soft-spoken way of are we
17 getting full access to that Navy and NGA data
18 that we heard a little bit about this week.

19 DR. CALLENDER: Yes. Okay.

20 CHAIR PERKINS: Not sure whether we
21 want to say call out maybe an NGA by name, so
22 your guidance or input on that when you see a

1 draft of the letter, would be useful.

2 DR. CALLENDER: So, I would be a
3 little bit clearer that you're looking for some
4 of the authoritative federal data versus going
5 down the route of outsourcing kind of side,
6 unless that's what you really mean?

7 CHAIR PERKINS: No, you hit it on the
8 head. It's the authoritative federal data that
9 potentially is being collected, that isn't making
10 it into the chart process now.

11 DR. CALLENDER: I'd be clear about
12 that. That would be a good I think to push that
13 conversation.

14 CHAIR PERKINS: Yes, Lawson is
15 coaching me on the sidebar here, so.

16 DR. CALLENDER: Sure. That's okay.

17 CHAIR PERKINS: What we're looking for
18 are those coordinating bodies, the arctic
19 coordinating council, the CMTS council, looking
20 at making sure that we get that message to those
21 coordination bodies.

22 DR. CALLENDER: Okay.

1 CHAIR PERKINS: It was suggested, we
2 did get good public participation and input. One
3 of the suggestions that came to the HSRP from the
4 public was that, a 15-year plan be developed to
5 complete the critical arctic areas. We were
6 struggling with do we make a suggestion on how
7 many nautical miles should be completed each
8 season. Do we address it in terms of percentage
9 of area that should be charted? But the
10 suggestion from the public that a 15-year plan to
11 complete the critical arctic areas did seem to
12 capture that concept quite well.

13 DR. CALLENDER: So, the comment that,
14 maybe from Gerd if he is aware, we had some
15 language in either a House or Senate mark, I
16 thought, about an arctic mapping plan.

17 RADM GLANG: That's right, Russell.
18 You're correct. In the Senate, one or the other,
19 the Senate mark or the House mark, there was -

20 DR. CALLENDER: So maybe highlight
21 that for the panel and with that language to
22 come, so they are aware of what that request is,

1 so that we cannot do two different things, but we
2 can be congruent at least with the expectations
3 from the Hill.

4 CHAIR PERKINS: All right. Go ahead,
5 Lawson.

6 MEMBER BRIGHAM: It's Lawson Brigham.
7 I think it's estimated, just a rough estimate,
8 that it's 600,000 square nautical miles in the
9 United States Maritime Arctic, 600,000. There
10 might be a little bit more, a little bit less.

11 DR. CALLENDER: He's really breaking
12 up. Lawson, I can only hear about every other
13 word.

14 MEMBER BRIGHAM: It's 600,000.

15 CHAIR PERKINS: Lawson is saying that
16 it's estimated that there are 600,000 square
17 nautical miles in the U.S. Maritime Arctic.

18 RADM GLANG: According to my clever
19 table, it's 426,400 square nautical miles in the
20 U.S. EEZ and the arctic.

21 DR. CALLENDER: And we did roughly 800
22 square nautical miles this year with ourselves

1 and the contractors. Is that correct?

2 RADM GLANG: Correct, but not all of
3 the -

4 DR. CALLENDER: It's a long ways to
5 go.

6 RADM GLANG: Well, we don't have to
7 dive into this now. We don't need to survey all
8 of it to IHO Order One standard.

9 DR. CALLENDER: Right. Right. You
10 and I have talked about it, and it's to
11 absolutely survey the main channels that we'll
12 expect to be using. So, I mean I understand all
13 that.

14 MEMBER BRIGHAM: The issue is, do we
15 want to show numbers like point zero five percent
16 to give that to Senator Murkowski. We don't want
17 to do that, I don't think.

18 CHAIR PERKINS: Yes, so Lawson's point
19 is we don't want to give the Senator Murkowski,
20 for instance, a value like point zero five
21 percent, which is why I use the term less than
22 one percent of the U.S. arctic. I think the

1 number is actually point zero seven, based on our
2 calculations from last year.

3 DR. CALLENDER: So, it might be useful
4 for us to actually pitch a briefing to the
5 Senator and go and walk through to what the
6 reality is of what we actually believe we do need
7 a mapping of what those priorities look like. I
8 think that would probably be a good idea.

9 CHAIR PERKINS: That's a great idea,
10 Russell. We did brief her staff last year, and
11 showed them these numbers, but we can certainly
12 do that again and, maybe with you actually
13 speaking to the Senator?

14 DR. CALLENDER: Sure. I'm happy to go
15 south, or we can use your new political champion,
16 either way.

17 CHAIR PERKINS: That is the goal.
18 Sir, those are the items that we agreed that we
19 want to put in the letter, and those are the
20 short term things that we are going to engage
21 Vice Admiral Brown on.

22 DR. CALLENDER: Okay.

1 CHAIR PERKINS: The thing you missed
2 was a heartfelt send off for Dr. Jeffress for his
3 eight years of service on the HSRP.

4 DR. CALLENDER: Well, I am sorry I
5 missed that, and I absolutely appreciate all of
6 the service on the panel. That's pretty
7 remarkable. So, thank you.

8 CHAIR PERKINS: Gary says, you're
9 welcome. All right. I think that's everything
10 we wanted to share with you.

11 DR. CALLENDER: Okay. Well I
12 appreciate that. It sounds like you guys and
13 ladies have a pretty good panel. I certainly
14 appreciate it. I learned a lot from the time
15 that I was able to be there, and I frankly wish
16 I'd been able to stay, because it was madness
17 when I went back to the office. But, I hope you
18 know that you definitely have a supporter in me.

19 I'm willing to do what I can to
20 certainly help advocate for the panel itself, for
21 what you're doing, and absolutely for the NAV
22 offices in NOS. I think we've got a lot of

1 momentum in the NAV offices. I think the panel,
2 in my view, gained some momentum from a lot of
3 the attention you had from leadership and from
4 some of the partners that came in, both from the
5 federal and nonfederal side, and so I'm pretty
6 excited about where you are and where you're
7 going, and again, I want to just thank everybody
8 for all your time and effort on this.

9 CHAIR PERKINS: Well, likewise. We
10 certainly appreciate the access to NOAA
11 Leadership and being able to hear and benefit
12 from their guidance.

13 DR. CALLENDER: So, you know, I think
14 the big take home message is, let's not do this
15 by a series of letters. Let's continue on the
16 engagements and have an actual edgy conversation
17 as Admiral Brown said.

18 CHAIR PERKINS: Vice Chair Hanson and
19 I have heard that message loud and clear, and we
20 are going to take you up on that offer.

21 DR. CALLENDER: Cool.

22 CHAIR PERKINS: Very good.

1 DR. CALLENDER: All right. I'm happy
2 to help facilitate time.

3 CHAIR PERKINS: All right. I think,
4 based on that, and people's travel schedules,
5 we're to the point of adjournment for this
6 meeting of the HSRP.

7 DR. CALLENDER: Great, again I
8 appreciate everybody's time and hard work this
9 week. Thank you.

10 CHAIR PERKINS: You're welcome, sir.

11 DR. CALLENDER: Okay.

12 CHAIR PERKINS: All right. Hearing no
13 other business, we shall officially adjourn this
14 meeting of the Hydrographic Services Review
15 Panel. Thank you all and safe travels home.

16 (Whereupon, the above-entitled meeting
17 of the Hydrographic Services Review Panel was
18 adjourned at 3:49 p.m.)

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Hydrographic Services Panel

Before: NOAA

Date: 09-18-15

Place: Silver Spring, MD

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Court Reporter

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