

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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THURSDAY
MARCH 17, 2016

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The Hydrographic Services Review Panel met in the Sam Houston Ballroom, Tremont House Hotel, 2300 Ships Mechanic Row, Galveston, Texas, at 8:00 a.m., Scott Perkins, Chair, presiding.

MEMBERS PRESENT

SCOTT R. PERKINS, HSRP Chair
WILLIAM HANSON, HSRP Vice Chair
DR. LARRY ATKINSON
DR. LAWSON W. BRIGHAM
LINDSAY GEE
KIM HALL
EDWARD J. KELLY
DR. DAVID MAUNE
CAPTAIN ANNE MCINTYRE
JOYCE E. MILLER
CAPTAIN SALVATORE RASSELLO
EDWARD J. SAADE

SUSAN SHINGLEDECKER

GARY THOMPSON

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

**REAR ADMIRAL GERD F. GLANG, HSRP Designated
Federal Official**

GLENN BOLEDOVICH, NOAA/NOS

CAPTAIN RICK BRENNAN, NOAA

ASHLEY CHAPPELL, NOAA/OCS

GINA DAVENPORT, NOAA/NOS

CHRISTA JOHNSTON, NOAA/NOS

GARY MAGNUSON, NOAA/OCS

LAURA REAR MCLAUGHLIN, NOAA/CO-OPS

**RACHEL MEDLEY, NOAA Customer Affairs
Branch**

LYNNE MERSELDER-LEWIS, HSRP Coordinator

RUSS PROCTOR, Chief, Navigation Services

Division, NOAA/OCS

DR. NEIL WESTON, Acting Chief, Coast Survey

Development Lab

C-O-N-T-E-N-T-S

Overview and Discussion of Day Two	
Chair Scott Perkins	4
Rear Admiral Gerd F. Glang, HSRP DFO	7
Presentation - 2015 JALBTCX Workshop/IOCM Update	
Ashley Chappell	8
Chair, Vice Chair and Working Group Leadership	
Nominations44
Vote48
Discussion	
Planning and Engagement Working Group,	
Joyce Miller51
Emerging Arctic Priorities Working Group,	
Lawson Brigham64
Coastal Resilience and Hampton Roads	
Pilot Project, Larry Atkinson80
Megaships and Cruise Ships, Salvatore	
Rassello and Lawson Brigham	112
Public Comment Period	133
Discussion	
Working Groups and Other Topics	153
Discussion and Deliberations	
Framing of Meeting Outcomes, Assignment	
of Tasks, Other Topics	206
Review and Consensus of Meeting	
Outcomes	221
Closing Remarks	
Vice Chair Bill Hanson	228

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

2 (8:14 a.m.)

3 CHAIR PERKINS: Okay, good morning.

4 If we could be -- if you could take your seats,
5 let's try to get the show on the road.

6 Great. Thank you. We'd now like to
7 officially convene day three of the Spring 2016
8 meeting of the Hydrographic Services Review
9 Panel.

10 I'd like to just start with a couple
11 of remarks recapping some of the activities from
12 yesterday. We had an excellent Panel
13 presentation on regional vulnerability and
14 resilience of the Texas coast.

15 I want to extend our thanks to Dr.
16 Jeffress for putting that Panel together. You
17 know, we heard a lot about the planning and the
18 preparations that are being made for the 2022
19 datum change.

20 The Panel had a beautiful blend of
21 professional practitioners and academic
22 researchers. So, again, thank you Dr. Jeffress

1 for that.

2 We had the pleasure of having Dr.
3 Callender, the Deputy AA with us, you know,
4 yesterday as well. And appreciate his commitment
5 and participation to the Hydrographic Services
6 Review Panel.

7 We have some business activities that
8 we're going to need to take care of here today
9 before we conclude the meeting. Among those are
10 completing the nominations process for the
11 positions of Chair and Vice Chair.

12 We need to also identify a Chair and
13 a Co-Chair for the Technology Working Group. And
14 then we need to finish the action of
15 consolidation or discontinuing of the four
16 existing working groups.

17 Another item of business that we'll
18 need to make sure we take care of is the
19 discussion and selection of the location for the
20 next meeting. And the dates for the meetings.

21 And so, I'm going to give you fair
22 warning, look at your calendars, you know, try to

1 put a little thought into that. The end of
2 August, beginning of September is what we're
3 targeting.

4 So, the week based on the doodle poll
5 that went out membership August 29, September 3,
6 you know, was targeted. That is right before the
7 Labor Day holiday.

8 You know, so travel on that Friday,
9 September 4 could be busy. But, you know, look
10 at, you know, take another look at your calendars
11 and we do need to conclude that before we close
12 today.

13 We're going to make an addition to the
14 scheduled published agenda. You know that I've
15 asked Ashley Chappell if she'll give us a
16 briefing, you know, on the National Coastal
17 Mapping Strategy, how the SeaSketch tool has been
18 used effectively.

19 And if she could share with us a
20 little bit of insight about the 2015 JALBTCX
21 workshop and other IOCM activities. So, we're
22 going to put that in at the beginning of this

1 morning's schedule.

2 So, with that we have something that
3 we would like to do that also wasn't on the
4 agenda. And I'm going to turn it over to Joyce
5 Miller.

6 MEMBER MILLER: Admiral Glang, we've
7 totally enjoyed working with you. I highly
8 respect your -- excuse me, you aren't going to
9 hear much from me today.

10 You're vision of the future of the
11 Hydrographic Office, as well as your strong
12 leadership in giving the Hydrographic Services
13 Review Panel a clear mandate of how we should
14 function. And what our roles are.

15 I've personally found that extremely
16 positive. And I think it's helped the HSRP be a
17 lot more efficient if you will.

18 So, in light of that, we have a very
19 small token of our appreciation and respect. And
20 if our -- I hope everybody saw it.

21 But, since -- I found a way to shake
22 your hand, but I just washed this off.

1 (Laughter.)

2 RADM GLANG: Oh, thank you.

3 (Applause.)

4 CHAIR PERKINS: Thank you Joyce. And
5 congratulation's Admiral, on your upcoming
6 retirement. You will -- your service will be
7 missed.

8 Ashley, are you in a position where we
9 can? Great.

10 MS. CHAPPELL: Sure. Can I pull up a
11 couple of slides? I'll just talk.

12 Well, good morning everyone. I'm
13 Ashley Chappell, NOAA's Integrated Ocean and
14 Coastal Mapping Coordinator.

15 I sit in the office of Coast Survey
16 with Admiral Glang and everyone else there.
17 Sure. A little closer?

18 I know a lot of you, but there are
19 some new faces at the table. So, it's nice to
20 meet you for the first time. Welcome.

21 I was asked to update you on a few
22 things that we have going in the IOCM world in

1 our Integrated Ocean and Coastal Mapping world.
2 The first of which is the National Coastal
3 Mapping Strategy.

4 I briefed on this at our last meeting
5 I think. Or maybe the one prior in L.A., Long
6 Beach. I know I talked about it there.

7 We have had a National Coastal Mapping
8 Strategy in the works for some time, directly
9 resulting from our Ocean and Coastal Mapping
10 Integration Act. What is that? Oh, wow. A
11 tornado?

12 So, by law the Ocean and Coastal
13 Mapping Integration Act and by the National Ocean
14 Policy, we are mandated to do -- to develop a
15 national coasting mapping plan.

16 These are all of the agencies that are
17 involved in ocean and coastal mapping. Because
18 we're one team, a working group focused on
19 coordination, reducing duplication of effort.

20 Streamline, being efficient with
21 taxpayer dollars. All of those good things. So,
22 our National Coastal Mapping Strategy, when I

1 briefed it last time, had five pieces.

2 It had an aspirational sort of concept
3 discussion about potentially surveying, or
4 actually applying topo-bathy LIDAR for the entire
5 U.S. coast on an eight-year cycle.

6 It talked about how we would annually
7 meet to coordinate through an annual coastal
8 mapping summit. It talked about standards.

9 Quality levels for bathymetric LIDAR
10 that are akin to the ones that USGS has for
11 topographic LIDAR. Those sorts of quality
12 levels.

13 And a data management piece. Because
14 the whole sort of soup to nuts of handling data
15 is very important in order to get that data out
16 and available for use.

17 And then finally an R&D component.
18 And it builds upon what already exists, the good
19 work that already exists between NOAA, Army Corps
20 and USGS at the Joint Airborne LIDAR Technical
21 Bath -- the Bath -- Bathymetric Technical Center
22 of Expertise.

1 I was at a meeting yesterday and it
2 flowed off my tongue very easily. I was very
3 proud of myself. But today I got a little jammed
4 up. Sorry.

5 So, the work that NOAA, Army Corps,
6 and USGS as well as NAVO already are engaged in,
7 in terms of bathymetric LIDAR and elevation
8 became our focus for this first stage of the
9 strategy.

10 I am happy to report that it is now --
11 it's cleared OMB. Only because we actually had
12 to delete the aspirational piece that I just
13 mentioned. The eight-year concept.

14 But, there's still a lot of really
15 good things in it. The quality levels are there.
16 The annual mapping summit. That instigation for
17 coordination is there. And the other pieces.

18 So that will soon hit the street for
19 public comment. It will -- it's a great starting
20 point.

21 A great sort of framework upon which
22 we will then build in acoustic -- strategy for

1 acoustic coordination on multi-beam and other
2 types of mapping, other kinds of remote sensing,
3 the pieces that we didn't cover such as digital
4 imagery, hyper-spectral, and those sorts of
5 things.

6 So, it's all in an effort to just
7 become more coordinate. More -- to be smarter
8 about how we not only acquire data, which is sort
9 of the easy part.

10 You know, talking about acquisition,
11 coordination on acquisition is the easy piece.
12 But the more challenging pieces, is all the rest
13 of it that follows.

14 Linked to that is our SeaSketch site.
15 And this is something -- we can circulate the
16 link after I finish. But our SeaSketch site is
17 exciting.

18 This is what I actually wanted to pull
19 up Lynne, but you don't -- is there internet
20 access that we could pull it up? So just go to
21 SeaSketch.org while I'm talking.

22 And then in the projects, if you just

1 search on Federal, it should come up. Our
2 SeaSketch site is our online coordination site.
3 It's really been met with rave reviews and
4 interest in participation.

5 The exciting development that I think
6 happened after I spoke with you was that the 3D
7 Elevation Program used it for their topo LIDAR.
8 Their broad area announcement for grant funds,
9 matching funds for coordination.

10 So, it really has a national focus.
11 Not just coastal, but now national. And when it
12 comes up, you can see the breadth of it.

13 But, the SeaSketch site is intended to
14 put people who have areas where they need data
15 together with people who have plans for data and
16 somehow sort of -- not somehow, because it's
17 actually happening.

18 So, if you go to projects, the second
19 tab at the top. A live demonstration. This is
20 how you get there, SeaSketch.org. And then
21 search for projects. Just type in the word
22 Federal and that should get you there.

1 Hit return. Hit enter. Hit the
2 search button. There we go. Okay. So, this
3 tells you a little bit about our project. And if
4 you just X off in the top right corner, there we
5 go.

6 So, this collects mapping priorities,
7 needs, and requirements, as you see in the first
8 layer -- category there. The 3D Elevation
9 Program has its own folder where it puts in all
10 of its proposed areas and then they go through a
11 process of winnowing down to find matching
12 projects.

13 And then we have planned and ongoing
14 mapping projects. And maybe just turn on the --
15 just put a check in the topo-bathymetric LIDAR
16 box. No, that's fine. But the next one below
17 it. And the third one.

18 And then you could zoom in on the Gulf
19 area just by clicking on the map. And you can
20 just grab that map and drag it around.

21 But the power of this has already been
22 demonstrated. But I think there's a lot more

1 that can happen with it.

2 You know, this is showing -- what
3 you're seeing in that redline is actually the
4 Army Corps plans for its topo-bathymetric LIDAR
5 projects for five years around the U.S. Coast.

6 They know where they're going to be
7 for the next five years. And that kind of
8 information, even with agencies that only know a
9 year out or a year or two out, when you can see
10 where people plan to go and then where people
11 need data.

12 And you can start to sort of think
13 about how you could adjust. How you could
14 augment with additional funds. How you could
15 perhaps cover someone else's need.

16 It may overlap completely as we found
17 in Maine, with surveys in Maine. That we had
18 areas that we were doing, that NOAA was doing
19 that the State of Maine was also interested in.

20 And they ended up doing some surveys
21 in areas that we didn't go. And then we did
22 other areas that they were interested in.

1 So, a very quick demonstration of the
2 functionality and the utility of this SeaSketch
3 site. I was just at a meeting in Charleston
4 yesterday.

5 The southeast region sort of got
6 together on how to tap mapping. And they are
7 interested in using this to continue to
8 coordinate.

9 It's not just for Federal agencies.
10 It's for anyone, any entity that wants to
11 participate.

12 The Northeast region, which is
13 probably the furthest along for actually marine
14 planning coordination, they've written it into
15 their charter that they will be using the
16 SeaSketch site to coordinate mapping.

17 I think that's it. Our annual summit,
18 actually a note you have there, the 2015 JALBTCX
19 Workshop. We use the JALBTCX Workshop as our
20 sort of home base for our annual Coastal Mapping
21 Summit.

22 Last year in Oregon it went really

1 well. But, we learned that we need to take a
2 more regional focus. So, we're going to be
3 latching onto regional meetings that different
4 agencies are having to hold that same sort of
5 summit, but on a regional stage instead of just
6 one once a year.

7 RADM GLANG: Can you mention how many
8 participants you had?

9 MS. CHAPPELL: Oh, sure.

10 RADM GLANG: And sort of promote and
11 in person and what agencies.

12 MS. CHAPPELL: We had -- we were in
13 Oregon. We had about, I guess 100 people there.
14 And then we had 60 people on the phone joining by
15 webinar.

16 And we didn't think that all of the
17 JALBTCX participants would be that interested.
18 But actually, they were quite interested.

19 We had not just Federal agencies, you
20 know, the likely suspects, Army Corps, FEMA,
21 USGA. But we had lots of private sector
22 interests, academia is very interested. And the

1 states, the folks on the phone were mostly from
2 the states.

3 And they -- we had solicited areas of
4 interest before the meeting so that we had
5 something to discuss when we got to the meeting.
6 So, we were kind of bowled over by the level of
7 interest even with that first sort of step out.

8 RADM GLANG: Gerd Glang, Coast Survey.
9 So, this is a really important piece of
10 information that Ashley is sharing about the
11 success of that workshop and how SeaSketch works.

12 Because I'm going back to the first
13 day when we heard from -- the question raised
14 from a few Panel members about, I think it was in
15 our Panel discussion with -- when Chris Frabotta
16 from the Army Corps spoke about duplication and
17 how we coordinate.

18 And my sense was there's an
19 implication that NOAA needs to be doing more.
20 But, I would -- frankly I would suggest that
21 other agencies need to do more as well. And
22 their awareness needs to be raised.

1 And so one last bit of information is
2 that the Ocean and Coastal Mapping Integration
3 Act, which was passed in 2009, these things only
4 last for five years. Unless they're deliberately
5 removed of course, the Act continues to stand and
6 we continue to follow the Act.

7 So, the reports to Congress will
8 continue that Ashley mentioned. There are two,
9 one for the agency and one from the inner agency
10 that get sent to Congress. Every two years?

11 MS. CHAPPELL: Every two -- alternate
12 years.

13 RADM GLANG: Yes. So, I don't think
14 we've gotten any feedback on those from -- they
15 just sort of go into the black hole.

16 But, the point is, the Act is due to
17 be reauthorized. And if we think IOCM is
18 important, or if the Panel -- in the Panel's
19 views IOCM and this kind of behavior where you
20 see agencies getting their act together and
21 coordinating is important, it would be terrific
22 if the Panel could express that.

1 There is no champion that I'm aware of
2 right now for reauthorizing that legislation.

3 MS. CHAPPELL: That is true. But, the
4 same idea appears in the National Ocean Policy
5 and also in actually the National Strategy for
6 the Arctic Region. All mentioning the same
7 concepts of IOCM.

8 RADM GLANG: Right. So, and one of
9 the things we talked about Ashley, was getting
10 the Panel to think ahead. And how they might
11 advise the administration after a transition.

12 So, things like National Ocean Policy
13 and the National Strategy for the Arctic Region
14 are products of an administration. And they
15 could potentially go away after we transition to
16 a new administration.

17 The legislation is somewhat more
18 enduring. So, that's why I made that connection.

19 MS. CHAPPELL: Good point.

20 CHAIR PERKINS: Is there anything in
21 the Digital Coast Act that speaks to IOCM? Or is
22 there a legislative opportunity there to combine

1 the reauthorization of IOCM into the current
2 Digital Coast Act that's --

3 MS. CHAPPELL: I think that -- this is
4 Ashley Chappell. The Digital Coast Act
5 explicitly says, you know, that it is in
6 conjunction with all of the existing laws
7 including the Ocean and Coastal Mapping
8 Integration Act.

9 MEMBER GEE: Lindsay Gee. Just so if
10 you're coordinating now the ongoing mapping
11 activities, does this include then looking at the
12 data holdings from all the different agencies?
13 Or the previous survey, so you're not surveying
14 areas that are already being done?

15 Is that being addressed as well?

16 MS. CHAPPELL: Yes. If you -- who's
17 got the conn on the SeaSketch site? Can you
18 scroll all the way to the bottom?

19 Actually you can just see it there.
20 Right at the bottom line. This is not the place
21 you would go to do your due diligence. But, we
22 do have some resources.

1 If you can click on the arrow under
2 existing data just to open it up. That little
3 black. Okay. That turns everything on.

4 So that -- we do with our SeaSketch
5 site have sort of quick look at what exists. And
6 where there are data portals that we can, you
7 know, pull services in.

8 But again, we advise folks to be more
9 diligent about looking. Because you know, we
10 don't have every data source in here. But, this
11 is just a snapshot.

12 RADM GLANG: So, there's another piece
13 to this right? When SeaSketch is showing you
14 existing data, it's harvesting it from, for
15 instance, NCEI.

16 It's a place formerly known as NGDC,
17 the NOAA archive. Which is where all our
18 geophysical mapping data is being archived.

19 But, I did want to point out that
20 there was an Executive Order from 2013 that tells
21 Federal agencies that you have to essentially --
22 you're responsible for the stewardship of your

1 data when you've collected it with Federal money.
2 And that includes grant recipients.

3 So, grant recipients who go do
4 mapping, they're also required to share their
5 mapping data through the archive. And that's
6 poorly enforced at the moment.

7 VICE CHAIR HANSON: If I could,
8 Ashley. So, I can't think of anything, any
9 better news than this of things that we've been
10 working on in the last few years.

11 I know that Admiral Brown and Steve
12 Stockton have been meeting. You guys have aided
13 issues. You've been to a lot of things trying to
14 learn how to collaborate and reduce some of that
15 redundancy.

16 And it certainly is a much better
17 story to tell when you can walk into a new
18 Administrator's office, a member's office and
19 talk first about the things we're doing
20 proactively to be more efficient with the money
21 you're getting.

22 So, next question is, where does the

1 funding for this come from? And something as
2 elaborate as this and complicated as this, a
3 little bit of tongue and cheek, how much is this
4 effort costing?

5 MS. CHAPPELL: Well, we funded our
6 initial use of this through Sandy Supplemental
7 monies. It's actually very inexpensive. It's --
8 we're using -- SeaSketch was actually developed
9 by UC Santa Barbara.

10 And so, we just have an instance of
11 it. It's actually not -- it's all based on web
12 services. So, there's nothing, you know, no
13 hardware or no software really.

14 But, so really it's just the site
15 license. And then any development work that
16 we've put in where they've tweaked things
17 specifically for us.

18 I think the total has been about 60K.

19 VICE CHAIR HANSON: So, nothing to do
20 the right thing. Almost nothing to do the right
21 thing, so.

22 RADM GLANG: But there's more to it,

1 right? So the SeaSketch is a tool that allows
2 people to communicate and share information.

3 But, it's getting those people
4 actually aware of what we're doing. And building
5 the relationships and engaging.

6 That's where Ashley has been the
7 champion, her and her team. So, we pay for that
8 out of Coast Survey's base salary.

9 The IOCM -- the work the IOCM team has
10 been doing, and we showed you the Barnegat Bay
11 compilation work the other day, that was paid for
12 through Sandy Supplemental money.

13 That money goes away, we're going to
14 lose those people. So, there is no base funding
15 dedicated for IOCM. That comes straight out of
16 our mapping and charting base for the program.

17 VICE CHAIR HANSON: As part exists is
18 the overall mission. I think that's something we
19 can probably highlight in the future.

20 I guess the next step would be is to
21 have an example of where this collaboration has
22 actually resulted in cost savings. In a more

1 efficient, and more comprehensive surveys. And
2 maybe you already have a dozen of those in your
3 back pocket.

4 MS. CHAPPELL: I could talk about them
5 now. Or I could just write them up and send them
6 to you. But one example --

7 VICE CHAIR HANSON: How about your
8 favorite one?

9 MS. CHAPPELL: Okay. Well, the first
10 one was -- one of my favorites was during the
11 Sandy, you know, it wasn't the immediate
12 response. Because the Sandy Supplemental funds
13 that we received, of course, came after the
14 initial fast response effort.

15 But, that's actually why we developed
16 the SeaSketch site. Because we knew that
17 agencies, lots of agencies were going to get
18 Sandy Supplemental funds.

19 And we knew a lot of it was going to
20 go to mapping. And we did not want kind of a
21 repeat of situations where we have three agencies
22 who are acquiring data in the same area,

1 completely unaware of what each other is doing.

2 And so with Sandy, we all started at
3 the interagency end -- within NOAA, to say let's
4 approach this differently this time. And so the
5 SeaSketch site sort of -- we landed on it. It
6 was serendipity.

7 It just kind of all came together.
8 But, we found the SeaSketch tool. And it just
9 met our needs for what we wanted to do.

10 So, the first instance was NOAA put in
11 its planned areas for topo-bathy LIDAR
12 acquisition. And then USGS had a -- was doing
13 county by county acquisition.

14 And we realized that for topo LIDAR,
15 we realized that what USGS was collecting of
16 course in the Sandy area overlapped very much
17 with the strip that NOAA would collect at the
18 coast. And we thought that was a little too
19 redundant to just let it go.

20 And after some coordination, Mike
21 Aslaksen's group was able push their project
22 areas back far enough to collect what USGS needed

1 in certain areas. Which meant that USGS didn't
2 have to collect those.

3 And they put their resources to their
4 second tier planned efforts. The ones they
5 weren't going to fund, but now they had resources
6 to do it.

7 So they actually acquired more in
8 other areas. So, that was sort of our first big
9 win.

10 Some of the others, some have been
11 bigger, some have been smaller. But, what I like
12 about this tool is that what -- the really
13 exciting ones are the small groups like the
14 National Estuarine Research Reserves or other
15 smaller entities that kind of really don't have a
16 great sense of how to understand who's doing what
17 where.

18 And when you can put the limits of
19 their marine protected areas or their NERRs, you
20 know, up. And then show them who is doing what
21 nearby.

22 And all they have to do is call up,

1 you know, call up the Army Corps, Jennifer
2 Wozencraft at the Army Corps. And say, you know,
3 could you actually push the edge of your, you
4 know, westernmost lines further back to collect
5 more of my NERRs or my wildlife refuge.

6 And we've had several instances of
7 that. You know, where it really doesn't cost
8 that much to push it.

9 Or they can augment with additional
10 resources. Again, it doesn't cost that much
11 because the major project is already covered.

12 So, those are some of our successes.
13 I think we're working on some now with
14 Massachusetts, who is planning for potential wind
15 energy. That's been in the news.

16 But now they're looking at the
17 transmission cables that might come from these
18 wind energy sites as they approach land. And
19 there's a really nice sort of congruence there
20 with surveys that NOAA's already doing.

21 So, we're talking about some adjusting
22 for work that the TJ's doing in Buzzards Bay to

1 cover some of those needs. Or directing them --
2 directing the State of Massachusetts to other
3 agencies that can help them.

4 So, I'm working on that one right now.

5 CHAIR PERKINS: Great. It's really
6 exciting to see that SeaSketch has moved inland.
7 And that it's being used, you know, in the
8 interior of the U.S. as well.

9 You mentioned the 2016, you know,
10 coordination meeting. Will that happen in
11 conjunction with JALBTCX again? And has the date
12 been established for that?

13 MS. CHAPPELL: The -- oh, goodness.
14 The JALBTCX dates, I think, are July 19 to the 21
15 in Silver Spring this year. Everyone is welcome
16 of course.

17 Those are -- okay. I just want to
18 make sure because the JALBTCX dates flip flopped
19 a lot as well as some other things.

20 We are going to have a summit there.
21 But in addition, we are, as I said, we'll be
22 having regional summits. We're going to latch

1 onto existing meetings and not create our own.

2 But, you know, we're looking for
3 meetings that bring a lot of these mapping
4 interests together. Maybe for another purpose.
5 But, you know, they're there. And we can add an
6 afternoon.

7 Some might include the, you know, the
8 3D Elevation Program folks move around the nation
9 in a similar way as they talk about their BAA,
10 their Broad Area Announcement. There are lots of
11 regional planning body meetings.

12 IOOS Association, regional association
13 meetings. So, there's a lot that we can latch
14 onto.

15 MS. BLACKWELL: May I ask a follow-up
16 question? This is Juliana Blackwell.

17 Ashley, yesterday we were talking a
18 little bit about this coordination effort. And
19 in particular, FEMA. I know that you mentioned
20 them.

21 But, could you expand a little bit on
22 whether or not FEMA is engaged in this process

1 and these meetings that are occurring, such as
2 the annual coordination meeting? And also just
3 the IWG-OCM coordination body was one of the
4 groups that was mentioned in the TMAC, the
5 Technical Mapping Advisory Council annual report
6 from last year.

7 Again, it was a large report. But, it
8 was listed as one of those bodies. And FEMA was
9 basically a -- it was suggested to FEMA that they
10 continue to support that coordination group.

11 But, could you just say a few words
12 about FEMA's role?

13 MS. CHAPPELL: Sure. FEMA is one of
14 our more active IWG-OCM participants. They're
15 always there. Paul Rooney and some of his
16 colleagues when he can't be there, are always in
17 attendance.

18 FEMA typically collects topographic
19 LIDAR. And so in an ocean and coastal mapping
20 group, in some cases when we're talking about
21 topo bathymetric LIDAR, they don't feel like
22 they're always, you know, that much of a

1 participant.

2 However, I think that they will be
3 moving more, they will be growing more interest
4 in topo-bathy LIDAR because I think of course
5 that coastal near-shore interface is very
6 important. And it will be even more important to
7 FEMA as we go on.

8 I will say FEMA has been, after some
9 initial push back, the strongest proponent of
10 SeaSketch in our group. Because they had a
11 project tracker that was kind of built to do this
12 sort of thing some years ago.

13 But, it had grown obsolete. It wasn't
14 being maintained. And it was very clunky anyway.
15 And sort of the elegance of this one, they --
16 Paul Rooney immediately recognized it.

17 And he actually came up with the
18 schema that we use. We try to keep it very
19 simple. We have what we call metadata light.

20 You know, we don't -- the whole --
21 this whole framework is built on being easy.
22 Because people aren't going to share information

1 if it's burdensome. Because this is really data
2 about plans.

3 And FEMA came up with this sort of
4 framework of that. And has been the strongest
5 proponent.

6 And I've really appreciated Paul
7 Rooney's support as we talk to the Federal
8 Geospatial Data Committees, IT Development folks
9 who are developing -- redeveloping the
10 marketplace. Which is the place where all the
11 Federal agencies are supposed to put their plans
12 by law or by directive from OMB.

13 And it's kind of -- it was there with
14 Geospatial One Stop. And sort of fell off. But,
15 they're redeveloping it. And we've really been
16 pushing them to, if not take SeaSketch entirely,
17 take what SeaSketch does and have it there.

18 And FEMA's been right with me in
19 advocating for that. So, I really appreciate
20 that.

21 MEMBER GEE: Lindsay Gee. I guess the
22 question again related to that, the historical

1 data. And I guess some of the comments from
2 Susan about crowdsourcing and how we need more
3 data in areas.

4 Is this -- maybe it's more for Gerd,
5 I think, but the question is, is this like sort
6 of saying well, actually in a lot of places we
7 have data. We just -- it's not enough data is
8 getting to the chart.

9 So, how is that -- is that creating
10 problems for you? That, you know, this is
11 exposing a lot of data that okay, you've got to
12 get through.

13 RADM GLANG: Gerd Glang. I'm not sure
14 it's a problem, Lindsay. In fact what we're
15 looking at doing is building another component to
16 this that would be coupled with the crowdsource
17 bathymetry database effort that we've got going
18 on.

19 That would highlight areas where we
20 would invite the crowd. You know, perhaps
21 recreational boaters or somebody else to go and
22 collected data.

1 So, we're thinking of using this as a
2 way, this tool, to sort of show folks where we do
3 have gaps or uncertainties. Or lots of hazard
4 reports where they may want to provide data to
5 help us understand the gap in the chart.

6 So, we're thinking of that. And I'm
7 not sure, I know we've talked with Lisa about
8 building that tool. So, it will probably be
9 coming along. It's not the top priority for her.

10 Is that -- does that?

11 MEMBER GEE: No. I guess part of that
12 was that in places that people think there's no
13 data and the crowdsource. That there actually is
14 data that's just not on the chart is the issue.

15 And I think dealing with that is kind
16 of still an issue to have.

17 RADM GLANG: So, there's --

18 MEMBER GEE: There's -- we've had
19 discussions about the concentrations being well,
20 are the charts adequate? And it's like are they
21 -- what does that mean, really to modern
22 standards?

1 And that's kind of saying modern
2 standards for navigation where it's critical for
3 under keel clearance or critical for navigation.
4 Whereas, there's that whole other area now of
5 data that could be on the charts that's just not
6 there.

7 And it's in those areas that aren't
8 specifically.

9 RADM GLANG: Yes, so Lindsay, that's
10 probably a longer conversation about how we --
11 what kinds of data we put on our chart. And what
12 our policy will be going forward.

13 So, right now we view crowdsource
14 bathymetry as a data source to help inform us
15 about the adequacy of our charts. We're not
16 looking to put crowdsource bathymetry on our
17 charts right now.

18 That's a nut we don't want to crack
19 right now. So, but we are using it to help
20 crowdsource information like the Active Captain
21 Hazards Report to help inform where we need to
22 either focus attention or where our charts are

1 inadequate.

2 So, it's a little bit different. So,
3 I don't see that there's an issue right now.
4 But, we can talk more.

5 CHAIR PERKINS: Ashley, you mentioned
6 that the national mapping strategy report has
7 gone through the, you know, the review process at
8 OMB. And that the aspirations have been removed
9 or edited.

10 And that the report is coming out for
11 public comment. So, you know, as a Panel I don't
12 know whether our charter allows us to make a
13 collective comment, you know, on it.

14 But individually, we certainly can
15 make individual comments, you know, representing
16 our own individual interests. But, that eight-
17 year cycle of the topo bathymetric LIDAR of the
18 nation's coast, can you add a little color on
19 what is it that was objectionable?

20 And why has that been scrubbed from
21 the strategy? And that might help those of us
22 that are interested in making a public comment,

1 compose a more compelling rebuttal. If you're so
2 inclined.

3 MS. CHAPPELL: Well -- this is Ashley
4 Chappell. I mean, I think it's understandable
5 that OMB in representing the administration
6 doesn't want the public necessarily to make the
7 assumption that if there's a conceptual idea for
8 an eight-year topo-bathy LIDAR mapping cycle that
9 the government can then pay for it.

10 Because we can't. And we do try in
11 every meeting to say, you know, SeaSketch does
12 not represent the fact that the government's
13 going to come in and save the day and do all the
14 mapping that everyone needs.

15 You know, we try to make that clear.
16 We tried to make it clear in the plan. But, I
17 think ultimately they felt that it would be too
18 easy to have then thought that we could do it.

19 Even though, you know, the way that it
20 was presented, I felt was that it would take a
21 collaborative effort. It was something to aspire
22 to.

1 But, that's generally not how OMB
2 likes to frame things. So, they weren't opposed
3 to the idea. It was more that it was in print I
4 think.

5 CHAIR PERKINS: It seems like a great
6 strategic initiative to have in a national
7 mapping strategy.

8 MEMBER SAADE: Thanks Scott. And my
9 apologies for arriving late. Hi Ashley, nice to
10 see you.

11 As you know, you and I've talked a lot
12 about this over the years in terms of -- this is
13 Ed Saade. That we've talked a lot. It's really
14 nice to see that there's such a huge amount of
15 data moving back and forth.

16 I just wanted to comment on the aspect
17 of the FEMA work. That we got tied up with in
18 California, was the interest in calculating run-
19 up, remodeling run-up. Storm surge or tsunami
20 surge.

21 So, the offshore/near shore data was
22 important in that respect in terms of aiding the

1 models. But as Admiral Glang pointed out
2 yesterday, the data densities tend to be too
3 dense for what the models are like.

4 But, all that data is definitely of
5 interest to FEMA. Thanks.

6 MS. CHAPPELL: I think it is too. And
7 I think having Juliana on the TMAC, the Technical
8 Mapping Advisory Committee -- what? Council,
9 sorry.

10 I think that's very important too. I
11 think she's been a great advocate for that area.

12 CHAIR PERKINS: Very good. One other
13 comment. The topo-bathy LIDAR, you know, there
14 are inland customers and projects that are now
15 acquiring that data.

16 So, I would encourage you to reach out
17 to the Bureau of Reclamation and look at some of
18 those more interior agencies. You know, because
19 that data is now being collected in places, you
20 know, far from the coast.

21 So, there may be other stakeholders
22 there that you can bring into the mix and help

1 with that coordination effort. Because they do
2 seem to operate in an isolated fashion sometimes.

3 MS. CHAPPELL: I'm glad you mentioned
4 that Scott. Because, you know, while I won't say
5 we've got all the problems solved or every, you
6 know, every group connected in, one -- another
7 success story we have is that Ocean and Coastal
8 Mapping Interagency or Working Group, has paired
9 up really strongly I think with the 3D Elevation
10 Program Working Group.

11 Such even to the point where we now
12 have kind of an overarching umbrella initiative
13 called 3D Nation, named by Juliana. A 3D nation
14 elevation, you know, from the heights of our
15 mountains to the depths of our oceans.

16 A seamless elevation data set is the
17 goal of that. And that's become an FGDC
18 Subcommittee called 3D Nation. And it's chaired
19 by myself and the 3D Elevation Program Chair,
20 Diane Eldridge in an effort to really bring
21 together the IWG-OCM and the 3D Elevation
22 Program.

1 And the Bureau of Land Reclamation is
2 part of that. The National Soil Conservation
3 Service is part of that. And so, I think that's
4 been also really strong.

5 And that's what brought them to use
6 this as a national mapping coordination site. Is
7 to put it all together.

8 CHAIR PERKINS: Great. That's very
9 encouraging to hear that those folks are involved
10 with the 3D Nation initiative.

11 So, you know, for a non-scheduled item
12 on our agenda, I think you've made a very nice
13 contribution to the HSRP meeting. And I
14 appreciate you doing it on extremely short
15 notice.

16 (Applause.)

17 MS. CHAPPELL: Thank you very much.

18 CHAIR PERKINS: Is the Panel ready to
19 discuss nominations? Or would you like to think
20 about that a little longer and push that back on
21 the agenda?

22 All right. We'll give you a little

1 more time so you can do your back -- your back
2 office arm wrestling.

3 MEMBER HALL: Are you looking for
4 nominations? Chair, should we just start making
5 nominations? And I think most of us are actually
6 ready to do it, right?

7 CHAIR PERKINS: Yes. Absolutely we
8 are.

9 MEMBER HALL: I'd -- we would like to
10 -- I guess I would like to nominate Bill Hanson
11 to be the next Chair of the HSRP.

12 MEMBER MAUNE: Second it.

13 CHAIR PERKINS: Okay. So, let the
14 record show we've got a nomination for Mr. Hanson
15 as the Chair and a second. Do we have
16 nominations for Vice Chair?

17 MEMBER MAUNE: I would like to
18 nominate -- this is Dave Maune. I would like to
19 nominate Joyce Miller as Vice Chair.

20 MEMBER KELLY: Second.

21 CHAIR PERKINS: Okay. Let the minutes
22 show that we had a nomination of Joyce Miller for

1 Vice Chair and a second. Do we have any other
2 nominations?

3 MEMBER HALL: I'd like to nominate Ed
4 Saade to be the Technology Working Group Chair.

5 CHAIR PERKINS: And do we have a
6 second?

7 MEMBER KELLY: Second.

8 CHAIR PERKINS: Thank you. Let the
9 record show we had a nomination of Mr. Saade for
10 the Chair of the Technology Working Group, and a
11 second.

12 We need a Co-Chair for that working
13 group as well. Do we have a nomination for Co-
14 Chair?

15 MEMBER MILLER: I nominate potentially
16 Carol Lockhart.

17 (Laughter.)

18 MEMBER KELLY: And I second that.

19 CHAIR PERKINS: All right. Let the
20 minutes show that we had a nomination of Carol
21 Lockhart for the Co-Chair of the Technology
22 Working Group, and a second.

1 Okay. Thank you Lynne. We understand
2 that Carol is not able to be in attendance this
3 morning. But, she has indicated that she would
4 not accept that nomination.

5 Do we have a new nomination for Co-
6 Chair?

7 MEMBER BRIGHAM: Yes. I nominate
8 Lindsay for Co-Chair. If he's so inclined.

9 MEMBER GEE: If I was a member.

10 MEMBER BRIGHAM: Well, okay.

11 CHAIR PERKINS: I think that's a small
12 procedural detail that we can overcome. So,
13 we'll take a pending nomination for Lindsay Gee
14 as the Co-Chair of the Technology Working Group.
15 Subject to his final oath of office and full on
16 boarding.

17 Do we have a second of that?

18 MEMBER MILLER: I second.

19 CHAIR PERKINS: Okay, great. So, let
20 the record show that we have Lindsay Gee
21 nominated as the Co-Chair of the Technology
22 Working Group, with a second.

1 MEMBER SAADE: So that question came
2 up of whether Larry Mayer could be nominated in
3 that position?

4 CHAIR PERKINS: A non-voting member,
5 I think, actually could be seated in that
6 capacity.

7 MEMBER BRIGHAM: Just from the
8 experience of the Arctic, we just had Andy be a
9 member of the group. Plus Andy, it's a different
10 situation between Andy and Larry.

11 CHAIR PERKINS: Yes, I mean, the
12 working groups are assigned to, you know, a task.
13 And they serve for a finite period of time until
14 that task is completed.

15 They don't engage in deliberation.
16 They engage in activity and recommendation. So,
17 I don't think there's any problem at all with
18 having our non-voting members, you know, serve in
19 either the Chair or Co-Chair capacity of a
20 working group.

21 Yes, Joyce?

22 MEMBER SAADE: I'm going to withdraw

1 that nomination.

2 MEMBER MILLER: Okay. I was going to
3 say that Larry, in my five years on the Panel,
4 has only been able to attend one meeting because
5 he's so busy.

6 CHAIR PERKINS: I would encourage you
7 to reach out to him for input and contribution as
8 his time permits. Do we have any other
9 nominations?

10 Okay. I would make a motion then that
11 we do a vote on the slate in its entirety in one
12 singular vote for the efficiency and simplicity.
13 So, is there a second to doing a single vote for
14 all of the candidates that have been nominated?

15 MEMBER MAUNE: I second.

16 CHAIR PERKINS: Okay. Can I have --

17 MEMBER MILLER: A procedural question.
18 Should any of us that have been nominated not
19 vote then? I don't know if -- I don't know the--

20 CHAIR PERKINS: I don't think it's
21 necessary for anyone to abstain. You know,
22 anyone -- and that's a good point. You are

1 welcome to self-nominate as well.

2 You know, so if you have an interest,
3 you know, this would be the time to self-
4 nominate, you know, as well it's not necessary
5 that you have, you know.

6 So, with that, one more time, is there
7 anyone that would be interested in self-
8 nomination for any of the positions that we've
9 discussed on the slate?

10 (No audible response.)

11 CHAIR PERKINS: Okay. Can we have a
12 show of hands of those in favor of electing or
13 appointing the Chairs and Vice Chair and working
14 group leadership as presented? All in favor?

15 (Voting.)

16 CHAIR PERKINS: Great. And any
17 opposed?

18 (Voting.)

19 CHAIR PERKINS: All right. Let the
20 record show, we have unanimously elected new
21 leadership to HSRP that will go into effect at
22 the conclusion of this meeting.

1 So, thank you very much. You guys did
2 that in a very efficient manner.

3 (Applause.)

4 VICE CHAIR HANSON: Scott, did we --
5 is there any need to codify the past Chairman's
6 position? Or we're just going to have you
7 available to us as we need you?

8 CHAIR PERKINS: Yes, I think that
9 because of the Charter, you know, we will have to
10 have the title of Past Chair as an informal, you
11 know, position. Until such time that we can
12 revisit the Charter and then consider
13 establishing that in a more permanent manner.

14 VICE CHAIR HANSON: Well, I appreciate
15 your leadership on this. And your willingness to
16 think -- be forward thinking to make this
17 transition, instead of having it just be dumped
18 on the next Panel.

19 So, thank you, Scott.

20 CHAIR PERKINS: All right. You're
21 welcome. Does anyone need a short break before
22 we get into continuing our work on the working

1 groups and the issue papers?

2 (No audible response.)

3 CHAIR PERKINS: Okay. Great. So, we
4 have our agendas in front of us. I think we'll -
5 - are we going to start with taking one more look
6 at the fleet recap? That's the first order.

7 MEMBER MILLER: We made some
8 significant changes. Well, the intent is clearly
9 still there. The sort of bulk of it.

10 But, we have tried to incorporate
11 suggestions made during yesterday's. Lynne?
12 Lynne, I just sent you -- did you see the revised
13 copy?

14 And I passed this out last night to
15 the people that had agreed to work with us. And
16 I got comments back from Andy and Kim.

17 So, to distinguish what our draft was
18 last night, with the changes I had made, anything
19 that's new that Andy or Ann added, I have
20 indicated in red. Just so you understand what's
21 there.

22 I'm sorry. That was Kim. Kim made

1 the suggestions. Yes. So, Kim and Andy came up
2 with a -- what's it called? The BLUF? Bottom
3 line up front.

4 And so that's probably the most
5 important part. Would somebody else like to
6 speak? Because I'm not much in voice here.

7 MEMBER HALL: I can go over at least
8 the bottom line up front. Because I think Andy
9 and I were on the same page.

10 One of the key pieces I added in
11 there, and the big question is, and it was kind
12 of buried in the back in the current activities,
13 was there's 80 million dollars up for grabs.

14 So, we think, or recommend, or
15 whatever terminology we use as a Panel, that that
16 appropriated funding go toward the hydrographic
17 services -- survey vessel.

18 And so I just wanted to put that right
19 up front so that when the Administrator sees
20 this, she knows exactly what we're recommending.

21 MEMBER MAUNE: Okay. I'm not sure,
22 you're wanting to go over just the items in red?

1 MEMBER MILLER: No. It's -- okay,
2 take --

3 MEMBER HALL: Should I read it?

4 MEMBER MILLER: Yes. Let's go to the
5 next two paragraphs. Because those are the ones
6 that we significantly shortened.

7 Yes, it's tough with -- okay, so start
8 with the next paragraph, the ships. Yes.

9 MEMBER HALL: I just had one quick
10 question. I didn't see in the first paragraph,
11 just a point of editing. We do in that next
12 paragraph say the fleet also play.

13 But, I don't think we've ever
14 mentioned in the top paragraph anything about the
15 fleet in the first place. We do say that Office
16 of Coast Survey provide hydrographic information.

17 And I don't know if it needs from
18 surveys conducted by these ships. Or something
19 to that effect. So, if you go up to the first
20 paragraph, there's no mention I think there,
21 unless it's changed significantly.

22 So, just -- because then the also as

1 you get to that paragraph we were just looking at
2 doesn't make sense.

3 So it says the hydrographic
4 information that is provided by survey was
5 conducted by the vessels that we're pointing to,
6 is my question Joyce.

7 MEMBER MAUNE: Are you talking about
8 the second paragraph there?

9 MEMBER HALL: So, here we would need
10 to add something about what the fleet does to
11 give you that hydrographic information. Because
12 as you get to the next paragraph, it says the
13 ships and launches of NOAA's hydrographic fleet
14 also play vital roles.

15 Either that or we get rid of also.

16 MEMBER MILLER: Oh, it says the Office
17 of Coast Survey, not the fleet.

18 MEMBER HALL: Right. So, that's --
19 you're making the mention of the connection that
20 the fleet is what helps provide this. I know
21 there's other things, there's contract vessels.
22 There's other types of sensors and things that

1 provide us that information.

2 But, key to the fleet if we're making

3 --

4 MEMBER MILLER: So, we could put in
5 there the Office of Coast Survey's fleet provides
6 hydrographic --

7 MEMBER ARMSTRONG: Or maybe NOAA
8 hydrographic fleet or something like that.

9 MEMBER MILLER: Right.

10 MEMBER HALL: Yes. Just connect it.

11 MEMBER MILLER: All right. So, let's
12 change Office -- Lynne, can you make changes?
13 Okay. Actually, let's take out Office of Coast
14 Survey.

15 And I did put in there as mandated by
16 Federal Statutes. Because that is often a driver
17 of how the money gets advocate -- or gets
18 allocated.

19 And so at the end I added references
20 there actually directly from the Office of Coast
21 Survey web page. Andy?

22 MEMBER ARMSTRONG: Just an

1 interruption. Were we going to get to the sort
2 of the urgent letter issue following this?

3 MEMBER MILLER: Yes, I think we
4 should. Yes.

5 MEMBER ARMSTRONG: Okay. Thanks.

6 MEMBER MILLER: Go ahead Kim.

7 MEMBER HALL: Yes, next paragraph,
8 Lynne, if you can get down. Or do you --

9 MEMBER MILLER: I think the caption is
10 okay. What I did was, there was some redundant
11 information in the caption. And so I pretty much
12 just left it in the caption and took it out
13 elsewhere.

14 So, the next one.

15 MEMBER HALL: Okay. Would you like me
16 to read that out loud? Or is that -- Joyce, I
17 just want to make sure you want me to read that
18 out loud?

19 MEMBER MILLER: Yes, go ahead.

20 MEMBER HALL: Okay. The ships and
21 launches of NOAA's hydrographic fleet also play
22 vital roles in research and maintenance of

1 expertise. Private government partnerships are
2 used to develop new and innovative survey
3 equipment and techniques, which are evaluated and
4 placed in service on these vessels.

5 Almost 50 percent of NOAA junior
6 officers are trained in hydrography and sonar
7 technologies aboard the hydrographic ships and
8 launches, as well as qualified as officers of the
9 deck.

10 NOAA contracts with commercial vendors
11 for approximately half of its hydrographic
12 surveys. Although contracting for a portion of
13 surveys is an important element of OCS's
14 portfolio, NOAA must also maintain in-house
15 survey capability and expertise to effectively
16 manage hydrographic surveys and ensure navigation
17 safety.

18 In offshore or remote areas such as
19 the Arctic, Alaska, and the Pacific, it is
20 impossible to perform critical surveys without
21 dedicated ships.

22 MEMBER MILLER: Okay. And then this

1 next one, I'm hoping that OCS can help us. Even
2 if it's only just the figures and we'll make a
3 plot that shows survey years since multi-beam was
4 installed on these ships.

5 Andy?

6 MEMBER ARMSTRONG: I think I may have
7 access to a figure that may be over a shorter but
8 more recent time span. I'm not sure we'll be
9 able to right away, put together the full
10 history.

11 So, we --

12 MEMBER MILLER: Yes.

13 MEMBER ARMSTRONG: I think we can come
14 up quickly with something in the last few years
15 that shows the loss of time.

16 MEMBER MILLER: But it would be --
17 since we're talking specifically about the
18 Fairweather and the Rainier, it would be good if
19 we could just -- if we could show those ships and
20 what's happened. Not the entire fleet or
21 something.

22 MEMBER ARMSTRONG: Right. It would be

1 just for those ships.

2 MEMBER MILLER: Okay.

3 MEMBER ARMSTRONG: But maybe a shorter
4 period then their 55-year life.

5 MEMBER MILLER: Yes. Okay. All
6 right, go ahead down to challenges. There.

7 Now, these are mostly the same as we
8 had the other -- yesterday.

9 MEMBER HALL: My only question for the
10 first one is, do we need to be using, and I know
11 we're just -- we're a Panel, so I don't know if
12 we need to be using the acquisition terminology.

13 But, I don't think it's operational
14 life span. I think it's operational service
15 life. Or those kind of things. And Lawson, you
16 can correct me if I'm wrong.

17 But, I just don't know if we want to
18 use the government's terminology there or just
19 our own.

20 MEMBER MILLER: Well, operating past
21 their operational life span is not good just from
22 an editing. Does anybody have any --

1 MEMBER ARMSTRONG: Service life
2 sounds good, yes.

3 MEMBER MILLER: Other service life.
4 Okay, so Lynne, change original design life to
5 service life. Nope, not there.

6 And take out -- I don't know, is
7 original correct there? Original service life?

8 MEMBER HALL: I don't think you need
9 original.

10 MEMBER MILLER: Okay.

11 MEMBER HALL: But we saw the life span
12 up top. So, I just -- I don't know if we're
13 repeating ourselves here.

14 MEMBER MILLER: And the new one is the
15 fourth bullet. We talked about this yesterday.

16 I do want to check on that one. That
17 10 thousand square nautical miles is correct in
18 terms of backlog.

19 CHAIR PERKINS: That is the number
20 that was provided to me within the last ten days
21 from Captain Berkowitz.

22 MS. MERSFELDER-LEWIS: We will make

1 sure all the facts get checked. And we will also
2 do some editing. And so, I'll make up some
3 things -- you know, something come out --

4 MEMBER MILLER: Okay.

5 MEMBER ARMSTRONG: Yes. I think we
6 have some fact issues with that one.

7 MEMBER MILLER: Yes. That one
8 definitely needs to be checked. You can star it
9 or something and make sure that you.

10 Okay. Current activities is pretty
11 much, I think, exactly the same as what we looked
12 at yesterday. We could -- oh, except for the
13 last sentence, which I requested that Andy check
14 for political correctness.

15 And he changed it to -- the sentence
16 in red. NOAA should use the available funds for
17 replacement of Rainier and Fairweather.

18 MEMBER HALL: And I think it's good to
19 reiterate that. So, we've got it in our bottom
20 line up front. But, reiterate it at the end is
21 always a great thing.

22 MEMBER ARMSTRONG: No, I agree.

1 MEMBER MILLER: And then Federal
2 actions recommended. Those are largely the same.
3 With one change from Andy. Continue to
4 coordinate with other Federal agencies.

5 And then the last two partners we
6 have, on a third page, because the paging is kind
7 of wonky here. Go ahead down to the last bits.

8 Those are the references of -- to the
9 Acts that are quoted on the Coast Survey page.
10 There are additional Environmental Acts and so
11 forth, but I thought we should just use the ones
12 that directly affect it.

13 More suggestions or comments?

14 MEMBER MAUNE: I think this is looking
15 good.

16 CHAIR PERKINS: Okay. I'll make a
17 motion that we adopt the issue paper as presented
18 in its present state. Subject to the edits and
19 the validation of the numerical statistics
20 within.

21 MEMBER MILLER: And possibly getting
22 that figure in there if we can.

1 VICE CHAIR HANSON: I keep harping on
2 the partners because that's the kind of questions
3 you get asked. Who cares about this besides us?

4 If we could just go down to look at
5 the partners list. So, we've got -- these are
6 all people who are -- other than the State of
7 Alaska, these are service providers I would say.

8 Folks that will still have a job
9 regardless if this happens or not. The State of
10 Alaska is in there as a -- as somebody with skin
11 in the game.

12 I would actually propose in this case
13 maybe eliminating the partners. Unless we can
14 come up with a list of commercial folks with skin
15 in the game or maybe even state folks.

16 Or folks who -- when we do this type
17 of advocacy, you have to have people who have the
18 passion that their jobs are going to be
19 eliminated. Their businesses are -- they're
20 going to go out of business.

21 Their lives are going to be impacted.
22 And just having mostly other Federal agencies up

1 there is not that helpful, I don't think.

2 And I'll yield on this. But, I keep
3 harping on it because in terms of making the
4 pitch, you have to have others outside the choir
5 who really care about this.

6 MEMBER MILLER: Go ahead Lawson.

7 MEMBER BRIGHAM: Lawson Brigham. I
8 mean, yes, I mean, partners, I mean, what you're
9 talking about is all the whole range of
10 stakeholders and users.

11 And we either change the topic or
12 eliminate it. I mean, you can change it to be
13 broader and include -- in the Arctic one, I was
14 more expansive.

15 I added some Red Dog Mine and
16 commercial operators, fishing vessels, et cetera,
17 who are not necessarily direct partners, but
18 their stakeholders or actors in the process.

19 MEMBER MILLER: I mean, we could list
20 all -- we could list the ports too. I mean, they
21 are --

22 VICE CHAIR HANSON: I mean, obviously

1 this is big. I mean, this is the reason NOS
2 exists, right?

3 And so, the conversation we've been
4 having for several years is, you know, who cares
5 if NOS is around? Who cares about the charts?
6 Whose business is it?

7 It's a big group. And that's maybe
8 why I'm saying it's -- rather than list a partial
9 list that really doesn't give NOS due credit,
10 maybe just eliminate that part of it this time.

11 CHAIR PERKINS: This is Chairman
12 Perkins. I just did an informal query of two of
13 the commercial stakeholders that are in
14 attendance today.

15 And David Evans and Associates and
16 Fugro are both willing to, you know, to go onto
17 the bottom of the document as commercial
18 partners. I know there are other stakeholders,
19 you know, in the hydrographic survey business
20 that could be.

21 You know, we perhaps can grow that
22 list too beyond Fugro and David Evans.

1 MEMBER HALL: Couldn't that list then
2 take up a whole page? So, can you just -- if you
3 started to get very particular and very specific,
4 you've kind of missed the mark as well.

5 Because obviously, the cruise industry
6 would be interested. So, -- to some extent,
7 because we're all around Alaska especially.

8 So, I just -- I just want to caution
9 that we start listing every possible. I
10 understand what Bill's saying as well.

11 There's kind of -- there's got to be
12 a balance here. So, I don't know if we just add
13 in there commercial entities, including survey
14 companies and the users of the waterways. I'm
15 sure rep boaters care.

16 And that kind of thing. So, we can
17 include that it's more than just the government
18 entities to get it a little bit more expansive.
19 But maybe not get specific to companies willing
20 to sign.

21 And one thing perhaps we can do is, on
22 our own, I've done this before as CLIA. Send

1 letters in support of something like this as well
2 from our own organizations to NOAA.

3 MEMBER MAUNE: This is Dave Maune.
4 And I guess, really the entire maritime industry?
5 And keep it short like that?

6 MEMBER KELLY: Yes, anybody that's
7 operating commercially, recreationally,
8 industrially. Anybody that's using the waterways
9 relies on these surveys and the ability of NOAA
10 to continue having the assets to do them
11 productively and efficiently.

12 So, I'd just be afraid of turning this
13 issue paper into a laundry list of trying to list
14 all those port authorities and, you know, et
15 cetera, et cetera.

16 VICE CHAIR HANSON: Well, if I can.
17 So, what really caught my eye was State of
18 Alaska. Okay, so you walk into another member's
19 office, and well, where's the other 49 states?

20 Where's all the other coastal states?
21 Why is Alaska listed as that.

22 MEMBER KELLY: I don't think you have

1 to limit it to Alaska.

2 VICE CHAIR HANSON: Oh.

3 MEMBER KELLY: I would say state and
4 -- state, local, municipal users. Because, you
5 know, all the states use it. Great Lakes, Gulf,
6 I mean, all over the place.

7 VICE CHAIR HANSON: Right. Exactly.

8 MEMBER ARMSTRONG: Yes, so at least in
9 my senses, we're making a distinction between
10 stakeholders and partners. And we shouldn't
11 probably include anybody on this list that's not
12 -- doesn't know their name is on it and hasn't
13 signed up for it.

14 So, I guess I'm inclined to agree with
15 Bill that for this issue paper, maybe the
16 partners section is -- can be left off.

17 You know, unless we want to have
18 another kind of full page of stakeholders that,
19 you know, we've staffed a little bit that it
20 would include cruise ship operators, the states,
21 the Corps of Engineers, USGS.

22 So, I agree, it is kind of an awkward

1 bit hanging on the end. But, on the other hand,
2 I think we -- you've also advocated for showing
3 that we're working with others sharing the
4 sandbox.

5 So, I'd be okay if we dropped it off
6 of this one.

7 MEMBER MILLER: And I agree. I would
8 say given the sensitivities and also given the
9 critical time frame that -- and we might make a
10 revision of this later.

11 But, lest we offend anybody for not
12 being on the list or being on the list, just
13 remove that from it. That's fine with me.

14 Any other people?

15 MEMBER McINTYRE: I would agree. Anne
16 McIntyre. That this is more of an ask then it is
17 a proposal for a project moving forward or
18 something that needs to be worked on.

19 It's not something that it's really be
20 partnered with. I would just remove it.

21 CHAIR PERKINS: Okay. I'll modify the
22 motion that we approve the issue paper with the

1 removal of the partners as presented. Subject to
2 clarification of the statistical data and the
3 interior of it that Andy has noted.

4 Do we have a second?

5 MEMBER MILLER: Second.

6 CHAIR PERKINS: Okay. We have a
7 second from Miller. All in favor?

8 (Voting.)

9 CHAIR PERKINS: Great. Let the
10 minutes show that we've approved the issue paper.
11 Thank you.

12 (Applause.)

13 MEMBER ARMSTRONG: So Joyce, did you
14 want to present -- did you want to present --

15 MEMBER MILLER: Why don't you, Andy.
16 My voice is not here.

17 MEMBER ARMSTRONG: Okay. In the
18 context of offering it for the Panel's
19 consideration, as a non-voting member of. Do we
20 have that draft letter Lynne?

21 So yesterday we talked about a
22 separate letter from the Panel to the

1 Administrator on the specific issue of this
2 year's money for fleet replacement in
3 anticipation that the issue paper might be a
4 little more involved and could take a little bit
5 longer to get out with other issue papers and so
6 on.

7 So, I took the liberty of drafting for
8 the Panel's consideration a short letter. This
9 is the text of the letter here.

10 And perhaps it might be modified in
11 the same way that Kim added the extra sentence to
12 the first paragraph of the other. So, I'll let
13 you just look at that.

14 This is intended to be a letter with
15 one specific topic. Please use this year's money
16 for a hydrographic ship rather than whatever else
17 you might have had in mind.

18 What was the second sentence in? Yes.
19 All the way up at the very top.

20 MEMBER MILLER: No, the second
21 sentence.

22 MEMBER ARMSTRONG: The second

1 sentence. So, I'm not suggesting you -- yes,
2 just -- I'm suggesting that we take the second
3 sentence of the first -- yes, delete that.

4 And I would delete the FY '16 funds.
5 I think -- I guess I'm sort of moderating. So,
6 Lawson?

7 MEMBER BRIGHAM: Anyway I just -- this
8 is Lawson Brigham. This is my issue with this.

9 We don't know the pressing needs of
10 the other dimensions. It might be that the
11 Nation needs a fish boat number one. And we're
12 saying in that sentence that we actually know all
13 of this.

14 And that the most pressing need -- I
15 mean, maybe I believe that. But, I can't put it
16 in context of the other things.

17 So, I think that's a pretty strong
18 statement that I don't know as if we're qualified
19 to make. This is a statement of HSRP believes
20 the most pressing NOAA fleet replacement need.

21 When you say NOAA fleet replacement,
22 are you meaning the entire battle fleet? And I

1 just wonder whether we could massage that. Or
2 maybe it isn't an issue to anyone else. But,
3 that's --

4 MEMBER MILLER: Actually, if you know
5 the history of what's been built, Fisheries has
6 five new survey vessels all under, I think, five
7 years old approximately.

8 And I believe one of their other
9 vessels was due to be removed. Or, you know, due
10 to be taken out of service.

11 So, I've worked in Fisheries for quite
12 a while. And they, you know, they almost always
13 win the arguments by quoting the Magnuson-Stevens
14 Act as, you know, their mandate and so forth.

15 So, I think I can say I'm pretty
16 certain that the most pressing need is a
17 hydrographic survey ship.

18 MEMBER BRIGHAM: Okay. And it just
19 would have been nice to have the fleet, all the
20 dates of the fleet, the whole fleet on a picture.
21 And then we could make that judgement.

22 But, it's a little late. But, I agree

1 that we probably know enough about it.

2 MEMBER ARMSTRONG: So, I offer this in
3 the strongest possible context for the Panel to
4 consider. And I certainly think Lawson makes a
5 good point.

6 But, my thought was if the -- that the
7 Panel would perhaps feel this way, you know,
8 regardless of, you know, whatever else is going
9 on in NOAA.

10 MEMBER HALL: Yes, let the Fisheries
11 fight for their boats. And we'll fight for the
12 hydrographic ones.

13 MEMBER SHINGLEDECKER: This is Susan
14 Shingledecker. I would just say I -- in the
15 pressing time need to get it out, I certainly
16 understand that. And that has to be first and
17 foremost.

18 If there is a way to have a quick
19 chart with the data of the age of ships, if that
20 clearly tells the picture and makes the case, I'd
21 say you might be able to get it in an hour or so.
22 And it might make a stronger point if you can get

1 the data included.

2 MEMBER BRIGHAM: Yes, Lawson Brigham.

3 I mean, I'm aware of the whole fleet. And I
4 think the hydrographic ships are the oldest
5 fleets in the United States fleet, except for a
6 couple of Coast Guard cutters.

7 So, I think they are the oldest ships
8 beyond the service life of any other ships in the
9 American fleet.

10 CHAIR PERKINS: Since I've been on
11 this Panel, we've had presentations on the fleet
12 capitalization, you know, planned. We've had
13 presentations from OMAO.

14 So, I don't think we're over-
15 stretching our statement. I appreciate your
16 input and your perspective Lawson.

17 You know, time is of the essence. You
18 know, delaying it to bring more statistical
19 support, and I don't think you know, it is going
20 to make our -- you know, we're saying, do this
21 now.

22 I think we're well founded in doing

1 so. And I'm comfortable, you know, with it going
2 forward with that statement in it.

3 MEMBER BRIGHAM: Yes, Lawson Brigham.
4 Just a quick note. And putting the Arctic
5 capable adds another dimension to it.

6 I mean it adds to the whole issue of
7 the Arctic and its -- and surveying it.

8 CHAIR PERKINS: Yes. I think the
9 additions of being Arctic capable and multiple
10 launch carrying, are both necessary and
11 beneficial additions. Admiral Glang?

12 RADM GLANG: Mr. Chair, just a point
13 of information. Gerd Glang, Coast Survey. In
14 fact the oldest fleet in the -- or the oldest
15 ship in the NOAA fleet is the Oregon II, which is
16 a Fisheries vessel.

17 Just for the record.

18 CHAIR PERKINS: Okay.

19 RADM GLANG: But the Rainier and
20 Fairweather would be the next oldest. By a year.
21 '67 versus '68.

22 CHAIR PERKINS: Yes. If you take out

1 the time in dry dock, maybe we could come up with
2 a different number, right? That's good to know
3 though.

4 MEMBER ARMSTRONG: Okay. So, could
5 you scroll a little bit. Pick up the last. So,
6 are there any other -- any other comments on this
7 text?

8 MEMBER MILLER: I think the text is
9 fine. My question is for the Panel. Do we want
10 to go with this as a standalone letter? Or is
11 this part of our letter?

12 CHAIR PERKINS: No, I think we'd be
13 better served to do it as a standalone letter
14 like -- you know, co-signatures by the Chair and
15 the Co-Chair.

16 One thought, getting everyone -- I
17 don't know if everyone has a digital signature
18 that it can provide. Putting it up forward with
19 15 signatures from the voting members of the
20 Panel is something I think that might have a
21 little more impact.

22 I'm looking at the end of the table

1 for the Admiral for advice there.

2 RADM GLANG: Thank you, Mr. Chair.

3 So, I think that's a great idea. It might be in
4 practice a little bit hard to orchestrate.

5 Certainly your signature as the Chair
6 of the Panel would be very effective as well.
7 Unless we brought letterhead. Lynne, did we
8 bring any letterhead?

9 MS. MERSFELDER-LEWIS: No, we didn't.

10 RADM GLANG: Do we have it digitally?
11 Could we be creative here? I didn't hear you.

12 MS. MERSFELDER-LEWIS: Everybody's not
13 installed as yet.

14 RADM GLANG: That's all right. They
15 could sign as member designee. We would put
16 member designee in their signature block. Yes,
17 we could do that.

18 Why don't we -- so why don't we see
19 what we can do. I'll press Lynne and see what
20 she can create for us here by the end of the
21 meeting.

22 MEMBER HALL: I think given the strong

1 language in the letter, I think it helps to
2 reiterate how strongly I think that this Panel
3 feels.

4 So, I think to have all of us sign is
5 a great idea.

6 CHAIR PERKINS: Any other comments
7 before we call for a motion?

8 MS. MERSFELDER-LEWIS: I would like to
9 suggest a few more edits. I would like one or
10 two people get together and edit it. And that
11 should be it.

12 CHAIR PERKINS: All right. Do we have
13 a motion to accept the letter as prepared,
14 subject to edits for grammar and the addition of
15 bulk signatures?

16 MEMBER MILLER: I so move.

17 MEMBER BRIGHAM: Second.

18 CHAIR PERKINS: Okay. We've got a
19 motion and a second. All in favor?

20 (Voting.)

21 CHAIR PERKINS: Great. Let the
22 minutes show that we have adopted the letter. The

1 intent is to have this distributed within 72
2 hours.

3 Next item on the agenda. Working
4 Group Report on Coastal Intelligence.

5 MEMBER MILLER: Yes, it's going to
6 take a while to get his up.

7 CHAIR PERKINS: All right. We'll take
8 a ten minute recess. Thank you.

9 (Whereupon, the above-entitled matter
10 went off the record at 9:33 a.m. and resumed at
11 9:52 a.m.)

12 CHAIR PERKINS: All right. If we can
13 have the panelists back in their seats, we'll try
14 to reconvene.

15 Dr. Atkinson, are you ready to go?

16 MEMBER ATKINSON: I'm ready if Lynne's
17 ready.

18 Oh, I guess we're going to watch a
19 video here. Cool.

20 (Whereupon, a video recording was
21 played.)

22 MEMBER ATKINSON: Okay. So anyway, if

1 you all can agree that that general
2 recommendation, those bold-faced things are
3 acceptable, "many coastal regions are becoming
4 susceptible to increased flooding" -- well,
5 that's a no-brainer. "To accomplish this NOAA is
6 encouraged to facilitate federal coordination and
7 the Hampton Roads pilot project provides a model
8 for these activities." From there on down it
9 really hasn't changed. I'm just trying to
10 scrunch everything into two pages.

11 So if you're okay with those and
12 you'll accept that we're going to work, re-work
13 -- it's just a description of the Hampton Roads
14 pilot stuff, and I'm just trying to scrunch it
15 down. And so it both describes the pilot and
16 kind of is -- applies to other coastal urban
17 areas. So if that makes sense and it's
18 acceptable, if you'll approve that, then I can --

19 CHAIR PERKINS: I hate to engage in
20 actual wordsmithing, but --

21 MEMBER ATKINSON: A little bit is
22 okay.

1 CHAIR PERKINS: -- I'm going to ask,
2 "becoming more susceptible to," can we --

3 MEMBER ATKINSON: Sure.

4 CHAIR PERKINS: -- change that to
5 "experiencing?"

6 MEMBER ATKINSON: Yes. Yes.

7 CHAIR PERKINS: Can we say "many
8 coastal regions are experiencing increased
9 flooding?"

10 MEMBER ATKINSON: Yes. Yes, sure.

11 CHAIR PERKINS: I won't wordsmith
12 anymore.

13 MEMBER ATKINSON: That's okay. Just
14 trying to --

15 MEMBER HALL: The second -- now it
16 completely looks like the first sentence in the
17 issue paragraph.

18 MEMBER ATKINSON: Yes, I know. Let
19 me --

20 MEMBER HALL: Yes, that's why she's
21 trying to find a different way to say it up
22 there.

1 MEMBER ATKINSON: Yes. Can you
2 highlight that in the second one -- paragraph,
3 and I'll work on it? I just started rearranging
4 things, so there's some -- yes. But, no, if you
5 see stuff. Thanks. I'll fix that. There's
6 other things that need fixing down below. I can
7 do that in the next day. And I don't know how we
8 want to filter stuff through the group. I'm
9 trying to get that figure of all the defense
10 facilities up front and not take up the whole
11 page. I think I'll get redraft of it that's
12 better quality.

13 If you just scan down a little bit,
14 Lynne. Keep going. Yes, that figure is going to
15 be bigger and it shows all the federal -- the
16 facilities. Need to get the NOAA facilities in
17 there, too. They're not even there.

18 How do you want to proceed, Dave?

19 MEMBER MAUNE: How did your
20 introductory sentence read? Did you change that
21 any?

22 MEMBER ATKINSON: No, they were

1 looking at it.

2 MEMBER MAUNE: Because Kim volunteered
3 and I challenged her to come up with a zinger of
4 an opening sentence for --

5 MEMBER ATKINSON: Well, that general
6 recommendation was meant to be -- to get your
7 approval.

8 MEMBER MAUNE: I have a feeling she
9 would.

10 MEMBER HALL: I don't have an issue.
11 I think this is exactly what we needed to do.
12 But I understand that Dave is challenging me
13 to --

14 (Laughter.)

15 MEMBER MAUNE: Well, I'm challenging
16 everybody. And Ed Kelly came forward this
17 morning and he had rewrote his, and I liked it.
18 And so, just the idea of doing it. I mean, once
19 you read Ed's first sentence, you're going to
20 read the rest of the paper. And that's what I
21 really liked about what Ed gave me this morning.
22 So I thought it was constructive that you

1 suggested that yesterday and that we're trying to
2 get people's attention up front.

3 MEMBER ATKINSON: Well, I could reduce
4 that all down to one sentence.

5 MEMBER SHINGLEDECKER: This is Susan.
6 I think it's a great start at making it. I mean,
7 I would -- I don't like wordsmithing in a group
8 either. I'd take out "general recommendation"
9 just because that's a soft start.

10 MEMBER ATKINSON: Okay. Yes.

11 MEMBER SHINGLEDECKER: I'd bring the
12 NOAA part up to the beginning --

13 MEMBER ATKINSON: Okay.

14 MEMBER SHINGLEDECKER: -- and just say
15 that we are looking for NOAA to continue to
16 provide leadership in this area --

17 MEMBER ATKINSON: Okay.

18 MEMBER SHINGLEDECKER: -- building on
19 the Hampton Roads pilot project.

20 MEMBER ATKINSON: Yes, got it.

21 MEMBER SHINGLEDECKER: Something like
22 that that's just really --

1 MEMBER ATKINSON: Yes. Yes. Got it.

2 MEMBER SHINGLEDECKER: -- this is what
3 we want.

4 MEMBER ATKINSON: Got that, Gary?

5 MEMBER MAUNE: Okay. Well, we can see
6 what you come up with.

7 MEMBER ATKINSON: I'll redo while
8 we're doing other stuff and I'll pop it back up.

9 MEMBER MAUNE: And we can also see
10 what Kim comes up with.

11 MEMBER ATKINSON: Okay.

12 MEMBER MAUNE: Kim, both of you are
13 going to see what you come up with to open this
14 paper.

15 MEMBER HALL: Great.

16 MEMBER ATKINSON: Wait. Who's doing
17 it? You or me? I'll do it.

18 MEMBER MAUNE: Both of you. Well, I
19 want to see what both of you recommend --

20 MEMBER ATKINSON: Okay.

21 MEMBER MAUNE: -- and see if --

22 MEMBER HALL: Team effort.

1 MEMBER ATKINSON: Face off.

2 MEMBER MAUNE: -- you say what might
3 be the best --

4 MEMBER ATKINSON: Okay.

5 MEMBER MAUNE: -- that way we get two
6 ideas.

7 MEMBER ATKINSON: Okay.

8 MEMBER MAUNE: I think sometimes it
9 helps to have somebody not involved with the
10 paper --

11 MEMBER ATKINSON: Yes, no kidding.

12 MEMBER MAUNE: -- read it and see what
13 grasps my attention or what doesn't grasp my
14 attention and --

15 MEMBER HALL: I will say it's always
16 easier to edit than it is to do the first --

17 (Simultaneous speaking.)

18 MEMBER MAUNE: -- it's helpful --

19 MEMBER ATKINSON: Oh, yes.

20 MEMBER MAUNE: -- for an outsider to
21 take a look at it.

22 MEMBER ATKINSON: Lynne could send --

1 can you send Kim -- you want that? Just send Kim
2 that copy.

3 Are we done? For now. We're going to
4 bring it back up in an hour or so.

5 MEMBER MAUNE: Okay. Thank you,
6 Larry. Any other comment on this paper?

7 (No audible response.)

8 MEMBER MAUNE: I had one other
9 comment. Yesterday we were scheduled to have
10 Anne McIntyre and Gary Thompson. We really only
11 talked about Gary Thompson's part of it. Anne is
12 going to be working with Rich Edwing offline here
13 to address that issue and not have an issue paper
14 on the subject that Anne originally proposed.

15 MEMBER McINTYRE: Yes, I think that's
16 correct. After we did the megaship presentation
17 I was going to talk a little bit about some
18 slides in the video and then maybe just --

19 MEMBER MAUNE: Okay.

20 MEMBER McINTYRE: -- speak a little
21 bit about the PORTS system.

22 MEMBER MAUNE: All right. Thank you.

1 Okay. What's next on the agenda then?

2 CHAIR PERKINS: Megaships.

3 MEMBER BRIGHAM: Yes, Lawson Brigham.

4 Just a word about the Arctic Issue Paper. It's
5 back in the hands of Dave, and I think Lynne has
6 it and maybe Scott. And I'm presuming, Dave,
7 you'll send it out to everyone.

8 I incorporated a fair number of the
9 comments of -- and I tweaked the numbers in the
10 technical issues, got a number from the admiral
11 and his staff on 4.7 percent of U.S. maritime
12 Arctic is charted to modern international
13 standards. So I tweaked it all. I think it's
14 ready to go. So I don't know what the process is
15 for consensus on it. I mean, there's been
16 consensus on almost all of the topics in the
17 Arctic and the report. And I don't know, there
18 was reasonable consensus yesterday, but not a
19 vote. So we're okay I think on the Arctic paper,
20 but pass it around. I wouldn't look for too much
21 redo, but --

22 MEMBER MAUNE: I can send it out to

1 everybody, or Lynne can send them out to
2 everybody for comment, if there's any final -- if
3 it takes approval from everybody or give
4 everybody the opportunity to comment on the final
5 version of it. Would that make sense?

6 CHAIR PERKINS: Yes, that makes sense.

7 MEMBER BRIGHAM: It's not
8 significantly different than it was. I mean,
9 you'll see in red -- I left everything in red. I
10 changed the name of it to Mapping the U.S.
11 Maritime Arctic and then I tweaked from the
12 comments. But I tweaked. I didn't rewrite whole
13 sections.

14 CHAIRMAN MAUNE: Okay. Then we'll see
15 if Kim has any comments on that.

16 (Laughter.)

17 MEMBER MAUNE: Did he you adequately
18 grasp your attention to make you want to read the
19 rest of it?

20 MEMBER BRIGHAM: Well, I actually
21 tweaked in a couple of comments from Kim --

22 MEMBER MAUNE: Okay.

1 MEMBER BRIGHAM: -- at different
2 places.

3 MEMBER MAUNE: Okay.

4 MEMBER BRIGHAM: So anyway, now to
5 this issue which is not necessarily an issue
6 paper. It's an issue -- it's related to the
7 challenges of the larger ships of the planet
8 operating in America's ports. That's the issue.
9 It came about because at the last HSRP meeting we
10 did have a few slides from Captain Rassello who
11 gave us a few slides of that and showed the size
12 of the ships. But then in December we had this
13 largest ship ever to come to American port,
14 larger than America's aircraft carriers, a huge
15 ship, the Ben Franklin, with the curious name of
16 Ben Franklin, which is one of the largest
17 container -- ultra-container ships on the planet.

18 Sal mentioned this morning that his
19 cruise ship is about 100,000 tons, I think, and
20 this ship is 178,000 tons, 1,310 feet long, 177-
21 foot beam, and carries 18,000 containers. Well,
22 it came to -- and the height of the ship from the

1 water level to the top of the ship is 197 feet
2 and it barely cleared the Gold Gate Bridge. The
3 ship came to LA/Long Beach and also to Oakland in
4 December. Got a lot of press.

5 I had a few friends talk -- call me
6 who know I'm on HSRP and wondered what we're
7 doing about it. And I said, well, not a lot yet,
8 but I'll get it on the agenda. And so we did
9 pass some information to Chair, Vice-Chair and to
10 Admiral Glang.

11 And then in February, just to add some
12 spice to this topic, two ultra-large container
13 ships grounded in Europe. One in the River Elbe
14 blocking Hamburg for six days. It's a -- the
15 Indian Ocean. It's a China Shipping Company Hong
16 Kong flag ship. It grounded at high tide. And
17 this ship is only 150,000 tons. Carries 14,000
18 containers, 50-foot draft. They put six tugs on
19 it. Didn't move. They put 12 tugs on it and
20 didn't move. They had to dredge around the ship
21 and also lighter off bunker fuel to get it
22 moving. And it was deeply imbedded in the soft

1 mud of the River Elbe.

2 And then on the 14th of February
3 another ultra-large container ship, the Vanda,
4 grounded off of -- in the English Channel, but
5 off of Southampton, in what I always find
6 tremendously interesting terminology, a
7 controlled grounding. Lost power, low steerage
8 and they grounded with little damage. But again,
9 50-foot draft and lost power. And it just
10 highlighted the issues of these megaships. And
11 we include in this terminology, I think, the
12 largest cruise ships that -- some of which Sal
13 operates.

14 So what we had in mind was that
15 Captain Rassello will -- maybe since we have
16 these slides -- Anne, I don't know if you want to
17 just use the slides and just tell us a little bit
18 about -- give us some background.

19 MEMBER McINTYRE: Right. Yes, we can
20 just go through these slides very quickly. I had
21 contacted some of my colleagues at the San
22 Francisco Pilots and told them that I was new to

1 the HSRP and was -- there was going to be a topic
2 on megaships. And I had just asked them if you
3 had any materials that you have been using in
4 your presentations, would you mind just
5 forwarding them along so that we could have a
6 look.

7 And so there's just four slides here
8 that demonstrate the size of the ships. And they
9 really are --

10 MR. EDWING: If I could just --

11 MEMBER McINTYRE: Yes.

12 MR. EDWING: Rich Edwing. If I could
13 just interrupt. I see there is a clearance
14 needed of 197 feet. I'm looking at our air gap
15 on the Oakland Bay Bridge, which shows 199.8 feet
16 available right now, so if it really hurries, it
17 can make it.

18 MEMBER McINTYRE: Exactly. And then
19 in speaking to that, that speaks to the
20 importance of the PORTS systems and the sensors,
21 which is what I will get back to. But that's
22 exactly right. Those air gap gauges are super

1 important, again because I would say like the
2 traditional information that's available to us as
3 pilots, you know, where they say the vertical
4 clearance is blah, but then you -- if you have
5 traffic on the bridge, if it's an exceedingly hot
6 day. For instance, the Golden Gate Bridge, the
7 clearance on the Golden Gate Bridge can change up
8 to two meters just basis traffic loads and heat.
9 So real time information is critical in
10 addressing the safety concerns of navigating
11 these large ships.

12 And it's not different in my port
13 where the ships are smaller, but the clearances
14 are smaller. So the issues are still the same.
15 There's just an added complexity in the handling
16 of the ships due to the size and the mass.

17 So we can go to the next slide. So
18 just another one enforcing the height of this.
19 There's the Empire State Building and there's the
20 ship. And, yes, they're really, really big.

21 And next slide. Just again some
22 comparisons there. Look at the car. It's like

1 the blip of the engine on the Malaysia flight.
2 You can barely, barely see it. And that also
3 just gives you an idea of what the capacity and
4 how much cargo these ships can carry.

5 And then next slide. Just one more
6 example. They're just -- they're biggest thing
7 on earth. They're huge.

8 And so, I have these slides. And then
9 I just have a couple short videos. We can watch
10 the first one and you can see if you then want to
11 watch the next ones. These were put together by
12 Captain Dave McCoy, who was the San Francisco bar
13 pilot in charge of the project for the passage
14 planning for bringing this ship into the Oakland
15 Harbor the first time. So the time is speeded up
16 and there's some funny music associated with it,
17 but it's pretty impressive when you see the view
18 from the bridge of the ship.

19 (Whereupon, a video recording was
20 played.)

21 MEMBER McINTYRE: And if you want to
22 see one more, there's one where they actually

1 turn the ship in Oakland Inner Harbor that's
2 pretty impressive.

3 MEMBER BRIGHAM: When they went under
4 the Golden Gate Bridge, they were smart to design
5 the ship so you could retract some of the
6 antenna. So they really had to get the height of
7 the ship down.

8 MEMBER McINTYRE: Okay. It would be
9 the next one. There's one more link. I think it
10 says "Turning Away."

11 (Whereupon, a video recording was
12 played.)

13 MEMBER McINTYRE: So this is inbound
14 into Oakland Inner Harbor. Actually this is
15 Oakland Outer Harbor.

16 MEMBER BRIGHAM: It's so easy. Why do
17 we pay you people so much money?

18 (Laughter.)

19 MEMBER McINTYRE: Well, yes, that
20 wasn't the one I wanted you to pull up actually.
21 There's one where it's turned. In San Francisco
22 when they started bringing in these large ships,

1 they actually established kind of a second
2 position within the pilots that are boarding so
3 they have a primary pilot assigned to the vessel.
4 They also have what they call an ePilot.

5 And I think those that have been on
6 the panel for a while, when you were doing the
7 Precision Navigation stuff down in Long Beach,
8 you were seeing the equipment that the Long Beach
9 pilots were using. And so they're using the same
10 equipment in San Francisco to do that. So they
11 have one dedicated pilot in San Francisco who is
12 solely monitoring the electrical equipment.

13 So there's on pilot that's kind of
14 monitoring everything interfacing with the
15 captain and the crew and the ePilot is just
16 monitoring the position. Because when the
17 vessels are turning you can't see over the bow or
18 over the stern and the clearances are quite,
19 quite narrow. I think it's less than 100 feet on
20 each end when they're turned sideways in the
21 estuary.

22 Did you find the last one? There were

1 three links on the email.

2 MEMBER BRIGHAM: Did you say the magic
3 word, ePilot?

4 MEMBER McINTYRE: ePilot.

5 MEMBER BRIGHAM: ePilot.

6 (Whereupon, a video recording was
7 played.)

8 MEMBER McINTYRE: Yes, that's not it.

9 RADM GLANG: So, Captain McIntyre,
10 Gerd Glang. I have a question. So I've had the
11 chance -- the opportunity to visit with the
12 pilots in San Francisco and they don't -- as an
13 organization they don't, to my knowledge, have a
14 standard precise pilot unit, PPU. They do have a
15 PPU set which they take specifically for turning
16 vessels in that inner Oakland reach, in that
17 turning basin. And it uses dual GPS antennas
18 tightly coupled so they can get precise heading
19 and also, their fore and aft motion, because like
20 you said, when they're pivoting that vessel
21 around in that basin, they have to do it very
22 precisely.

1 MEMBER McINTYRE: Correct.

2 RADM GLANG: And I think the PPU they
3 use is the Booz Allen product, formerly known as
4 ARINC.

5 MEMBER McINTYRE: That is correct.
6 They have I think two or three of the ARINC units
7 which the ePilot brings on board with them. They
8 don't -- the ePilot doesn't bring the ship in
9 from sea. He boards off the city front, comes
10 in, sets up that equipment. It would be too
11 complex of a task to be piloting the vessel and
12 trying to set all that stuff up at the same time.

13 They also -- I don't know if they're
14 using the Raven units right now, but they also
15 use a separate PPU for other ships. But for the
16 very large ships they're bringing on this -- you
17 know, the ARINC.

18 RADM GLANG: Yes, and some of the
19 pilots bring their own kit with Rose Point
20 software on it.

21 MEMBER McINTYRE: Right. Yes, some
22 are using Rose Point, some are using Raven.

1 RADM GLANG: And then there were some
2 old school that didn't use anything.

3 MEMBER McINTYRE: Yes, that's really
4 being discouraged. I mean, those are kind of
5 complex political issues with the state and the
6 monitoring system as well as within the pilot
7 groups. Within our group we have a PPU system
8 that we use and it's a software that we developed
9 in conjunction with the Volpe Center. It's an
10 AIS-based system. We plug into the AIS. We get
11 the AIS data from the ship.

12 And what's interesting about the
13 system that we use is that it layers all types of
14 information. And it goes back to a comment that
15 Ed made when he was talking about future
16 technology needs is that within our program we're
17 able to layer products from all different types
18 of agencies. So we have Army Corps of Engineers
19 soundings available to us. We have ENC charts
20 available to us. We have private terminal
21 soundings available to us. And then we're also
22 able to go in and very accurately put in docks to

1 the extent where we have -- we can put a fender.
2 So we'd show like there's a dock line and then
3 there's a fender that's maybe a meter wide. We
4 can even draw those things in. And Jon Dasler
5 has been very critical to us in helping us set up
6 all that information.

7 But there's still a lot of
8 inaccuracies, or I guess uncertainties when
9 you're using the equipment. If the data that the
10 ship's providing isn't correct, if they didn't
11 correlate the parameters of the ship correctly
12 into their AIS system, it may show an offset.
13 Sometimes there's delay in signaling where a ship
14 may be actually three ship lengths ahead of the
15 vicinity being displayed. And there's still a
16 lot of stuff to be worked out with the potential
17 of that technology and putting together all the
18 data that's available from the different agencies
19 into one system. It's really pretty amazing.

20 RADM GLANG: Well, I think you've
21 raised the point that I wanted to raise, which is
22 you're bringing together lots of different

1 information. And in the TB32 system, for
2 instance, my understanding is it's not
3 necessarily an open standard, Jon? Or it may be
4 an open standard, but it's not a standard
5 standard in the maritime community.

6 MEMBER McINTYRE: Yes, it's been a lot
7 of work getting the data into it and getting it
8 all to integrate well and display correctly. And
9 the other thing then is this is our system and
10 it's not -- when you get into, okay, this is
11 government-provided, this is regulated by IMO,
12 all that kind of stuff, we wouldn't -- if we were
13 kind of following those paths, we wouldn't be
14 able to do what we're doing right now.

15 RADM GLANG: Right. No, I appreciate
16 that. You're a new member. We've got several
17 new members and I would offer you all the
18 opportunity to receive our briefing on Precision
19 Navigation and kind of the direction we see
20 ourselves going in.

21 Which brings me back to this one
22 pager. It would be really wonderful if the panel

1 could provide us their thoughts on this document.
2 This really intended to focus on what kinds of
3 services and products we envision specifically
4 for megaships, right? So one of the principles
5 in the back is data interoperability, that there
6 is a standard for that.

7 My other question is -- and I'm taking
8 up the panel's discussion time, but maybe
9 stimulating more thought on megaships. How do
10 ports decide, or is it the pilots that decide
11 what the upper limit is? When do you decide a
12 ship is too big to bring into a port? How does
13 that happen?

14 MEMBER McINTYRE: When it's a new ship
15 that's coming into the port, typically we'll hold
16 pre-planning meetings with all the stakeholders
17 that are involved in that. So that would involve
18 the Coast Guard. It would involve the pilots,
19 the vessel operator and the terminal. We take a
20 look at all those factors and develop a plan.
21 But in my port and in most ports around the
22 United States the ultimate decision whether or

1 not to bring a ship in is up to the pilot
2 organization unless there's an overriding safety
3 concern with the Coast Guard. For instance, in
4 the Columbia River the Coast Guard may close the
5 bar or something like that. But the pilot
6 organization makes the final decision, kind of
7 within the parameters that are publicly published
8 for that particular part.

9 RADM GLANG: So can you go into a
10 little bit more detail what pilots look at for
11 the upper limit? I mean, are there hard numbers
12 for things like draft and beam and air draft and
13 sail area and environmental limits for cross-
14 current and winds and direction of winds and
15 things like that in the --

16 MEMBER McINTYRE: The answer is yes
17 and no. There's parameters, but then there's a
18 lot of fluid situations that play into those. So
19 for instance, on our pilotage ground we passage
20 plan for a two-foot under-keel clearance. Air
21 draft is the ship has to clear the bridge and we
22 plan our passages like that.

1 As far as current, we have in place
2 like different -- we call them vessel moving
3 guidelines. We have parameters for -- certain
4 size tugs would have to be used on certain size
5 ships under certain current conditions. So
6 there's guidelines out there, but there can
7 always be with any particular ship an individual
8 circumstance that might cause you to have to
9 impose a more stringent requirement.

10 For instance, we have a lot of issues
11 right now with the new low-sulfur fuel oil that
12 ships are required to burn once they're inside
13 the federal limits. And the ships aren't
14 designed to operate on that fuel, most of the
15 older ships, so we get limited power, limited
16 starts with the engines. And so, we might in
17 that particular case -- even though the
18 dimensions of the ship fit the physical
19 parameters of whatever the maneuver might be, we
20 may have to bring in more tug resources, an
21 additional pilot, those types of things.

22 MEMBER KELLY: Admiral, I would really

1 say that we're talking a lot of focus on
2 megaships, but it's not the size of the peg, it's
3 the size of the hole it's going into. The real
4 constraint is the configuration of the port
5 itself: the depths of the channels, the heights
6 of the air gaps, the widths of the channels, how
7 much of the bends are involved in the channels.
8 Because we have the same thing. Every port has
9 wind restrictions, certain classes of vessels
10 have one-way traffic at -- no-meet, no-pass
11 zones. So there's a lot of considerations.

12 But all of this really caters back to
13 the size of the port itself. And that's why it's
14 so important that we get precise information for
15 these ports, because different size ships are
16 problems in different ports. You came up and you
17 saw us in New York. And we're going to -- you
18 know, we're looking at the 13 to 14,000 T-class
19 to max out once we take the Bayonne Bridge out,
20 but with the reconstruction of the 50-foot
21 channel, the Kill Van Kull hasn't gotten any
22 wider.

1 So we're looking at different
2 hydraulics. We're looking at different
3 configurations. We're looking at a lot of issues
4 that come up. Certainly squat comes into it. We
5 have minimum configurations. Two foot above and
6 two foot below is the current VTS, so we have
7 restrictions there. We're going to look at
8 simulations to take a look at what we can do as
9 far as meeting and passing, because a lot of
10 these much larger ships are just making the space
11 more constrained than it was in the past and with
12 the new configuration of the channel we have to
13 understand the hydraulics that are going on so we
14 can meet, pass, etcetera, with this new class of
15 ships.

16 And we can't just -- even though our
17 pilots that we've paid -- we sent them out to the
18 West Coast and they've ridden along on some of
19 these bigger ships. You don't know how it will
20 behave in your particular port. And we can't
21 take a chance of somebody saying, oh, crap, that
22 didn't work. So we're doing all this simulation

1 work. As you know, we're modeling actual ship
2 construction design plans, sending it down to
3 MITAGS to model it, put it in the simulator with
4 detailed plans of the harbor. So there's an
5 awful lot of work on this, but the real
6 constraint is the harbor and the port itself, not
7 so much the ship.

8 MEMBER McINTYRE: Yes, I would
9 absolutely agree with that. Every ship is being
10 -- or every port is pushing the limits of what
11 they can bring in and out of the -- and the
12 megaships are sexy today, but I guarantee you
13 that once we start -- the oil markets recover and
14 we start exporting more crude oil and more LNG,
15 everybody's going to be looking at that big LNG
16 ship that's coming out of wherever they end up
17 putting the terminals. So really it's a common
18 problem everywhere. And there are some, I will
19 say, ship handling challenges to the megaships,
20 but Ed is absolutely correct. And I sure that
21 Sal would agree that it's every ship you take --

22 MEMBER KELLY: Yes, I'm not quite the

1 old man of the sea, but I remember we brought
2 Tobi Maru to the East Coast and it was a
3 practical intake of 1,750 TEU, and everybody in
4 the port turned out to see it because it was the
5 biggest damn ship they'd ever seen and we had to
6 rewrite all of our operating procedures. And
7 then they -- everybody came to see the Verrazano
8 Bridge at 2,000 TEU. Malcolm had 4,400 TEU in
9 his econ class, and he had to lay them up because
10 they were too big. He couldn't operate them.

11 So I would just venture to say that
12 anybody who's shaking their head and says they
13 can't get any bigger than they are right now is
14 probably wrong. And there will be continued
15 larger vessels in different configurations.

16 And we also have to look toward the
17 not-too-distant future of unmanned vessels, at
18 least for ocean open crossings, not so much here
19 at coastal and harbor work, but the technology of
20 the shipping business is nowhere near being
21 finished and the technology that's out there I
22 would beg to say that the maritime transportation

1 industry is a bit of a dinosaur. We're a little
2 too tradition-bound and there's a lot of
3 technology that's been employed in airlines,
4 roads and other modes that we really need to
5 catch up to. So it's going to -- the challenge
6 of technology against physical constraints of
7 ports, harbors and the people that operate them
8 is going to continue even more.

9 MEMBER BRIGHAM: Yes, the ports in
10 America, just to get back to the topic here at
11 hand --

12 CHAIR PERKINS: Can you recognize
13 Captain Rassello?

14 MEMBER BRIGHAM: Yes.

15 CHAIR PERKINS: Okay. Thank you.

16 MEMBER BRIGHAM: I know I'm running --
17 I'm trying to orchestrate this.

18 And my comment is, yes, I agree with
19 everything that's been said, but I still believe
20 that these ships have physical characteristics
21 that are so unique and not seen before, and I
22 think Captain Rassello will amplify that.

1 The ports that we have, Ed's port and
2 others, will have to be one heck of a lot larger
3 and deeper and broader if the ships get even --
4 well, I think the two groundings show you that
5 we're at the max draft of these ships. When you
6 can have a ship essentially blocking Hamburg
7 Harbor for 6 days and 12 tugs and all of what
8 they had to do, dredge to get around it, it was a
9 good case study of what can happen if -- and
10 that's normal grounding. It's not really
11 emergency kind of grounding.

12 So anyway, to Captain Rassello to add
13 the dimension of the large cruise ships and their
14 physical characteristics. Sal?

15 MEMBER RASSELLO: Good morning. Sal
16 Rassello. I have a question for Captain Anne. I
17 understand that in the U.S. port the pilot
18 association is the last word when it comes to
19 these cases, marginal cases of taking the ship in
20 under certain circumstances.

21 Do you think that this is the fair way
22 to do it, or how the pilot can assess these limit

1 cases when they don't know the maneuverability of
2 the ship?

3 MEMBER McINTYRE: My response to
4 Admiral Gerd was basis the planning before a big
5 ship like that is brought in. And I -- that was
6 the answer in that question in the context of the
7 first time it comes in, what kind of planning is
8 done. Your question is more along the lines of
9 with a particular ship that's coming in at some
10 time. And I mean, those types of decisions are
11 made in conjunction with the master of the ship
12 and the conditions of that particular port
13 arrival.

14 MEMBER RASSELLO: So you think it
15 should be a decision made by the two entities
16 instead of having one entity say, no, we're not
17 going to make it?

18 MEMBER McINTYRE: Yes, I think it's a
19 decision that needs to be made jointly between
20 the master and the pilot.

21 MEMBER RASSELLO: Okay. Thank you.
22 Can I do my humble presentation?

1 CHAIR PERKINS: Yes, please.

2 MEMBER RASSELLO: Thank you. Okay.

3 That's me and that's what I do.

4 Next. Okay. My presentation will
5 include the available depth and water dredging
6 concern, vessel's dynamic draft, consider squat
7 and heel angles. We will decide to have a better
8 instrumented port to help us to define these --
9 when we have very minimal tolerances regarding
10 the under-keel clearances. Pilot and ports. We
11 decided to have better coordination. And all
12 these entities should work on one common standard
13 platform when it comes to the passage plan to the
14 berth.

15 You can interrupt me any times or we
16 can do the question later.

17 Okay. Don't mind the numbers. This
18 is part of my daily routine when we assess a new
19 port, or this is what the ship bridge team do
20 every single time before they go into port
21 regardless if they've been in that port the week
22 before.

1 So to define what will be the safe on
2 the clearance, we take in consideration various
3 factors. And that you can see with a draft of
4 8.5 the ship may require 12 meters of depth.

5 Squat is the one that affects our ship
6 the most. Squat in open waters is a bit
7 different from the one when we are in the close
8 water in waterways and channels. The block
9 coefficient for a cruise ship is still 073 to 078
10 regarding the ship or the hull. And the squat
11 effect very much, as I said, at the higher speed.

12 And now in the next slide you will
13 realize what speed is a major -- one of the major
14 factor in maneuvering in the restricted water.

15 This is same thing. Different
16 channels. This is prismatic channels. Some
17 channels, artificial channels are usually square.
18 What is not defined in a nautical chart is the --
19 what's the depth on the side of the channel. So
20 it's mostly they define that on the center of the
21 channel. That's fine if the ship stays in the
22 center, but if ship is forced to go on the side

1 of the channel, then there are unknown situation
2 that may affect the safety of the navigation.

3 This is another factor we take in
4 consideration. These are very tall ships. The
5 sail areas are above 10,000 square feet. So even
6 a blow wind of 15 knots can make the ship heel.
7 The rate of turn, if it's too aggressive, can
8 make the ship heel on one side of the other side.
9 So the use of the route there is very, very
10 important for -- from the operator, from the
11 pilot.

12 So we always invite the pilots to use
13 rate of turn when they need to change courses and
14 not to give the numbers to the wellsmen. And
15 angle over heel can reduce the draft of six feet,
16 so if you calculate a clearance of 10 feet, you
17 remove 6 feet, you have only 4 feet left, which
18 is really not enough for navigate.

19 And now we going to the charting, the
20 mapping. As you can see, there is a lot of area
21 that is unsurveyed and this is a concern. We
22 have a situation here in Galveston where we do

1 navigate on -- outside the channel in non-
2 navigational water as it states on the chart, but
3 pilot are comfortable to navigate with that
4 depth, so we do navigate outside the channel.

5 And this is another factor that I take
6 in consideration when I do my planning and what
7 the office do when they do their planning before
8 entering the port. Wind and currents. Wind is
9 our enemy. Currents and well. Wind is the most
10 affecting the ship safety when navigating in
11 narrow channels. As you can see, the ship need
12 to have sometimes with 20 knots, 25 knots wind to
13 hold the heading. And it can go sideways
14 grabbing -- with a grabbing angle and the swept
15 area of 50 meters. Are ships are 320 meters
16 long, so if you have just 10 degrees of drift
17 angle, it will be 51 meters more you need in the
18 channel.

19 This is a Carnival Cruise Line weather
20 buoy. We have ports. We own ports and we -- not
21 in the U.S. territory. Outside. Talking about
22 the Caribbean. And we have purchase this weather

1 buoy to advise about weather condition in real
2 time. And so, we connect in real time with these
3 instruments and the captain can make a good
4 assessment. In some port we don't have pilotage
5 in the Caribbean, so it's all left on the captain
6 skill. So we have three of these so far in three
7 different ports.

8 Here is the projection of an approach,
9 transit and final mooring of a large cruise ship.
10 So as you can see we are very restricted in
11 maneuvering and a good assessment need to be made
12 prior commit to the maneuver.

13 So what we will like to ask NOAA is to
14 consider to improve the resolution of charts in
15 narrow channels and ports and create the kind of
16 port ECDIS which reflect our passage plan which
17 we make on the ECDIS supply of apart from the
18 departure port.

19 Also I think topographic is something
20 we need to include in the mapping because
21 topography can change the environment in a port.
22 If you have wind outside that comes a beam when

1 you are in port can be affected by the topography
2 of the area and the wind will come from a
3 different direction. So we need to know this
4 before we approach. That's the -- to make a good
5 assessment and to -- for larger vessel we don't
6 have much of tolerances. Yes, Andy?

7 MR. ARMSTRONG: So instead of
8 topography would a higher resolution wind model
9 be more helpful?

10 MEMBER RASSELLO: Either way, yes, I
11 think that will -- if it's less expensive to do
12 that, just having wind -- to measure the wind.
13 An example is in Miami. In Miami it's strong
14 current outside. And then in addition to the
15 current you have the wind is very challenging to
16 make the entry in the channel. And then you need
17 to slow down because the channel get very narrow
18 and you really need to know what is the wind in
19 that place. You don't need to know where is the
20 wind outside, because outside you can manage with
21 speed. But when you take the speed down to six
22 knots, because that's what -- the channel allows

1 you to do it. Then you have an unknown. The
2 question is do I make it or I do I don't make it?
3 Then when you start sweating.

4 You've seen this already. This is
5 what I think the future of navigation will go on
6 Precise Navigation for Port ECDIS. All these
7 elements are very important to make a risk
8 assessment for a large vessel going into ports.

9 And what I see in the future, I see
10 that, as I say, the port need to be Port ECDIS.
11 The coordination between the ship's operator, the
12 pilots and the VTS should be made on a common
13 platform, should be presented before the ship
14 arrived and not just discuss in the last minute
15 on the bridge between the pilot and captain.
16 Should be more harmonized coordination between
17 the three entities.

18 I think that's all I have. Any
19 question?

20 MR. ARMSTRONG: I have another
21 question. You had a Zone of Confidence element
22 on your clearance calculation. And I couldn't

1 see exactly what you had in there. Do you have a
2 number, a plus/minus number that you use on Zone
3 of Confidence, a standard number? And if so, how
4 did you arrive at that number?

5 MEMBER RASSELLO: Yes, is a
6 calculation we have made at the simulator. And
7 if we can go back, I think there was a slide
8 showing the way it's done. Practically the Zone
9 of Confidence is the most important factor of the
10 chart when you approach. And I have my
11 parameters based on the experience. Sometimes
12 the calculation doesn't give you the real result.

13 Just to give you an example, in the
14 Mississippi, yes, we know the gulch, we know the
15 current, we know the tides, but we don't know the
16 silting on the bottom of the river. That's
17 something that's unknown. So we came to
18 experience some soft grounding where all the
19 elements or the chart and the all the data we
20 have in our instruments was not showing. So how
21 can we determine that?

22 MEMBER BRIGHAM: Yes, thanks, Captain

1 Rassello.

2 Thanks, Captain McIntyre.

3 The idea of this topic was to have a
4 discussion, get it into public record. There has
5 been these issues in Europe and the Ben Franklin
6 coming. So we've done that. Maybe some follow-
7 on actions is to integrate the Precision
8 Navigation into whatever issue papers we have. I
9 think that was -- Ed's idea was to integrate
10 these issues. But also to review, all of us to
11 review, but maybe both our captains to review in
12 depth the NOAA paper on Precision Navigation and
13 see if we can come up with some more language and
14 better attune to issues in that. So I think
15 those are the two actions from this discussion
16 that was really generated internally by HSRP.

17 So, Mr. Chairman, I think we're done
18 with the session unless there's something else.

19 RADM GLANG: Captain Sal?

20 MEMBER RASSELLO: Yes?

21 RADM GLANG: Gerd Glang. In the case
22 where you're bringing ships into federally

1 maintained channels where the Army Corps does the
2 survey work, those survey standards were -- we
3 use the Army Corps data and portray that on the
4 chart generally as the quarter depths, right,
5 center, left quarter, right quarter, center line,
6 and the tabulations. And the standard for Army
7 Corps surveys don't necessarily support some of
8 the CATZOC definitions that you rely on. So how
9 do you make your decision then?

10 MEMBER RASSELLO: That's a good
11 question. And the decision is made mostly on --
12 I -- I take in consideration all the data, but at
13 the end I don't trust any data. I take in
14 account that there is -- the numbers are there
15 and they have been verified, but then also I take
16 a buffer on top of it. And that is made
17 according to the environment of that day: winds,
18 currents, size of the ship, maneuverability of
19 the ship, power of the ship. That changes from a
20 static condition of 10 percent to a dynamic
21 condition 20, 25 percent.

22 So it's more -- it's not engraved in

1 the stone, the calculation. That's to be made
2 according to experience. How those ships react
3 with the environment. And that's why I ask that
4 the data, the most realistic data. And in some
5 areas such as say the Mississippi they should be
6 more real time than past calculated.

7 VICE CHAIR HANSON: So just to
8 clarify, the issue is not the accuracy of the
9 Corps of -- we're talking about the Mississippi
10 River, which is surveyed frequently, but it's
11 just not enough? You need the real data?

12 MEMBER RASSELLO: Yes. No, the issue
13 is not the numbers on the chart. The issue is
14 that the ships are getting bigger and the buffer,
15 the tolerances safe -- for safe navigation are
16 getting very slim, so what we can do to make it
17 -- the channel more useable, or the port more
18 useable and the safe -- more safe to navigate?
19 That's what we have in the limit of say -- really
20 work on the very tiny tolerances and that's what
21 we really need to be sure that study from the
22 data and the study and the discussion with the

1 pilot become a little bit more effective --

2 VICE CHAIR HANSON: So --

3 MEMBER RASSELLO: -- to complete
4 the --

5 VICE CHAIR HANSON: -- using the
6 Mississippi River as an example, is that a
7 seasonal issue when they're having floods or
8 droughts, or is it --

9 MEMBER RASSELLO: That way --

10 VICE CHAIR HANSON: -- year 'round?

11 MEMBER RASSELLO: Yes, okay. Let's
12 say the corporation here made the assessment a
13 week ago.

14 VICE CHAIR HANSON: Yes.

15 MEMBER RASSELLO: And then NOAA
16 replicate the numbers on the chart. So we are a
17 fresh start. We get -- find everything
18 correspond. But let's say after three weeks has
19 been major hurricane. And then I found myself
20 sitting on the bottom of the port. How can I
21 manage that?

22 VICE CHAIR HANSON: But in a dynamic

1 situation like in the Mississippi River versus
2 Miami, which is fairly static --

3 (Simultaneous speaking.)

4 MEMBER RASSELLO: Yes, it's not --
5 these are two different cases, but those two
6 cases need to be analyzed every single time. So,
7 yes, data are good, but then it comes also to
8 what you do with the data. And I think the
9 future will be to have real time data. How do we
10 do that? I don't know there's technology, must
11 be, that gives the operator a real time
12 situation.

13 VICE CHAIR HANSON: Okay. Understood.
14 Thank you.

15 MEMBER McINTYRE: Anne McIntyre. If
16 I could just follow up on that a bit. I use the
17 Army Corps of Engineers sounding data daily in my
18 work, and I've found it to be very reliable and
19 it -- the interface there where it becomes
20 critical in the passage planning, as Captain Sal
21 had said, we do have a safety factor. So you
22 might have a two-foot under-keel clearance like

1 we have. Other ports might have 10 percent, a
2 meter. There's different factors there.

3 But really what plays into it is
4 having the real time information, like you said.
5 And then again, particularly the water level
6 information, because that over time is really --
7 the most continually dynamic input into the
8 decision making is what is the river level or the
9 tide at this particular place and this point of
10 time?

11 And then we can take that information
12 and apply it to the most accurate soundings that
13 we have available, which is the -- for us is the
14 Army Corps of Engineers sounding. And we meet
15 with them monthly to review the soundings, to
16 discuss where dredging should occur. And then in
17 periods of low water we meet every two weeks to
18 review those soundings.

19 And so, it would be great if we could
20 see more integration of that again. I don't see
21 the pilots giving up their PPU's any time soon.
22 And it's for just that reason we can have that

1 information available to us. It's not available
2 on an ENC. And it doesn't make sense to me for
3 NOAA to try to replicate the data that the Army
4 Corps of Engineers already has that is really
5 quite effective. And I'm sure this varies from
6 port to port in how that information is utilized.
7 But I know for our region and I also know within
8 San Francisco that that's the data they really
9 look at.

10 MR. ARMSTRONG: I don't think there
11 would be any intent for NOAA to replicate Army
12 Corps of Engineers data, but I think our goal
13 would be to serve it to the mariners in a way
14 that say the -- that all the users would have
15 access to it sort of all the time or as near real
16 time as we could. I think that would be our
17 goal.

18 MEMBER McINTYRE: Absolutely. I would
19 agree with that. Just my point is --

20 (Off microphone comment.)

21 MEMBER McINTYRE: Yes.

22 MR. ARMSTRONG: And as the admiral

1 points out, delivery of that for navigation
2 purposes is NOAA's mandate --

3 MEMBER McINTYRE: Right.

4 MR. ARMSTRONG: -- despite the fact
5 that the Corps is the survey agency, the
6 navigation product is --

7 MEMBER McINTYRE: Right, and my --

8 MR. ARMSTRONG: -- a NOAA mandate.

9 MEMBER McINTYRE: Yes. As they're
10 completing the soundings. I mean, the soundings
11 aren't intended for navigational use and, I mean,
12 there's a disclaimer on every survey that they do
13 that they're doing those surveys to calculate
14 dredging volumes. But from a pilot's
15 perspective, and I'm sure probably from a
16 captain's perspective as well, that you want the
17 best data. You're going to use the best data
18 available regardless of what it's legal intent or
19 it's practical intent was.

20 MEMBER GEE: So just a question.

21 Lindsay Gee. So in regard to that, it's NOAA's
22 mandate and I understand that, but it would seem

1 in ports that just isn't used that way. It is --
2 like you're saying, it's the Corps of Engineers'
3 data because it's available and it's the best,
4 even though it wasn't done for navigation. So
5 how do you address that? And really, using the
6 pull on the pottle, it's just something to solve
7 the problem, you've to bring the ship in. And so
8 you do it, right?

9 MEMBER McINTYRE: Yes.

10 MEMBER GEE: How does that relate into
11 the requirements of the Precision Navigation for
12 NOAA? Even though it's a mandate, it's currently
13 not happening now and you're trying to push the
14 limit to take things forward. So it's --

15 MEMBER McINTYRE: I think Jon Dasler
16 may have a comment.

17 MR. ARMSTRONG: So I think as we've
18 said many times NOAA and the Corps are partners
19 in this process, and one of the things that I
20 think you've heard mentioned is eHydro where we
21 hope to get those Corps of Engineers surveys into
22 a digital form and near real time from when they

1 get them. And I think that we recognize in the
2 meantime that certainly the pilots would like and
3 should have those Corps of Engineers surveys. So
4 we would I think hope that down the line that
5 something could be delivered in a unified
6 navigation product from NOAA. And we certainly
7 have a lot of people working on that. And that
8 way we would like to be able to deliver the
9 depths outside of a channel at that resolution as
10 often as we can, too. So I think these are great
11 issues for us to hear and to take as things to
12 work on.

13 MEMBER GEE: Thanks, Andy. So I just
14 happen to have -- you can go ahead and push play.

15 So this is a high-resolution multi-
16 beam survey of the channel somewhere going into
17 Charleston Harbor. And so what you would see on
18 the chart is just the simple geometry of the
19 channel and you would have a tabulation for the
20 depths. And as you fly through this you can see
21 sort of the left to right arc sweeps. Those are
22 from the dredge characteristics. But you can see

1 that what -- and I don't know what the period of
2 time was between when this was dredged and when
3 it was --

4 PARTICIPANT: Like at the entrance or
5 the inside?

6 MEMBER GEE: Yes, I'm not exactly sure
7 where this is. I'd have to go back. But the
8 point is that you can see these sand wave
9 artifacts. You can see the edge of the channel
10 starting to move in. So these are things that
11 are invisible in sort of the normal engineering
12 surveying paradigm that the Army Corps uses.
13 These are details that you would only see in a
14 high-resolution multi-beam survey. You build a
15 grid from this data and that's what you need to
16 support a ports scale ENC. So that's what I
17 wanted to show here.

18 So while we put -- where's Jon?

19 MR. DASLER: Right here.

20 MEMBER GEE So there's a tremendous
21 amount of information potential that could be
22 communicated to the mariner, but we haven't built

1 the paradigm or the processes to do that.

2 CHAIR PERKINS: Okay. We do need to
3 make sure we allow time here before 1100 for the
4 public comment period. Lawson?

5 MEMBER BRIGHAM: Yes, I just wanted to
6 finish up this discussion. I thought the most
7 relevant and most important thing that was said
8 this morning was Captain Rassello's comment about
9 harmonizing the information. And what we need is
10 also transparency. Unified information to all of
11 the players. And he suggested of course the ship
12 owners and the operators, the pilots, the VTS.
13 They're all sharing the same information. Some
14 of that information, or maybe all of it, comes
15 from the Federal Government, but this
16 harmonization related to the human dimension is
17 hugely important. So I think we had good
18 discussion on this topic for the HSRP.

19 CHAIR PERKINS: Okay. We did have two
20 comments submitted in in the public comment
21 period electronically, one from our first day of
22 session on March 15th and one from today. For

1 the sake of time we'll read those into the record
2 when we reconvene this afternoon. So I'd like to
3 public comment period now for anyone in the room
4 that's so desiring to make a public comment.

5 MR. DASLER: I think it's just
6 important to note -- you talk about the Corps of
7 Engineers' accuracy. I mean, I don't think it's
8 really accuracy. What you're talking about is
9 the timeliness of the data, right? So this is
10 all temporal changes, when we see on the Columbia
11 River sand waves moving at a meter per day, right
12 ? So it's getting updated information on that
13 shoaling. And that has always been the problem
14 of -- NOAA's mission is object detection. The
15 Corps of Engineers' is dredging the channels,
16 right? And that can be a problem in the
17 channels, right, and updating that data.

18 So it's pretty nice the way that the
19 pilots have it set up right now on the Columbia
20 River. The Corps posts their data to the web
21 site. When they turn on their PPU's, that data
22 gets downloaded off the web site, goes to the web

1 site, gets the most recent surveys. Those
2 overlays are there.

3 Gerd's right, those are single-beam
4 lines. It doesn't necessarily represent all the
5 shoals. Getting high-resolution multi-beam is
6 really going to be a better product. And then
7 just getting a higher resolution data set rather
8 than single-beam out of that multi-beam data that
9 can more accurately show where all the shoaling
10 is is definitely the way to go.

11 So is there a way that as NOAA updates
12 charts? I know that the tables get updated as
13 some of that goes through, but how do you better
14 represent that to the pilots? Because I think
15 Anne would say that having that sounding set on
16 an overlay -- I mean, they can still bring in
17 raster charts or other things on there, but they
18 can overlay that updated sounding set that shows
19 what's currently going on in the dynamic
20 situation of the rivers. I mean, that's I think
21 what Precision Navigation is all about. So
22 having not only full coverage optic detection,

1 but actually capturing that temporal change is
2 key, I think, to Precision Navigation.

3 MR. ARMSTRONG: I couldn't agree more
4 and I would say that there's probably different
5 requirements in every area. In some cases the
6 multi-beam detail is necessary. In some cases
7 the timeliness is much more important. So I
8 think it's great for us to hear both from my
9 perspective on the research on development end
10 and I think for our colleagues on the production
11 end to kind of hear what we ought to be aiming
12 at. I think this is really valuable to me.

13 MEMBER McINTYRE: Just a quick comment
14 because I know we're time-pressed, but with what
15 I find professionally and how I've -- evaluating
16 the soundings is it's a pilot. Your expertise is
17 local knowledge. And so you're every day out
18 there on the same route. And so I can see a
19 little bleep on a survey from the Army Corps of
20 Engineers and I know in that particular area if I
21 see this, this indicates this is what the bottom
22 condition is here. And that's something that

1 from a piloting perspective and local knowledge
2 that's something we know, but that isn't
3 something that an outside mariner or a
4 recreational user or anything like that would
5 know. We are able because of the time that we
6 spend on the route to interpret the data as we
7 have it now pretty well.

8 MR. DASLER: Just a follow-on. I
9 think also the critical part and to address the
10 comment of frequency of the surveys and how often
11 that would be done. So what they do in the
12 Columbia a lot of times is -- especially at the
13 ports is they'll do the surveys after the spring
14 freshet. So the run-off from the mountains and
15 the spring freshet not only brings a lot of
16 sediment; it brings a lot of debris.

17 And so we've seen in many cases there
18 are logs and snags and things actually in the
19 channel that get missed by single-beam surveys.
20 Recently in a shipyard a 4-foot diameter coming
21 15 feet off the sea floor, significant
22 obstruction that can get missed by single-beam

1 surveys. And how do you capture all of that with
2 these updated surveys?

3 So I guess just looking at the nature
4 of a harbor, when is the time to -- like I said,
5 they do surveys after the spring freshet. Then
6 they plan their dredging operations. So when low
7 water hits in the fall, they've got channels
8 cleared. And usually there's not that much
9 sediment movement over the summer months.

10 MEMBER SAADE: So there's a fear
11 factor that you've all put into me of if we're
12 talking two feet of clearance on some of these
13 ships, I can't imaging not surveying every single
14 day, because you don't --

15 (Laughter.)

16 MEMBER SAADE: -- know if a piece of
17 pipe fell off of somebody's boat and it's
18 sticking up. You don't even know if you have the
19 bottom in soft sediments like this. How many
20 times are these two feet of clearance actually
21 dragging through the mud and nobody even knows
22 it?

1 MEMBER McINTYRE: Right. On the
2 Columbia River it's not like a smooth bottom.
3 There will be sand waves, there will be areas
4 where it's deeper. And so, two foot under-keel
5 clearances, it's not something that we're driving
6 the ship 85 miles with two foot of under-keel
7 clearance. So it's areas where we pass through
8 shoaling where it's two foot of under-keel
9 clearance.

10 And we're moving ships every day all
11 the time. And when you handle a ship, when you
12 get into shallow water, you -- the ship behaves
13 differently and you can feel it a bit. You slow
14 the ship down. And so there may have been a
15 pilot that went down the river the day before
16 you. He experienced some shoaling there. And
17 so, we pass that information along. And then we
18 might change our passage planning the next day to
19 allow more water to go through there.

20 Then we call the Army Corps of
21 Engineers. We say, hey, we're feeling a little
22 bit right here. We need you guys to get out

1 there, give us a survey. And so, that's how it
2 works in practice. But again, I'll just go back
3 to my point, having the river level information
4 allows us to be able to make those decisions.
5 And then you have your safety factor.

6 But, yes, when you think about two-
7 foot of under-keel clearance, you could be laying
8 on your back and you could touch the bottom of
9 the ship. And, I mean, that's how we operate
10 now. That's what we need to do as a nation, the
11 ports, in order to be competitive. So, it's just
12 again the best information that we can have in
13 order to make safe decisions.

14 MEMBER GEE: Sorry. I know time is
15 pressing, but one of the questions -- I agree
16 with Jon on this, the repeat surveys to give
17 pilots better information, it's not -- by doing
18 those repeat surveys you're also modeling and
19 seeing any changes. And I think that's kind of
20 important.

21 The other thing is there was a mention
22 of -- I'm not sure who it was, in going to

1 Hamburg to visit to see what's done over there.
2 Well, some of the European ports that are
3 critical like Rotterdam -- I've had some
4 involvement over there, and that's an everyday
5 survey operation. And not only is it an everyday
6 survey operation. They actually -- updating of
7 the charts over there are not done by a
8 benevolent topographic service. It's being
9 handed over to the port and the pilots look after
10 another organization. The bathymetry is ripped
11 out and the local port produces it, and it's an
12 update overnight.

13 So the requirement on the -- the
14 survey gets done and all of the charts, the
15 chartlets they have and the high-resolution ones
16 in the Port of Rotterdam have to be updated
17 overnight. So they have a process in place. The
18 technology is there. It's just a matter of
19 trying to close that out. And that's a specific
20 port, so I think that's kind of something that --
21 I mean, it's hard to solve for every port in the
22 U.S. because they're all different, but I think

1 there's models of how this can be done.

2 MEMBER McINTYRE: Absolutely. I mean,
3 I think it's just a matter of resources and
4 funding, really. But the ports and the
5 conditions in the ports vary so widely, I think
6 it's very difficult to find a one-size-fits-all
7 solution. And then again just the way different
8 ports structures operate. I mean, Rotterdam is a
9 very, very centralized port. Our port is made up
10 of -- our system is made up of five different
11 ports. They're all regulated over two states and
12 we don't have a lot of major lines calling, so we
13 have a lot of tramp shipping. And there isn't
14 like much of a consolidated stakeholder base to
15 put those kind of programs together. So
16 Rotterdam style -- type system wouldn't work for
17 us.

18 MEMBER KELLY: Ed Kelly. Lindsay,
19 that's correct. In fact, I've been in the
20 international business a long time. One of the
21 recommendations could be for NOAA to look at
22 comparable models in other industrialized and

1 international deep water ports. They do it very
2 differently in Singapore than they do it here and
3 they do it in other places. There are other
4 models. Fortunately for them, not so fortunately
5 for us, a lot of their national interests
6 recognize the importance of coastal traffic and
7 their budgets reflect that.

8 So some of the things that they are
9 doing, as in example, in Rotterdam, are done with
10 public money and it's done the right way.

11 MEMBER GEE: And I wasn't -- Lindsay
12 Gee. I wasn't suggesting to take that and just
13 kind of stamp it out everywhere. I think it's
14 just there's technology and approaches that you
15 can adapt and you can just pick the nuggets out
16 that are suitable for the U.S. system.

17 VICE CHAIR HANSON: If I could, I
18 mean, bring us back to the U.S. example again,
19 because I think what we're saying, the Columbia
20 River, the Mississippi River, surveys are getting
21 done. Not getting done by -- maybe not by NOAA
22 and they're not getting on the NOAA charts.

1 They're being done by the Corps and they're very
2 responsible. They do them overnight in the
3 Mississippi River. Particularly right now when
4 you have the flood season and the high shoaling.
5 They're all over that. I mean, they've got
6 certain areas out there every day.

7 So the question becomes, as we've
8 talked, is how do we get those into the NOAA
9 mandate, which is -- that's the part that's
10 missing. I think the work's actually getting
11 done. We always push the Corps for more surveys
12 for our business as well, so, yes, you could do
13 more. Real time would be ideal. Maybe that's
14 Nirvana for us in the future, but right now just
15 how do you get the data that exists?

16 And you talked about this last couple
17 days, Lindsay. There's data out there. How do
18 we get it into the NOAA system since NOAA -- this
19 is NOAA's job.

20 MEMBER KELLY: Ed Kelly. I think one
21 of the key things that we're discussing here as
22 the Hydrographic Services Review Panel is that we

1 have put out on the table the fact that the ports
2 are in crisis, the ships are bigger, there is
3 more congestion. Safety of human life, cargo,
4 the ecology are all increasingly becoming at
5 risk. And to continue a safe operation in these
6 restricted capacities, it's essential that NOAA
7 continue to evolve more responsive products to
8 address this.

9 And whether we call -- I'm not sure.
10 Is the correct word now "Precision Navigation" or
11 "NextGen Navigation," or -- but we need to
12 aggressively pursue ways of getting more real
13 time data and useable coordinated formats that
14 are available to be put forward so that the
15 people that are responsible for navigating these
16 vessels in these ports, whether they be megaships
17 or small recreational boats, have got access to
18 the most accurate and timely information to be
19 safe, secure and efficient. And I think that's
20 really what we have to say.

21 Do we have the exact answers? No.
22 NOAA has a lot of the technological capability

1 and the resource capability. Perhaps our
2 Technology Committee can help to steer some of
3 that thinking, but I think our statement is not
4 to decide what that system should be or who
5 should put it together, but that it needs to be
6 crafted, evolved and put in place on an
7 operational basis. And we need it yesterday, not
8 a year from now.

9 So I think the statement from our
10 group needs to be to impel NOAA to move as
11 aggressively as possible in that direction. I
12 don't know if we need to put all the detail of
13 how to do it, but we need to say that this nation
14 is in desperate need to continue to be involved
15 in international trade, commerce and to protect
16 human life and property and the ecology that we
17 need to evolve more interactive real time and
18 more highly detailed services. Technology is out
19 there that can help us to achieve this and we
20 need to get this done.

21 CHAIR PERKINS: I'd like to recognize
22 Captain Brennan.

1 CAPT. BRENNAN: So we do get those
2 surveys. I think frequently what happens is
3 depending on the port -- and it's on a port-by-
4 port basis and user-group-by-user-group basis.
5 What gets charted is typically just the channel
6 framework. And so, unless the survey shows that
7 there's a depth that's shoaler than that channel
8 framework that's specified in the Code of Federal
9 Regulations, we don't show that because it's all
10 deeper than project depth.

11 And so, I think what's happening now
12 is that there's a change. and I think certainly
13 that can be completely driven by the customer
14 base. So the requirements for how that gets
15 charted can be changed. In the past we just
16 showed the channel framework and that area was
17 white inside that with no soundings.

18 And so, if the intent is -- the
19 mariners I think feel as if they're -- that
20 putting soundings in the channel is critical; and
21 I would also add having it at a higher chart
22 scale, or a lower chart scale, higher resolution,

1 then that kind of a recommendation would be
2 helpful. But right now typically we're guided by
3 what's in the Code of Federal Regulations and how
4 those get calculated. And I think that CFR is in
5 dire need of being updated.

6 MR. DASLER: Jon Dasler. I think also
7 just -- it's not just in the channel either. So
8 in the case of the Columbia, right, we have 100-
9 mile transit, so anchorages are at a premium.
10 And so, we've taken NOAA data and re-sorted it to
11 where they could look at where can we squeeze in
12 a ship? Where can we get another anchorage? And
13 that's where I think NOAA could really assist on
14 that effort. They have the data, so providing
15 sounding sets at different resolutions -- you
16 know, a one meter grid is pretty hard to load on
17 a portable pilot unit, but having data sets that
18 are at a different resolution where you can
19 assess where can I squeeze a ship in if I have to
20 go to anchor?

21 And maybe Anne can speak to that a
22 little bit, but I know that's been critical to

1 them and when they have to get into the
2 anchorages -- I mean, the Corps isn't typically
3 surveying the anchorages. I mean, again, that's
4 going to be NOAA coverage of those areas. So
5 often that data exists and it's just how can you
6 get that into a format that can be loaded into a
7 portable pilot unit readily?

8 MEMBER McINTYRE: Yes, I would agree
9 with that 100 percent. And then I'll speak just
10 a little bit to kind of the general mariner.
11 When we anchor in very narrow anchorage areas and
12 using either an ENC or a paper chart, whether
13 it's a NOAA chart or a BA chart, it's impossible
14 for the ship's crew to accurately monitor their
15 position on a chart. I mean, literally it's like
16 -- I don't -- like 10 millimeters would be like
17 the size of the ship on the chart. The scales
18 aren't appropriate. And then when you do zoom in
19 on the ENC, you lose the information.

20 So much of the -- in those particular
21 cases the master of the vessel is taking our word
22 for it that this is an appropriate place to

1 anchor the ship. They don't have a method of I
2 would say I guess independently verifying the
3 information that we're giving them.

4 CHAIR PERKINS: Okay. I want to give
5 you an update on schedule. Our scheduled
6 departure of course has been delayed due to the
7 atmospheric conditions and the weather and the
8 fog in the Port of Galveston.

9 The pilot is on board the vessel, so
10 we're looking at approximately a 1:30 departure
11 as our best estimate to depart here, walk over to
12 the ship. We can do a late lunch on the ship.
13 So we have the luxury of being able to stay in
14 session and continue our work until that time.
15 We're going to try and get some light
16 refreshments: fruit, snacks or something in here
17 to tide people over in that time frame.

18 So just wanted to give you the update
19 on that.

20 I'd like to take the opportunity to
21 read into the record the two public comments that
22 we received since we have a little room in the

1 schedule.

2 So the first from March 15th was from
3 Chris Freeman of Geodynamics, and his comments
4 are, "Great update, Rear Admiral Glang. To
5 expand on the bathy radar system, although not
6 chart quality, as you mentioned, we are looking
7 at one among many very important navigation
8 elements in measuring rapid shoaling, change due
9 to storms or long-term shoaling trends.

10 "At Beaufort Inlet and other natural
11 inlets that serve as smaller ports, a low-cost
12 system such as an X Band radar can reduce the
13 maintenance costs by increasing the knowledge of
14 trends so that management can be more efficient.
15 These data can also alert the NRTs, Corps or
16 contractors that a survey needs to be completed
17 all to help reduce the trend of emergency
18 dredging and chart updates by be able to look
19 forward to using the data.

20 "Arete and Geodynamics have a white
21 paper that was produced for Jack and others to
22 potentially keep the experiment going a bit

1 longer at Beaufort. If all of this is of any
2 interest, I can forward via email. Thanks for
3 looking forward and looking forward to learning
4 more this week."

5 So thank you, Mr. Freeman, for that
6 comment. Pretty timely based on our conversation
7 we had this morning. So I don't know how he was
8 quite so clairvoyant.

9 We have a comment this morning from
10 Mr. Todd Mitchell of Fugro, March 17th, 2016,
11 regarding Ashley's briefing. "Ashley's work with
12 SeaSketch has been great at providing both
13 interagency cooperation and transparency. I will
14 say however that the breadth of communication
15 remains largely limited to the federal level.

16 "As an example, in recent meetings
17 with a few regional examples in Southern
18 California the PORTS. most county and inter-city
19 coalitions for mapping, even as recently as a
20 year-and-a-half ago the Army Corps of Engineers,
21 were largely unaware of the National Coastal
22 Mapping Program and the work that is being done

1 by the semi-formal federal coalition. Thus,
2 there are these local level agencies collecting
3 data such as topographic LIDAR and oblique
4 imagery in the case of Los Angeles' LAR-IAC
5 Program.

6 "Although it's a large undertaking, I
7 strongly encourage getting in the message, and
8 involvement of local agencies can bring more
9 resources to the program, as well as ensure more
10 use and value is derived from the work that is
11 being done."

12 And we want to thank Mr. Mitchell for
13 taking the time and providing that input as well.

14 We have an order of business regarding
15 our working groups, and we have an order of
16 business regarding the date of our next meeting.
17 So I think we can get to the working group
18 consolidation fairly painlessly. So I'd like to
19 do that, and then move onto the discussion on the
20 meeting date and location. So, is that
21 agreeable?

22 (No audible response.)

1 CHAIR PERKINS: Okay. So we have four
2 existing working groups. So yesterday we started
3 discussion on the blending on discontinuing of
4 some of them. So that's where I'd like to pick
5 up the conversation. So Coastal Intelligence
6 Working Group. I don't want to say on the
7 chopping block, but --

8 MEMBER BRIGHAM: Lawson Brigham. Yes,
9 I think both Carol and -- Larry isn't here right
10 now. He's still with us I think here. But they
11 were the advocates that perhaps we might not need
12 this or want this particular -- be available to
13 address yet what this working group is about. I
14 think there's still some question. But Larry's
15 not here to give his pitch. He's probably close
16 by, but --

17 CHAIR PERKINS: Okay. So let's set
18 Coastal Intelligence aside until Dr. Atkinson is
19 back in the room and change our focus to Working
20 Groups No. 1 and No. 2, Legislative Policy and
21 Planning and Engagement. For the sake of
22 efficiency can those two working groups be

1 combined?

2 MEMBER MILLER: In the legislative and
3 policy is -- it's a sporadic need. I think we
4 could probably -- there's nothing that's terribly
5 compelling right now, but in a year we will need
6 to once again review the charter and make
7 suggestions or changes, which last year we
8 reviewed it, made suggestions for two changes,
9 which I think subsequently were not implemented
10 for various reasons.

11 So I don't see that as a significant
12 amount of work. So I would say I can stay on
13 that -- I mean, we could either combine them or
14 just put the legislative one on sort of the back
15 burner again and --

16 CHAIR PERKINS: You know, prior to 15
17 minutes ago I would have been 100 percent on
18 board with that, but based on the comment that we
19 just received from Captain Brennan regarding the
20 topic of possibly making a recommendation
21 regarding updating the CFR and how the channel is
22 handled on a chart, I'm not sure that -- I think

1 maybe we have something that that group should be
2 putting eyes on and putting interest, or
3 considering.

4 MEMBER MILLER: I certainly would need
5 other people to serve on the committee if that
6 were the case.

7 RADM GLANG: Scott, can I make an
8 observation? Gerd Glang. So I think what we
9 need to do at Coast Survey, and we've talked
10 about this, is first -- and we have been working
11 on our relationship with Army Corps and through
12 their eHydro project trying to engage them on
13 revising what data products we would prefer to
14 receive from them. And I think that's where the
15 big chunk of work is.

16 I think updating the CFR is a bit of
17 a bureaucratic follow up that probably will
18 happen. We can make that happen sort of -- I
19 mean, there's a process for that. I think the
20 key is that we actually get the substance of the
21 relationship sort of steered towards where we
22 needed to go. And that's -- there's some

1 technical challenge there and there's a lot of
2 relationship building and awareness building. So
3 I really think getting the CFR changed is kind of
4 -- that will happen in due course. So that's
5 just my observation.

6 MEMBER SHINGLEDECKER: Gerd, in that
7 -- Susan Shingledecker. In that effort with Army
8 Corps is there any -- are there any barriers that
9 you're facing? Is there anything that we can do
10 to help facilitate that faster, or is it moving
11 on its own and there's not much we can do to push
12 it along?

13 RADM GLANG: Thank you, Susan. Gerd
14 Glang. So I appreciate the offer. I think the
15 challenge is just we're doing a lot of things
16 Coast Survey and we only have so many experts who
17 can speak the right talk and who can focus on all
18 these different things. So for us it's a
19 challenge of keeping this as a priority.

20 Jon Nyberg, the chief of the Marine
21 Chart Division just -- he's already departed, but
22 I know he's committed to making this one of his

1 priorities. But as you saw from my program
2 update, I've given him a lot of other priorities,
3 like get the database loaded, get the templates
4 built so we can fully transition to single
5 production.

6 So the Army Corps relationship is
7 really important to us. We have to focus on it.
8 That's got to be one of our top priorities
9 because that source data takes so much of our
10 effort. So at this point we meet regularly now
11 with Army Corps leadership, headquarters
12 leadership. They're aware of what we want to do,
13 or starting to become aware. And then building
14 the relationships with the individual districts.
15 That's just a process that's going take focused
16 attention and continued engagement.

17 So unless I'm missing something, Rick?

18 CHAIR PERKINS: I'll add a couple
19 comments that maybe might help move that ball
20 down the court.

21 After we got the first briefing on
22 eHydro, I had the opportunity to travel to

1 Portland, Oregon and visited the Portland Army
2 Corps District where the coding and the
3 development of the eHydro tool set was being
4 produced. Army Corps gave me a half a day. I
5 met with the developers and with the section
6 chief in charge of that.

7 As we heard, eHydro has moved from a
8 concept to a mandate within the Army Corps for
9 the districts that are involved with the inland
10 navigation chart development with their ENC's.
11 eHydro has a monthly users webinar that's being
12 hosted by the Army Corps for stakeholders. So I
13 think what we should do is we should -- and I
14 don't think it needs to be in a recommendation
15 letter, but I think we should communicate back to
16 Mr. Nyberg that there's an opportunity there for
17 better -- for access to the eHydro.

18 So whoever the user is going to be on
19 the marine charting side for NOAA should get
20 involved with those monthly meetings and become
21 part of that community of practice inside and
22 interface with the Army Corps. We have some

1 panel members that have geographic proximity as
2 well to the Portland District.

3 I would encourage you, if you can fit
4 it into your schedule, anyone that's on this
5 panel and is in the Portland area, take the Army
6 Corps up on that offer to go in and visit the
7 Portland District and see what they're doing
8 there with the eHydro tool. I found it a very
9 beneficial use of time when I was able to fit it
10 into my schedule.

11 MEMBER McINTYRE: Right, I work with
12 those -- Anne McIntyre. I work with those people
13 weekly. They do a fantastic job with what
14 they're doing and they really are approachable
15 and willing to share information. They've helped
16 us out a lot again in trying to make sure that we
17 can get the soundings downloaded into our PPU's
18 and they really do a great job. I can't say
19 anything bad at all about the Portland District
20 for the Army Corps of Engineers. They're one of
21 our most valued partners.

22 CHAIR PERKINS: Yes, they're

1 developing that tool I will say with a myopic
2 vision. It's being developed to meet their needs
3 and what they need, not to meet the greater
4 charting need of NOAA. So there may be some room
5 there.

6 But circling back to our working
7 group, are we in agreement then that we don't
8 need to continue the Legislative Policy Working
9 Group?

10 MEMBER MILLER: I'm assuming with what
11 Admiral Glang said that we don't need to work on
12 the CRF -- or CFR. Sorry. So that would be
13 fine. And since I worked on the charter with my
14 committee, when it comes up again perhaps one or
15 more of the group could work with me looking
16 forward to -- it's a three-year cycle. And so,
17 we need to look forward to people understanding
18 it, because I just came in kind of cold on it,
19 and understanding what needs to be done.

20 So that's what I would propose for the
21 -- you know, it doesn't necessarily need to be a
22 working group, but one of the less-senior, shall

1 we say, panel members should be involved in the
2 next update basically. That would be my
3 suggestion. So we can do it outside of a formal
4 committee.

5 CHAIR PERKINS: So I think we need a
6 motion to discontinue the Legislative and Policy
7 Initiatives Working Group.

8 PARTICIPANT: I so move.

9 CHAIR PERKINS: And we need a second.

10 MEMBER BRIGHAM: Second.

11 CHAIR PERKINS: Okay. Any further
12 discussion?

13 (No audible response.)

14 CHAIR PERKINS: All in favor --

15 (Off microphone comment.)

16 MEMBER MILLER: So it's coming up
17 again. Yes, and I would say that I will
18 volunteer to be on the group that Dave is head
19 of. And we talked about co-chair. It doesn't
20 make any difference to me. I'll just stay
21 involved with your group, if that's okay.

22 VICE CHAIR HANSON: Can I just make

1 one following comment, because I want to follow
2 up what Susan said about the cooperation and
3 collaboration. I think one of the things we can
4 do through our individual groups right now is to
5 say thank you and encourage continued
6 cooperation, because it's already generating some
7 benefits. And it's kind of easy to criticize and
8 whine, but when they work on the right path, I
9 think it's a good thing to say thank you.

10 CHAIR PERKINS: Okay. So working
11 group No. 1, we've closed the action on that.
12 Okay.

13 Planning and Engagement Working Group
14 continues on. Emerging Arctic and Priorities
15 Working Group continues on. So that puts us back
16 to Working Group No. 4, Coastal Intelligence and
17 Resilience.

18 MEMBER ATKINSON: We really wanted it
19 to be killed off.

20 (Laughter.)

21 RADM GLANG: Gerd Glang, Coast Survey.
22 So for those who were there, you'll recall a year

1 ago when we introduced the six questions from Dr.
2 Callender, out of that the panel chose to
3 establish the Coastal Resilience -- Coastal
4 Intelligence and Resilience Working Group to help
5 address those six questions. I think the panel
6 should congratulate themselves because you have
7 in fact pulled together, especially through
8 Joyce's effort, some I think pretty useful
9 responses to those six questions.

10 And I would suggest maybe the panel
11 use that document. And it doesn't need to be
12 made too much prettier, although just be aware we
13 will have to share it on the web. But to use
14 that in your response, in a response to Dr.
15 Callender and say so we've considered your six
16 questions, we've answered them in a variety of
17 ways, as a way of sort of closing that out.

18 So I think that was the initial task
19 that spawned the creation of that working group.
20 So I would just offer that observation and thank
21 you for your hard work on -- especially Joyce on
22 pulling those responses together. That was very

1 useful.

2 MEMBER ATKINSON: Yes, that sounds
3 great and I think you've got all the -- or Lynne
4 has all the revisions now, I believe.

5 MEMBER MILLER: Yes, and I think we
6 should review it once more. I'll be happy to
7 take another look at it, but to make sure that
8 corrections were made correctly, yes. Not right
9 now. I think Dave and Carol and I should just
10 look it over one final time.

11 MEMBER BRIGHAM: Lawson Brigham. Yes,
12 even today I was unclear at what terms of
13 reference are and how the questions were being
14 answered. I know Joyce was working on it. So I
15 think that's good indication that if we don't
16 have clear direction in terms of reference like
17 we're going to talk about with technology, at
18 least I'm unclear what that working group was
19 about. And if that working group was about
20 answering the questions, I might have
21 participated more. But I actually thought that
22 Larry was off doing something different with the

1 team. So again, the terms of reference and how
2 -- right from the beginning so we all know what
3 the heck the working group is about would be
4 useful.

5 CHAIR PERKINS: That will be a
6 challenge for the new chair.

7 MEMBER ATKINSON: Yes, this is Larry.
8 I think we can all mark this down as lessons
9 learned and don't have us start up a new working
10 group.

11 CHAIR PERKINS: All right. Can we
12 proceed forward to the date of the next meeting?

13 PARTICIPANT: Do we have a term of
14 reference for the Technology Group?

15 PARTICIPANT: Speaking of terms of
16 reference --

17 MEMBER HALL: Lynne, did you have
18 that?

19 (No audible response.)

20 MEMBER HALL: Okay.

21 MEMBER MILLER: One question. Should
22 we use NOS or Navigation Services or -- because

1 NOS is much broader than what this panel has.

2 MEMBER BRIGHAM: Lawson Brigham. Not
3 only does it enhance sufficiency. We should roll
4 the word "safety" in there somewhere, that it --
5 enhancing safety if navigation and -- right? All
6 -- some of these technological tools are -- so
7 maybe squeeze in the word "safety." I didn't see
8 it there. Maybe missing it somewhere.

9 MEMBER MILLER: You could add in right
10 after "efficiency," "and enhance safety across
11 Navigation Services activities." Take out the
12 "NOS?"

13 MEMBER BRIGHAM: Yes. Yes, take out
14 NOS.

15 MEMBER MILLER: Yes.

16 CHAIR PERKINS: So the other piece of
17 this is what is the expected outcome and a date
18 for that?

19 MEMBER MILLER: I think that's very
20 much an ongoing issue as new technologies evolve
21 and get put into use, but perhaps initially just
22 one of the one-pagers to provide a summary.

1 MEMBER SAADE: I would say not
2 worrying so much about a date is putting
3 something on the order of 5 years or 10 years
4 projection into the future. But Joyce is right,
5 we put a date on it and then next some new
6 technology comes out and you missed it.

7 CHAIR PERKINS: Yes. No, I'm sorry.
8 Maybe I didn't communicate that clearly. Are we
9 going to see a report at the next meeting from
10 this group?

11 MEMBER SAADE: Yes.

12 CHAIR PERKINS: Or is this group going
13 to endeavor to put together a panel that's going
14 to present to us that -- what outcome and what
15 timeline for the next -- what are we going to see
16 next?

17 MEMBER SAADE: We're going to produce
18 a report for the next meeting.

19 CHAIR PERKINS: Okay. And how about
20 a New Technology Stakeholder Panel?

21 MEMBER SAADE: To hold it at the next
22 meeting?

1 CHAIR PERKINS: Bring in --

2 MEMBER SAADE: Let's figure that out
3 before the next meeting.

4 CHAIR PERKINS: Okay. All right.
5 Fair enough.

6 MEMBER HALL: Or do we want to see the
7 paper and then decide what we want to see at
8 the --

9 MEMBER SAADE: Next, yes.

10 MEMBER HALL: -- 2017 meeting?

11 CHAIR PERKINS: I want to push it to
12 do something with bells and whistles and lights
13 on it at the next meeting.

14 MEMBER GEE: Yes, I think there's a
15 lot of -- there may be I think a report and that
16 may be the -- part of that will be a
17 recommendation for a stakeholder panel. And then
18 maybe to highlight areas where -- I think and
19 that's part of the discussion with NOAA about
20 where the technology is required. There's lots
21 of technology we see everywhere, but where is
22 those low-hanging fruit and the particular

1 technology that might really assist in the tasks
2 that NOAA had? And I think that then defines
3 potentially the stakeholders then. So I think
4 it's a review initially that would --

5 CHAIR PERKINS: All right. A boring
6 report it is.

7 (Laughter.)

8 MEMBER SAADE: No, it won't be boring.
9 That's for sure.

10 MEMBER MAUNE: Scott, there are a lot
11 of navigation services other than Marine
12 Navigation. I mean, we've got aviation, land
13 transportation navigation. Shouldn't we put
14 marine in there somewhere on the navigation?

15 MEMBER SAADE: I don't think -- I
16 think it's pretty certain that what this panel's
17 for.

18 MEMBER MAUNE: Well, it is to us. But
19 if nobody else sees a problem, I guess I'll
20 withdraw my objection. But I thought we should
21 add marine navigation. See, they also get
22 involved -- NOAA also gets involved with aviation

1 safety. You do on air fields and things.

2 MEMBER BRIGHAM: Yes, it's a systems
3 approach to -- Lawson Brigham. It's a systems
4 approach to integrating the geodetic
5 observations, the oceanographic observations and
6 the marine operations. And so I think we speak
7 systems and wherever the technologies can cross
8 all these and assist the system. So even I think
9 marine is a bit too narrow. I don't know. But I
10 think you'll take that view, won't you, in the
11 technology group?

12 MEMBER MILLER: I think it would be
13 good if we got the report a little before the
14 meeting. But also we should plan at least a
15 presentation on what you guys would like us --
16 just a PowerPoint slide or something, not --
17 something like that, if that's acceptable.

18 MEMBER GEE: Are you saying before the
19 meeting, Joyce, or somewhere during that interim
20 up until the next meeting to have a presentation
21 about -- once there's some sort of general feel
22 of what we're going to --

1 (Simultaneous speaking.)

2 MEMBER MILLER: I think at the meeting
3 would be excellent so the public can listen, too.

4 CHAIR PERKINS: I'll say that in the
5 development of the meeting agenda, right, there
6 will have to be some discussion on what the
7 report out is going to look like. So there
8 should be an opportunity for -- those of you that
9 are paying attention to the development of the
10 meeting agenda will be able to get a feel for
11 what that's going to look like and the time slot
12 allotted for it. Okay. Good.

13 Mr. Brigham?

14 MEMBER BRIGHAM: Lawson Brigham. And
15 dependent upon these reports, whatever they are,
16 maybe this one, maybe not, but we should always
17 think about if we gain consensus in the group,
18 that we liked to report, answered a lot of
19 questions, then we append it to our letter to the
20 administrator. And it gets in the public record.
21 And then we put it on the web site. And again,
22 the administrator doesn't have to answer any

1 questions or recommendations on that, but I think
2 maybe getting the work of the working groups up
3 the chain is very useful. Depending how the
4 robust the report is and where it's at. It's a
5 timing thing.

6 CHAIR PERKINS: Very good. Yes,
7 Joyce?

8 MEMBER MILLER: I just had a -- I was
9 looking for days at sea, so I had -- and I found
10 an OMAO report that I'll have Lynne send out to
11 everybody the link. I think we should be careful
12 to say -- in looking at it the age of the ships,
13 it's very complicated. There are ships that are
14 now operating past their design life, but have
15 not been upgraded. The Rainier and the
16 Fairweather are both considered ships that are
17 operating past their design life, but have been
18 upgraded.

19 And I'm sure it's -- but we should
20 just be careful when we do the edit. And I
21 wanted to let -- I need to let Andy know that we
22 say "two of the oldest ships" rather than "the

1 two oldest ships in the: -- thank you, Lawson,
2 for suggesting that. But I just think we need to
3 be careful that we're accurate there, that it's
4 very difficult to say really what is the oldest
5 ship, relatively? So --

6 CHAIR PERKINS: Can we just call them
7 antiques?

8 (Laughter.)

9 MEMBER MILLER: Yes.

10 CHAIR PERKINS: Yes, we should have a
11 motion and just do the formal -- for the mission
12 objective statement for the Technology Working
13 Group. So do we have a motion?

14 MEMBER KELLY: So moved.

15 CHAIR PERKINS: Okay. Do we have a
16 second?

17 MEMBER BRIGHAM: Second.

18 CHAIR PERKINS: Great. Any comment?

19 (No audible response.)

20 CHAIR PERKINS: All in favor?

21 (Voting.)

22 CHAIR PERKINS: Let the record show

1 we've adopted the Technology Working Group
2 objective statement as presented.

3 Next meeting date. Did you take a
4 look at your calendars? And I'm going to tell
5 you that you need to acquiesce to the dates of
6 August 29th, 30 and 31st. Lots of reasons.
7 Staying ahead of the end of the FY is one driving
8 factor that gets us before the back to school,
9 Labor Day holiday.

10 PARTICIPANT: And Congress is out of
11 session.

12 CHAIR PERKINS: Yes, and the other --
13 thank you. Congress is out of session, so that
14 should give us better access to the legislative
15 representatives for the Congressional and Senate
16 districts that will be in as well.

17 (Off microphone comment.)

18 CHAIR PERKINS: August 29, 30, 31. So
19 the intent would be to convene on the morning of
20 Monday the 29th, morning meaning at some point
21 before noon.

22 Yes, Juliana?

1 MS. BLACKWELL: I'd just like to have
2 a discussion on that, because I find that it
3 would be much better and more family-friendly if
4 we could have the travel on a Monday, on a
5 regular work day, and if need be shorten the
6 meeting to a two full-day meeting, or two-and-a-
7 half and give people an opportunity to meet
8 Tuesday, Wednesday and fly out Thursday afternoon
9 rather than require people to travel on a Sunday.

10 MEMBER SHINGLEDECKER: This is Susan
11 Shingledecker. I mean, I'm in agreement with
12 that. Monday for me, I can travel Monday, but I
13 can't -- that week I cannot be there on Monday
14 first thing.

15 MEMBER MAUNE: I think Lynne arranged
16 that schedule at my request because I'm not
17 available on Thursday, but I could perhaps attend
18 the first two days or something like that.

19 MS. BLACKWELL: So if I may speak
20 again, so I know that we've done three-day
21 meetings in the most recent past, but if you look
22 back four or five years ago a lot of times the

1 meetings were held to two days. And I realize
2 that we have new panel members and that's going
3 to be the case for the future also, but it may be
4 something for the panel to consider whether or
5 not we have a visit or field trip event at each
6 and every session. And if not, then we can
7 consolidate the meeting time to two full days.
8 Just to let those of you who weren't here before
9 that three-day meeting started to occur and
10 continued that it is an option to have a shorter
11 meeting.

12 MEMBER ATKINSON: This is Larry.

13 MEMBER SAADE: I support two-day
14 meetings.

15 MEMBER ATKINSON: Yes, I do, too.

16 CHAIR PERKINS: Okay. We could look
17 at Monday the 29th as a travel day, Tuesday the
18 30th, Wednesday the 31st as the meeting days.
19 That would give people the option perhaps of a
20 late flight out on Wednesday the 31st or on the
21 morning of Thursday, September 1st. And keep in
22 mind we have a holiday weekend that's

1 approaching, so I know we're all going to want to
2 be back with family and friends. At least I
3 will.

4 We have choice of Cleveland or
5 Chicago. We want to be in the greater Great
6 Lakes system. Chicago I think we all know will
7 have many options for flights and arrivals and
8 departures. We may have fewer in Cleveland, but
9 we have the Rock and Roll Hall of Fame in
10 Cleveland.

11 (Laughter.)

12 PARTICIPANT: I vote Chicago.

13 CHAIR PERKINS: So I'm going to open
14 the floor for discussion on Cleveland or Chicago.
15 I'm going to say let's do a quick run around the
16 table. If you feel strong about one or the
17 other, make your peace.

18 MEMBER KELLY: Ed Kelly. Is there a
19 preference as far as our local audience? Where
20 would we have a better participation with local
21 public people?

22 VICE CHAIR HANSON: As a company based

1 on Chicago, if you want to hear about Asian carp,
2 we can go to Chicago. If you want to talk about
3 navigation issues on the Great Lakes, Cleveland.
4 You got Interlake Shipping. You got Jim
5 Weakley's group, Lake Carriers Association. The
6 Great Lakes Governors Association is based there.
7 They're available to speak as well. St. Lawrence
8 Seaway.

9 MEMBER KELLY: Well, then this is
10 supposed to -- one of our main focuses is to have
11 a public meeting and to interface with the
12 interested public. I would say; I can't believe
13 I'm saying this, I'll go to Cleveland.

14 (Laughter.)

15 PARTICIPANT: For the record.

16 PARTICIPANT: Yes, for the record.

17 MEMBER KELLY: I spent a week in
18 Cleveland one day.

19 (Laughter.)

20 CHAIR PERKINS: You know, we've got an
21 Army Corps' district office in Chicago. The
22 closest Army Corps district office to Cleveland

1 would be Detroit or Huntington, West Virginia,
2 which are both reasonable distances for Army
3 Corps participation.

4 VICE CHAIR HANSON: And Detroit
5 handles the navigation for the Corps on the Great
6 Lakes, so -- Detroit and Buffalo.

7 MR. EDWING: And the Coast Guard's
8 district is headquartered in Cleveland.

9 VICE CHAIR HANSON: And you get
10 General Kaiser from LRD to come as well. He's
11 taken a lot of interest in navigation issues
12 since Cleveland is actually kind of a hot button
13 issue for the Corps these days related to in-lake
14 disposal versus upland.

15 MEMBER MILLER: Can I make one comment
16 about the two day? The three-day meetings are
17 two-and-a-half-day meetings have really enabled
18 us to make progress on the letters and so forth,
19 you know, to get done what we need to get done.

20 I would advocate that if it's going to
21 be a two-day meeting, we cannot fill up
22 everything with panels and -- or breakout

1 sessions, or whatever, that there is certain work
2 that needs to be done, which we weren't getting
3 done. I mean, you said it took 120 days to get
4 out a letter. That was one of the reasons is we
5 just didn't have time in the meetings.

6 I just think if we're going to
7 schedule a two-day meeting we have to kind of
8 minimize. Maybe make day one the public, the
9 really engaged public part of it and make day two
10 sort of what the panel needs to get done. That's
11 just my two cents.

12 MEMBER BRIGHAM: Yes, Lawson Brigham.
13 But I do believe it's hugely valuable to go out
14 like on the boat ride we had and see this place
15 and understand -- and like we had, right, from
16 Hawaii, we went on a container ship and now we'll
17 go on a cruise ship. And then we went to
18 Maryland in the training center. I don't think
19 we should dismiss those. And if something is in
20 Cleveland that's easy to do, whatever it might be
21 -- the Coast Guard might have something, bring a
22 buoy tender or something, we should do it if we

1 can squeeze it into a tight schedule.

2 I believe my time on the HSRP that the
3 working groups have now spun up and they're more
4 engaged. We want to report out. Takes time and
5 it takes time a little bit away from the public
6 part. I mean, we're in the public, but it's us
7 talking. So I think still a lot of things to
8 squeeze into two days, not that I'm advocating
9 being three-days in Cleveland, but there may be
10 something.

11 Maybe the Coast Guard could one day --
12 I don't know if we've gone on a Coast Guard
13 cutter. A buoy tender would be important to see
14 and see the navigation systems they have on the
15 modern buoy tender and how they relate to our
16 work. So maybe we can orchestrate that.

17 CHAIR PERKINS: I think I'm hearing
18 that we are having a consensus on Cleveland.
19 Okay.

20 MEMBER KELLY: Do we have a consensus
21 on two or three days at this point, because I
22 kind of feel if I'm in for two, I might as well

1 be in for three. And there is some value in
2 local interface. And I don't know if we can fit
3 all of that in in two days. We're having a hard
4 time covering everything we're supposed to in
5 three.

6 CHAIR PERKINS: Yes, maybe
7 there's --

8 (Simultaneous speaking.)

9 CHAIR PERKINS: Right. Your new
10 chairman is very diplomatic. He said maybe
11 there's a compromise position here at two-and-a-
12 half and that trailing half day could be our site
13 visit or the leading half day could be the site
14 visit, and it may not be necessary for everyone
15 to attend the site visit. So I think we can
16 maybe hit the best of both recommendations, or
17 we'll sure try like heck to do that.

18 If it's a challenge for Lynne -- and
19 Lynne does a great job at this, but -- so if we
20 have a -- if we can do site visit on a Monday
21 afternoon, convene on Tuesday, Wednesday, I think
22 that might be --

1 RADM GLANG: The site visit could be
2 optional, but I really think if you're going to
3 go to Cleveland, it's worth going to see a
4 locker. I just think that's what makes the
5 experience. Every port is unique. I just think
6 that -- that's my personal opinion.

7 CHAIR PERKINS: Yes, I've had the
8 privilege of being in Cleveland and seeing the
9 water infrastructure there from the harbor, the
10 locks, the working drawbridges. There is a great
11 educational value there if you haven't had an
12 opportunity to see that infrastructure before.

13 PARTICIPANT: Then make it optional.

14 CHAIR PERKINS: Yes, but we can
15 certainly make that piece optional. I agree.

16 So we'll agree. We'll have a motion
17 for Cleveland and a two-day official public
18 meeting. Do we have a second?

19 MEMBER MILLER: Second.

20 CHAIR PERKINS: Okay. Great. Any
21 further discussion?

22 (No audible response.)

1 CHAIR PERKINS: Hearing none, a show
2 of hands?

3 (Voting.)

4 CHAIR PERKINS: Let the minutes record
5 that we're going to Cleveland for a two-day
6 public meeting with optional site visits to be
7 scheduled, to be determined, August 30th, 31st,
8 2016. Great.

9 Shall we take just a brief bio break
10 before we get into our work on the recommendation
11 letter?

12 (Whereupon, the above-entitled matter
13 went off the record at 11:53 a.m. and resumed at
14 12:31 p.m.)

15 CHAIR PERKINS: It's right at 12:30.
16 We have a scheduled 1:30 departure, so we have
17 one hour, 59 minutes actually here to get into
18 the hard work of formulating our recommendation
19 letter.

20 What we have on the screen is from
21 Panel Member Carol Lockhart. So Carol has
22 provided us some input for topics for the

1 recommendation letter, and I think we can use
2 that as a starting point. So if you can put your
3 eyes on that and then think about what other
4 significant thing do you feel should be in the
5 recommendation letter beyond that, and we'll do a
6 quick around-the-table and then try to get into
7 the wordsmithing of it.

8 So I think Carol made a good point
9 about addressing the importance that the next DFO
10 of the Hydrographic Services Review Panel, you
11 know, and that will have the experience and
12 training in hydrography. And I think Carol also
13 made a good point regarding the comments that
14 we've heard this week regarding the challenges
15 that NOS has regarding workforce and the staffing
16 of the NRTs and even the delays in getting our
17 panel members fully processed.

18 So that's our starting point. Susan;
19 I'd like to just go around the horn, is there
20 anything additional, significant that you would
21 like to add or if you have -- if you feel neither
22 of those and comments from Carol are

1 inappropriate, let's just kind of hash it out.

2 MEMBER SHINGLEDECKER: Sure. Susan
3 Shingledecker. I agree with a lot of what Carol
4 has started us off with. I think we didn't
5 really explore it, but I did hear in other
6 conversations that the workforce needs I think
7 really are something that needs to be brought up.
8 It seems that that is a problem across many areas
9 of the offices that should be included, so I'm
10 glad Carol mentioned that. But it's definitely
11 more broad than just our panel itself.

12 The other -- this is more a question
13 to the group. Usually when we're drafting these
14 recommendation letters we tease out anything from
15 the local area that we heard from our local
16 stakeholders. As I'm recalling the discussions
17 from the panel members, I didn't really hear a
18 big local critical need that we've seen in this
19 area that we haven't necessarily seen elsewhere,
20 but I thought I'd maybe throw it out to everybody
21 to think was there anything locally specific to
22 this area that we need to consider.

1 CHAIR PERKINS: Okay. Good comments.
2 Dave, you're next.

3 MEMBER MAUNE: I really don't have
4 anything to add. I agree with both of them. I
5 just had a question. Are you getting signatures
6 from everybody for that letter? You're taking
7 care of that separately?

8 MS. MERSFELDER-LEWIS: Everybody be
9 sure to come seem me before you leave.

10 MEMBER MAUNE: Okay.

11 MS. MERSFELDER-LEWIS: Before we
12 leave.

13 MEMBER MAUNE: That's really all -- I
14 have nothing else to add. Thank you.

15 CHAIR PERKINS: Thank you, Dave.
16 Larry?

17 (Off microphone comment.)

18 CHAIR PERKINS: Okay. Rich, you're a
19 non-voting member, but we'd welcome your input or
20 comments.

21 MR. EDWING: So Rich Edwing with CO-
22 OPS. So I would just recommend -- you know, and

1 again once again we've heard how much people
2 value the PORTS systems here. We seem to hear
3 that at every meeting. And not get into the
4 funding issue, but just reflect that it seems to
5 be an essential service in the ports that we've
6 been hearing from the stakeholders on.

7 CHAIR PERKINS: Lindsay?

8 MEMBER KELLY: Scott, if I could just
9 build on Rich's comment. You know, I'm Mr.
10 PORTS. I love that. I think it's true that we
11 have heard once again the value and the
12 efficiency of PORTS and the broad gamut of users,
13 but we also heard the continued frustration
14 regarding the funding issue. And I think we just
15 should keep that on the table. I think it's
16 important that we say what positive results we're
17 hearing about PORTS, but I think we also need to
18 have in this official letter that we're also
19 hearing the frustration on the funding.

20 CHAIR PERKINS: Okay. We're going to
21 try and do this in order and work our way around,
22 so you've got a window of opportunity to light up

1 your keyboard and compose a few words.

2 Okay. So and if you can do that and
3 then email them to Lynne, we might be able to get
4 those -- actually get a draft of the letter
5 rolling here pretty quickly.

6 So, Mr. Gee?

7 MEMBER GEE: Yes, I don't think I have
8 anything to add right now to the --

9 CHAIR PERKINS: Mr. Saade?

10 MEMBER SAADE: The topic is this or
11 things in general? The letter specifically?

12 CHAIR PERKINS: The letter
13 specifically.

14 MEMBER SAADE; I think the letter
15 specifically should stick to one topic.

16 CHAIR PERKINS: And what would that
17 one topic be?

18 MEMBER SAADE: I mean, this letter
19 that we're talking about relative to the
20 replacement of the ships, correct?

21 CHAIR PERKINS: No. No. No, we've
22 completed that letter.

1 MEMBER SAADE: Okay.

2 CHAIR PERKINS: This is our formal
3 recommendation letter that we do at the
4 conclusion of each of our meetings.

5 MEMBER SAADE: Oh, I didn't know that
6 we did that. Sorry.

7 CHAIR PERKINS: Yes. No, that's --

8 MEMBER SAADE: Okay.

9 CHAIR PERKINS: Yes, so what we do at
10 the conclusion of each public -- two days of --
11 or whatever the duration of the public meeting is
12 is the panel collectively composes a
13 recommendation letter to the administrator of
14 NOAA with what our current input is for their
15 consideration. So this is more than just that
16 one topic.

17 MEMBER SAADE: Caught me off guard.
18 I wasn't even prepared to do anything like this,
19 so I'll just skip it rather than wing it.

20 CHAIR PERKINS: Okay. One thing that
21 may be useful, there are -- on the web site are
22 the prior recommendation letters and then the --

1 NOAA's administrator responses to them. So
2 they're not great reading, but it's probably
3 worth the time just you can maybe get a feel for
4 what the panel has done in the way of
5 recommendations in the past and what the
6 administrator's response is.

7 PARTICIPANT: There's one --

8 PARTICIPANT: Oh, are they? Okay.

9 CHAIR PERKINS: Yes, they're in your
10 packet as well. Great.

11 Mr. Armstrong?

12 MR. ARMSTRONG: Thank you, Mr.
13 Chairman. I was struck at least in one set of
14 panel presentations about the importance in this
15 area of sea level rise, tracking sea level rise
16 and nuisance and serious flooding. And so, I'm
17 not quite sure I have the words together here,
18 but I think it's probably important to call out
19 the need for continued monitoring of sea level
20 rise and efforts towards predicting and
21 disseminating information on inundation.

22 CHAIR PERKINS: Thank you. Admiral

1 Glang?

2 RADM GLANG: Thank you, Mr. Chair.

3 Gerd Glang. Are we capturing these for sort of
4 real time display or -- the bullets that are
5 coming up, or how are we capturing what's coming
6 from -- there's some pearls of wisdom coming off
7 the panel members. I want to make sure we
8 capture those. You got it.

9 MR. HALL: The court reporter has
10 them.

11 RADM GLANG: Okay. You got them?
12 Okay. So I'm looking through my notes, which are
13 far from complete. I think we heard about the
14 value of the NRTs. That was stressed by several
15 speakers. The four corners of maritime
16 governance and that NOAA is one of those four
17 corners. We heard on that. Andy's already
18 mentioned the sea level rise and the importance
19 of that for coastal resilience and planning. So
20 I think I'll stop there and let the ball keep
21 rolling.

22 CHAIR PERKINS: Vice-Chair Hanson?

1 VICE CHAIR HANSON: Thanks, Scott.
2 Yes, I think probably something I'd like to see
3 at least a couple lines on is thanking the Corps
4 and the NOAA for their collaboration and push
5 towards getting more data into the stakeholders'
6 hands and encouraging additional attention and
7 support of those efforts.

8 CHAIR PERKINS: Very good. Thank you.
9 Captain McIntyre?

10 MEMBER McINTYRE: I would just like to
11 build on Bill's suggestion where as far as
12 partnering in the data exchange. I think maybe
13 the USGS could be included with that as well.
14 And then also building on Rich's suggestion, I do
15 think that the PORTS should be included and I do
16 think that there should be some mention of
17 funding as well as the utility of the system.

18 MEMBER THOMPSON: Same area. I heard
19 during the meeting the need for efficient access
20 to data and without having to go to multiple
21 locations to get it.

22 MEMBER HALL: Gary stole my thunder,

1 so I will leave it Juliana.

2 MS. BLACKWELL: Juliana Blackwell.

3 Maybe again just focusing on that collectively
4 this is about Navigation Services, and although
5 many of the discussions and topics are focused on
6 the marine transportation side of things, it has
7 -- as I talk about when I get up there and talk
8 about NGS and talk about the Coastal Mapping
9 Program, there are other transportation
10 navigation things that we support as part of the
11 National Spatial Reference System.

12 It doesn't necessarily have to be in
13 the letter to point that out, but just in
14 reference to navigation if we can make sure that
15 it doesn't just focus on just marine navigation
16 and marine transportation, that there is an
17 intermodal appreciation and support for the
18 issues that we're dealing with and the projects
19 that we have underway for modernizing the whole
20 framework of knowing where things are and knowing
21 them accurately to support the future.

22 So again, just for the panel to keep

1 that in mind as they finalize the paper. Thank
2 you.

3 CHAIR PERKINS: Dr. Brigham?

4 MEMBER BRIGHAM: Lawson Brigham.

5 Thanks, Mr. Chairman. I think we should say
6 something about the new working group on
7 technology and kind of why we did it, and we have
8 core capacity in the panel, just to say a few
9 words just to get it in the letter as a little
10 sea change in our group.

11 I do believe we should say something
12 about the Arctic, and I'm not sure if we're going
13 to attach some of the issues papers to this. Are
14 we?

15 CHAIR PERKINS: Yes, that would be the
16 intent, that we identify the issue papers that
17 were developed, that we have developed and that
18 we're developing and then attach the ones that
19 are completed and ready at the time that the
20 letter goes.

21 MEMBER BRIGHAM: Well, hopefully the
22 Arctic will be one. And we should reiterate our

1 concern about Arctic hydrography and geoid
2 measurements, oceanographic measurements. And
3 maybe we could recommend again and reference our
4 issue paper and our study that we highly
5 recommend a line item in the budget for those
6 efforts: Arctic hydrography charting and geodetic
7 and oceanographic measurements, however we want
8 to say it. I think we should say it. Whether
9 there's agreement with NOAA or not, I'm not
10 concerned. I think it's a message for the Hill.

11 MEMBER MILLER: I had noted in one of
12 the early discussions, if I can find the right
13 file, that we had the -- Captain Penoyer of the
14 Coast Guard mentioned that the maritime -- this
15 -- and this goes right into the data issue that
16 other people have -- maritime industries in
17 transition with voluminous data and information.
18 I think we could organize several of these. One
19 of the things for the new members, usually what
20 we try to do is have one or two main
21 recommendations.

22 Now, in that we've already decided to

1 send a separate letter as quickly as possible, we
2 should mention that, but there recommendation
3 goes in the other letter, or we reiterate it in
4 very short form. I think we should rank what we
5 think are the most critical suggestions. And I
6 would agree with Carol that mentioning that the
7 hydrographer of -- NOAA's hydrographer must be a
8 hydrographer. I think to me that's the second
9 most important issue.

10 And one question. Are we planning to
11 attach the paper that we worked on this morning
12 to Andy's letter or to this letter?

13 CHAIR PERKINS: The fleet
14 recapitalization letter?

15 MEMBER MILLER: Yes.

16 CHAIR PERKINS: It will go separately.
17 And we can attach an additional copy here, but it
18 will be received by the administrator before this
19 letter.

20 PARTICIPANT: I think the question is
21 the issue sheet.

22 CHAIR PERKINS: Oh, the issue sheet?

1 Yes. Yes, the issue sheet. The longer issue
2 sheet on fleet recap will be attached.

3 MEMBER MILLER: To this letter?

4 CHAIR PERKINS: Right. We're going to
5 identify yourself the issue --

6 MEMBER MILLER: So that will just
7 reiterate that we -- we'll mention that it's
8 attached and that we sent a previous letter and
9 then we'll -- and so, I think that besides -- I
10 mean, this is only my people. Besides the
11 hydrographer of the Navy, I think we can --

12 PARTICIPANT: NOAA. Not the Navy.

13 (Laughter.)

14 MEMBER MILLER: Or of the -- I'm
15 sorry. Not the -- the hydrographer for the
16 nation, or whatever it is, can be -- and we
17 should -- we can combine a lot of the comments
18 into -- you know, it was mentioned that PORTS and
19 the NRTs are very valuable to many of the
20 stakeholders that attended and -- but in terms of
21 solid recommendations, we do try to hold them
22 down to two or three, generally.

1 CHAIR PERKINS: That's correct. This
2 is the gathering process and we will filter it
3 down and make the letter clearer, shorter and
4 succinct and keep it in our prior -- similar to
5 our last two letters try to keep it to the top
6 three.

7 Okay. Mr. Kelly?

8 MEMBER KELLY: Well, in the sense of
9 keeping it short, I've got six topics.

10 (Laughter.)

11 MEMBER KELLY: So some of them we've
12 heard, and I just want to chime in in supporting
13 them. We definitely need the hydrographic
14 vessel. As we said, we do need a hydrographer in
15 chief, particularly with Admiral Glang stepping
16 out on us. I think we need to point out that our
17 ports are in crisis. There is a looming
18 problematic crisis with the ports of the United
19 States with the introduction of the megaships,
20 the increased congestion, the increased
21 strictures regarding security, etcetera,
22 etcetera. We're running onto all of that. I

1 think that's an important item for us to present
2 that. And that's the ground work and the case
3 for the necessity of proceeding as rapidly as
4 possible for the production, refinement and
5 Precision Navigation or we call it -- whatever
6 name we're giving it these days.

7 I would like to make a comment about
8 PORTS, how we continue to hear that and how
9 important it is, especially in light of these
10 congested harbors. I did pop something over to
11 Lynne; and you can whack that up, but it's just a
12 ground or base for what that might say.

13 And I think we have to mention here
14 locally the biggest local issue I was hearing was
15 inundation and surge. Certainly they have a
16 history of the Great Storm. And from what we're
17 hearing and whatever, there's really not a whole
18 of solutions to that and they need accurate data
19 and forecasting to help preclude. There will be
20 another storm. It may or may not be as great or
21 greater than the one they had before, but we need
22 as NOAA to help to do something here in this

1 local area. That's it.

2 CHAIR PERKINS: Captain Rassello?

3 MEMBER KELLY: He wants less fog.

4 (Laughter.)

5 MEMBER RASSELLO: Yes, Lawson?

6 MEMBER BRIGHAM: Yes, I see more
7 energy on the HSRP and a lot more ideas than I
8 did five years ago. I don't think we should be
9 constrained by three major points. I'll tell you
10 one of my concerns. The Arctic's going to be
11 squeezed off the paper because it's sight-unseen
12 without BP and everybody offshore. The time now
13 is -- we're talking about the Arctic, which is --
14 you never hear about is to just keep it on the
15 list.

16 But beyond Arctic we have five or six
17 ports. I mean, I don't feel -- nobody's told us
18 we have to have three. I understand that the
19 administrator is deluged by all kinds of stuff.
20 Maybe the points have to be just a sentence or a
21 point rather than some description. I don't
22 know, but I don't feel we should be constrained.

1 CHAIR PERKINS: Okay. Go ahead.

2 MEMBER SAADE: I'll be really brief
3 because it's my favorite mantra and we didn't
4 even mention it I don't think once, but map once,
5 us many times. We can't say it enough. We can't
6 do it enough.

7 CHAIR PERKINS: I do like that catch
8 phrase of map it once, use it many.

9 Maybe we might keep in mind that we're
10 looking at two things that will happen between
11 now and the next meeting. Well, I guess it won't
12 happen between now and the next meeting. I was
13 going to say we could have a shorter letter to
14 the administrator and then the longer list that
15 goes to the transition team. But we will meet
16 again before change of administration, so --
17 okay.

18 And a long letter isn't necessarily
19 the problem. What we're trying to do is make
20 sure that we don't make our letter into a summary
21 of the minutes of the meeting.

22 MEMBER GEE: So Lindsay Gee. I just

1 had a question -- I guess it's Gerd, or those
2 that know, who is recommending, and I would agree
3 that we need a hydrographer, but what is the
4 alternative? What are we recommending against?
5 Like is it nobody, or there's a temporary
6 position, or there's a non-hydrographer admiral,
7 or what's the alternative? What's the bad news
8 potentially?

9 MEMBER BRIGHAM: I can comment from
10 the Coast Guard experience that we would put a
11 general line officer, a lawyer, a civil engineer,
12 maybe not a mariner, ship driver, in a position
13 like this. And my concern is -- personal concern
14 is on the international level in particular, IHO
15 and in all the regional commissions in the
16 international level that we need a really a
17 hydrographer, because most, if not all -- there
18 are a few general officers, but most if not all
19 of the international folks are hydrographers.
20 Not all, but ours should be.

21 RADM GLANG: Gerd Glang. Just to
22 respond to Lindsay's question, the alternative to

1 having a hydrographer as the director of Coast
2 Survey is a non-hydrographer.

3 (Laughter.)

4 RADM GLANG: That's sort of the short
5 answer. In all seriousness.

6 PARTICIPANT: They wouldn't gap it?

7 RADM GLANG: They wouldn't gap it.

8 PARTICIPANT: Or a temporary position
9 of someone that's a non-flagman.

10 RADM GLANG: Unlikely. The process is
11 in motion. Someone will be picked.

12 CHAIR PERKINS: So can we pass control
13 of the screen back over to Lynne, please, Kelvin?
14 Thank you.

15 MEMBER McINTYRE: Anne McIntyre. Can
16 I ask one question just real quickly? Just so I
17 understand the format of everything being is --
18 we've got the one funding letter essentially
19 going out for the vessels and then we send a
20 larger report letter of this meeting and the
21 issues that we've seen to the administrator? And
22 then issue papers are going to be attached to

1 this longer letter. That's correct?

2 CHAIR PERKINS: We've done a really
3 good job of explaining it. You've got it.

4 MEMBER McINTYRE: Okay. And so my
5 question is the issues that we raise that don't
6 have issue papers attached at this time, will
7 they be treated of lesser value, that type of
8 thing?

9 CHAIR PERKINS: That's really what we
10 need to deliberate on and come to conclusion on
11 literally in the next 30 minutes so that we have
12 time to prepare a draft letter. So the issue
13 papers are the issue papers. We will identify
14 them, right, that they're -- that some are done,
15 some are working. That's clear. What do we want
16 in the letter to the administrator beyond that is
17 really the matter at hand.

18 MEMBER McINTYRE: Okay.

19 RADM GLANG: Mr. Chair, could I make
20 another suggestion for the panel to consider,
21 which had to do with the reauthorization on the
22 Ocean and Coastal Mapping Integration Act, if the

1 panel were interested in articulating a position
2 on that, they saw value in that or not.

3 CHAIR PERKINS: Thank you. That's
4 very good input.

5 So just so everyone understands, we
6 don't have to wordsmith the letter right now,
7 right? Our standard operating procedures are
8 that we allow ourselves a two-week window to --
9 between the Chair and the Vice Chair to prepare a
10 draft and put it back out. But what we want to
11 do here is identify the items that you want
12 included in that letter. So we don't have to
13 worry about the grammar and that piece of it. We
14 just want to make sure that these are the --
15 think of them as the bullet items that we're
16 going to put in there.

17 So we want to get clarity on the
18 bullet items and then talk about perhaps the
19 order in which to present them in the letter.
20 And I think that will be really good if we can
21 get through that here.

22 Susan?

1 MEMBER SHINGLEDECKER: I was just
2 going to kind of summarize a little bit what I
3 had from my notes. I think an important thing
4 with the recommendations we make is you have to
5 think about what is the ask? What are you
6 looking for them to do as a result? I mean,
7 there's many topics you can mention.

8 So certainly fleet allocation would be
9 on there. And that would be mentioned briefly
10 because per our separate communication.

11 I agree with the mention of Garrett's
12 replacement. I wonder if that could -- while you
13 don't want to water that down, is there some
14 benefit to expanding that a little bit to include
15 broader secession and leadership building and
16 workforce issues within the offices as well?

17 I think Ed's phrasing of ports in
18 crisis and combining that with Precision
19 Navigation and the PORTS systems -- but we need
20 to figure out what the ask is there.

21 Then I heard something -- what we
22 heard here locally on sea level rise and

1 inundation challenges and then the issue of, I
2 think as Anne said, getting the data into the
3 hands of users in the most efficient way.

4 So I kind of saw that as five
5 recommendations, although the fleet allocation
6 one would probably be very short. And then the
7 bottom of the letter could be slightly more
8 administrative noting the standing up of the
9 Technology Working Group and then noting the one-
10 pagers that are attached on additional topics.
11 So there might not be a specific recommendation
12 -- and I don't mean to cut Arctic out. I think
13 these are the topics we've been working on for a
14 much longer standing time and have a more robust
15 offering to say. That would be my thought.

16 MEMBER BRIGHAM: Yes, I agree with Mr.
17 Kelly here about the crisis, but crisis is a
18 Washington Monument term, that you get --
19 everything's in crisis. The country's in crisis.
20 All the politicals tell us we're all in crisis.
21 And is there another -- could we adjust the word,
22 or are you really -- I mean, I'm just looking for

1 a way to -- "challenge" isn't good enough and
2 strong enough, but are we in crisis? Maybe we
3 are, but I see trade and I see -- we're the
4 trading nation of the world with China, so stuff
5 still comes in.

6 So I don't know if there's an easier
7 way to say that, Ed.

8 MEMBER RASSELLO: Port demands?

9 MR. ARMSTRONG: Maybe ports under
10 stress.

11 VICE CHAIR HANSON: I can circulate a
12 paper that the -- you know the FACA I'm on,
13 Supply Chain Competitive advisory Committee,
14 Department of Commerce that just put a paper out
15 on port congestion that actually does talk about
16 every port in the country being congested and
17 needing attention. It goes back to the West
18 Coast port and the attention that that brought to
19 the supply chain system. And it was a big cry
20 focused on the West Coast ports.

21 Turns out it was actually a little
22 misplaced, but it allowed us to focus attention

1 on every port in the country, as the story goes,
2 except one, and that's Savannah. But that's a
3 different story. But the bottom line is even as
4 Ed's articulated, it has congestion issues that
5 are not the same as the West Coast, but they are
6 congestion issues that need to be addressed and
7 dealt with. So I'll circulate that paper.

8 MEMBER GEE: Lindsay Gee. Just
9 related to Susan's comment about the number of --
10 we're not -- we need to ask for something, from
11 the previous, the experience of the HSRP and
12 sending those recommendations and previous
13 letters, have they seen any results in response
14 to the actual stuff getting done?

15 CHAIR PERKINS: You have both the
16 recommendation letters and the NOAA administrator
17 responses at your fingertips to read and draw
18 your own conclusion.

19 I will give you one example; and I'll
20 ask for Juliana's input on this, I mean, two
21 years ago we heard about the struggle that NGS
22 was having with getting approval for the hiring

1 of the geodetic advisors. Juliana made a very
2 clear need and -- she explained the need for it,
3 the importance of it, how those positions were
4 going to be essential as we go into GRAV-D in the
5 coming datum transformation to 2022 that you've
6 heard about. We put pen in hand and addressed
7 that issue in a recommendation letter and we have
8 geodetic advisors in place in the U.S., one of
9 which was in attendance here at this meeting.

10 So I think this may be the most
11 demonstrable evidence I have since I've been on
12 the panel of where we've made a clear
13 recommendation about a very specific topic that
14 was very actionable on the part of the NOAA
15 administrator. And I think that if we can build
16 on that, if we can make our recommendations clear
17 and specific with a real requested action, it is
18 probably easier to get something demonstrable.
19 When we throw a big problem out there and say
20 this is a big problem without a clear
21 recommendation, right, it's a recommendation
22 letter. So it's kind of a long-winded answer,

1 but I feel very --

2 MEMBER GEE: No, I think it was

3 more --

4 (Simultaneous speaking.)

5 CHAIR PERKINS: -- happy with the

6 results on the geodetic advisor.

7 MEMBER GEE: Thinking out loud, I

8 think to say, okay, well, what are those

9 recommendations that have had success before and

10 should we tailor out?

11 MR. ARMSTRONG: Just looking over the

12 list of input we had here, it seems to me in this

13 letter we might have -- we have two or

14 potentially three kind of challenge questions or

15 points to the administrator, and that would be

16 the ship replacement, the admiral succession and

17 potentially the Arctic line item, if the panel

18 were to ask for those three things. And the

19 others appear to me to be things that we're

20 reminding the administrator that -- or pointing

21 out to the administrator that we feel important.

22 And they kind of give her the

1 opportunity to say thanks for keeping these
2 things on the table and we agree and we're
3 working hard on all of them. So they're not
4 really challenge questions. We have -- I think
5 we have kind of -- and that's good I think to
6 have some of those things where we're -- so, it
7 looks like we're only coming up with a limited
8 number of whammos and then the rest of them are
9 things that she can say, gee, thanks, we'll do
10 this or we'll continue to pay attention to it or
11 something like that.

12 MEMBER MILLER: We can phrase -- a lot
13 of times we have sort of a section discussing
14 what we heard from the stakeholders, and we could
15 put NRTs in ports are important and appreciated
16 by the users. In this level sea level rise,
17 inundation, storms are very important. Also very
18 important is getting data into the hands of
19 users, and we could include the Army Corps issues
20 there. And then we often discuss -- and so, HSRP
21 took action on these things. We can talk about
22 we're forming a Technology Work Group.

1 And these aren't in any order. It's
2 just how I threw them together. We have attached
3 issue papers that we've been working on,
4 including fleet, Arctic and Hampton Roads. Ports
5 are in crisis due to megaships and infrastructure
6 and so forth. And again, I don't know if we want
7 to mention data again here again, but that PORTS
8 and Precision Navigation are critical to the
9 needs of the users. And that may go up to the
10 user. And then the same major recommendations
11 that Andy suggested: ships, hydrographer and
12 something about Arctic funding, direct Arctic
13 funding.

14 Does that -- I just want to -- I
15 started typing after people gave their -- or sort
16 of somewhere in there. And so, I was trying to
17 remember are there things I missed there?

18 CHAIR PERKINS: Well, I think we have
19 captured everybody's comments on the
20 screen --

21 MEMBER MILLER: Oh, okay.

22 CHAIR PERKINS: -- or pretty close to

1 it. So if -- I think Lynne can email that to
2 you, Joyce, and then you can maybe assimilate it
3 into the draft that you've started.

4 MEMBER MILLER: Yes, I can work on
5 that.

6 CHAIR PERKINS: Okay. Yes, we've got
7 --

8 MEMBER MILLER: Probably later this
9 afternoon I can work on it. And I can -- if
10 anybody's -- whoever is still around, we could
11 get a draft, too. I'd offer to skip the cruise
12 ship, but I don't want to.

13 (Laughter.)

14 CHAIR PERKINS: No, not asking that,
15 but we do have 15 minutes right now.

16 MEMBER MILLER: Yes.

17 CHAIR PERKINS: Can you light up a
18 keyboard.

19 MEMBER MILLER: I write fast, but --

20 (Laughter.)

21 CHAIR PERKINS: Okay.

22 MR. ARMSTRONG: Mr. Chairman, I wonder

1 if we might also in the letter indicate some
2 things that the panel is planning to take up.
3 For example, we're going to take up some more in-
4 depth look at the ports congestion and stress
5 situation and we're going to take up the
6 technology for data sharing and dissemination.
7 And so, kind of report to her some of the things
8 that we think are important and that we're going
9 to take on as action for a more in-depth look
10 down the road further.

11 MEMBER MILLER: So something like
12 currently discussing now and in future. Okay.

13 MEMBER SHINGLEDECKER: That could be
14 put in context of attached are the one-pager, or
15 whatever we call those documents, on these
16 topics, and then these are ones that are
17 currently in progress and that you can expect to
18 see in the future.

19 MEMBER MILLER: Yes. We might ask
20 just if they have any preference of things that
21 we tackle first, if there's -- but so, I may have
22 missed one. Ports are in crisis due to

1 megaships. We've got a Technology Working Group.
2 Okay. Let me clarify. We're going to hand in
3 the fleet paper, the Arctic paper and the Hampton
4 Roads paper this time. Are there any others that
5 we think will be ready?

6 PARTICIPANT: That's as close -- but
7 he said several weeks away.

8 MEMBER McINTYRE: What's the deadline
9 on the letter? When does that want to -- when do
10 you want to send that?

11 CHAIR PERKINS: We have the standard
12 operating procedures outline that should be in
13 your materials. So two weeks. It gets written
14 and circulated within two weeks for panel comment
15 and then -- I'm doing this -- I apologize, I'm
16 doing this from memory.

17 MEMBER MILLER: And it's -- comments
18 are expected, I believe, in four weeks and a week
19 after that the -- after it passes through the
20 Office of Coast Survey for finalization, you
21 know, for just final agreement or --

22 CHAIR PERKINS: Yes.

1 MEMBER MILLER: Then, so I believe
2 it's five weeks it goes to the administrator.

3 CHAIR PERKINS: Yes.

4 MEMBER MILLER: We of course have the
5 other letter that's going first.

6 CHAIR PERKINS: Correct. The other
7 letter will go first. But so, and we don't have
8 to take all five weeks, but the commitment that
9 we put in the standard operating procedures is
10 that a draft will go out to the panel within two
11 weeks. We will wait no longer than two weeks to
12 hear back from the panel. And then it goes in.
13 There's a process inside of NOAA of where the
14 letter goes and how it gets routed.

15 MEMBER THOMPSON: Gary Thompson. Mine
16 should be -- I'll provide that to you next
17 Monday.

18 MEMBER MAUNE: Okay. I'm concerned on
19 how much time it might take for us to coordinate
20 these. Even though Ed gets me something in a
21 week or two, and Gary in a week or two, sometimes
22 it takes weeks for us to scrub those things and

1 reach agreement that this is ready to go. So I'm
2 not particularly encouraging rushing them
3 through. I'd rather get them done right and we
4 all agree to than to try to rush it out along
5 with this letter to the administrator.

6 MEMBER MILLER: I think it might
7 weaken it if we send in too many at once. It
8 also -- we need to have continuing product.

9 MEMBER MAUNE: That's right.

10 MEMBER MILLER: So I think the ones
11 that are ready: Hampton Roads, Arctic and fleet,
12 should go in with this letter. And we don't have
13 to wait until the next meeting to put them on the
14 web site once they're done. But it also --
15 there's a lot of stuff that Lynne and her staff
16 are going to have to get through for us: the
17 first letter, the second letter, and finalize the
18 three issue papers.

19 MEMBER MAUNE: I think we learned
20 something yesterday in that when we coordinate --
21 between meetings these things often go out and we
22 don't get any feedback, but yet yesterday we had

1 all kinds of feedback on Joyce's paper. And so
2 I'm a little concerned about the process we might
3 go through between the meetings to try to get
4 these things out with this letter when actually
5 it seems to me as though this kind of meeting is
6 when we all get together, we wordsmith the actual
7 wording and we reach consensus that this paper is
8 really ready to go.

9 So I'm not adverse to us formulizing
10 Amy to get three new issue papers every meeting
11 or something like that. But I don't see the need
12 to rush Ed's paper and Gary's paper out.

13 MEMBER MILLER: So the future papers
14 would be ports and harbors, technology. Is
15 integration of data -- since we -- several people
16 mentioned data. Is that something that --

17 (Off microphone comment.)

18 MEMBER MILLER: Okay. Datums and
19 reference frames. Okay.

20 MEMBER McINTYRE: Anne McIntyre. I
21 wouldn't mind taking a shot at a position paper
22 on the PORTS system if we're not under a huge

1 deadline on those types of things. I see it as
2 kind of a separate issue to the PORTS issue and
3 the Precision Navigation issue because it's an
4 existing system that we can really take advantage
5 of now in a lot of different areas and a lot of
6 different users as opposed to something that we
7 are looking forward towards using and developing
8 for the future.

9 MEMBER MILLER: I'd add Precision
10 Navigation to that, too, given the development
11 that's going on.

12 MEMBER McINTYRE: Okay.

13 MEMBER MILLER: Okay. So discussing
14 now and in future papers, ports and harbors,
15 technology, datums and reference frames,
16 integration of data. We don't have that
17 underway, but it could be a future paper. I
18 think we probably need to --

19 MEMBER MAUNE: I don't know if
20 anybody's volunteered to prepare a paper on that.

21 MEMBER MILLER: I think it's an --
22 well, at least --

1 MR. ARMSTRONG: Maybe the Technology
2 Committee could kind of take up that integration
3 of data challenge.

4 MEMBER MILLER: Okay. I'll take a cut
5 at it after we get back from the cruise ships.

6 Lynne, should we leave our stuff here
7 or should we -- are we coming back here?

8 MS. MERSFELDER-LEWIS: So that's up to
9 the Chair.

10 CHAIR PERKINS: Yes, we will
11 officially end the public meeting, so this room
12 -- I don't know how long it's available. So in a
13 formal fashion we will not be coming back here
14 and reconvening.

15 MS. MERSFELDER-LEWIS: If you have
16 papers you want to leave, no problem. But do not
17 leave any electronic ever, ever, ever in any
18 conference room ever.

19 MEMBER HALL: Quick question. As a
20 new panel member how do we go about joining a
21 working group? Seemed to be a fairly formal list
22 in there, and a lot of the old folks -- and I

1 don't mean by age, I'm sorry.

2 (Laughter.)

3 MEMBER HALL: I mean, the people who
4 have recently left the panel --

5 (Laughter.)

6 MEMBER HALL: -- for the record. A
7 lot of those working groups seem to be covered.
8 There's one that's -- I mean, I think Joyce's, I
9 know that's gone, but it was completely -- just
10 down to her. So I just want to make sure that we
11 understand as the new members how we go ahead and
12 -- I know Lindsay's already a co-chair, so good
13 for Lindsay. But I just wanted to understand how
14 we would do that.

15 VICE CHAIR HANSON: I think she needs
16 to leave the room so we can nominate her for
17 something.

18 (Laughter.)

19 MEMBER HALL: Not a chance.

20 MEMBER MILLER: You go like this.

21 That's all you do.

22 MEMBER HALL: Just talk to the co-

1 chair? I mean, I wasn't sure if there was a --
2 we didn't do a meeting.

3 MEMBER MILLER: You can do it now. If
4 you want to be on a committee, volunteer.

5 RADM GLANG: Gerd Glang. So as the
6 DFO I would suggest maybe Lynne will send out the
7 revised list of working groups based on today's
8 outcomes. And the memberships as we understand
9 them, we'll remove the names of those folks who
10 are no longer on the panel. And then we would
11 circulate that and whoever wants to volunteer is
12 more than welcome to -- there's no restriction.

13 I mean, even if you don't formally
14 belong to one working group but you're interested
15 in the other group -- and we haven't even talked
16 about the use of outside experts. That is
17 allowed. We just can't call them members. So if
18 we need to consult someone, that's not an issue.

19 I guess the only point on working
20 groups is what working groups develop; for Kim's
21 sake and the new members, needs to come back to
22 the full panel for consideration. That's the

1 whole point under the FACA rules, right? The
2 working groups by themselves can't make a
3 recommendation on behalf of the HSRP. The HSRP
4 as a group makes the recommendations to NOAA.

5 CHAIR PERKINS: All right. Well, I'm
6 going to thank Joyce in advance for preparing the
7 first draft of the recommendation letter from the
8 input that we've gathered here this afternoon.

9 We've got 12 minutes to our scheduled
10 departure for our visit to Carnival Cruise Line.
11 I know some of you are going to want to go and
12 store your electronics, so I think we're at a
13 good official stopping point for the meeting. So
14 without any objection I would make --

15 MS. MERSFELDER-LEWIS: We are going to
16 all walk together to the pier. Like you cannot
17 go on your own. You have to go with our group so
18 that we can get you through. And there's going
19 to be some thousands of people, so we got to --

20 PARTICIPANT: Hold hands?

21 (Laughter.)

22 (Simultaneous speaking.)

1 RADM GLANG: Go ahead, Sal.

2 MEMBER RASSELLO: Yes, we have been
3 cleared to board about 1:45. Don't know yet is
4 going to be one gangway or the other, depending
5 what the flow of the people coming out of the
6 ship. So I will say that once we get there, we
7 get a clear number of people that get on, same
8 number need to get off.

9 (Laughter.)

10 MEMBER MILLER: And we do need IDs?

11 MEMBER RASSELLO: I think it's better
12 to have your ID. If you have your COC, or CAC,
13 or the other one, the TWIC. But we are already
14 cleared, so there is somebody there that will
15 escort us on board. But just in case come the
16 policeman, he wants to see -- yes.

17 MEMBER MILLER: I don't have a TWIC or
18 a CAC.

19 MEMBER RASSELLO: Yes. No, that's
20 just an ID with you will be fine, because
21 practically what we do -- most probably we're
22 going to leave the ID at the gangway and they

1 give you a visitor tag. And then on the way back
2 -- same we did in Washington.

3 CHAIR PERKINS: If you can please
4 remain in position, we have not officially
5 adjourned yet.

6 MEMBER RASSELLO: Thank you.

7 MEMBER HALL: Since we're still on the
8 public record, I'd like to note that you do need
9 your photo ID. And they should check it as the
10 security protocol on board ship, so just expect
11 to be needing your ID. Just on the record.

12 MEMBER RASSELLO: I made some
13 arrangement.

14 (Simultaneous speaking.)

15 CHAIR PERKINS: Vice-Chair Hanson?

16 VICE CHAIR HANSON: Okay. Just two
17 quick things. First off, I wanted to
18 congratulate again Admiral Glang since it's going
19 to be our last time formally together. Great
20 career. Someone who deals with other federal
21 agencies.

22 I know how respected you are and how

1 well you've represented NOAA. I want to
2 congratulate you for that as well. A few words
3 came to mind when I was trying to think of how
4 people perceive you, and I think probably the
5 biggest word is loyal. And you're loyal to your
6 people, you're loyal to your agency and you're
7 loyal to your cause. So I think that's an
8 honorable word and I congratulate on a great
9 career. Look forward to your future endeavors.

10 RADM GLANG: Thank you.

11 VICE CHAIR HANSON: Also want to say
12 thanks to Scott Perkins. It's been six years
13 we've been on the panel, right? And we've all
14 talked, those of us who've been on it for a
15 while, about the growth and maturing of the old
16 people on the committee.

17 (Laughter.)

18 MEMBER HALL: New versus old, not --

19 VICE CHAIR HANSON: There you go. But
20 the key part is is that we've all learned how to
21 work together, and that's an important part of
22 the discussions and that we have -- we've very

1 comfortable speaking now freely. We're very
2 comfortable pursuing our issues, which is really
3 what an advisory committee is all about. The
4 folks at NOAA know us, we're meant to be here to
5 help us with some of their issues, but mostly
6 it's up to us to drive it.

7 You've struggled with this, you've
8 wrestled with it, you've succeeded. You've
9 actually changed it for the better. You made a
10 difference. And I know that's all you wanted to
11 do here. So appreciate your leadership and I
12 look forward to counting on you much, much more
13 in the future.

14 (Applause.)

15 (Whereupon, the above-entitled matter
16 went off the record at 1:22 p.m.)

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18
19
20
21
22

A

a.m. 1:12 4:2 80:10,11
185:13
AA 5:3
ability 67:9
able 27:21 46:2 48:4
58:9 74:21 101:17,22
103:14 131:8 137:5
140:4 150:13 151:18
160:9 172:10 190:3
aboard 57:7
above-entitled 80:9
185:12 230:15
absolutely 44:7 109:9
109:20 128:18 142:2
abstain 48:21
academia 17:22
academic 4:21
accept 46:4 79:13
81:12
acceptable 81:3,18
171:17
access 12:20 58:7
128:15 145:17 159:17
175:14 194:19
accomplish 81:5
account 123:14
accuracy 124:8 134:7,8
accurate 127:12 145:18
174:3 201:18
accurately 101:22
135:9 149:14 195:21
achieve 146:19
acoustic 11:22 12:1
acquiesce 175:5
acquire 12:8
acquired 28:7
acquiring 26:22 41:15
acquisition 12:10,11
27:12,13 59:12
act 9:10,13 19:3,5,6,16
19:20 20:21 21:2,4,8
73:14 206:22
Acting 2:14
action 5:14 163:11
212:17 214:21 217:9
actionable 212:14
actions 62:2 122:7,15
active 32:14 37:20
activities 4:11 5:7 6:21
21:11 52:12 61:10
81:8 167:11
activity 47:16
actors 64:18
Acts 62:9,10
actual 81:20 109:1
211:14 221:6
adapt 143:15

add 31:5 38:18 54:10
66:12 92:11 112:12
147:21 158:18 167:9
170:21 186:21 188:4
188:14 190:8 222:9
added 51:19 52:10
55:19 64:15 71:11
95:15
addition 6:13 30:21
79:14 119:14
additional 15:14 29:9
62:10 106:21 186:20
194:6 198:17 209:10
additions 76:9,11
address 88:13 130:5
137:9 145:8 154:13
164:5
addressed 21:15 211:6
212:6
addressing 95:10 186:9
adds 76:5,6
adequacy 37:15
adequate 36:20
adequately 90:17
adjourned 228:5
adjust 15:13 209:21
adjusting 29:21
administration 1:3
20:11,14,16 39:5
203:16
administrative 209:8
administrator 52:19
71:1 172:20,22
191:13 192:1 198:18
202:19 203:14 205:21
206:16 211:16 212:15
213:15,20,21 219:2
220:5
administrator's 23:18
192:6
admiral 2:6 3:3 7:6 8:5
8:16 23:11 41:1 76:11
78:1 89:10 92:10
106:22 113:4 128:22
151:4 161:11 192:22
200:15 204:6 213:16
228:18
adopt 62:17
adopted 79:22 175:1
advance 226:6
advantage 222:4
adverse 221:9
advice 78:1
advise 20:11 22:8 118:1
advisor 213:6
advisors 212:1,8
advisory 32:5 41:8
210:13 230:3

advocacy 63:17
advocate 41:11 55:17
180:20
advocated 69:2
advocates 154:11
advocating 34:19 182:8
Affairs 2:10
affect 62:12 116:2
afraid 67:12
aft 99:19
afternoon 31:6 134:2
176:8 183:21 216:9
226:8
age 74:19 173:12 224:1
agencies 9:16 15:8
16:9 17:4,11,19 18:21
19:20 21:12 22:21
26:17,17,21 30:3
34:11 41:18 62:4
63:22 101:18 102:18
153:2,8 228:21
agency 19:9,9 129:5
229:6
agenda 6:14 7:4 43:12
43:21 80:3 89:1 92:8
172:5,10
agendas 51:4
aggressive 116:7
aggressively 145:12
146:11
ago 33:12 125:13
152:20 155:17 164:1
176:22 202:8 211:21
agree 61:22 68:14,22
69:7,15 73:22 81:1
109:9,21 111:18
128:19 136:3 140:15
149:8 184:15,16
187:3 188:4 198:6
204:2 208:11 209:16
214:2 220:4
agreeable 153:21
agreed 51:15
agreement 161:7
176:11 197:9 218:21
220:1
ahead 20:10 56:6,19
59:6 62:7 64:6 102:14
131:14 175:7 203:1
224:11 227:1
aided 23:12
aiding 40:22
aiming 136:11
air 94:14,22 105:12,20
107:6 171:1
Airborne 10:20
aircraft 91:14
airlines 111:3

AIS 101:10,11 102:12
AIS-based 101:10
akin 10:10
Alaska 57:19 63:7,10
66:7 67:18,21 68:1
alert 151:15
Allen 100:3
allocated 55:18
allocation 208:8 209:5
allotted 172:12
allow 133:3 139:19
207:8
allowed 210:22 225:17
allows 25:1 38:12
119:22 140:4
alternate 19:11
alternative 204:4,7,22
amazing 102:19
America 111:10
America's 91:8,14
American 75:9 91:13
amount 40:14 132:21
155:12
amplify 111:22
Amy 221:10
analyzed 126:6
anchor 148:20 149:11
150:1
anchorage 148:12
149:11
anchorages 148:9
149:2,3
Andy 2:2 47:8,9,10
51:16,19 52:1,8 55:21
58:5 61:13 62:3 70:3
70:15 119:6 131:13
173:21 215:11
Andy's 193:17 198:12
Angeles' 153:4
angle 116:15 117:14,17
angles 114:7
Ann 51:19
Anne 1:18 69:15 88:10
88:11,14 93:16
112:16 126:15 135:15
148:21 160:12 205:15
209:2 221:20
announcement 13:8
31:10
annual 10:7 11:16
16:17,20 32:2,5
annually 10:6
answer 105:16 113:6
172:22 205:5 212:22
answered 164:16
165:14 172:18
answering 165:20
answers 145:21

antenna 97:6
antennas 99:17
anticipation 71:3
antiques 174:7
anybody 59:22 67:6,8
 68:11 69:11 110:12
anybody's 216:10
 222:20
anymore 82:12
anyway 33:14 72:7
 80:22 91:4 112:12
apart 118:17
apologies 40:9
apologize 218:15
appear 213:19
appears 20:4
append 172:19
Applause 8:3 43:16
 50:3 70:12 230:14
applies 81:16
apply 127:12
applying 10:4
appointing 49:13
appreciate 5:4 34:19
 43:14 50:14 75:15
 103:15 157:14 230:11
appreciated 34:6
 214:15
appreciation 7:19
 195:17
approach 27:4 29:18
 118:8 119:4 121:10
 171:3,4
approachable 160:14
approaches 143:14
approaching 178:1
appropriate 149:18,22
appropriated 52:16
approval 84:7 90:3
 211:22
approve 69:22 81:18
approved 70:10
approximately 57:11
 73:7 150:10
arc 131:21
archive 22:17 23:5
archived 22:18
Arctic 3:9 20:6,13 47:8
 57:19 64:13 76:4,7,9
 89:4,12,17,19 90:11
 163:14 196:12,22
 197:1,6 202:13,16
 209:12 213:17 215:4
 215:12,12 218:3
 220:11
Arctic's 202:10
area 13:8 14:19 26:22
 27:16 31:10 37:4

41:11 85:16 105:13
 116:20 117:15 119:2
 136:5,20 147:16
 160:5 187:15,19,22
 192:15 194:18 202:1
areas 13:14 14:10
 15:18,21,22 18:3
 21:14 27:11,22 28:1,8
 28:19 35:3,19 37:7
 57:18 81:17 116:5
 124:5 139:3,7 144:6
 149:4,11 169:18
 187:8 222:5
Arete 151:20
arguments 73:13
ARINC 100:4,6,17
arm 44:2
Armstrong 2:2 55:7,22
 56:5 58:6,13,22 59:3
 60:1 61:5,22 68:8
 70:13,17 71:22 74:2
 77:4 119:7 120:20
 128:10,22 129:4,8
 130:17 136:3 192:11
 192:12 210:9 213:11
 216:22 223:1
Army 10:19 11:5 15:4
 17:20 18:16 29:1,2
 101:18 123:1,3,6
 126:17 127:14 128:3
 128:11 132:12 136:19
 139:20 152:20 156:11
 157:7 158:6,11 159:1
 159:4,8,12,22 160:5
 160:20 179:21,22
 180:2 214:19
around-the-table 186:6
arranged 176:15
arrangement 228:13
arrival 113:13
arrivals 178:7
arrive 121:4
arrived 120:14
arriving 40:9
arrow 22:1
articulated 211:4
articulating 207:1
artifacts 132:9
artificial 115:17
Ashley 2:8 3:4 6:15 8:8
 8:13 18:10 19:8 20:9
 21:4 23:8 25:6 31:17
 38:5 39:3 40:9
Ashley's 152:11,11
Asian 179:1
aside 154:18
asked 6:15 8:21 63:3
 94:2

asking 216:14
Aslaksen's 27:21
aspect 40:16
aspirational 10:2 11:12
aspirations 38:8
aspire 39:21
assess 112:22 114:18
 148:19
assessment 118:4,11
 119:5 120:8 125:12
assets 67:10
assigned 47:12 98:3
Assignment 3:16
assimilate 216:2
assist 148:13 170:1
 171:8
associated 96:16
Associates 65:15
association 31:12,12
 112:18 179:5,6
assuming 161:10
assumption 39:7
Atkinson 1:15 3:10
 80:15,16,22 81:21
 82:3,6,10,13,18 83:1
 83:22 84:5 85:3,10,13
 85:17,20 86:1,4,7,11
 86:16,20 87:1,4,7,11
 87:19,22 154:18
 163:18 165:2 166:7
 177:12,15
atmospheric 1:3 150:7
attach 196:13,18
 198:11,17
attached 199:2,8
 205:22 206:6 209:10
 215:2 217:14
attend 48:4 176:17
 183:15
attendance 32:17 46:2
 65:14 212:9
attended 199:20
attention 37:22 85:2
 87:13,14 90:18
 158:16 172:9 194:6
 210:17,18,22 214:10
attune 122:14
audible 49:10 51:2 88:7
 153:22 162:13 166:19
 174:19 184:22
audience 178:19
augment 15:14 29:9
August 6:2,5 175:6,18
 185:7
authorities 67:14
available 10:16 50:7
 61:16 94:16 95:2
 101:19,20,21 102:18

114:5 127:13 128:1,1
 129:18 130:3 145:14
 154:12 176:17 179:7
 223:12
aviation 170:12,22
aware 20:1 25:4 75:3
 158:12,13 164:12
awareness 18:22 157:2
awful 109:5
awkward 68:22

B

BA 149:13
BAA 31:9
back 18:12 26:3 27:22
 29:4 33:9 40:15 43:20
 44:1,1 51:16 52:12
 80:13 86:8 88:4 89:5
 94:21 101:14 103:21
 104:5 107:12 111:10
 121:7 132:7 140:2,8
 143:18 154:19 155:14
 159:15 161:6 163:15
 175:8 176:22 178:2
 205:13 207:10 210:17
 219:12 223:5,7,13
 225:21 228:1
background 93:18
backlog 60:18
bad 160:19 204:7
balance 66:12
ball 158:19 193:20
Ballroom 1:11
Band 151:12
bar 96:12 105:5
Barbara 24:9
barely 92:2 96:2,2
Barnegat 25:10
barriers 157:8
base 16:20 25:8,14,16
 142:14 147:14 201:12
based 6:4 24:11 121:11
 152:6 155:18 178:22
 179:6 225:7
basically 32:9 162:2
basin 99:17,21
basis 95:8 113:4 146:7
 147:4,4
Bath 10:21,21
bathy 151:5
bathymetric 10:9,21
 11:7 32:21 38:17
bathymetry 35:17 37:14
 37:16 141:10
battle 72:22
Bay 25:10 29:22 94:15
Bayonne 107:19
Beach 9:6 92:3 98:7,8

beam 91:21 105:12
 118:22 131:16
Beaufort 151:10 152:1
beautiful 4:20
becoming 81:3 82:2
 145:4
beg 110:22
beginning 6:2,22 85:12
 166:2
behalf 226:3
behave 108:20
behaves 139:12
behavior 19:19
believe 72:15 73:8
 111:19 165:4 179:12
 181:13 182:2 196:11
 218:18 219:1
believes 72:19
bells 169:12
belong 225:14
Ben 91:15,16 122:5
bends 107:7
beneficial 76:11 160:9
benefit 208:14
benefits 163:7
benevolent 141:8
Berkowitz 60:21
berth 114:14
best 87:3 129:17,17
 130:3 140:12 150:11
 183:16
better 23:9,16 77:13
 83:12 114:7,11
 122:14 135:6,13
 140:17 159:17 175:14
 176:3 178:20 227:11
 230:9
beyond 65:22 75:8
 186:5 202:16 206:16
big 28:8 52:11 65:1,7
 95:20 104:12 109:15
 110:10 113:4 156:15
 187:18 210:19 212:19
 212:20
bigger 28:11 83:15
 108:19 110:13 124:14
 145:2
biggest 96:6 110:5
 201:14 229:5
Bill 3:22 44:10 68:15
Bill's 66:10 194:11
bio 185:9
bit 6:20 14:3 19:1 24:3
 31:18,21 38:2 66:18
 68:19 69:1 71:4 77:5
 78:4 81:21 83:13
 88:17,21 93:17
 105:10 111:1 115:6

125:1 126:16 139:13
 139:22 148:22 149:10
 151:22 156:16 171:9
 182:5 208:2,14
bits 62:7
black 19:15 22:3
Blackwell 2:3 31:15,16
 176:1,19 195:2,2
blah 95:4
bleep 136:19
blend 4:20
blending 154:3
blip 96:1
block 78:16 115:8
 154:7
blocking 92:14 112:6
blow 116:6
BLUF 52:2
board 100:7 150:9
 155:18 227:3,15
 228:10
boarding 46:16 98:2
boards 100:9
boat 72:11 138:17
 181:14
boaters 35:21 66:15
boats 74:11 145:17
bodies 32:8
body 31:11 32:3
bold-faced 81:2
BOLEDOVICH 2:7
Booz 100:3
boring 170:5,8
bottom 21:18,20 52:2,8
 61:19 65:17 121:16
 125:20 136:21 138:19
 139:2 140:8 209:7
 211:3
bow 98:17
bowled 18:6
box 14:16
BP 202:12
Branch 2:11
breadth 13:12 152:14
break 50:21 185:9
breakout 180:22
Brennan 2:7 146:22
 147:1 155:19
bridge 92:2 94:15 95:5
 95:6,7 96:18 97:4
 105:21 107:19 110:8
 114:19 120:15
brief 185:9 203:2
briefed 9:4 10:1
briefing 6:16 103:18
 152:11 158:21
briefly 208:9
Brigham 1:16 3:9,11

46:7,10 47:7 64:7,7
 72:7,8 73:18 75:2,2
 76:3,3 79:17 89:3,3
 90:7,20 91:1,4 97:3
 97:16 99:2,5 111:9,14
 111:16 121:22 133:5
 154:8,8 162:10
 165:11,11 167:2,2,13
 171:2,3 172:13,14,14
 174:17 181:12,12
 196:3,4,4,21 202:6
 204:9 209:16
bring 31:3 41:22 42:20
 75:18 78:8 85:11 88:4
 100:8,19 104:12
 105:1 106:20 109:11
 130:7 135:16 143:18
 153:8 169:1 181:21
bringing 96:14 97:22
 100:16 102:22 122:22
brings 100:7 103:21
 137:15,16
broad 13:8 31:10
 187:11 189:12
broader 64:13 112:3
 167:1 208:15
brought 43:5 78:7
 110:1 113:5 187:7
 210:18
Brown 23:11
budget 197:5
budgets 143:7
Buffalo 180:6
buffer 123:16 124:14
build 11:22 132:14
 189:9 194:11 212:15
building 25:4 35:15
 36:8 85:18 95:19
 157:2,2 158:13
 194:14 208:15
builds 10:18
built 33:11,21 73:5
 132:22 158:4
bulk 51:9 79:15
bullet 60:15 207:15,18
bullets 193:4
bunker 92:21
buoy 117:20 118:1
 181:22 182:13,15
burdensome 34:1
Bureau 41:17 43:1
bureaucratic 156:17
buried 52:12
burn 106:12
burner 155:15
business 5:7,17 63:20
 65:6,19 110:20
 142:20 144:12 153:14

153:16
businesses 63:19
busy 6:9 48:5
button 14:2 180:12
Buzzards 29:22

C

C-O-N-T-E-N-T-S 3:1
cables 29:17
CAC 227:12,18
calculate 116:16
 129:13
calculated 124:6 148:4
calculating 40:18
calculation 120:22
 121:6,12 124:1
calendars 5:22 6:10
 175:4
California 40:18 152:18
call 28:22 29:1 33:19
 79:7 92:5 98:4 106:2
 139:20 145:9 174:6
 192:18 201:5 217:15
 225:17
called 42:13,18 52:2
Callender 5:3 164:2,15
calling 142:12
candidates 48:14
capability 57:15 145:22
 146:1
capable 76:5,9
capacities 145:6
capacity 47:6,19 96:3
 196:8
capitalization 75:12
CAPT 147:1
captain 1:18,19 2:7
 37:20 60:21 91:10
 93:15 96:12 98:15
 99:9 111:13,22
 112:12,16 118:3,5
 120:15 121:22 122:2
 122:19 126:20 133:8
 146:22 155:19 194:9
 197:13 202:2
captain's 129:16
captains 122:11
caption 56:9,11,12
capture 138:1 193:8
captured 215:19
capturing 136:1 193:3
 193:5
car 95:22
care 5:8,18 64:5 66:15
 188:7
career 228:20 229:9
careful 173:11,20 174:3
cares 63:3 65:4,5

cargo 96:4 145:3
Caribbean 117:22
 118:5
Carnival 117:19 226:10
Carol 45:16,20 46:2
 154:9 165:9 185:21
 185:21 186:8,12,22
 187:3,10 198:6
carp 179:1
carriers 91:14 179:5
carries 91:21 92:17
carry 96:4
carrying 76:10
case 63:12 74:20
 106:17 112:9 122:21
 148:8 153:4 156:6
 177:3 201:2 227:15
cases 32:20 112:19,19
 113:1 126:5,6 136:5,6
 137:17 149:21
catch 111:5 203:7
category 14:8
caters 107:12
CATZOC 123:8
caught 67:17 191:17
cause 106:8 229:7
caution 66:8
censors 94:20
center 2:3 10:21 101:9
 115:20,22 123:5,5
 181:18
centralized 142:9
cents 181:11
certain 28:1 73:16
 106:3,4,5 107:9
 112:20 144:6 170:16
 181:1
certainly 23:16 38:14
 74:4,15 78:5 108:4
 131:2,6 147:12 156:4
 184:15 201:15 208:8
cetera 64:16 67:15,15
CFR 148:4 155:21
 156:16 157:3 161:12
chain 173:3 210:13,19
chair 1:12,14,15 3:2,5,5
 3:22 4:3 5:11,11,12
 8:4 20:20 23:7 24:19
 25:17 26:7 30:5 38:5
 40:5 41:12 42:19 43:8
 43:18 44:4,7,11,13,15
 44:16,19,21 45:1,4,5
 45:8,10,14,19 46:6,11
 46:19 47:4,11,19 48:6
 48:16,20 49:11,13,16
 49:19 50:4,8,10,14,20
 51:3 60:19 62:16 63:1
 64:22 65:11 67:16

68:2,7 69:21 70:6,9
 75:10 76:8,12,18,22
 77:12,14 78:2,5 79:6
 79:12,18,21 80:7,12
 81:19 82:1,4,7,11
 89:2 90:6 92:9 111:12
 111:15 114:1 124:7
 125:2,5,10,14,22
 126:13 133:2,19
 143:17 146:21 150:4
 154:1,17 155:16
 158:18 160:22 162:5
 162:9,11,14,22
 163:10 166:5,6,11
 167:16 168:7,12,19
 169:1,4,11 170:5
 172:4 173:6 174:6,10
 174:15,18,20,22
 175:12,18 177:16
 178:13,22 179:20
 180:4,9 182:17 183:6
 183:9 184:7,14,20
 185:1,4,15 188:1,15
 188:18 189:7,20
 190:9,12,16,21 191:2
 191:7,9,20 192:9,22
 193:2,22 194:1,8
 196:3,15 198:13,16
 198:22 199:4 200:1
 202:2 203:1,7 205:12
 206:2,9,19 207:3,9,9
 210:11 211:15 213:5
 215:18,22 216:6,14
 216:17,21 218:11,22
 219:3,6 223:9,10
 224:15 225:1 226:5
 228:3,15,16 229:11
 229:19
chaired 42:18
chairman 65:11 90:14
 122:17 183:10 192:13
 196:5 216:22
Chairman's 50:5
Chairs 49:13
challenge 111:5 157:1
 157:15,19 166:6
 183:18 210:1 213:14
 214:4 223:3
challenged 84:3
challenges 59:6 91:7
 109:19 186:14 209:1
challenging 12:12
 84:12,15 119:15
champion 20:1 25:7
chance 99:11 108:21
 224:19
change 4:19 55:12 60:4
 62:3 64:11,12 82:4

83:20 95:7 116:13
 118:21 136:1 139:18
 147:12 151:8 154:19
 196:10 203:16
changed 53:21 61:15
 81:9 90:10 147:15
 157:3 230:9
changes 51:8,18 55:12
 123:19 134:10 140:19
 155:7,8
channel 93:4 107:21
 108:12 115:19,21
 116:1 117:1,4,18
 119:16,17,22 124:17
 131:9,16,19 132:9
 137:19 147:5,7,16,20
 148:7 155:21
channels 107:5,6,7
 115:8,16,16,17,17
 117:11 118:15 123:1
 134:15,17 138:7
Chappell 2:8 3:4 6:15
 8:10,13 17:9,12 19:11
 20:3,19 21:3,4,16
 24:5 26:4,9 30:13
 32:13 39:3,4 41:6
 42:3 43:17
characteristics 111:20
 112:14 131:22
charge 96:13 159:6
Charleston 16:3 131:17
chart 35:8 36:5,14
 37:11 74:19 115:18
 117:2 121:10,19
 123:4 124:13 125:16
 131:18 147:21,22
 149:12,13,13,15,17
 151:6,18 155:22
 157:21 159:10
charted 89:12 147:5,15
charter 16:15 38:12
 50:9,12 155:6 161:13
charting 25:16 116:19
 159:19 161:4 197:6
chartlets 141:15
charts 36:20 37:5,15,17
 37:22 65:5 101:19
 118:14 135:12,17
 141:7,14 143:22
check 14:15 60:16
 61:13 228:9
checked 61:1,8
cheek 24:3
Chicago 178:5,6,12,14
 179:1,2,21
chief 2:12,14 157:20
 159:6 200:15
chime 200:12

China 92:15 210:4
choice 178:4
choir 64:4
chopping 154:7
chose 164:2
Chris 18:15 151:3
CHRISTA 2:9
chunk 156:15
circling 161:6
circulate 12:15 210:11
 211:7 225:11
circulated 218:14
circumstance 106:8
circumstances 112:20
city 100:9
civil 204:11
clairvoyant 152:8
clarification 70:2
clarify 124:8 218:2
clarity 207:17
class 108:14 110:9
classes 107:9
clear 7:13 39:15,16
 105:21 165:16 206:15
 212:2,12,16,20 227:7
clearance 37:3 94:13
 95:4,7 105:20 115:2
 116:16 120:22 126:22
 138:12,20 139:7,9
 140:7
clearances 95:13 98:18
 114:10 139:5
cleared 11:11 92:2
 138:8 227:3,14
clearer 200:3
clearly 51:8 74:20
 168:8
Cleveland 178:4,8,10
 178:14 179:3,13,18
 179:22 180:8,12
 181:20 182:9,18
 184:3,8,17 185:5
CLIA 66:22
click 22:1
clicking 14:19
close 6:11 105:4 115:7
 141:19 154:15 215:22
 218:6
closed 163:11
closer 8:17
closest 179:22
closing 3:21 164:17
clunky 33:14
co- 45:13 46:5 188:21
 224:22
co-chair 5:13 45:12,21
 46:8,14,21 47:19
 77:15 162:19 224:12

- Co-Director** 2:2
CO-OPS 2:4
co-signatures 77:14
coalition 153:1
coalitions 152:19
coast 2:14 4:14 8:15
 10:5 15:5 18:8 20:21
 21:2,4 25:8 27:18
 38:18 41:20 53:16
 54:17 55:5,13,20 62:9
 75:6 76:13 104:18
 105:3,4 108:18 110:2
 156:9 157:16 163:21
 180:7 181:21 182:11
 182:12 197:14 204:10
 205:1 210:18,20
 211:5 218:20
coastal 3:10 6:16 8:14
 9:1,2,7,9,12,17,22
 10:7 13:11 16:20 19:2
 21:7 32:19 33:5 42:7
 67:20 80:4 81:3,16
 82:8 110:19 143:6
 152:21 154:5,18
 163:16 164:3,3
 193:19 195:8 206:22
coasting 9:15
COC 227:12
Code 147:8 148:3
codify 50:5
coding 159:2
coefficient 115:9
cold 161:18
collaborate 23:14
collaboration 25:21
 163:3 194:4
collaborative 39:21
colleagues 32:16 93:21
 136:10
collect 27:17,22 28:2
 29:4
collected 23:1 35:22
 41:19
collecting 27:15 153:2
collective 38:13
collectively 191:12
 195:3
collects 14:6 32:18
color 38:18
Columbia 105:4 134:10
 134:19 137:12 139:2
 143:19 148:8
combine 20:22 155:13
 199:17
combined 155:1
combining 208:18
come 13:1 24:1 29:17
 39:13 58:13 61:3
 63:14 77:1 84:3 86:6
 86:13 91:13 108:4
 119:2 122:13 180:10
 188:9 206:10 225:21
 227:15
comes 13:12 25:15
 86:10 100:9 108:4
 112:18 113:7 114:13
 118:22 126:7 133:14
 161:14 168:6 210:5
comfortable 76:1 117:3
 230:1,2
coming 36:9 38:10
 104:15 109:16 113:9
 122:6 137:20 162:16
 193:5,5,6 212:5 214:7
 223:7,13 227:5
comment 3:12 11:19
 38:11,13,22 40:16
 41:13 88:6,9 90:2,4
 101:14 111:18 128:20
 130:16 133:4,8,20
 134:3,4 136:13
 137:10 152:6,9
 155:18 162:15 163:1
 174:18 175:17 180:15
 188:17 189:9 201:7
 204:9 211:9 218:14
 221:17
comments 35:1 38:15
 51:16 62:13 77:6 79:6
 89:9 90:12,15,21
 133:20 150:21 151:3
 158:19 186:13,22
 188:1,20 199:17
 215:19 218:17
commerce 1:1 146:15
 210:14
commercial 57:10
 63:14 64:16 65:13,17
 66:13
commercially 67:7
commissions 204:15
commit 118:12
commitment 5:4 219:8
committed 157:22
committee 41:8 146:2
 156:5 161:14 162:4
 210:13 223:2 225:4
 229:16 230:3
Committees 34:8
common 109:17 114:12
 120:12
communicate 25:2
 159:15 168:8
communicated 132:22
communication 152:14
 208:10
community 103:5
 159:21
companies 66:14,19
company 92:15 178:22
comparable 142:22
comparisons 95:22
compelling 39:1 155:5
competitive 140:11
 210:13
compilation 25:11
complete 125:3 193:13
completed 47:14
 151:16 190:22 196:19
completely 15:16 27:1
 82:16 147:13 224:9
completing 5:10 129:10
complex 100:11 101:5
complexity 95:15
complicated 24:2
 173:13
component 10:17
 35:15
compose 39:1 190:1
composes 191:12
comprehensive 26:1
compromise 183:11
concentrations 36:19
concept 10:2 11:13
 159:8
concepts 20:7
conceptual 39:7
concern 105:3 114:6
 116:21 197:1 204:13
 204:13
concerned 197:10
 219:18 221:2
concerns 95:10 202:10
conclude 5:9 6:11
conclusion 49:22 191:4
 191:10 206:10 211:18
condition 118:1 123:20
 123:21 136:22
conditions 106:5
 113:12 142:5 150:7
conducted 53:18 54:5
conference 223:18
Confidence 120:21
 121:3,9
configuration 107:4
 108:12
configurations 108:3,5
 110:15
congested 201:10
 210:16
congestion 145:3
 200:20 210:15 211:4
 211:6 217:4
congratulate 164:6
 228:18 229:2,8
congratulation's 8:5
Congress 19:7,10
 175:10,13
Congressional 175:15
congruence 29:19
conjunction 21:6 30:11
 101:9 113:11
conn 21:17
connect 55:10 118:2
connected 42:6
connection 20:18 54:19
consensus 3:18 89:15
 89:16,18 172:17
 182:18,20 221:7
Conservation 43:2
consider 50:12 74:4
 114:6 118:14 177:4
 187:22 206:20
consideration 70:19
 71:8 115:2 116:4
 117:6 123:12 191:15
 225:22
considerations 107:11
considered 164:15
 173:16
considering 156:3
consolidate 177:7
consolidated 142:14
consolidation 5:15
 153:18
constrained 108:11
 202:9,22
constraint 107:4 109:6
constraints 111:6
construction 109:2
constructive 84:22
consult 225:18
contacted 93:21
container 91:17 92:12
 93:3 181:16
containers 91:21 92:18
context 70:18 72:16
 74:3 113:6 217:14
continually 127:7
continue 16:7 19:6,8
 32:10 62:3 67:10
 85:15 111:8 145:5,7
 146:14 150:14 161:8
 201:8 214:10
continued 110:14
 158:16 163:5 177:10
 189:13 192:19
continues 19:5 163:14
 163:15
continuing 50:22 220:8
contract 54:21
contracting 57:12

contractors 151:16
contracts 57:10
contribution 43:13 48:7
control 205:12
controlled 93:7
convene 4:7 175:19
 183:21
conversation 37:10
 65:3 152:6 154:5
conversations 187:6
Cool 80:19
cooperation 152:13
 163:2,6
coordinate 10:7 12:7
 16:8,16 18:17 62:4
 219:19 220:20
coordinated 145:13
coordinating 19:21
 21:10
coordination 9:19
 11:17 12:1,11 13:2,9
 16:14 27:20 30:10
 31:18 32:2,3,10 42:1
 43:6 81:6 114:11
 120:11,16
Coordinator 2:11 8:14
copy 51:13 88:2 198:17
core 196:8
corner 14:4
corners 193:15,17
corporation 125:12
Corps 10:19 11:5 15:4
 17:20 18:16 29:1,2
 68:21 101:18 123:1,3
 123:7 124:9 126:17
 127:14 128:4,12
 129:5 130:2,18,21
 131:3 132:12 134:6
 134:15,20 136:19
 139:20 144:1,11
 149:2 151:15 152:20
 156:11 157:8 158:6
 158:11 159:2,4,8,12
 159:22 160:6,20
 179:22 180:3,5,13
 194:3 214:19
Corps' 179:21
correct 59:16 60:7,17
 88:16 100:1,5 102:10
 109:20 142:19 145:10
 190:20 200:1 206:1
 219:6
corrections 165:8
correctly 102:11 103:8
 165:8
correctness 61:14
correlate 102:11
correspond 125:18

cost 25:22 29:7,10
costing 24:4
costs 151:13
Council 32:5 41:8
counting 230:12
country 210:16 211:1
country's 209:19
county 27:13,13 152:18
couple 4:10 8:11 75:6
 90:21 96:9 144:16
 158:18 194:3
coupled 35:16 99:18
course 19:5 26:13
 27:16 30:16 33:4
 133:11 150:6 157:4
 219:4
courses 116:13
court 158:20 193:9
cover 12:3 15:15 30:1
coverage 135:22 149:4
covered 29:11 224:7
covering 183:4
crack 37:18
crafted 146:6
crap 108:21
create 31:1 78:20
 118:15
creating 35:9
creation 164:19
creative 78:11
credit 65:9
crew 98:15 149:14
CRF 161:12
crisis 145:2 200:17,18
 208:18 209:17,17,19
 209:19,20 210:2
 215:5 217:22
critical 37:2,3 57:20
 69:9 95:9 102:5
 126:20 137:9 141:3
 147:20 148:22 187:18
 198:5 215:8
criticize 163:7
cross 171:7
cross- 105:13
crossings 110:18
crowd 35:20
crowdsource 35:16
 36:13 37:13,16,20
crowdsourcing 35:2
crude 109:14
cruise 3:11 66:5 68:20
 91:19 93:12 112:13
 115:9 117:19 118:9
 181:17 216:11 223:5
 226:10
cry 210:19
curious 91:15

current 21:1 52:12
 61:10 105:14 106:1,5
 108:6 119:14,15
 121:15 191:14
currently 130:12
 135:19 217:12,17
currents 117:8,9
 123:18
customer 2:10 147:13
customers 41:14
cut 209:12 223:4
cutter 182:13
cutters 75:6
cycle 10:5 38:17 39:8
 161:16

D

daily 114:18 126:17
damage 93:8
damn 110:5
Dasler 102:4 130:15
 132:19 134:5 137:8
 148:6,6
data 10:13,14,15 12:8
 13:14,15 15:11 21:12
 22:2,6,10,14,18 23:1
 23:5 26:22 34:1,8
 35:1,3,7,7,11,22 36:4
 36:13,14 37:5,11,14
 40:15,21 41:2,4,15,19
 42:16 70:2 74:19 75:1
 101:11 102:9,18
 103:7 104:5 121:19
 123:3,12,13 124:4,4
 124:11,22 126:7,8,9
 126:17 128:3,8,12
 129:17,17 130:3
 132:15 134:9,17,20
 134:21 135:7,8 137:6
 144:15,17 145:13
 148:10,14,17 149:5
 151:15,19 153:3
 156:13 158:9 194:5
 194:12,20 197:15,17
 201:18 209:2 214:18
 215:7 217:6 221:15
 221:16 222:16 223:3
database 35:17 158:3
date 30:11 153:16,20
 166:12 167:17 168:2
 168:5 175:3
dates 5:20 30:14,18
 73:20 175:5
datum 4:19 212:5
datums 221:18 222:15
Dave 44:18 67:3 83:18
 84:12 89:5,6 96:12
 162:18 165:9 188:2

188:15
DAVENPORT 2:8
David 1:18 65:15,22
day 3:2 4:7 6:7 18:13
 25:11 39:13 83:7 95:6
 123:17 133:21 134:11
 136:17 138:14 139:10
 139:15,18 144:6
 159:4 175:9 176:5
 177:17 179:18 180:16
 181:8,9 182:11
 183:12,13
days 60:20 92:14 112:7
 144:17 173:9 176:18
 177:1,7,18 180:13
 181:3 182:8,21 183:3
 191:10 201:6
deadline 218:8 222:1
dealing 36:15 195:18
deals 228:20
dealt 211:7
debris 137:16
December 91:12 92:4
decide 104:10,10,11
 114:7 146:4 169:7
decided 114:11 197:22
decision 104:22 105:6
 113:15,19 123:9,11
 127:8
decisions 113:10 140:4
 140:13
deck 57:9
dedicated 25:15 57:21
 98:11
deep 143:1
deeper 112:3 139:4
 147:10
deeply 92:22
defense 83:9
define 114:8 115:1,20
defined 115:18
defines 170:2
definitely 41:4 61:8
 135:10 187:10 200:13
definitions 123:8
degrees 117:16
delay 102:13
delayed 150:6
delaying 75:18
delays 186:16
delete 11:12 72:3,4
deliberate 206:10
deliberately 19:4
deliberation 47:15
Deliberations 3:15
deliver 131:8
delivered 131:5
delivery 129:1

deluged 202:19
demands 210:8
demonstrable 212:11
 212:18
demonstrate 94:8
demonstrated 14:22
demonstration 13:19
 16:1
dense 41:3
densities 41:2
depart 150:11
departed 157:21
Department 1:1 210:14
departure 118:18 150:6
 150:10 185:16 226:10
departures 178:8
dependent 172:15
depending 147:3 173:3
 227:4
depth 114:5 115:4,19
 117:4 122:12 147:7
 147:10 217:4
depths 42:15 107:5
 123:4 131:9,20
Deputy 5:3
derived 153:10
describes 81:15
description 81:13
 202:21
design 60:4 97:4 109:2
 173:14,17
Designated 2:6
designed 106:14
designee 78:15,16
desiring 134:4
desperate 146:14
despite 129:4
detail 46:12 105:10
 136:6 146:12
detailed 109:4 146:18
details 132:13
detection 134:14
 135:22
determine 121:21
determined 185:7
Detroit 180:1,4,6
develop 9:14 57:2
 104:20 225:20
developed 24:8 26:15
 101:8 161:2 196:17
 196:17
developers 159:5
developing 34:9 161:1
 196:18 222:7
development 2:15 13:5
 24:15 34:8 136:9
 159:3,10 172:5,9
 222:10

DFO 3:3 186:9 225:6
diameter 137:20
Diane 42:20
difference 162:20
 230:10
different 17:3 21:12
 38:2 47:9 77:2 82:21
 90:8 91:1 95:12
 101:17 102:18,22
 106:2 107:15,16
 108:1,2 110:15 115:7
 115:15 118:7 119:3
 126:5 127:2 136:4
 141:22 142:7,10
 148:15,18 157:18
 165:22 211:3 222:5,6
differently 27:4 139:13
 143:2
difficult 142:6 174:4
digital 12:3 20:21 21:2
 21:4 77:17 130:22
digitally 78:10
diligence 21:21
diligent 22:9
dimension 76:5 112:13
 133:16
dimensions 72:10
 106:18
dinosaur 111:1
diplomatic 183:10
dire 148:5
direct 64:17 215:12
directing 30:1,2
direction 103:19 105:14
 119:3 146:11 165:16
directive 34:12
directly 9:8 55:20 62:12
director 2:3,4 205:1
disclaimer 129:12
discontinue 162:6
discontinuing 5:15
 154:3
discouraged 101:4
discuss 18:5 43:19
 120:14 127:16 214:20
discussed 49:9
discussing 144:21
 214:13 217:12 222:13
discussion 3:2,7,13,15
 5:19 10:3 18:15 104:8
 122:4,15 124:22
 133:6,18 153:19
 154:3 162:12 169:19
 172:6 176:2 178:14
 184:21
discussions 36:19
 187:16 195:5 197:12
 229:22

dismiss 181:19
display 103:8 193:4
displayed 102:15
disposal 180:14
disseminating 192:21
dissemination 217:6
distances 180:2
distinction 68:9
distinguish 51:17
distributed 80:1
district 159:2 160:2,7
 160:19 179:21,22
 180:8
districts 158:14 159:9
 175:16
Division 2:13 157:21
dock 77:1 102:2
docks 101:22
document 65:17 104:1
 164:11
documents 217:15
Dog 64:15
doing 15:18,18,20
 18:19 23:19 25:4,10
 27:1,12 28:16,20
 29:20,22 35:15 43:14
 48:13 75:22 84:18
 86:8,16 92:7 98:6
 103:14 108:22 129:13
 140:17 143:9 157:15
 160:7,14 165:22
 218:15,16
dollars 9:21 52:13
doodle 6:4
downloaded 134:22
 160:17
dozen 26:2
Dr 1:15,16,18 2:14 4:15
 4:22 5:2 80:15 154:18
 164:1,14 196:3
draft 51:17 70:20 92:18
 93:9 105:12,12,21
 112:5 114:6 115:3
 116:15 190:4 206:12
 207:10 216:3,11
 219:10 226:7
drafting 71:7 187:13
drag 14:20
dragging 138:21
draw 102:4 211:17
drawbridges 184:10
dredge 92:20 112:8
 131:22
dredged 132:2
dredging 114:5 127:16
 129:14 134:15 138:6
 151:18
drift 117:16

drive 230:6
driven 147:13
driver 55:16 204:12
driving 139:5 175:7
dropped 69:5
droughts 125:8
dry 77:1
dual 99:17
due 19:16 21:21 65:9
 73:9,9 95:16 150:6
 151:8 157:4 215:5
 217:22
dumped 50:17
duplication 9:19 18:16
duration 191:11
dynamic 114:6 123:20
 125:22 127:7 135:19

E

E 1:19
early 197:12
earth 96:7
easier 87:16 210:6
 212:18
easily 11:2
East 110:2
easy 12:9,11 33:21
 39:18 97:16 163:7
 181:20
ECDIS 118:16,17 120:6
 120:10
ecology 145:4 146:16
econ 110:9
Ed 40:13 45:3 84:16,21
 101:15 109:20 142:18
 144:20 178:18 210:7
 219:20
Ed's 84:19 112:1 122:9
 208:17 211:4 221:12
edge 29:3 132:9
edit 79:10 87:16 173:20
edited 38:9
editing 53:11 59:22
 61:2
edits 62:18 79:9,14
educational 184:11
EDWARD 1:17,20
Edwing 2:4 88:12 94:10
 94:12,12 180:7
 188:21,21
effect 49:21 53:19
 115:11
effective 78:6 125:1
 128:5
effectively 6:18 57:15
efficiency 48:12 154:22
 167:10 189:12
efficient 7:17 9:20

23:20 26:1 50:2
145:19 151:14 194:19
209:3
efficiently 67:11
effort 9:19 12:6 24:4
26:14 31:18 35:17
39:21 42:1,20 86:22
148:14 157:7 158:10
164:8
efforts 28:4 192:20
194:7 197:6
eHydro 130:20 156:12
158:22 159:3,7,11,17
160:8
eight- 38:16
eight-year 10:5 11:13
39:8
either 37:22 47:19
54:15 64:11 85:8
119:10 148:7 149:12
155:13
elaborate 24:2
Elbe 92:13 93:1
Eldridge 42:20
elected 49:20
electing 49:12
electrical 98:12
electronic 223:17
electronically 133:21
electronics 226:12
elegance 33:15
element 57:13 120:21
elements 120:7 121:19
151:8
elevation 11:7 13:7
14:8 31:8 42:9,14,16
42:19,21
eliminate 64:12 65:10
eliminated 63:19
eliminating 63:13
else's 15:15
email 99:1 152:2 190:3
216:1
emergency 112:11
151:17
Emerging 3:9 163:14
Empire 95:19
employed 111:3
enabled 180:17
ENC 101:19 128:2
132:16 149:12,19
encourage 41:16 48:6
153:7 160:3 163:5
encouraged 81:6
encouraging 43:9
194:6 220:2
ENCs 159:10
endeavor 168:13

endeavors 229:9
ended 15:20
enduring 20:18
enemy 117:9
energy 29:15,18 202:7
enforced 23:6
enforcing 95:18
engage 47:15,16 81:19
156:12
engaged 11:6 31:22
181:9 182:4
engagement 3:8 154:21
158:16 163:13
engaging 25:5
engine 96:1
engineer 204:11
engineering 132:11
Engineers 68:21
101:18 126:17 127:14
128:4,12 130:21
131:3 136:20 139:21
152:20 160:20
Engineers' 130:2 134:7
134:15
engines 106:16
English 93:4
engraved 123:22
enhance 167:3,10
enhancing 167:5
enjoyed 7:7
ensure 57:16 153:9
enter 14:1
entering 117:8
entire 10:4 58:20 67:4
72:22
entirely 34:16
entirety 48:11
entities 28:15 66:13,18
113:15 114:12 120:17
entity 16:10 113:16
entrance 132:4
entry 119:16
environment 118:21
123:17 124:3
environmental 62:10
105:13
envision 104:3
ePilot 98:4,15 99:3,4,5
100:7,8
equipment 57:3 98:8,10
98:12 100:10 102:9
escort 227:15
especially 66:7 137:12
164:7,21 201:9
essence 75:17
essential 145:6 189:5
212:4
essentially 22:21 112:6

205:18
establish 164:3
established 30:12 98:1
establishing 50:13
estimate 150:11
Estuarine 28:14
estuary 98:21
et 64:16 67:14,15
etcetera 108:14 200:21
200:22
Europe 92:13 122:5
European 141:2
evaluated 57:3
evaluating 136:15
Evans 65:15,22
event 177:5
everybody 7:20 84:16
90:1,2,3,4 110:3,7
173:11 187:20 188:6
188:8 202:12
everybody's 78:12
109:15 215:19
everyday 141:4,5
everything's 209:19
evidence 212:11
evolve 145:7 146:17
167:20
evolved 146:6
exact 145:21
exactly 52:20 61:11
68:7 84:11 94:18,22
121:1 132:6
example 25:21 26:6
96:6 119:13 121:13
125:6 143:9,18
152:16 211:19 217:3
examples 152:17
exceedingly 95:5
excellent 4:12 172:3
exchange 194:12
exciting 12:17 13:5
28:13 30:6
excuse 7:8
Executive 22:20
existing 5:16 21:6 22:2
22:14 31:1 154:2
222:4
exists 10:18,19 22:5
25:17 65:2 144:15
149:5
expand 31:21 151:5
expanding 208:14
expansive 64:14 66:18
expect 217:17 228:10
expected 167:17
218:18
expensive 119:11
experience 47:8 121:11

121:18 124:2 184:5
186:11 204:10 211:11
experienced 139:16
experiencing 82:5,8
experiment 151:22
expertise 10:22 57:1,15
136:16
experts 157:16 225:16
explained 212:2
explaining 206:3
explicitly 21:5
explore 187:5
exporting 109:14
exposing 35:11
express 19:22
extend 4:15
extent 66:6 102:1
extra 71:11
extremely 7:15 43:14
eye 67:17
eyes 156:2 186:3

F

F 2:6 3:3
FACA 210:12 226:1
Face 87:1
faces 8:19
facilitate 81:6 157:10
facilities 83:10,16,16
facing 157:9
fact 35:14 39:12 61:6
76:14 129:4 142:19
145:1 164:7
factor 115:14 116:3
117:5 121:9 126:21
138:11 140:5 175:8
factors 104:20 115:3
127:2
facts 61:1
fair 5:21 89:8 112:21
169:5
fairly 126:2 153:18
223:21
Fairweather 58:18
61:17 76:20 173:16
fall 138:7
Fame 178:9
family 178:2
family-friendly 176:3
fantastic 160:13
far 27:22 41:20 106:1
108:9 118:6 178:19
193:13 194:11
fashion 42:2 223:13
fast 26:14 216:19
faster 157:10
favor 49:12,14 70:7
79:19 162:14 174:20

favorite 26:8 203:3
favorites 26:10
fear 138:10
February 92:11 93:2
federal 2:6 13:1,22 16:9
 17:19 22:21 23:1 34:7
 34:11 55:16 62:1,4
 63:22 81:6 83:15
 106:13 133:15 147:8
 148:3 152:15 153:1
 228:20
federally 122:22
feedback 19:14 220:22
 221:1
feel 32:21 74:7 139:13
 147:19 171:21 172:10
 178:16 182:22 186:4
 186:21 192:3 202:17
 202:22 213:1,21
feeling 84:8 139:21
feels 79:3
feet 91:20 92:1 94:14
 94:15 98:19 116:5,15
 116:16,17,17 137:21
 138:12,20
fell 34:14 138:17
felt 39:17,20
FEMA 17:20 31:19,22
 32:8,9,13,18 33:7,8
 34:3 40:17 41:5
FEMA's 32:12 34:18
fender 102:1,3
fewer 178:8
FGDC 42:17
field 177:5
fields 171:1
fight 74:11,11
figure 58:7 62:22 83:9
 83:14 169:2 208:20
figures 58:2
file 197:13
fill 180:21
filter 83:8 200:2
final 46:15 90:2,4 105:6
 118:9 165:10 218:21
finalization 218:20
finalize 196:1 220:17
finally 10:17
find 14:11 82:21 93:5
 98:22 125:17 136:15
 142:6 176:2 197:12
fine 14:16 69:13 77:9
 115:21 161:13 227:20
fingertips 211:17
finish 5:14 12:16 133:6
finished 110:21
finite 47:13
first 8:20 9:2 11:8 14:7

18:7,12 23:19 26:9
 27:10 28:8 51:6 53:10
 53:15,19 59:10 71:12
 72:3 74:16 82:16
 84:19 87:16 96:10,15
 113:7 133:21 151:2
 156:10 158:21 176:14
 176:18 217:21 219:5
 219:7 220:17 226:7
 228:17
fish 72:11
Fisheries 73:5,11 74:10
 76:16
fishing 64:16
fit 106:18 160:3,9 183:2
five 10:1 15:5,7 19:4
 48:3 73:6,6 142:10
 176:22 202:8,16
 209:4 219:2,8
fix 83:5
fixing 83:6
flag 92:16
fleet 51:6 53:12,15
 54:10,13,17,20 55:2,5
 55:8 56:21 58:20 71:2
 72:20,21,22 73:19,20
 73:20 75:3,5,9,11
 76:14,15 198:13
 199:2 208:8 209:5
 215:4 218:3 220:11
fleets 75:5
flight 96:1 177:20
flights 178:7
flip 30:18
flood 144:4
flooding 81:4 82:9
 192:16
floods 125:7
floor 137:21 178:14
flopped 30:18
flow 227:5
flowed 11:2
fluid 105:18
fly 131:20 176:8
focus 11:8 13:10 17:2
 37:22 104:2 107:1
 154:19 157:17 158:7
 195:15 210:22
focused 9:18 158:15
 195:5 210:20
focuses 179:10
focusing 195:3
fog 150:8 202:3
folder 14:9
folks 18:1 22:8 31:8
 34:8 36:2 43:9 63:8
 63:14,15,16 204:19
 223:22 225:9 230:4

follow 19:6 126:16
 156:17 163:1
follow- 122:6
follow-on 137:8
follow-up 31:15
following 56:2 103:13
 163:1
follows 12:13
food 58:18
foot 91:21 108:5,6
 139:4,6,8 140:7
forced 115:22
fore 99:19
forecasting 201:19
foremost 74:17
form 130:22 198:4
formal 162:3 174:11
 191:2 223:13,21
formally 225:13 228:19
format 149:6 205:17
formats 145:13
formerly 22:16 100:3
forming 214:22
formulating 185:18
formulizing 221:9
forth 40:15 62:11 73:14
 180:18 215:6
fortunately 143:4,4
forward 37:12 50:16
 69:17 76:2 77:18
 84:16 130:14 145:14
 151:19 152:2,3,3
 161:16,17 166:12
 222:7 229:9 230:12
forwarding 94:5
found 7:15,21 15:16
 27:8 125:19 126:18
 160:8 173:9
founded 75:22
four 5:15 94:7 154:1
 176:22 193:15,16
 218:18
fourth 60:15
Frabotta 18:15
frame 40:2 69:9 150:17
frames 221:19 222:15
framework 11:21 33:21
 34:4 147:6,8,16
 195:20
Framing 3:16
Francisco 93:22 96:12
 97:21 98:10,11 99:12
 128:8
Franklin 91:15,16 122:5
frankly 18:20
freely 230:1
Freeman 151:3 152:5
frequency 137:10

frequently 124:10
 147:2
fresh 125:17
freshet 137:14,15 138:5
Friday 6:8
friends 92:5 178:2
front 51:4 52:3,8,19
 61:20 83:10 85:2
 100:9
fruit 150:16 169:22
frustration 189:13,19
fuel 92:21 106:11,14
Fugro 65:16,22 152:10
full 46:15 58:9 68:18
 135:22 177:7 225:22
full-day 176:6
fully 158:4 186:17
function 7:14
functionality 16:2
fund 28:5
funded 24:5
funding 24:1 25:14
 52:16 142:4 189:4,14
 189:19 194:17 205:18
 215:12,13
funds 13:8,9 15:14
 26:12,18 61:16 72:4
funny 96:16
further 29:4 162:11
 184:21 217:10
furthest 16:13
future 7:10 25:19
 101:15 110:17 120:5
 120:9 126:9 144:14
 168:4 177:3 195:21
 217:12,18 221:13
 222:8,14,17 229:9
 230:13
FY 72:4 175:7

G

gain 172:17
Galveston 1:12 116:22
 150:8
game 63:11,15
gamut 189:12
gangway 227:4,22
gap 36:5 94:14,22
 205:6,7
gaps 36:3 107:6
Garrett's 208:11
Gary 1:22 2:9 86:4
 88:10,11 194:22
 219:15,21
Gary's 221:12
Gate 92:2 95:6,7 97:4
gathered 226:8
gathering 200:2

gauges 94:22
gee 1:16 21:9,9 34:21
 34:21 36:11,18 46:9
 46:13,20 129:20,21
 130:10 131:13 132:6
 132:20 140:14 143:11
 143:12 169:14 171:18
 190:6,7 203:22,22
 211:8,8 213:2,7 214:9
general 81:1 84:5 85:8
 149:10 171:21 180:10
 190:11 204:11,18
generally 40:1 123:4
 199:22
generated 122:16
generating 163:6
geodetic 171:4 197:6
 212:1,8 213:6
Geodynamics 151:3,20
geographic 160:1
geoid 197:1
geometry 131:18
geophysical 22:18
Geospatial 34:8,14
Gerd 2:6 3:3 18:8 35:4
 35:13 76:13 99:10
 113:4 122:21 156:8
 157:6,13 163:21
 193:3 204:1,21 225:5
Gerd's 135:3
getting 19:20 20:9
 23:21 25:3 35:8 62:21
 77:16 103:7,7 124:14
 124:16 134:12 135:5
 135:7 143:20,21,22
 144:10 145:12 153:7
 157:3 173:2 181:2
 186:16 188:5 194:5
 209:2 211:14,22
 214:18
GINA 2:8
give 5:21 6:15 43:22
 54:11 65:9 90:3 93:18
 116:14 121:12,13
 140:1,16 150:4,18
 154:15 175:14 176:7
 177:19 211:19 213:22
 228:1
given 69:8,8 78:22
 158:2 222:10
gives 96:3 126:11
giving 7:12 127:21
 150:3 201:6
glad 42:3 187:10
Glang 2:6 3:3 7:6 8:2,16
 17:7,10 18:8,8 19:13
 20:8 22:12 24:22
 35:13,13 36:17 37:9

41:1 76:11,12,13,19
 78:2,10,14 92:10 99:9
 99:10 100:2,18 101:1
 102:20 103:15 105:9
 122:19,21,21 151:4
 156:7,8 157:13,14
 161:11 163:21,21
 184:1 193:1,2,3,11
 200:15 204:21,21
 205:4,7,10 206:19
 225:5,5 227:1 228:18
 229:10
GLENN 2:7
go 12:20 13:18 14:2,5
 14:10 15:10,21 19:15
 20:15 21:21 23:3
 26:20 27:19 33:7
 35:21 49:21 52:7,16
 52:22 53:4,19 56:6,19
 59:6 62:7 63:4,20
 64:6 65:16 77:10
 80:15 89:14 93:20
 95:17 101:22 105:9
 114:20 115:22 117:13
 120:5 121:7 131:14
 132:7 135:10 139:19
 140:2 148:20 156:22
 160:6 179:2,13
 181:13,17 184:3
 186:19 194:20 198:16
 203:1 212:4 215:9
 219:7,10 220:1,12,21
 221:3,8 223:20
 224:11,20 226:11,17
 226:17 227:1 229:19
goal 42:17 128:12,17
goes 25:13 101:14
 134:22 135:13 196:20
 197:15 198:3 203:15
 210:17 211:1 219:2
 219:12,14
going 5:8,21 6:13,22
 7:4,8 8:22 15:6 17:2
 18:12 25:13 26:17,19
 28:5 30:20,22 33:22
 35:17 37:12 39:13
 47:22 48:2 50:6 51:5
 56:1 63:18,20,21 74:8
 75:19 76:1 80:5,18
 81:12 82:1 83:14,14
 84:19 86:13 88:3,12
 88:17 94:1 103:20
 107:3,17 108:7,13
 109:15 111:5,8
 113:17 116:19 120:8
 129:17 131:16 135:6
 135:19 140:22 149:4
 150:15 151:22 158:15

159:18 165:17 168:9
 168:12,13,15,17
 171:22 172:7,11
 175:4 177:2 178:1,13
 178:15 180:20 181:6
 184:2,3 185:5 189:20
 196:12 199:4 202:10
 203:13 205:19,22
 207:16 208:2 212:4
 217:3,5,8 218:2 219:5
 220:16 222:11 226:6
 226:11,15,18 227:4
 227:22 228:18
Gold 92:2
Golden 95:6,7 97:4
good 4:3 8:12 9:21
 10:18 11:15 20:19
 41:12 48:22 59:21
 60:2 61:18 62:15 74:5
 77:2 112:9,15 118:3
 118:11 119:4 123:10
 126:7 133:17 163:9
 165:15 171:13 172:12
 173:6 186:8,13 188:1
 194:8 206:3 207:4,20
 210:1 214:5 224:12
 226:13
goodness 30:13
gotten 19:14 107:21
governance 193:16
government 39:9 57:1
 66:17 133:15
government's 39:12
 59:18
government-provided
 103:11
Governors 179:6
GPS 99:17
grab 14:20
grabbing 117:14,14
grabs 52:13
grammar 79:14 207:13
gram 13:8 23:2,3
grasp 87:13 90:18
grasps 87:13
GRAV-D 212:4
great 4:6 8:9 11:19,21
 28:16 30:5 40:5 41:11
 43:8 46:19 49:16 51:3
 61:21 68:5 70:9 78:3
 79:5,21 85:6 86:15
 127:19 131:10 136:8
 151:4 152:12 160:18
 165:3 174:18 178:5
 179:3,6 180:5 183:19
 184:10,20 185:8
 192:2,10 201:16,20
 228:19 229:8

greater 161:3 178:5
 201:21
grid 132:15 148:16
ground 105:19 201:2
 201:12
grounded 92:13,16
 93:4,8
grounding 93:7 112:10
 112:11 121:18
groundings 112:4
group 3:5,8,9 5:13 9:18
 27:21 32:10,20 33:10
 42:6,8,10 45:4,10,13
 45:22 46:14,22 47:9
 47:20 49:14 65:7 80:4
 83:8 85:7 101:7
 146:10 153:17 154:6
 154:13 156:1 161:7,9
 161:15,22 162:7,18
 162:21 163:11,13,15
 163:16 164:4,19
 165:18,19 166:3,10
 166:14 168:10,12
 171:11 172:17 174:13
 175:1 179:5 187:13
 196:6,10 209:9
 214:22 218:1 223:21
 225:14,15 226:4,17
groups 3:14 5:16 28:13
 32:4 47:12 51:1 101:7
 153:15 154:2,20,22
 163:4 173:2 182:3
 224:7 225:7,20,20
 226:2
grow 65:21
growing 33:3
grown 33:13
growth 229:15
guarantee 109:12
guard 75:6 104:18
 105:3,4 181:21
 182:11,12 191:17
 197:14 204:10
Guard's 180:7
guess 17:13 25:20
 34:21 35:1 36:11
 44:10 67:4 68:14 72:5
 80:18 102:8 138:3
 150:2 170:19 203:11
 204:1 225:19
guided 148:2
guidelines 106:3,6
gulch 121:14
Gulf 14:18 68:5
guys 23:12 50:1 139:22
 171:15

 H

half 57:11 159:4 176:7
 183:12,12,13
Hall 1:17 44:3,9 45:3
 52:7 53:3,9 54:9,18
 55:10 56:7,15,20 59:9
 60:8,11 61:18 66:1
 74:10 78:22 82:15,20
 84:10 86:15,22 87:15
 166:17,20 169:6,10
 178:9 193:9 194:22
 223:19 224:3,6,19,22
 228:7 229:18
Hamburg 92:14 112:6
 141:1
Hampshire 2:2
Hampton 3:10 81:7,13
 85:19 215:4 218:3
 220:11
hand 7:22 69:1 111:11
 206:17 212:6 218:2
handed 141:9
handle 139:11
handled 155:22
handles 180:5
handling 10:14 95:15
 109:19
hands 49:12 89:5 185:2
 194:6 209:3 214:18
 226:20
hanging 69:1
Hanson 1:15 3:22 23:7
 24:19 25:17 26:7
 44:10,14 50:4,14 63:1
 64:22 67:16 68:2,7
 124:7 125:2,5,10,14
 125:22 126:13 143:17
 162:22 178:22 180:4
 180:9 193:22 194:1
 210:11 224:15 228:15
 228:16 229:11,19
happen 15:1 30:10
 104:13 112:9 131:14
 156:18,18 157:4
 203:10,12
happened 13:6 58:20
happening 13:17
 130:13 147:11
happens 63:9 147:2
happy 11:10 165:6
 213:5
harbor 96:15 97:1,14
 97:15 109:4,6 110:19
 112:7 131:17 138:4
 184:9
harbors 111:7 201:10
 221:14 222:14
hard 78:4 105:11
 141:21 148:16 164:21

183:3 185:18 214:3
hardware 24:13
harmonization 133:16
harmonized 120:16
harmonizing 133:9
harping 63:1 64:3
harvesting 22:14
hash 187:1
hate 81:19
Hawaii 181:16
hazard 36:3
Hazards 37:21
head 110:12 162:18
heading 99:18 117:13
headquartered 180:8
headquarters 158:11
hear 7:9 43:9 78:11
 131:11 136:8,11
 179:1 187:5,17 189:2
 201:8 202:14 219:12
heard 4:17 18:13
 130:20 159:7 186:14
 187:15 189:1,11,13
 193:13,17 194:18
 200:12 208:21,22
 211:21 212:6 214:14
hearing 182:17 185:1
 189:6,17,19 201:14
 201:17
heat 95:8
heck 112:2 166:3
 183:17
heel 114:7 116:6,8,15
height 91:22 95:18 97:6
heights 42:14 107:5
held 177:1
help 30:3 36:5 37:14,19
 37:21 38:21 41:22
 58:1 114:8 146:2,19
 151:17 157:10 158:19
 164:4 201:19,22
 230:5
helped 7:16 160:15
helpful 64:1 87:18
 119:9 148:2
helping 102:5
helps 54:20 79:1 87:9
hey 139:21
Hi 40:9
high 92:16 144:4
high-resolution 131:15
 132:14 135:5 141:15
higher 115:11 119:8
 135:7 147:21,22
highlight 25:19 35:19
 83:2 169:18
highlighted 93:10
highly 7:7 146:18 197:4

Hill 197:10
hiring 211:22
historical 34:22
history 58:10 73:5
 201:16
hit 11:18 14:1,1,1
 183:16
hits 138:7
hold 17:4 104:15
 117:13 168:21 199:21
 226:20
holdings 21:12
hole 19:15 107:3
holiday 6:7 175:9
 177:22
home 16:20
Hong 92:15
honorable 229:8
hope 7:20 130:21 131:4
hopefully 196:21
hoping 58:1
horn 186:19
hosted 159:12
hot 95:5 180:12
Hotel 1:12
hour 74:21 88:4 185:17
hours 80:2
House 1:11
Houston 1:11
HSRP 1:14,15 2:6,11
 3:3 7:16 43:13 44:11
 49:21 72:19 91:9 92:6
 94:1 122:16 133:18
 182:2 202:7 211:11
 214:20 226:3,3
huge 40:14 91:14 96:7
 221:22
hugely 133:17 181:13
hull 115:10
human 133:16 145:3
 146:16
humble 113:22
Huntington 180:1
hurricane 125:19
hurries 94:16
hydraulics 108:2,13
hydrographer 198:7,7
 198:8 199:11,15
 200:14 204:3,17
 205:1 215:11
hydrographers 204:19
hydrographic 1:4,11
 2:2 4:8 5:5 7:11,12
 52:16 53:16 54:3,11
 54:13 55:6,8 56:21
 57:7,11,16 65:19
 71:16 73:17 74:12
 75:4 144:22 186:10

200:13
hydrography 57:6
 186:12 197:1,6
hyper-spectral 12:4

I

ID 227:12,20,22 228:9
 228:11
idea 20:4 39:7 40:3 78:3
 79:5 84:18 96:3 122:3
 122:9
ideal 144:13
ideas 87:6 202:7
identify 5:12 196:16
 199:5 206:13 207:11
IDs 227:10
IHO 204:14
II 76:15
imagery 12:4 153:4
imaging 138:13
imbedded 92:22
immediate 26:11
immediately 33:16
IMO 103:11
impact 77:21
impacted 63:21
impel 146:10
implemented 155:9
implication 18:19
importance 94:20
 143:6 186:9 192:14
 193:18 212:3
important 10:15 18:9
 19:18,21 33:6,6 40:22
 41:10 52:5 57:13 95:1
 107:14 116:10 120:7
 121:9 133:7,17 134:6
 136:7 140:20 151:7
 158:7 182:13 189:16
 192:18 198:9 201:1,9
 208:3 213:21 214:15
 214:17,18 217:8
 229:21
impose 106:9
impossible 57:20
 149:13
impressive 96:17 97:2
improve 118:14
in- 217:3
in-depth 217:9
in-house 57:14
in-lake 180:13
inaccuracies 102:8
inadequate 38:1
inappropriate 187:1
inbound 97:13
inclined 39:2 46:8
 68:14

include 21:11 31:7
64:13 66:17 68:11,20
93:11 114:5 118:20
208:14 214:19
included 75:1 187:9
194:13,15 207:12
includes 23:2
including 21:7 66:13
215:4
incorporate 51:10
incorporated 89:8
increased 81:4 82:8
200:20,20
increasing 151:13
increasingly 145:4
independently 150:2
Indian 92:15
indicate 217:1
indicated 46:3 51:20
indicates 136:21
indication 165:15
individual 38:15,16
106:7 158:14 163:4
individually 38:14
industrialized 142:22
industrially 67:8
industries 197:16
industry 66:5 67:4
111:1
inexpensive 24:7
inform 37:14,21
informal 50:10 65:12
information 15:8 18:10
19:1 25:2 33:22 37:20
53:16 54:4,11 55:1
56:11 76:13 92:9 95:2
95:9 101:14 102:6
103:1 107:14 127:4,6
127:11 128:1,6
132:21 133:9,10,13
133:14 134:12 139:17
140:3,12,17 145:18
149:19 150:3 160:15
192:21 197:17
infrastructure 184:9,12
215:5
initial 24:6 26:14 33:9
164:18
initially 167:21 170:4
initiative 40:6 42:12
43:10
Initiatives 162:7
inland 30:6 41:14 159:9
Inlet 151:10
inlets 151:11
inner 19:9 97:1,14
99:16
innovative 57:2

input 48:7 75:16 127:7
153:13 185:22 188:19
191:14 207:4 211:20
213:12 226:8
inside 106:12 132:5
147:17 159:21 219:13
insight 6:20
installed 58:4 78:13
instance 22:15 24:10
27:10 95:6 103:2
105:3,19 106:10
instances 29:6
instigation 11:16
instrumented 114:8
instruments 118:3
121:20
intake 110:3
integrate 103:8 122:7,9
Integrated 8:13 9:1
integrating 171:4
integration 9:10,13
19:2 21:8 127:20
206:22 221:15 222:16
223:2
Intelligence 80:4 154:5
154:18 163:16 164:4
intended 13:13 71:14
104:2 129:11
intent 51:8 80:1 128:11
129:18,19 147:18
175:19 196:16
inter-city 152:18
interactive 146:17
interagency 27:3 42:8
152:13
interest 13:4 18:4,7
33:3 40:18 41:5 49:2
152:2 156:2 180:11
interested 15:19,22
16:7 17:17,18,22
38:22 49:7 66:6
179:12 207:1 225:14
interesting 93:6 101:12
interests 17:22 31:4
38:16 143:5
interface 33:5 126:19
159:22 179:11 183:2
interfacing 98:14
interim 171:19
interior 30:8 41:18 70:3
Interlake 179:4
intermodal 195:17
internally 122:16
international 89:12
142:20 143:1 146:15
204:14,16,19
internet 12:19
interoperability 104:5

interpret 137:6
interrupt 94:13 114:15
interruption 56:1
introduced 164:1
introduction 200:19
introductory 83:20
inundation 192:21
201:15 209:1 214:17
invisible 132:11
invite 35:20 116:12
involve 104:17,18
involved 9:17 43:9 71:4
87:9 104:17 107:7
146:14 159:9,20
162:1,21 170:22,22
involvement 141:4
153:8
IOCM 6:21 8:22 19:17
19:19 20:7,21 21:1
25:9,9,15
IOOS 31:12
isolated 42:2
issue 36:14,16 38:3
51:1 56:2 62:17 67:13
68:15 69:22 70:10
71:1,3,5 72:8 73:2
76:6 82:17 84:10
88:13,13 89:4 91:5,5
91:6,8 122:8 124:8,12
124:13 125:7 167:20
180:13 189:4,14
196:16 197:4,15
198:9,21,22 199:1,1,5
201:14 205:22 206:6
206:12,13 209:1
212:7 215:3 220:18
221:10 222:2,2,3
225:18
issues 23:13 61:6 89:10
93:10 95:14 101:5
106:10 108:3 122:5
122:10,14 131:11
179:3 180:11 195:18
196:13 205:21 206:5
208:16 211:4,6
214:19 230:2,5
item 5:17 43:11 80:3
197:5 201:1 213:17
items 52:22 207:11,15
207:18
IWG-OCM 32:3,14
42:21

J

J 1:17,20
Jack 151:21
JALBTCX 3:4 6:20
16:18,19 17:17 30:11

30:14,18
jammed 11:3
Jeffress 4:16,22
Jennifer 29:1
Jim 179:4
job 63:8 144:19 160:13
160:18 183:19 206:3
jobs 63:18
JOHNSTON 2:9
joining 17:14 223:20
Joint 2:2 10:20
jointly 113:19
Jon 102:4 103:3 130:15
132:18 140:16 148:6
157:20
Joyce 1:19 3:8 7:4 8:4
44:19,22 47:21 54:6
56:16 70:13 164:21
165:14 168:4 171:19
173:7 216:2 226:6
Joyce's 164:8 221:1
224:8
judgement 73:21
Juliana 2:3 31:16 41:7
42:13 175:22 195:1,2
212:1
Juliana's 211:20
July 30:14
junior 57:5

K

Kaiser 180:10
keel 37:3
keep 33:18 63:1 64:2
67:5 83:14 151:22
177:21 189:15 193:20
195:22 200:4,5
202:14 203:9
keeping 157:19 200:9
214:1
Kelly 1:17 44:20 45:7
45:18 67:6,22 68:3
84:16 106:22 109:22
142:18,18 144:20,20
174:14 178:18,18
179:9,17 182:20
189:8 200:7,8,11
202:3 209:17
Kelvin 205:13
key 52:10 55:2 136:2
144:21 156:20 229:20
keyboard 190:1 216:18
kidding 87:11
Kill 107:21
killed 163:19
Kim 1:17 51:16,22,22
52:1 56:6 71:11 84:2
86:10,12 88:1,1 90:15

90:21
Kim's 225:20
kind 15:7 18:6 19:19
 26:20 27:7 28:15
 33:11 34:13 36:15
 37:1 42:12 52:11
 59:15 62:6 63:2 66:4
 66:11,16 68:18,22
 81:16 98:1,13 101:4
 103:12,13,19 105:6
 112:11 113:7 118:15
 136:11 140:19 141:20
 142:15 143:13 148:1
 149:10 157:3 161:18
 163:7 180:12 181:7
 182:22 187:1 196:7
 208:2 209:4 212:22
 213:14,22 214:5
 217:7 221:5 222:2
 223:2
kinds 12:2 37:11 104:2
 202:19 221:1
kit 100:19
knew 26:16,19
knots 116:6 117:12,12
 119:22
know 4:17 5:3,22 6:6,8
 6:9,10,14,16 8:18 9:6
 12:10 15:2,6,8 17:20
 21:5 22:7,9 23:11
 24:12 26:11 28:20
 29:1,2,4,7 30:7,9 31:2
 31:5,7,19 32:22 33:20
 35:10,20 36:7 38:7,11
 38:12,13,15 39:11,15
 39:19 40:11 41:13,18
 41:20 42:4,6,14 43:11
 47:12,18 48:19,19,21
 49:2,3,4,5 50:9,11
 53:17 54:20 59:10,11
 59:17 60:6,12 61:3
 65:4,16,18,19,21
 66:12 67:14 68:5,12
 68:17,19 72:9,12,18
 73:4,9,12,14 74:1,7,8
 75:12,17,18,19,20
 76:1 77:2,14,17 82:18
 83:7 89:14,17 92:6
 93:16 95:3 100:13,17
 107:18 108:19 109:1
 111:16 113:1 119:3
 119:18,19 121:14,14
 121:15,15 126:10
 128:7,7 132:1 135:12
 136:14,20 137:2,5
 138:16,18 140:14
 146:12 148:16,22
 152:7 155:16 157:22

161:21 165:14 166:2
 171:9 173:21 176:20
 178:1,6 179:20
 180:19 182:12 183:2
 186:11 188:22 189:9
 191:5 199:18 202:22
 204:2 210:6,12 215:6
 218:21 222:19 223:12
 224:9,12 226:11
 227:3 228:22 230:4
 230:10
knowing 195:20,20
knowledge 99:13
 136:17 137:1 151:13
known 22:16 100:3
knows 52:20 138:21
Kong 92:16
Kull 107:21

L

L.A 9:5
LA/Long 92:3
Lab 2:15
Labor 6:7 175:9
Lake 179:5
Lakes 68:5 178:6 179:3
 179:6 180:6
land 29:18 43:1 170:12
landed 27:5
language 79:1 122:13
LAR-IAC 153:4
large 32:7 95:11 97:22
 100:16 112:13 118:9
 120:8 153:6
largely 62:2 152:15,21
larger 91:7,14 108:10
 110:15 112:2 119:5
 205:20
largest 91:13,16 93:12
Larry 1:15 3:10 47:2,10
 48:3 88:6 154:9
 165:22 166:7 177:12
 188:16
Larry's 154:14
latch 30:22 31:13
latching 17:3
late 40:9 73:22 150:12
 177:20
Laughter 8:1 45:17
 84:14 90:16 97:18
 138:15 163:20 170:7
 174:8 178:11 179:14
 179:19 199:13 200:10
 202:4 205:3 216:13
 216:20 224:2,5,18
 226:21 227:9 229:17
launch 76:10
launches 54:13 56:21

57:8
laundry 67:13
LAURA 2:10
law 9:12 34:12
Lawrence 179:7
laws 21:6
Lawson 1:16 3:9,11
 59:15 64:6,7 72:6,8
 74:4 75:2,16 76:3
 89:3 133:4 154:8
 165:11 167:2 171:3
 172:14 174:1 181:12
 196:4 202:5
lawyer 204:11
lay 110:9
layer 14:8 101:17
layers 101:13
laying 140:7
leadership 3:5 7:12
 49:14,21 50:15 85:16
 158:11,12 208:15
 230:11
leading 183:13
learn 23:14
learned 17:1 166:9
 220:19 229:20
learning 152:3
leave 188:9,12 195:1
 223:6,16,17 224:16
 227:22
left 56:12 68:16 90:9
 116:17 118:5 123:5
 131:21 224:4
legal 129:18
legislation 20:2,17
legislative 20:22
 154:20 155:2,14
 161:8 162:6 175:14
lengths 102:14
less-senior 161:22
lesser 206:7
lessons 166:8
lest 69:11
let's 4:5 27:3 53:4 55:11
 55:13 125:11,18
 154:17 169:2 178:15
 187:1
letter 56:2 70:20,22
 71:8,9,14 77:10,11,13
 79:1,13,22 159:15
 172:19 181:4 185:11
 185:19 186:1,5 188:6
 189:18 190:4,11,12
 190:14,18,22 191:3
 191:13 195:13 196:9
 196:20 198:1,3,12,12
 198:14,19 199:3,8
 200:3 203:13,18,20

205:18,20 206:1,12
 206:16 207:6,12,19
 209:7 212:7,22
 213:13 217:1 218:9
 219:5,7,14 220:5,12
 220:17,17 221:4
 226:7
letterhead 78:7,8
letters 67:1 180:18
 187:14 191:22 200:5
 211:13,16
level 18:6 92:1 127:5,8
 140:3 152:15 153:2
 192:15,15,19 193:18
 204:14,16 208:22
 214:16,16
levels 10:9,12 11:15
liberty 71:7
license 24:15
LIDAR 10:4,9,11,20
 11:7 13:7 14:15 15:4
 27:11,14 32:19,21
 33:4 38:17 39:8 41:13
 153:3
life 59:4,14,15,21 60:1,3
 60:4,5,7,11 75:8
 145:3 146:16 173:14
 173:17
light 7:18 33:19 150:15
 189:22 201:9 216:17
lighter 92:21
lights 169:12
liked 84:17,21 172:18
likes 40:2
limit 68:1 104:11
 105:11 112:22 124:19
 130:14
limited 106:15,15
 152:15 214:7
limits 28:18 105:13
 106:13 109:10
Lindsay 1:16 21:9
 34:21 35:14 37:9 46:8
 46:13,20 129:21
 142:18 143:11 144:17
 189:7 203:22 211:8
 224:13
Lindsay's 204:22
 224:12
line 21:20 52:3,8 61:20
 102:2 117:19 123:5
 131:4 197:5 204:11
 211:3 213:17 226:10
lines 29:4 113:8 135:4
 142:12 194:3
link 12:16 97:9 173:11
Linked 12:14
links 99:1

- Lisa** 36:7
list 63:5,14 64:19,20
65:8,9,22 66:1 67:13
67:13 68:11 69:12,12
202:15 203:14 213:12
223:21 225:7
listed 32:8 67:21
listen 172:3
listing 66:9
literally 149:15 206:11
little 6:1,20 8:17 11:3
14:3 22:2 24:3 27:18
31:18,21 38:2,18
43:20,22 66:18 68:19
71:4,4 73:22 77:5,21
78:4 81:21 83:13
88:17,20 93:8,17
105:10 111:1 125:1
136:19 139:21 148:22
149:10 150:22 171:13
182:5 196:9 208:2,14
210:21 221:2
live 13:19
lives 63:21
LNG 109:14,15
load 148:16
loaded 149:6 158:3
loads 95:8
local 68:4 136:17 137:1
141:11 153:2,8
178:19,20 183:2
187:15,15,18 201:14
202:1
locally 187:21 201:14
208:22
location 5:19 153:20
locations 194:21
locker 184:4
Lockhart 45:16,21
185:21
locks 184:10
logs 137:18
long 9:5 91:20 98:7,8
117:16 142:20 203:18
223:12
long-term 151:9
long-winded 212:22
longer 37:10 43:20 71:5
152:1 199:1 203:14
206:1 209:14 219:11
225:10
look 5:22 6:9,10 22:5
41:17 51:5 63:4 71:13
87:21 89:20 94:6
95:22 104:20 105:10
108:7,8 110:16 128:9
141:9 142:21 148:11
151:18 161:17 165:7
165:10 172:7,11
175:4 176:21 177:16
217:4,9 229:9 230:12
looked 61:11
looking 21:11 22:9
29:16 31:2 35:15
37:16 44:3 54:1 62:14
77:22 84:1 85:15
94:14 107:18 108:1,2
108:3 109:15 138:3
150:10 151:6 152:3,3
161:15 173:9,12
193:12 203:10 208:6
209:22 213:11 222:7
looks 82:16 214:7
looming 200:17
Los 153:4
lose 25:14 149:19
loss 58:15
lost 93:7,9
lot 4:17 7:17 8:18 11:14
14:22 23:13 26:19
30:19 31:3,13 35:6,11
40:11,13 92:4,7 102:7
102:16 103:6 105:18
106:10 107:1,11
108:3,9 109:5 111:2
112:2 116:20 131:7
137:12,15,16 142:12
142:13 143:5 145:22
157:1,15 158:2
160:16 169:15 170:10
172:18 176:22 180:11
182:7 187:3 199:17
202:7 214:12 220:15
222:5,5 223:22 224:7
lots 17:21 26:17 31:10
36:3 102:22 169:20
175:6
loud 56:16,18 213:7
love 189:10
low 93:7 127:17 138:6
low-cost 151:11
low-hanging 169:22
low-sulfur 106:11
lower 147:22
loyal 229:5,5,6,7
LRD 180:10
lunch 150:12
luxury 150:13
Lynne 2:11 12:19 46:1
51:11,12 55:12 56:8
60:4 70:20 78:7,19
83:14 87:22 89:5 90:1
165:3 166:17 173:10
176:15 183:18,19
190:3 201:11 205:13
216:1 220:15 223:6
225:6
Lynne's 80:16
-
- M**
-
- magic** 99:2
MAGNUSON 2:9
Magnuson-Stevens
73:13
main 179:10 197:20
Maine 15:17,17,19
maintain 57:14
maintained 33:14 123:1
maintenance 56:22
151:13
major 29:11 115:13,13
125:19 142:12 202:9
215:10
making 38:22 44:4
54:19 55:2 64:3 68:9
85:6 108:10 127:8
155:20 157:22
Malaysia 96:1
Malcolm 110:8
man 110:1
manage 57:16 119:20
125:21
management 10:13
151:14
mandate 7:13 73:14
129:2,8,22 130:12
144:9 159:8
mandated 9:14 55:15
maneuver 106:19
118:12
maneuverability 113:1
123:18
maneuvering 115:14
118:11
manner 50:2,13
mantra 203:3
map 14:19,20 203:4,8
mapping 6:17 8:14 9:1
9:3,7,9,13,15,17,22
10:8 11:16 12:2 14:6
14:14 16:6,16,20 19:2
21:7,10 22:18 23:4,5
25:16 26:20 31:3 32:5
32:19 38:6 39:8,14
40:7 41:8 42:8 43:6
90:10 116:20 118:20
152:19,22 195:8
206:22
March 1:9 133:22 151:2
152:10
marginal 112:19
marine 16:13 28:19
157:20 159:19 170:11
170:14,21 171:6,9
195:6,15,16
mariner 132:22 137:3
149:10 204:12
mariners 128:13 147:19
maritime 67:4 89:11
90:11 103:5 110:22
193:15 197:14,16
mark 66:4 166:8
marketplace 34:10
markets 109:13
Maru 110:2
Maryland 181:18
mass 95:16
Massachusetts 29:14
30:2
massage 73:1
master 113:11,20
149:21
matching 13:9 14:11
materials 94:3 218:13
matter 80:9 141:18
142:3 185:12 206:17
230:15
maturing 229:15
Maune 1:18 44:12,17
44:18 48:15 52:21
54:7 62:14 67:3,3
83:19 84:2,8,15 86:5
86:9,12,18,21 87:2,5
87:8,12,18,20 88:5,8
88:19,22 89:22 90:14
90:17,22 91:3 170:10
170:18 176:15 188:3
188:10,13 219:18
220:9,19 222:19
max 107:19 112:5
Mayer 47:2
McCoy 96:12
McINTYRE 1:18 69:15
69:16 88:10,15,20
93:19 94:11,18 96:21
97:8,13,19 99:4,8,9
100:1,5,21 101:3
103:6 104:14 105:16
109:8 113:3,18 122:2
126:15,15 128:18,21
129:3,7,9 130:9,15
136:13 139:1 142:2
149:8 160:11,12
194:9,10 205:15,15
206:4,18 218:8
221:20,20 222:12
MCLAUGHLIN 2:10
mean 36:21 39:4 47:11
64:8,8,8,12,19,20,22
65:1 68:6 72:15 75:3
76:6 84:18 85:6 89:15
90:8 101:4 105:11

113:10 129:10,11
 134:7 135:16,20
 140:9 141:21 142:2,8
 143:18 144:5 149:2,3
 149:15 155:13 156:19
 170:12 176:11 181:3
 182:6 190:18 199:10
 202:17 208:6 209:12
 209:22 211:20 224:1
 224:3,8 225:1,13
meaning 72:22 175:20
meant 28:1 84:6 230:4
measure 119:12
measurements 197:2,2
 197:7
measuring 151:8
Mechanic 1:12
MEDLEY 2:10
meet 8:20 10:7 108:14
 127:14,17 158:10
 161:2,3 176:7 203:15
meeting 1:6 3:16,18 4:8
 5:9,20 9:4 11:1 16:3
 18:4,5 23:12 30:10
 32:2 39:11 43:13 48:4
 49:22 78:21 91:9
 108:9 153:16,20
 166:12 168:9,18,22
 169:3,10,13 171:14
 171:19,20 172:2,5,10
 175:3 176:6,6 177:7,9
 177:11,18 179:11
 180:21 181:7 184:18
 185:6 189:3 191:11
 194:19 203:11,12,21
 205:20 212:9 220:13
 221:5,10 223:11
 225:2 226:13
meetings 5:20 17:3
 31:1,3,11,13 32:1
 104:16 152:16 159:20
 176:21 177:1,14
 180:16,17 181:5
 191:4 220:21 221:3
megaship 88:16
megaships 3:11 89:2
 93:10 94:2 104:4,9
 107:2 109:12,19
 145:16 200:19 215:5
 218:1
member 7:6 21:9 34:21
 36:11,18 40:8 44:3,9
 44:12,17,20 45:3,7,15
 45:18 46:7,9,9,10,18
 47:1,4,7,9,22 48:2,15
 48:17 51:7 52:7,21
 53:1,3,4,9 54:7,9,16
 54:18 55:4,7,9,10,11

55:22 56:3,5,6,7,9,15
 56:19,20 57:22 58:6
 58:12,13,16,22 59:2,3
 59:5,9,20 60:1,3,8,10
 60:11,14 61:4,5,7,18
 61:22 62:1,14,21 64:6
 64:7,19 66:1 67:3,6
 67:22 68:3,8 69:7,15
 70:5,13,15,17,19
 71:20,22 72:7 73:4,18
 74:2,10,13 75:2 76:3
 77:4,8 78:15,16,22
 79:16,17 80:5,16,22
 81:21 82:3,6,10,13,15
 82:18,20 83:1,19,22
 84:2,5,8,10,15 85:3,5
 85:10,11,13,14,17,18
 85:20,21 86:1,2,4,5,7
 86:9,11,12,15,16,18
 86:20,21,22 87:1,2,4
 87:5,7,8,11,12,15,18
 87:19,20,22 88:5,8,15
 88:19,20,22 89:3,22
 90:7,17,20,22 91:1,3
 91:4 93:19 94:11,18
 96:21 97:3,8,13,16,19
 99:2,4,5,8 100:1,5,21
 101:3 103:6,16
 104:14 105:16 106:22
 109:8,22 111:9,14,16
 112:15 113:3,14,18
 113:21 114:2 119:10
 121:5,22 122:20
 123:10 124:12 125:3
 125:9,11,15 126:4,15
 128:18,21 129:3,7,9
 129:20 130:9,10,15
 131:13 132:6,20
 133:5 136:13 138:10
 138:16 139:1 140:14
 142:2,18 143:11
 144:20 149:8 154:8
 155:2 156:4 157:6
 160:11 161:10 162:10
 162:16 163:18 165:2
 165:5,11 166:7,17,20
 166:21 167:2,9,13,15
 167:19 168:1,11,17
 168:21 169:2,6,9,10
 169:14 170:8,10,15
 170:18 171:2,12,18
 172:2,14 173:8 174:9
 174:14,17 176:10,15
 177:12,13,15 178:18
 179:9,17 180:15
 181:12 182:20 184:19
 185:21 187:2 188:3
 188:10,13,19 189:8

190:7,10,14,18 191:1
 191:5,8,17 194:10,18
 194:22 196:4,21
 197:11 198:15 199:3
 199:6,14 200:8,11
 202:3,5,6 203:2,22
 204:9 205:15 206:4
 206:18 208:1 209:16
 210:8 211:8 213:2,7
 214:12 215:21 216:4
 216:8,16,19 217:11
 217:13,19 218:8,17
 219:1,4,15,18 220:6,9
 220:10,19 221:13,18
 221:20 222:9,12,13
 222:19,21 223:4,19
 223:20 224:3,6,19,20
 224:22 225:3 227:2
 227:10,11,17,19
 228:6,7,12 229:18
member's 23:18 67:18
members 1:13 2:1
 18:14 47:18 77:19
 103:17 160:1 162:1
 177:2 186:17 187:17
 193:7 197:19 224:11
 225:17,21
membership 6:5
memberships 225:8
memory 218:16
mention 17:7 53:20
 54:19 140:21 194:16
 198:2 199:7 201:13
 203:4 208:7,11 215:7
mentioned 11:13 19:8
 30:9 31:19 32:4 38:5
 42:3 53:14 91:18
 130:20 151:6 187:10
 193:18 197:14 199:18
 208:9 221:16
mentioning 20:6 198:6
MERSFELDER-LEWIS
 2:11 60:22 78:9,12
 79:8 188:8,11 223:8
 223:15 226:15
message 153:7 197:10
met 1:11 13:3 27:9
 159:5
metadata 33:19
meter 102:3 127:2
 134:11 148:16
meters 95:8 115:4
 117:15,15,17
method 150:1
Miami 119:13,13 126:2
microphone 128:20
 162:15 175:17 188:17
 221:17

Mike 27:20
mile 148:9
miles 60:17 139:6
Miller 1:19 3:8 7:5,6
 44:19,22 45:15 46:18
 48:2,17 51:7 53:1,4
 54:16 55:4,9,11 56:3
 56:6,9,19 57:22 58:12
 58:16 59:2,5,20 60:3
 60:10,14 61:4,7 62:1
 62:21 64:6,19 69:7
 70:5,7,15 71:20 73:4
 77:8 79:16 80:5 155:2
 156:4 161:10 162:16
 165:5 166:21 167:9
 167:15,19 171:12
 172:2 173:8 174:9
 180:15 184:19 197:11
 198:15 199:3,6,14
 214:12 215:21 216:4
 216:8,16,19 217:11
 217:19 218:17 219:1
 219:4 220:6,10
 221:13,18 222:9,13
 222:21 223:4 224:20
 225:3 227:10,17
millimeters 149:16
million 52:13
mind 71:17 93:14 94:4
 114:17 177:22 196:1
 203:9 221:21 229:3
Mine 64:15 219:15
minimal 114:9
minimize 181:8
minimum 108:5
minute 80:8 120:14
minutes 44:21 45:20
 70:10 79:22 155:17
 185:4,17 203:21
 206:11 216:15 226:9
misplaced 210:22
missed 8:7 66:4 137:19
 137:22 168:6 215:17
 217:22
missing 144:10 158:17
 167:8
mission 25:18 134:14
 174:11
Mississippi 121:14
 124:5,9 125:6 126:1
 143:20 144:3
MITAGS 109:3
Mitchell 152:10 153:12
mix 41:22
model 81:7 109:3 119:8
modeling 109:1 140:18
models 41:1,3 142:1,22
 143:4

moderating 72:5
modern 36:21 37:1
 89:12 182:15
modernizing 195:19
modes 111:4
modified 71:10
modify 69:21
moment 23:6
Monday 175:20 176:4
 176:12,12,13 177:17
 183:20 219:17
money 23:1,20 25:12
 25:13 55:17 71:2,15
 97:17 143:10
monies 24:7
monitor 149:14
monitoring 98:12,14,16
 101:6 192:19
monthly 127:15 159:11
 159:20
months 138:9
Monument 209:18
mooring 118:9
morning 4:3 8:12 46:3
 84:17,21 91:18
 112:15 133:8 152:7,9
 175:19,20 177:21
 198:11
morning's 7:1
motion 48:10 62:17
 69:22 79:7,13,19
 99:19 162:6 174:11
 174:13 184:16 205:11
mountains 42:15
 137:14
move 31:8 79:16 92:19
 92:20 132:10 146:10
 153:19 158:19 162:8
moved 30:6 159:7
 174:14
movement 138:9
moving 33:3 40:15
 69:17 92:22 106:2
 134:11 139:10 157:10
mud 93:1 138:21
multi- 131:15
multi-beam 12:1 58:3
 132:14 135:5,8 136:6
multiple 76:9 194:20
municipal 68:4
music 96:16
myopic 161:1

N

name 68:12 90:10
 91:15 201:6
named 42:13
names 225:9

narrow 98:19 117:11
 118:15 119:17 149:11
 171:9
nation 31:8 42:13,13,18
 43:10 72:11 140:10
 146:13 199:16 210:4
nation's 38:18
national 1:3 6:16 9:2,7
 9:13,15,22 13:10,11
 20:4,5,12,13 28:14
 38:6 40:6 43:2,6
 143:5 152:21 195:11
natural 151:10
nature 138:3
nautical 60:17 115:18
navigate 116:18 117:1
 117:3,4 124:18
navigating 95:10
 117:10 145:15
navigation 2:12 37:2,3
 57:16 98:7 103:19
 116:2 120:5,6 122:8
 122:12 124:15 129:1
 129:6 130:4,11 131:6
 135:21 136:2 145:10
 145:11 151:7 159:10
 166:22 167:5,11
 170:11,12,13,14,21
 179:3 180:5,11
 182:14 195:4,10,14
 195:15 201:5 208:19
 215:8 222:3,10
navigational 117:2
 129:11
NAVO 11:6
Navy 199:11,12
NCEI 22:15
near 110:20 128:15
 130:22
near-shore 33:5
nearby 28:21
necessarily 39:6 64:17
 91:5 103:3 123:7
 135:4 161:21 187:19
 195:12 203:18
necessary 48:21 49:4
 76:10 136:6 183:14
necessity 201:3
need 5:8,12,14,18 6:11
 13:14 15:11,15 17:1
 18:21 35:2 37:21
 45:12 50:5,7,21 54:9
 59:10,12 60:8 72:14
 72:20 73:16 74:15
 83:6,16 111:4 116:13
 117:11,17 118:11,20
 119:3,16,18,19
 120:10 124:11,21

126:6 132:15 133:2,9
 139:22 140:10 145:11
 146:7,12,13,14,17,20
 148:5 154:11 155:3,5
 156:4,9 161:3,4,8,11
 161:17,21 162:5,9
 164:11 173:21 174:2
 175:5 176:5 180:19
 187:18,22 189:17
 192:19 194:19 200:13
 200:14,16 201:18,21
 204:3,16 206:10
 208:19 211:6,10
 212:2,2 220:8 221:11
 222:18 225:18 227:8
 227:10 228:8
needed 27:22 84:11
 94:14 156:22
needing 210:17 228:11
needs 14:7 18:19,22
 27:9 30:1 39:14 53:17
 61:8 69:18 72:9,11
 101:16 113:19 146:5
 146:10 151:16 159:14
 161:2,19 181:2,10
 187:6,7 215:9 224:15
 225:21
NEIL 2:14
neither 186:21
NERRs 28:19 29:5
never 202:14
new 2:2 8:19 20:16
 23:17 46:5 49:20
 51:19 57:2 60:14 73:6
 93:22 103:16,17
 104:14 106:11 107:17
 108:12,14 114:18
 166:6,9 167:20 168:5
 168:20 177:2 183:9
 196:6 197:19 221:10
 223:20 224:11 225:21
 229:18
news 23:9 29:15 204:7
NextGen 145:11
NGDC 22:16
NGS 195:8 211:21
nice 8:19 29:19 40:9,14
 43:12 73:19 134:18
night 51:14,18
Nirvana 144:14
no-brainer 81:5
no-meet 107:10
no-pass 107:10
NOAA 1:3 2:4,7,10
 10:19 11:5 15:18
 18:19 22:17 27:3,10
 27:17 55:7 57:5,10,14
 61:16 67:2,9 72:20,21

74:9 76:15 81:5 83:16
 85:12,15 118:13
 122:12 125:15 128:3
 128:11 129:8 130:12
 130:18 131:6 135:11
 142:21 143:21,22
 144:8,18,18 145:6,22
 146:10 148:10,13
 149:4,13 159:19
 161:4 169:19 170:2
 170:22 191:14 193:16
 194:4 197:9 199:12
 201:22 211:16 212:14
 219:13 226:4 229:1
 230:4
NOAA's 8:13 29:20
 54:13 56:21 129:2,21
 134:14 144:19 192:1
 198:7
NOAA/CO-OPS 2:10
NOAA/NGS 2:3
NOAA/NOS 2:7,8,9
NOAA/OCS 2:8,9,13
NOAA/University 2:2
nobody's 202:17
nominate 44:10,18,19
 45:3,15 46:7 49:4
 224:16
nominated 46:21 47:2
 48:14,18
nomination 44:14,22
 45:9,13,20 46:4,5,13
 48:1 49:8
nominations 3:6 5:10
 43:19 44:4,5,16 45:2
 48:9
non- 117:1
non-flagman 205:9
non-hydrographer
 204:6 205:2
non-scheduled 43:11
non-voting 2:1 47:4,18
 70:19 188:19
noon 175:21
Nope 60:5
normal 112:10 132:11
Northeast 16:12
NOS 65:1,5,9 166:22
 167:1,12,14 186:15
not-too-distant 110:17
note 16:18 76:4 134:6
 228:8
noted 70:3 197:11
notes 193:12 208:3
notice 43:15
noting 209:8,9
NRTs 151:15 186:16
 193:14 199:19 214:15

nuggets 143:15
nuisance 192:16
number 60:19 72:11
 77:2 89:8,10 121:2,2
 121:3,4 211:9 214:8
 227:7,8
numbers 89:9 105:11
 114:17 116:14 123:14
 124:13 125:16
numerical 62:19
nut 37:18
nuts 10:14
Nyberg 157:20 159:16

O

Oakland 92:3 94:15
 96:14 97:1,14,15
 99:16
oath 46:15
object 134:14
objection 170:20
 226:14
objectionable 38:19
objective 174:12 175:2
oblique 153:3
observation 156:8
 157:5 164:20
observations 171:5,5
obsolete 33:13
obstruction 137:22
obviously 64:22 66:5
occur 127:16 177:9
occurring 32:1
ocean 8:13 9:1,9,12,13
 9:17 19:2 20:4,12
 21:7 32:19 42:7 92:15
 110:18 206:22
OCEANIC 1:3
oceanographic 171:5
 197:2,7
oceans 42:15
OCS 58:1
OCS's 57:13
offend 69:11
offer 74:2 103:17
 157:14 160:6 164:20
 216:11
offering 70:18 209:15
office 7:11 8:15 23:18
 23:18 44:2 46:15
 53:15 54:16 55:5,12
 55:13,20 67:19 117:7
 179:21,22 218:20
officer 204:11
officers 57:6,8 204:18
offices 187:9 208:16
official 2:6 184:17
 189:18 226:13

officially 4:7 223:11
 228:4
offline 88:12
offset 102:12
offshore 57:18 202:12
offshore/near 40:21
oh 8:2 9:10 17:9 30:13
 54:16 61:12 68:2
 80:18 87:19 108:21
 191:5 192:8 198:22
 215:21
oil 106:11 109:13,14
okay 4:3 14:2 22:3 26:9
 30:17 35:11 44:13,21
 46:1,10,19 48:2,10,16
 49:11 51:3 52:21 53:1
 53:7 55:13 56:5,10,15
 56:20 57:22 59:2,5
 60:4,10 61:4,10 62:16
 67:18 69:5,21 70:6,17
 73:18 76:18 77:4
 79:18 80:22 81:11,22
 82:13 85:10,13,17
 86:5,11,20 87:4,7
 88:5,19 89:1,19 90:14
 90:22 91:3 97:8
 103:10 111:15 113:21
 114:2,4,17 125:11
 126:13 133:2,19
 150:4 154:1,17
 162:11,21 163:10,12
 166:20 168:19 169:4
 172:12 174:15 177:16
 182:19 184:20 188:1
 188:10,18 189:20
 190:2 191:1,8,20
 192:8 193:11,12
 200:7 203:1,17 206:4
 206:18 213:8 215:21
 216:6,21 217:12
 218:2 219:18 221:18
 221:19 222:12,13
 223:4 228:16
old 73:7 101:2 110:1
 223:22 229:15,18
older 106:15
oldest 75:4,7 76:14,14
 76:20 173:22 174:1,4
OMAO 75:13 173:10
OMB 11:11 34:12 38:8
 39:5 40:1
once 17:6 84:18 106:12
 107:19 109:13 155:6
 165:6 171:21 189:1
 189:11 203:4,4,8
 220:7,14 227:6
one- 209:9
one-pager 217:14

one-pagers 167:22
one-size-fits-all 142:6
one-way 107:10
ones 10:10 28:4,13
 53:5 62:11 74:12
 96:11 141:15 196:18
 217:16 220:10
ongoing 14:13 21:10
 167:20
online 13:2
open 22:2 86:13 103:3
 103:4 110:18 115:6
 178:13
opening 84:4
operate 42:2 106:14
 110:10 111:7 140:9
 142:8
operates 93:13
operating 59:20 67:7
 91:8 110:6 173:14,17
 207:7 218:12 219:9
operation 141:5,6
 145:5
operational 59:13,14
 59:21 146:7
operations 138:6 171:6
operator 104:19 116:10
 120:11 126:11
operators 64:16 68:20
 133:12
opinion 184:6
opportunity 20:22 90:4
 99:11 103:18 150:20
 158:22 159:16 172:8
 176:7 184:12 189:22
 214:1
opposed 40:2 49:17
 222:6
OPS 188:22
optic 135:22
option 177:10,19
optional 184:2,13,15
 185:6
options 178:7
orchestrate 78:4
 111:17 182:16
order 10:15 22:20 51:6
 140:11,13 153:14,15
 168:3 189:21 207:19
 215:1
Oregon 16:22 17:13
 76:15 159:1
organization 99:13
 105:2,6 141:10
organizations 67:2
organize 197:18
original 60:4,7,7,9
originally 88:14

otherwise 187:19
ought 136:11
outcome 167:17 168:14
outcomes 3:16,19
 225:8
Outer 97:15
outline 218:12
outside 64:4 117:1,4,21
 118:22 119:14,20,20
 131:9 137:3 162:3
 225:16
outsider 87:20
over- 75:14
overall 25:18
overarching 42:12
overcome 46:12
overlap 15:16
overlapped 27:16
overlay 135:16,18
overlays 135:2
overnight 141:12,17
 144:2
overriding 105:2
Overview 3:2
owners 133:12

P

P-R-O-C-E-E-D-I-N-G-S
 4:1
p.m 185:14 230:16
Pacific 57:19
packet 192:10
page 52:9 55:21 62:6,9
 66:2 68:18 83:11
pager 103:22
paggers 209:10
pages 81:10
paging 62:6
paid 25:11 108:17
painlessly 153:18
paired 42:8
panel 1:4,11 4:9,12,16
 4:20 5:6 7:13 18:14
 18:15 19:18,22 20:10
 38:11 43:18 48:3
 50:18 52:15 59:11
 70:22 74:3,7 75:11
 77:9,20 78:6 79:2
 98:6 103:22 144:22
 160:1,5 162:1 164:2,5
 164:10 167:1 168:13
 168:20 169:17 177:2
 177:4 181:10 185:21
 186:10,17 187:11,17
 191:12 192:4,14
 193:7 195:22 196:8
 206:20 207:1 212:12
 213:17 217:2 218:14

219:10,12 223:20
224:4 225:10,22
229:13
panel's 19:18 70:18
71:8 104:8 170:16
panelists 80:13
panels 180:22
paper 62:17 67:13
68:15 69:22 70:10
71:3 84:20 86:14
87:10 88:6,13 89:4,19
91:6 122:12 149:12
151:21 169:7 196:1
197:4 198:11 202:11
210:12,14 211:7
218:3,3,4 221:1,7,12
221:12,21 222:17,20
papers 51:1 71:5 122:8
196:13,16 205:22
206:6,13,13 215:3
220:18 221:10,13
222:14 223:16
paradigm 132:12 133:1
paragraph 53:8,10,12
53:14,20 54:1,8,12
56:7 71:12 82:17 83:2
paragraphs 53:5
parameters 102:11
105:7,17 106:3,19
121:11
part 12:9 25:17 36:11
43:2,3 52:5 65:10
77:11 85:12 88:11
105:8 114:18 137:9
144:9 159:21 169:16
169:19 181:9 182:6
195:10 212:14 229:20
229:21
partial 65:8
participant 33:1 132:4
162:8 166:13,15
175:10 178:12 179:15
179:16 184:13 192:7
192:8 198:20 199:12
205:6,8 218:6 226:20
participants 17:8,17
32:14
participate 16:11
participated 165:21
participation 5:5 13:4
178:20 180:3
particular 31:19 66:3
105:8 106:7,17
108:20 113:9,12
127:9 136:20 149:20
154:12 169:22 204:14
particularly 127:5
144:3 200:15 220:2

partnered 69:20
partnering 194:12
partners 62:5 63:2,5,13
64:8,17 65:18 68:10
68:16 70:1 130:18
160:21
partnerships 57:1
pass 89:20 92:9 108:14
139:7,17 205:12
passage 96:13 105:19
114:13 118:16 126:20
139:18
passages 105:22
passed 19:3 51:14
passes 218:19
passing 108:9
passion 63:18
path 163:8
paths 103:13
Paul 32:15 33:16 34:6
pay 25:7 39:9 97:17
214:10
paying 172:9
peace 178:17
pearls 193:6
peg 107:2
pen 212:6
pending 46:13
Penoyer 197:13
people 13:14,15 15:10
15:10 17:13,14 25:2,3
25:14 33:22 36:12
51:15 63:6,17 69:14
79:10 97:17 111:7
131:7 145:15 150:17
156:5 160:12 161:17
176:7,9 177:19
178:21 189:1 197:16
199:10 215:15 221:15
224:3 226:19 227:5,7
229:4,6,16
people's 85:2
perceive 229:4
percent 57:5 89:11
123:20,21 127:1
149:9 155:17
perform 57:20
period 3:12 47:13 59:4
132:1 133:4,21 134:3
periods 127:17
Perkins 1:12,14 3:2 4:3
8:4 20:20 30:5 38:5
40:5 41:12 43:8,18
44:7,13,21 45:5,8,19
46:11,19 47:4,11 48:6
48:16,20 49:11,16,19
50:8,20 51:3 60:19
62:16 65:11,12 69:21

70:6,9 75:10 76:8,18
76:22 77:12 79:6,12
79:18,21 80:7,12
81:19 82:1,4,7,11
89:2 90:6 111:12,15
114:1 133:2,19
146:21 150:4 154:1
154:17 155:16 158:18
160:22 162:5,9,11,14
163:10 166:5,11
167:16 168:7,12,19
169:1,4,11 170:5
172:4 173:6 174:6,10
174:15,18,20,22
175:12,18 177:16
178:13 179:20 182:17
183:6,9 184:7,14,20
185:1,4,15 188:1,15
188:18 189:7,20
190:9,12,16,21 191:2
191:7,9,20 192:9,22
193:22 194:8 196:3
196:15 198:13,16,22
199:4 200:1 202:2
203:1,7 205:12 206:2
206:9 207:3 211:15
213:5 215:18,22
216:6,14,17,21
218:11,22 219:3,6
223:10 226:5 228:3
228:15 229:12
permanent 50:13
permits 48:8
person 17:11
personal 184:6 204:13
personally 7:15
perspective 75:16
129:15,16 136:9
137:1
phone 17:14 18:1
photo 228:9
phrase 203:8 214:12
phrasing 208:17
physical 106:18 111:6
111:20 112:14
pick 77:5 143:15 154:4
picked 205:11
picture 73:20 74:20
piece 10:13 11:12 12:11
18:9 22:12 138:16
167:16 184:15 207:13
pieces 10:1 11:17 12:3
12:12 52:10
pier 226:16
pilot 3:10 81:7,14,15
85:19 96:13 98:3,11
98:13 99:14 101:6
105:1,5 106:21

112:17,22 113:20
114:10 116:11 117:3
120:15 125:1 136:16
139:15 148:17 149:7
150:9
pilot's 129:14
pilotage 105:19 118:4
piloting 100:11 137:1
pilots 93:22 95:3 98:2,9
99:12 100:19 104:10
104:18 105:10 108:17
116:12 120:12 127:21
131:2 133:12 134:19
135:14 140:17 141:9
pipe 138:17
pitch 64:4 154:15
pivoting 99:20
place 21:20 22:16 34:10
53:15 68:6 106:1
119:19 127:9 141:17
146:6 149:22 181:14
212:8
placed 57:4
places 35:6 36:12 41:19
91:2 143:3
plan 9:15 15:10 39:16
104:20 105:20,22
114:13 118:16 138:6
171:14
planet 91:7,17
planned 14:13 27:11
28:4 75:12
planning 3:8 4:17 16:14
29:14 31:11 96:14
113:4,7 117:6,7
126:20 139:18 154:21
163:13 193:19 198:10
217:2
plans 13:15 15:4 34:2
34:11 109:2,4
platform 114:13 120:13
play 53:12 54:14 56:21
105:18 131:14
played 80:21 96:20
97:12 99:7
players 133:11
plays 127:3
please 71:15 114:1
205:13 228:3
pleasure 5:2
plot 58:3
plug 101:10
Plus 47:9
plus/minus 121:2
pocket 26:3
point 11:20 19:16 20:19
22:19 42:11 48:22
53:11 74:5,22 76:12

- 100:19,22 102:21
127:9 128:19 132:8
140:3 158:10 175:20
182:21 186:2,8,13,18
195:13 200:16 202:21
225:19 226:1,13
pointed 41:1
pointing 54:5 213:20
points 129:1 202:9,20
213:15
policeman 227:16
policy 9:14 20:4,12
37:12 154:20 155:3
161:8 162:6
political 61:14 101:5
politicals 209:20
poll 6:4
poorly 23:6
pop 86:8 201:10
port 67:14 91:13 95:12
104:12,15,21 107:4,8
107:13 108:20 109:6
109:10 110:4 112:1
112:17 113:12 114:8
114:19,20,21 117:8
118:4,16,18,21 119:1
120:6,10,10 124:17
125:20 128:6,6 141:9
141:11,16,20,21
142:9,9 147:3,4 150:8
184:5 210:8,15,16,18
211:1
port-by- 147:3
portable 148:17 149:7
portals 22:6
portfolio 57:14
portion 57:12
Portland 159:1,1 160:2
160:5,7,19
portray 123:3
ports 64:20 88:21 91:8
94:20 104:10,21
107:15,16 111:7,9
112:1 114:10 117:20
117:20 118:7,15
120:8 127:1 130:1
132:16 137:13 140:11
141:2 142:4,5,8,11
143:1 145:1,16
151:11 152:18 189:2
189:5,10,12,17
194:15 199:18 200:17
200:18 201:8 202:17
208:17,19 210:9,20
214:15 215:4,7 217:4
217:22 221:14,22
222:2,14
position 8:8 47:3 50:6
50:11 98:2,16 149:15
183:11 204:6,12
205:8 207:1 221:21
228:4
positions 5:11 49:8
212:3
positive 7:16 189:16
possible 66:9 74:3
146:11 198:1 201:4
possibly 62:21 155:20
posts 134:20
potential 29:14 102:16
132:21
potentially 10:3 20:15
45:15 151:22 170:3
204:8 213:14,17
pottle 130:6
power 14:21 93:7,9
106:15 123:19
PowerPoint 171:16
PPU 99:14,15 100:2,15
101:7
PPUs 127:21 134:21
160:17
practical 110:3 129:19
practically 121:8
227:21
practice 78:4 140:2
159:21
practitioners 4:21
pre-planning 104:16
precise 99:14,18
107:14 120:6
precisely 99:22
Precision 98:7 103:18
122:7,12 130:11
135:21 136:2 145:10
201:5 208:18 215:8
222:3,9
preclude 201:19
predicting 192:20
prefer 156:13
preference 178:19
217:20
premium 148:9
preparations 4:18
prepare 206:12 207:9
222:20
prepared 79:13 191:18
preparing 226:6
present 1:13 2:5 62:18
70:14,14 168:14
201:1 207:19
presentation 3:4 4:13
88:16 113:22 114:4
171:15,20
presentations 75:11,13
94:4 192:14
presented 39:20 49:14
62:17 70:1 120:13
175:2
presiding 1:12
press 78:19 92:4
pressing 72:9,14,20
73:16 74:15 140:15
presuming 89:6
prettier 164:12
pretty 56:11 61:10
72:17 73:15 96:17
97:2 102:19 134:18
137:7 148:16 152:6
164:8 170:16 190:5
215:22
previous 21:13 199:8
211:11,12
primary 98:3
principles 104:4
print 40:3
prior 9:5 118:12 155:16
191:22 200:4
priorities 3:9 14:6
158:1,2,8 163:14
priority 36:9 157:19
prismatic 115:16
private 17:21 57:1
101:20
privilege 184:8
proactively 23:20
probably 16:13 25:19
36:8 37:10 52:4 68:11
74:1 110:14 129:15
136:4 154:15 155:4
156:17 192:2,18
194:2 209:6 212:18
216:8 222:18 227:21
229:4
problem 35:14 47:17
109:18 130:7 134:13
134:16 170:19 187:8
203:19 212:19,20
223:16
problematic 200:18
problems 35:10 42:5
107:16
procedural 46:12 48:17
procedures 110:6
207:7 218:12 219:9
proceed 83:18 166:12
proceeding 201:3
process 5:10 14:11
31:22 38:7 64:18
89:14 130:19 141:17
156:19 158:15 200:2
205:10 219:13 221:2
processed 186:17
processes 133:1
PROCTOR 2:12
produce 168:17
produced 151:21 159:4
produces 141:11
product 100:3 129:6
131:6 135:6 220:8
production 136:10
158:5 201:4
productively 67:11
products 20:14 101:17
104:3 145:7 156:13
professional 4:21
professionally 136:15
program 13:7 14:9
25:16 31:8 42:10,19
42:22 101:16 152:22
153:5,9 158:1 195:9
programs 142:15
progress 180:18
217:17
project 3:10 14:3 27:21
29:11 33:11 69:17
81:7 85:19 96:13
147:10 156:12
projection 118:8 168:4
projects 12:22 13:18,21
14:12,14 15:5 41:14
195:18
promote 17:10
property 146:16
proponent 33:9 34:5
proposal 69:17
propose 63:12 161:20
proposed 14:10 88:14
protect 146:15
protected 28:19
protocol 228:10
proud 11:3
provide 36:4 53:16
54:20 55:1 77:18
85:16 104:1 167:22
219:16
provided 54:4 60:20
185:22
providers 63:7
provides 55:5 81:7
providing 102:10
148:14 152:12 153:13
proximity 160:1
public 1:6 3:12 11:19
38:11,22 39:6 122:4
133:4,20 134:3,4
143:10 150:21 172:3
172:20 178:21 179:11
179:12 181:8,9 182:5
182:6 184:17 185:6
191:10,11 223:11
228:8

publicly 105:7
published 6:14 105:7
pull 8:10 12:18,20 22:7
 97:20 130:6
pulled 164:7
pulling 164:22
purchase 117:22
purpose 31:4
purposes 129:2
pursue 145:12
pursuing 230:2
push 27:21 29:3,8 33:9
 43:20 130:13 131:14
 144:11 157:11 169:11
 194:4
pushing 34:16 109:10
put 6:1,22 13:14 14:15
 24:16 27:10 28:3,18
 34:11 37:11,16 43:7
 52:18 55:4,15 58:9
 72:15 78:15 92:18,19
 96:11 101:22 102:1
 109:3 132:18 138:11
 142:15 145:1,14
 146:5,6,12 155:14
 167:21 168:5,13
 170:13 172:21 186:2
 204:10 207:10,16
 210:14 212:6 214:15
 217:14 219:9 220:13
puts 14:9 163:15
putting 4:16 76:4 77:18
 102:17 109:17 147:20
 156:2,2 168:2

Q

qualified 57:8 72:18
quality 10:9,11 11:15
 83:12 151:6
quarter 123:4,5,5
query 65:12
question 18:13 23:22
 31:16 34:22 35:5 47:1
 48:17 52:11 53:10
 54:6 59:9 77:9 99:10
 104:7 112:16 113:6,8
 114:16 120:2,19,21
 123:11 129:20 144:7
 154:14 166:21 187:12
 188:5 198:10,20
 204:1,22 205:16
 206:5 223:19
questions 63:2 140:15
 164:1,5,9,16 165:13
 165:20 172:19 173:1
 213:14 214:4
quick 16:1 22:5 53:9
 74:18 76:4 136:13

178:15 186:6 223:19
 228:17
quickly 58:14 93:20
 190:5 198:1 205:16
quite 17:18 73:11 98:18
 98:19 109:22 128:5
 152:8 192:17
quoted 62:9
quoting 73:13

R

R 1:14
R&D 10:17
RACHEL 2:10
radar 151:5,12
RADM 8:2 17:7,10 18:8
 19:13 20:8 22:12
 24:22 35:13 36:17
 37:9 76:12,19 78:2,10
 78:14 99:9 100:2,18
 101:1 102:20 103:15
 105:9 122:19,21
 156:7 157:13 163:21
 184:1 193:2,11
 204:21 205:4,7,10
 206:19 225:5 227:1
 229:10
Rainier 58:18 61:17
 76:19 173:15
raise 102:21 206:5
raised 18:13,22 102:21
range 64:9
rank 198:4
rapid 151:8
rapidly 201:3
Rassello 1:19 3:11
 91:10 93:15 111:13
 111:22 112:12,15,16
 113:14,21 114:2
 119:10 121:5 122:1
 122:20 123:10 124:12
 125:3,9,11,15 126:4
 202:2,5 210:8 227:2
 227:11,19 228:6,12
Rassello's 133:8
raster 135:17
rate 116:7,13
rave 13:3
Raven 100:14,22
re-sorted 148:10
re-work 81:12
reach 41:16 48:7 99:16
 220:1 221:7
react 124:2
read 53:3 56:16,17
 83:20 84:19,20 87:12
 90:18 134:1 150:21
 211:17
readily 149:7
reading 192:2
ready 43:18 44:6 80:15
 80:16,17 89:14
 196:19 218:5 220:1
 220:11 221:8
real 95:9 107:3 109:5
 118:1,2 121:12 124:6
 124:11 126:9,11
 127:4 128:15 130:22
 144:13 145:12 146:17
 193:4 205:16 212:17
realistic 124:4
realize 115:13 177:1
realized 27:14,15
really 11:14 13:3,10
 16:22 18:9 24:13,14
 28:12,15 29:7,19 30:5
 34:1,6,15,19 36:21
 40:13 42:9,20 43:4
 64:5 65:9 67:4,17
 69:19 81:9 84:21
 85:22 88:10 94:9,16
 95:20,20 97:6 101:3
 102:19 103:22 104:2
 106:22 107:12 109:17
 111:4 112:10 116:18
 119:18 122:16 124:19
 124:21 127:3,6 128:4
 128:8 130:5 134:8
 135:6 136:12 142:4
 145:20 148:13 157:3
 158:7 160:14,18
 163:18 170:1 174:4
 180:17 181:9 184:2
 187:5,7,17 188:3,13
 201:17 203:2 204:16
 206:2,9,17 207:20
 209:22 214:4 221:8
 222:4 230:2
Rear 2:6,10 3:3 151:4
rearranging 83:3
reason 65:1 127:22
reasonable 89:18 180:2
reasons 155:10 175:6
 181:4
reauthorization 21:1
 206:21
reauthorized 19:17
reauthorizing 20:2
rebuttal 39:1
recall 163:22
recalling 187:16
recap 51:6 199:2
recapitalization 198:14
recapping 4:11
receive 103:18 156:14
received 26:13 150:22

155:19 198:18
recess 80:8
recipients 23:2,3
Reclamation 41:17
 43:1
recognize 111:12 131:1
 143:6 146:21
recognized 33:16
recommend 52:14
 86:19 188:22 197:3,5
recommendation 47:16
 81:2 84:6 85:8 148:1
 155:20 159:14 169:17
 185:10,18 186:1,5
 187:14 191:3,13,22
 198:2 209:11 211:16
 212:7,13,21,21 226:3
 226:7
recommendations
 142:21 173:1 183:16
 192:5 197:21 199:21
 208:4 209:5 211:12
 212:16 213:9 215:10
 226:4
recommended 62:2
recommending 52:20
 204:2,4
reconstruction 107:20
reconvene 80:14 134:2
reconvening 223:14
record 44:14 45:9 46:20
 49:20 76:17 80:10
 122:4 134:1 150:21
 172:20 174:22 179:15
 179:16 185:4,13
 224:6 228:8,11
 230:16
recording 80:20 96:19
 97:11 99:6
recover 109:13
recreational 35:21
 137:4 145:17
recreationally 67:7
red 51:20 52:22 61:16
 64:15 90:9,9
redeveloping 34:9,15
redline 15:3
redo 86:7 89:21
redraft 83:11
reduce 23:14 85:3
 116:15 151:12,17
reducing 9:19
redundancy 23:15
redundant 27:19 56:10
reference 165:13,16
 166:1,14,16 195:11
 195:14 197:3 221:19
 222:15

references 55:19 62:8
refinement 201:4
reflect 118:16 143:7
 189:4
refreshments 150:16
refuge 29:5
regard 129:21
regarding 114:9 115:10
 152:11 153:14,16
 155:19,21 186:13,14
 186:15 189:14 200:21
regardless 63:9 74:8
 114:21 129:18
region 16:5,12 20:6,13
 128:7
regional 4:13 17:2,3,5
 30:22 31:11,12
 152:17 204:15
regions 81:3 82:8
regular 176:5
regularly 158:10
regulated 103:11
 142:11
Regulations 147:9
 148:3
reiterate 61:19,20 79:2
 196:22 198:3 199:7
relate 130:10 182:15
related 34:22 91:6
 133:16 180:13 211:9
relationship 156:11,21
 157:2 158:6
relationships 25:5
 158:14
relative 190:19
relatively 174:5
relevant 133:7
reliable 126:18
relies 67:9
rely 123:8
remain 228:4
remains 152:15
remarks 3:21 4:11
remember 110:1
 215:17
reminding 213:20
remodeling 40:19
remote 12:2 57:18
removal 70:1
remove 69:13,20
 116:17 225:9
removed 19:5 38:8 73:9
rep 66:15
repeat 26:21 140:16,18
repeating 60:13
replacement 61:17 71:2
 72:20,21 190:20
 208:12 213:16

replicate 125:16 128:3
 128:11
report 11:10 32:5,7
 37:21 38:6,10 80:4
 89:17 168:9,18
 169:15 170:6 171:13
 172:7,18 173:4,10
 182:4 205:20 217:7
reporter 193:9
reports 19:7 36:4
 172:15
represent 39:12 135:4
 135:14
representatives 175:15
represented 229:1
representing 38:15
 39:5
request 176:16
requested 61:13 212:17
require 115:4 176:9
required 23:4 106:12
 169:20
requirement 106:9
 141:13
requirements 14:7
 130:11 136:5 147:14
research 28:14 56:22
 136:9
researchers 4:22
Reserves 28:14
resilience 3:10 4:14
 163:17 164:3,4
 193:19
resolution 118:14
 119:8 131:9 135:7
 147:22 148:18
resolutions 148:15
resource 146:1
resources 21:22 28:3,5
 29:10 106:20 142:3
 153:9
respect 7:8,19 40:22
respected 228:22
respond 204:22
response 26:12,14
 49:10 51:2 88:7 113:3
 153:22 162:13 164:14
 164:14 166:19 174:19
 184:22 192:6 211:13
responses 164:9,22
 192:1 211:17
responsible 22:22
 144:2 145:15
responsive 145:7
rest 12:12 84:20 90:19
 214:8
restricted 115:14
 118:10 145:6

restriction 225:12
restrictions 107:9
 108:7
result 121:12 208:6
resulted 25:22
resulting 9:9
results 189:16 211:13
 213:6
resumed 80:10 185:13
retirement 8:6
retract 97:5
return 14:1
review 1:4,11 3:18 4:8
 5:6 7:13 38:7 122:10
 122:11,11 127:15,18
 144:22 155:6 165:6
 170:4 186:10
reviewed 155:8
reviews 13:3
revised 51:12 225:7
revising 156:13
revision 69:10
revisions 165:4
revisit 50:12
rewrite 90:12 110:6
rewrote 84:17
Rich 2:4 88:12 94:12
 188:18,21
Rich's 189:9 194:14
Rick 2:7 158:17
rid 54:15
ridden 108:18
ride 181:14
right 6:6 14:4 20:2,8
 21:20 22:13 24:20,20
 25:1 30:4 34:18 37:13
 37:17,19 38:3 43:22
 44:6 45:19 49:19
 50:20 52:18 54:18
 55:9,11 58:9,22 59:6
 65:2 68:7 77:2 78:14
 79:12 80:7,12 88:22
 93:19 94:16,22
 100:14,21 103:14,15
 104:4 106:11 110:13
 123:4,5 129:3,7 130:8
 131:21 132:19 134:9
 134:11,16,17,19
 135:3 139:1,22
 143:10 144:3,14
 148:2,8 154:9 155:5
 157:17 160:11 163:4
 163:8 165:8 166:2,11
 167:5,9 168:4 169:4
 170:5 172:5 181:15
 183:9 185:15 190:8
 197:12,15 199:4
 206:14 207:6,7

212:21 216:15 220:3
 220:9 226:1,5 229:13
ripped 141:10
rise 192:15,15,20
 193:18 208:22 214:16
risk 120:7 145:5
river 92:13 93:1 105:4
 121:16 124:10 125:6
 126:1 127:8 134:11
 134:20 139:2,15
 140:3 143:20,20
 144:3
rivers 135:20
road 4:5 217:10
roads 3:10 81:7,13
 85:19 111:4 215:4
 218:4 220:11
robust 173:4 209:14
Rock 178:9
role 32:12
roles 7:14 54:14 56:22
roll 167:3 178:9
rolling 190:5 193:21
room 134:3 150:22
 154:19 161:4 223:11
 223:18 224:16
Rooney 32:15 33:16
Rooney's 34:7
Rose 100:19,22
Rotterdam 141:3,16
 142:8,16 143:9
round 125:10
route 116:9 136:18
 137:6
routed 219:14
routine 114:18
Row 1:12
rules 226:1
run 178:15
run- 40:18
run-off 137:14
run-up 40:19
running 111:16 200:22
rush 220:4 221:12
rushing 220:2
RUSS 2:12

S

Saade 1:20 40:8,13
 45:4,9 47:1,22 138:10
 138:16 168:1,11,17
 168:21 169:2,9 170:8
 170:15 177:13 190:9
 190:10,14,18 191:1,5
 191:8,17 203:2
safe 115:1 124:15,15,18
 124:18 140:13 145:5
 145:19

safety 57:17 95:10
105:2 116:2 117:10
126:21 140:5 145:3
167:4,5,7,10 171:1
sail 105:13 116:5
sake 134:1 154:21
225:21
Sal 91:18 93:12 109:21
112:14,15 122:19
126:20 227:1
salary 25:8
Salvatore 1:19 3:11
Sam 1:11
San 93:21 96:12 97:21
98:10,11 99:12 128:8
sand 132:8 134:11
139:3
sandbox 69:4
Sandy 24:6 25:12 26:11
26:12,18 27:2,16
Santa 24:9
Savannah 211:2
save 39:13
savings 25:22
saw 7:20 60:11 107:17
158:1 207:2 209:4
saying 35:6 37:1 65:8
66:10 72:12 75:20
108:21 130:2 143:19
171:18 179:13
says 21:5 54:3,12,16
97:10 110:12
scale 132:16 147:22,22
scales 149:17
scan 83:13
schedule 7:1 150:5
151:1 160:4,10
176:16 181:7 182:1
scheduled 6:14 88:9
150:5 185:7,16 226:9
schema 33:18
school 101:2 175:8
Scott 1:12,14 3:2 40:8
42:4 50:4,19 89:6
156:7 170:10 189:8
194:1 229:12
screen 185:20 205:13
215:20
scroll 21:18 77:5
scrub 219:22
scrubbed 38:20
scrunch 81:10,14
sea 100:9 110:1 137:21
173:9 192:15,15,19
193:18 196:10 208:22
214:16
seamless 42:16
search 13:1,21 14:2

SeaSketch 6:17 12:14
12:16 13:2,13 16:2,16
18:11 21:17 22:4,13
24:8 25:1 26:16 27:5
27:8 30:6 33:10 34:16
34:17 39:11 152:12
SeaSketch.org 12:21
13:20
season 144:4
seasonal 125:7
seated 47:5
seats 4:4 80:13
Seaway 179:8
secession 208:15
second 13:18 28:4
44:12,15,20 45:1,6,7
45:11,18,22 46:17,18
46:22 48:13,15 54:8
70:4,5,7 71:18,20,22
72:2 79:17,19 82:15
83:2 98:1 162:9,10
174:16,17 184:18,19
198:8 220:17
section 68:16 159:5
214:13
sections 90:13
sector 17:21
secure 145:19
security 200:21 228:10
sediment 137:16 138:9
sediments 138:19
see 13:12 14:7 15:9
19:20 21:19 30:6 38:3
40:10,14 51:12 53:10
78:18,19 83:5 86:5,9
86:13,19,21 87:12
90:9,14 94:13 96:2,10
96:17,22 98:17
103:19 110:4,7 115:3
116:20 117:11 118:10
120:9,9 121:1 122:13
127:20,20 131:17,20
131:22 132:8,9,13
134:10 136:18,21
141:1 155:11 160:7
167:7 168:9,15 169:6
169:7,21 170:21
181:14 182:13,14
184:3,12 194:2 202:6
210:3,3 217:18
221:11 222:1 227:16
seeing 15:3 98:8
140:19 184:8
seen 110:5 111:21
120:4 137:17 187:18
187:19 205:21 211:13
sees 52:19 170:19
selection 5:19

self- 49:3,7
self-nominate 49:1
semi-formal 153:1
Senate 175:15
send 26:5 66:22 87:22
88:1,1 89:7,22 90:1
173:10 198:1 205:19
218:10 220:7 225:6
sending 109:2 211:12
sense 18:18 28:16 54:2
81:17 90:5,6 128:2
200:8
senses 68:9
sensing 12:2
sensitivities 69:8
sensors 54:22
sent 19:10 51:12
108:17 199:8
sentence 61:13,15
71:11,18,21 72:1,3,12
82:16 83:20 84:4,19
85:4 202:20
separate 70:22 100:15
198:1 208:10 222:2
separately 188:7
198:16
September 6:2,5,9
177:21
serendipity 27:6
serious 192:16
seriousness 205:5
serve 47:13,18 128:13
151:11 156:5
served 77:13
service 8:6 43:3 57:4
59:14 60:1,3,5,7 63:7
73:10 75:8 141:8
189:5
services 1:4,11 2:12
4:8 5:5 7:12 22:7
24:12 52:17 104:3
144:22 146:18 166:22
167:11 170:11 186:10
195:4
session 122:18 133:22
150:14 175:11,13
177:6
sessions 181:1
set 42:16 99:15 100:12
102:5 134:19 135:7
135:15,18 154:17
159:3 192:13
sets 100:10 148:15,17
sexy 109:12
shake 7:21
shaking 110:12
shallow 139:12
share 6:19 23:4 25:2

33:22 160:15 164:13
sharing 18:10 69:3
133:13 217:6
she'll 6:15
sheet 198:21,22 199:1
199:2
Shingledecker 1:21
74:13,14 85:5,11,14
85:18,21 86:2 157:6,7
176:10,11 187:2,3
208:1 217:13
ship 68:20 71:16 73:17
76:15 91:13,15,19,20
91:22 92:1,3,16,17,20
93:3 95:20 96:14,18
97:1,5,7 100:8 101:11
102:11,13,14 104:12
104:14 105:1,21
106:7,18 109:1,7,9,16
109:19,21 110:5
112:6,19 113:2,5,9,11
114:19 115:4,5,9,10
115:21,22 116:6,8
117:10,11 118:9
120:13 123:18,19,19
130:7 133:11 139:6
139:11,12,14 140:9
148:12,19 149:17
150:1,12,12 174:5
181:16,17 204:12
213:16 216:12 227:6
228:10
ship's 102:10 120:11
149:14
shipping 92:15 110:20
142:13 179:4
ships 1:12 3:11 53:8,18
54:13 56:20 57:7,21
58:4,19 59:1 74:19
75:4,7,8 91:7,12,17
92:13 93:12 94:8
95:11,13,16 96:4
97:22 100:15,16
106:5,12,13,15
107:15 108:10,15,19
111:20 112:3,5,13
116:4 117:15 122:22
124:2,14 138:13
139:10 145:2 173:12
173:13,16,22 174:1
190:20 215:11 223:5
shipyard 137:20
shoaler 147:7
shoaling 134:13 135:9
139:8,16 144:4 151:8
151:9
shoals 135:5
shore 40:21

- short** 43:14 50:21 67:5
 71:8 96:9 198:4 200:9
 205:4 209:6
shorten 176:5
shortened 53:6
shorter 58:7 59:3
 177:10 200:3 203:13
shot 221:21
show 4:5 28:20 36:2
 44:14,22 45:9,20
 46:20 49:12,20 58:19
 70:10 79:22 102:2,12
 112:4 132:17 135:9
 147:9 174:22 185:1
showed 25:10 91:11
 147:16
showing 15:2 22:13
 69:2 121:8,20
shows 58:3,15 83:15
 94:15 135:18 147:6
side 115:19,22 116:8,8
 159:19 195:6
sideways 98:20 117:13
sight-unseen 202:11
sign 66:20 78:15 79:4
signaling 102:13
signature 77:17 78:5,16
signatures 77:19 79:15
 188:5
signed 68:13
significant 51:8 137:21
 155:11 186:4,20
significantly 53:6,21
 90:8
silting 121:16
Silver 30:15
similar 31:9 200:4
simple 33:19 131:18
simplicity 48:12
simulation 108:22
simulations 108:8
simulator 109:3 121:6
Simultaneous 87:17
 126:3 172:1 183:8
 213:4 226:22 228:14
Singapore 143:2
single 48:13 114:20
 126:6 138:13 158:4
single-beam 135:3,8
 137:19,22
singular 48:12
sit 8:15
site 12:14,16 13:2,2,13
 16:3,16 21:17 22:5
 24:14 26:16 27:5 43:6
 134:21,22 135:1
 172:21 183:12,13,15
 183:20 184:1 185:6
 191:21 220:14
sites 29:18
sitting 125:20
situation 47:10 116:1
 116:22 126:1,12
 135:20 217:5
situations 26:21 105:18
six 92:14,18 116:15
 119:21 164:1,5,9,15
 200:9 202:16 229:12
size 91:11 94:8 95:16
 106:4,4 107:2,3,13,15
 123:18 149:17
skill 118:6
skin 63:10,14
skip 191:19 216:11
slate 48:11 49:9
slide 95:17,21 96:5
 115:12 121:7 171:16
slides 8:11 88:18 91:10
 91:11 93:16,17,20
 94:7 96:8
slightly 209:7
slim 124:16
slot 172:11
slow 119:17 139:13
small 7:19 28:13 46:11
 145:17
smaller 28:11,15 95:13
 95:14 151:11
smart 97:4
smarter 12:7
smooth 139:2
snacks 150:16
snags 137:18
snapshot 22:11
soft 85:9 92:22 121:18
 138:19
software 24:13 100:20
 101:8
Soil 43:2
solely 98:12
solicited 18:3
solid 199:21
solution 142:7
solutions 201:18
solve 130:6 141:21
solved 42:5
somebody 35:21 52:5
 63:10 87:9 108:21
 227:14
somebody's 138:17
somewhat 20:17
sonar 57:6
soon 11:18 127:21
sorry 11:4 41:9 51:22
 140:14 161:12 168:7
 191:6 199:15 224:1
sort 10:2,14 11:21 12:8
 13:16 15:12 16:5,20
 17:4,10 18:7 19:15
 22:5 27:5 28:8 29:19
 33:12,15 34:3,14 35:5
 36:2 51:9 56:1 72:5
 128:15 131:21 132:11
 155:14 156:18,21
 164:17 171:21 181:10
 193:3 205:4 214:13
 215:15
sorts 10:11 12:4
sounding 126:17
 127:14 135:15,18
 148:15
soundings 101:19,21
 127:12,15,18 129:10
 129:10 136:16 147:17
 147:20 160:17
sounds 60:2 165:2
soup 10:14
source 22:10 37:14
 158:9
Southampton 93:5
southeast 16:5
Southern 152:17
space 108:10
span 58:8 59:14,21
 60:11
Spatial 195:11
spawned 164:19
speak 52:6 88:20
 148:21 149:9 157:17
 171:6 176:19 179:7
speakers 193:15
speaking 87:17 94:19
 126:3 166:15 172:1
 183:8 213:4 226:22
 228:14 230:1
speaks 20:21 94:19
specific 66:3,19 71:1
 71:15 141:19 187:21
 209:11 212:13,17
specifically 24:17 37:8
 58:17 99:15 104:3
 190:11,13,15
specified 147:8
speed 115:11,13
 119:21,21
speeded 96:15
spend 137:6
spent 179:17
spice 92:12
spoke 13:6 18:16
sporadic 155:3
spring 4:7 30:15 137:13
 137:15 138:5
spun 182:3
square 60:17 115:17
 116:5
squat 108:4 114:6
 115:5,6,10
squeeze 148:11,19
 167:7 182:1,8
squeezed 202:11
St 179:7
staff 2:5 89:11 220:15
staffed 68:19
staffing 186:15
stage 11:8 17:5
stakeholder 142:14
 168:20 169:17
stakeholders 41:21
 64:10,18 65:13,18
 68:10,18 104:16
 159:12 170:3 187:16
 189:6 199:20 214:14
stakeholders' 194:5
stamp 143:13
stand 19:5
standalone 77:10,13
standard 99:14 103:3,4
 103:4,5 104:6 114:12
 121:3 123:6 207:7
 218:11 219:9
standards 10:8 36:22
 37:2 89:13 123:2
standing 209:8,14
star 61:8
start 4:10 15:12 44:4
 51:5 53:7 66:9 85:6,9
 109:13,14 120:3
 125:17 166:9
started 27:2 66:3 83:3
 97:22 154:2 177:9
 187:4 215:15 216:3
starting 11:19 132:10
 158:13 186:2,18
starts 106:16
state 15:19 30:2 62:18
 63:6,9,15 67:17 68:3
 68:4 95:19 101:5
statement 72:18,19
 75:15 76:2 146:3,9
 174:12 175:2
states 18:1,2 67:19,20
 68:5,20 75:5 104:22
 117:2 142:11 200:19
static 123:20 126:2
statistical 70:2 75:18
statistics 62:19
Statutes 55:16
stay 150:13 155:12
 162:20
Staying 175:7
stays 115:21

steer 146:2
steerage 93:7
steered 156:21
step 18:7 25:20
stepping 200:15
stern 98:18
Steve 23:11
stewardship 22:22
stick 190:15
sticking 138:18
stimulating 104:9
Stockton 23:12
stole 194:22
stone 124:1
stop 34:14 193:20
stopping 226:13
store 226:12
storm 40:19 201:16,20
storms 151:9 214:17
story 23:17 42:7 211:1
 211:3
straight 25:15
strategic 40:6
strategy 6:17 9:3,8,22
 11:9,22 20:5,13 38:6
 38:21 40:7
Streamline 9:20
street 11:18
stress 210:10 217:4
stressed 193:14
stretching 75:15
strictures 200:21
stringent 106:9
strip 27:17
strong 7:11 43:4 72:17
 78:22 119:13 178:16
 210:2
stronger 74:22
strongest 33:9 34:4
 74:3
strongly 42:9 79:2
 153:7
struck 192:13
structures 142:8
struggle 211:21
struggled 230:7
study 112:9 124:21,22
 197:4
stuff 81:14 83:5,8 86:8
 98:7 100:12 102:16
 103:12 202:19 210:4
 211:14 220:15 223:6
style 142:16
Subcommittee 42:18
subject 46:15 62:18
 70:1 79:14 88:14
submitted 133:20
subsequently 155:9

substance 156:20
succeeded 230:8
success 18:11 42:7
 213:9
successes 29:12
succession 213:16
succinct 200:4
sufficiency 167:3
suggest 18:20 79:9
 164:10 225:6
suggested 32:9 85:1
 133:11 215:11
suggesting 72:1,2
 143:12 174:2
suggestion 162:3
 194:11,14 206:20
suggestions 51:11 52:1
 62:13 155:7,8 198:5
suitable 143:16
summarize 208:2
summary 167:22
 203:20
summer 138:9
summit 10:8 11:16
 16:17,21 17:5 30:20
summits 30:22
Sunday 176:9
super 94:22
Supplemental 24:6
 25:12 26:12,18
supply 118:17 210:13
 210:19
support 32:10 34:7
 67:1 75:19 123:7
 132:16 177:13 194:7
 195:10,17,21
supporting 200:12
supposed 34:11 179:10
 183:4
sure 5:18 8:10,17 17:9
 30:18 32:13 35:13
 36:7 52:21 56:17 58:8
 61:1,9 66:15 82:3,10
 109:20 124:21 128:5
 129:15 132:6 133:3
 140:22 145:9 155:22
 160:16 165:7 170:9
 173:19 183:17 187:2
 188:9 192:17 193:7
 195:14 196:12 203:20
 207:14 224:10 225:1
surge 40:19,20 201:15
survey 2:14 8:15 18:8
 21:13 52:17 53:16
 54:4,17 55:14,21 57:2
 57:15 58:3 62:9 65:19
 66:13 73:6,17 76:13
 123:2,2 129:5,12

131:16 132:14 136:19
 140:1 141:5,6,14
 147:6 151:16 156:9
 157:16 163:21 205:2
 218:20
Survey's 25:8 55:5
surveyed 124:10
surveying 10:3 21:13
 76:7 132:12 138:13
 149:3
surveys 15:17,20 26:1
 29:20 53:18 57:12,13
 57:16,20 67:9 123:7
 129:13 130:21 131:3
 135:1 137:10,13,19
 138:1,2,5 140:16,18
 143:20 144:11 147:2
Susan 1:21 35:2 74:13
 85:5 157:7,13 163:2
 176:10 186:18 187:2
 207:22
Susan's 211:9
susceptible 81:4 82:2
suspects 17:20
sweating 120:3
sweeps 131:21
swept 117:14
system 88:21 101:6,7
 101:10,13 102:12,19
 103:1,9 142:10,16
 143:16 144:18 146:4
 151:5,12 171:8 178:6
 194:17 195:11 210:19
 221:22 222:4
systems 94:20 171:2,3
 171:7 182:14 189:2
 208:19

T

T-class 107:18
tab 13:19
table 8:19 77:22 145:1
 178:16 189:15 214:2
tables 135:12
tabulation 131:19
tabulations 123:6
tackle 217:21
tag 228:1
tailor 213:10
take 4:4 5:8,18 6:10
 17:1 34:16,17 39:20
 46:13 53:2 55:13 60:6
 66:2 71:4 72:2 76:22
 80:6,7 83:10 85:8
 87:21 99:15 104:19
 107:19 108:8,21
 109:21 115:2 116:3
 117:5 119:21 123:12

123:13,15 127:11
 130:14 131:11 143:12
 150:20 158:15 160:5
 165:7 167:11,13
 171:10 175:3 185:9
 217:2,3,5,9 219:8,19
 222:4 223:2,4
taken 73:10 148:10
 180:11
takes 90:3 158:9 182:4
 182:5 219:22
talk 8:11 23:19 26:4
 31:9 34:7 38:4 88:17
 92:5 134:6 157:17
 165:17 179:2 195:7,7
 195:8 207:18 210:15
 214:21 224:22
talked 9:6 10:6,8 20:9
 36:7 40:11,13 60:15
 70:21 88:11 144:8,16
 156:9 162:19 225:15
 229:14
talking 12:10,21 29:21
 31:17 32:20 54:7
 58:17 64:9 101:15
 107:1 117:21 124:9
 134:8 138:12 182:7
 190:19 202:13
tall 116:4
tap 16:6
targeted 6:6
targeting 6:3
task 47:12,14 100:11
 164:18
tasks 3:17 170:1
taxpayer 9:21
TB32 103:1
team 9:18 25:7,9 86:22
 114:19 166:1 203:15
tease 187:14
technical 10:20,21 32:5
 41:7 89:10 157:1
techniques 57:3
technological 145:22
 167:6
technologies 57:7
 167:20 171:7
technology 5:13 45:4
 45:10,21 46:14,21
 101:16 102:17 110:19
 110:21 111:3,6
 126:10 141:18 143:14
 146:2,18 165:17
 166:14 168:6,20
 169:20,21 170:1
 171:11 174:12 175:1
 196:7 209:9 214:22
 217:6 218:1 221:14

222:15 223:1
tell 23:17 93:17 175:4
 202:9 209:20
tells 14:3 22:20 74:20
templates 158:3
temporal 134:10 136:1
temporary 204:5 205:8
ten 60:20 80:8
tend 41:2
tender 181:22 182:13
 182:15
term 166:13 209:18
terminal 101:20 104:19
terminals 109:17
terminology 52:15
 59:12,18 93:6,11
terms 11:7 40:12,22
 60:18 64:3 165:12,16
 166:1,15 199:20
terribly 155:4
terrific 19:21
territory 117:21
TEU 110:3,8,8
Texas 1:12 4:14
text 71:9 77:7,8
thank 4:6,22 8:2,4
 43:17 45:8 46:1 50:1
 50:19 70:11 78:2 80:8
 88:5,22 111:15
 113:21 114:2 126:14
 152:5 153:12 157:13
 163:5,9 164:20 174:1
 175:13 188:14,15
 192:12,22 193:2
 194:8 196:1 205:14
 207:3 226:6 228:6
 229:10
thanking 194:3
thanks 4:15 40:8 41:5
 56:5 83:5 121:22
 122:2 131:13 152:2
 194:1 196:5 214:1,9
 229:12
the-- 48:19
they'd 110:5
thing 24:20,21 33:12
 61:21 66:16,21 96:6
 103:9 107:8 115:15
 133:7 140:21 163:9
 173:5 176:14 186:4
 191:20 206:8 208:3
things 8:22 9:21 11:15
 12:5 19:3 20:9,12
 23:9,13,19 24:16
 30:19 40:2 54:21,22
 59:15 61:3 72:16 81:2
 83:4,6 102:4 105:12
 105:15 106:21 130:14

130:19 131:11 132:10
 135:17 137:18 143:8
 144:21 157:15,18
 163:3 171:1 182:7
 190:11 195:6,10,20
 197:19 203:10 213:18
 213:19 214:2,6,9,21
 215:17 217:2,7,20
 219:22 220:21 221:4
 222:1 228:17
think 7:16 9:5 13:5
 14:22 15:12 16:17
 17:16 18:14 19:13,17
 20:10 21:3 23:8 24:18
 25:18 29:13 30:14
 33:2,4 35:5 36:12,15
 39:4,17 40:4 41:6,7
 41:10,11 42:9 43:3,12
 43:19 44:5 46:11 47:5
 47:17 48:20 50:8,16
 51:4 52:8,14 53:13,20
 56:3,9 58:6,13 59:13
 59:14 60:8 61:5,11,18
 62:14 64:1 67:22 69:2
 72:5,17 73:6,15 74:4
 75:4,7,14,19,22 76:8
 77:8,12,20 78:3,22
 79:1,2,4 83:11 84:11
 85:6 87:8 88:15 89:5
 89:13,19 91:19 93:11
 97:9 98:5,19 100:2,6
 102:20 111:22 112:4
 112:21 113:14,18
 118:19 119:11 120:5
 120:18 121:7 122:9
 122:14,17 126:8
 128:10,12,16 130:15
 130:17,20 131:1,4,10
 133:17 134:5,7
 135:14,20 136:2,8,10
 136:12 137:9 140:6
 140:19 141:20,22
 142:3,5 143:13,19
 144:10,20 145:19
 146:3,9 147:2,11,12
 147:19 148:4,6,13
 153:17 154:9,10,14
 155:3,9,22 156:8,14
 156:16,19 157:3,14
 159:13,14,15 162:5
 163:3,9 164:5,8,18
 165:3,5,9,15 166:8
 167:19 169:14,15,18
 170:2,3,15,16 171:6,8
 171:10,12 172:2,17
 173:1,11 174:2
 176:15 178:6 181:6
 181:18 182:7,17

183:15,21 184:2,4,5
 186:1,3,8,12 187:4,6
 187:21 189:10,14,15
 189:17 190:7,14
 192:18 193:13,20
 194:2,12,15,16 196:5
 197:8,10,18 198:4,5,8
 198:20 199:9,11
 200:16 201:1,13
 202:8 203:4 207:15
 207:20 208:3,5,17
 209:2,12 212:10,15
 213:2,8 214:4,5
 215:18 216:1 217:8
 218:5 220:6,10,19
 222:18,21 224:8,15
 226:12 227:11 229:3
 229:4,7
thinking 36:1,6 50:16
 146:3 213:7
third 14:17 62:6
Thompson 1:22 88:10
 194:18 219:15,15
Thompson's 88:11
thought 6:1 27:18
 39:18 62:11 74:6
 77:16 84:22 104:9
 133:6 165:21 170:20
 187:20 209:15
thoughts 104:1
thousand 60:17
thousands 226:19
three 4:7 26:21 99:1
 100:6 102:14 118:6,6
 120:17 125:18 182:21
 183:1,5 199:22 200:6
 202:9,18 213:14,18
 220:18 221:10
three-day 176:20 177:9
 180:16
three-days 182:9
three-year 161:16
throw 215:2
throw 187:20 212:19
thunder 194:22
Thursday 1:8 176:8,17
 177:21
tide 92:16 127:9 150:17
tides 121:15
tied 40:17
tier 28:4
tight 182:1
tightly 99:18
time 8:20 9:8 10:1 27:4
 44:1 47:13 48:8 49:3
 49:6 50:11 58:8,15
 65:10 69:9 74:15
 75:17 77:1 95:9 96:15

96:15 100:12 104:8
 113:7,10 114:20
 118:2,2 124:6 126:6,9
 126:11 127:4,6,10,21
 128:15,16 130:22
 132:2 133:3 134:1
 137:5 138:4 139:11
 140:14 142:20 144:13
 145:13 146:17 150:14
 150:17 153:13 160:9
 165:10 172:11 177:7
 181:5 182:2,4,5 183:4
 192:3 193:4 196:19
 202:12 206:6,12
 209:14 218:4 219:19
 228:19
time-pressed 136:14
timeline 168:15
timeliness 134:9 136:7
timely 145:18 152:6
times 114:15 130:18
 137:12 138:20 176:22
 203:5 214:13
timing 173:5
tiny 124:20
title 50:10
TJ's 39:22
TMAC 29:4 41:7
Tobi 110:2
today 5:8 6:12 7:9 11:3
 65:14 109:12 133:22
 165:12
today's 225:7
Todd 152:10
token 7:19
told 93:22 202:17
tolerances 114:9 119:6
 124:15,20
tongue 11:2 24:3
tons 91:19,20 92:17
tool 6:17 25:1 27:8
 28:12 36:2,8 159:3
 160:8 161:1
tools 167:6
top 13:19 14:4 36:9
 53:14 60:12 71:19
 92:1 123:16 158:8
 200:5
topic 64:11 71:15 92:12
 94:1 111:10 122:3
 133:18 155:20 190:10
 190:15,17 191:16
 212:13
topics 3:14,17 89:16
 185:22 195:5 200:9
 208:7 209:10,13
 217:16
topo 13:7 27:14 32:21

38:17
topo-bathy 10:4 27:11
 33:4 39:8 41:13
topo-bathymetric
 14:15 15:4
topographic 10:11
 32:18 118:19 141:8
 153:3
topography 118:21
 119:1,8
tornado 9:11
total 24:18
totally 7:7
touch 140:8
tough 53:7
tracker 33:11
tracking 192:15
trade 146:15 210:3
trading 210:4
tradition-bound 111:2
traditional 95:2
traffic 95:5,8 107:10
 143:6
trailing 183:12
trained 57:6
training 181:18 186:12
tramp 142:13
transformation 212:5
transit 118:9 148:9
transition 20:11,15
 50:17 158:4 197:17
 203:15
transmission 29:17
transparency 133:10
 152:13
transportation 110:22
 170:13 195:6,9,16
travel 6:8 158:22 176:4
 176:9,12 177:17
treated 206:7
tremendous 132:20
tremendously 93:6
Tremont 1:11
trend 151:17
trends 151:9,14
tried 39:16 51:10
trip 177:5
true 20:3 189:10
trust 123:13
try 4:5 5:22 33:18 39:10
 39:15 80:13 128:3
 150:15 183:17 186:6
 189:21 197:20 199:21
 200:5 220:4 221:3
trying 23:13 67:13 81:9
 81:14 82:14,21 83:9
 85:1 100:12 111:17
 130:13 141:19 156:12

160:16 203:19 215:16
 229:3
tsunami 40:19
Tuesday 176:8 177:17
 183:21
tug 106:20
tugs 92:18,19 106:4
 112:7
turn 7:4 14:14 97:1
 116:7,13 134:21
turned 97:21 98:20
 110:4
turning 67:12 97:10
 98:17 99:15,17
turns 22:3 210:21
tweaked 24:16 89:9,13
 90:11,12,21
TWIC 227:13,17
two 3:2 15:9 19:8,10,11
 53:5 62:5 65:12 79:10
 81:10 87:5 92:12 95:8
 100:6 108:5,6 112:4
 113:15 122:15 126:5
 126:5 127:17 133:19
 138:12,20 139:4,6,8
 142:11 150:21 154:22
 155:8 173:22 174:1
 176:6,18 177:1,7
 180:16 181:9,11
 182:8,21,22 183:3
 191:10 197:20 199:22
 200:5 203:10 211:20
 213:13 218:13,14
 219:10,11,21,21
 228:16
two- 140:6
two-and-a- 176:6
 183:11
two-and-a-half-day
 180:17
two-day 177:13 180:21
 181:7 184:17 185:5
two-foot 105:20 126:22
two-week 207:8
type 13:21 63:16
 142:16 206:7
types 12:2 54:22
 101:13,17 106:21
 113:10 222:1
typically 32:18 104:15
 147:5 148:2 149:2
typing 215:15

U

U.S 1:1 10:5 15:5 30:8
 89:11 90:10 112:17
 117:21 141:22 143:16
 143:18 212:8

UC 24:9
ultimate 104:22
ultimately 39:17
ultra-container 91:17
ultra-large 92:12 93:3
umbrella 42:12
unanimously 49:20
unaware 27:1 152:21
uncertainties 36:3
 102:8
unclear 165:12,18
under-keel 105:20
 114:10 126:22 139:4
 139:6,8 140:7
understand 28:16 36:5
 46:1 51:20 66:10
 74:16 84:12 108:13
 112:17 129:22 181:15
 202:18 205:17 224:11
 224:13 225:8
understandable 39:4
understanding 103:2
 161:17,19
understands 207:5
Understood 126:13
undertaking 153:6
underway 195:19
 222:17
unified 131:5 133:10
unique 111:21 184:5
unit 99:14 148:17 149:7
United 75:5 104:22
 200:18
units 100:6,14
unknown 116:1 120:1
 121:17
unmanned 110:17
unsurveyed 116:21
upcoming 8:5
update 3:4 8:21 141:12
 150:5,18 151:4 158:2
 162:2
updated 134:12 135:12
 135:18 138:2 141:16
 148:5
updates 135:11 151:18
updating 134:17 141:6
 155:21 156:16
upgraded 173:15,18
upland 180:14
upper 104:11 105:11
urban 81:16
urgent 56:2
use 10:16 16:19 24:6
 33:18 43:5 52:15
 59:18 61:16 62:11
 68:5 71:15 93:17
 100:3,15 101:2,8,13

116:9,12 121:2 123:3
 126:16 129:11,17
 153:10 160:9 164:11
 164:13 166:22 167:21
 186:1 203:8 225:16
useable 124:17,18
 145:13
useful 164:8 165:1
 166:4 173:3 191:21
user 137:4 159:18
 215:10
user-group-by-user-...
 147:4
users 64:10 66:14 68:4
 128:14 159:11 189:12
 209:3 214:16,19
 215:9 222:6
uses 99:17 132:12
USGA 17:21
USGS 10:10,20 11:6
 27:12,15,22 28:1
 68:21 194:13
usually 115:17 138:8
 187:13 197:19
utility 16:2 194:17
utilized 128:6

V

validation 62:19
valuable 136:12 181:13
 199:19
value 153:10 183:1
 184:11 189:2,11
 193:14 206:7 207:2
valued 160:21
Van 107:21
Vanda 93:3
varies 128:5
variety 164:16
various 115:2 155:10
vary 142:5
vendors 57:10
venture 110:11
verified 123:15
verifying 150:2
Verrazano 110:7
version 90:5
versus 76:21 126:1
 180:14 229:18
vertical 95:3
vessel 52:17 76:16 98:3
 99:20 100:11 104:19
 106:2 119:5 120:8
 149:21 150:9 200:14
vessel's 114:6
vessels 54:5,21 57:4
 64:16 73:6,9 98:17
 99:16 107:9 110:15

110:17 145:16 205:19
Vice 1:15 3:5,22 5:11
 23:7 24:19 25:17 26:7
 44:16,19 45:1 49:13
 50:4,14 63:1 64:22
 67:16 68:2,7 124:7
 125:2,5,10,14,22
 126:13 143:17 162:22
 178:22 180:4,9 194:1
 207:9 210:11 224:15
 228:16 229:11,19
Vice-Chair 92:9 193:22
 228:15
vicinity 102:15
video 80:19,20 88:18
 96:19 97:11 99:6
videos 96:9
view 37:13 96:17
 171:10
views 19:19
Virginia 180:1
vision 7:10 161:2
visit 99:11 141:1 160:6
 177:5 183:13,14,15
 183:20 184:1 226:10
visited 159:1
visitor 228:1
visits 185:6
vital 54:14 56:22
voice 52:6 70:16
Volpe 101:9
volumes 129:14
voluminous 197:17
volunteer 162:18 225:4
 225:11
volunteered 84:2
 222:20
vote 3:6 48:11,12,13,19
 89:19 178:12
voting 49:15,18 70:8
 77:19 79:20 174:21
 185:3
VTS 108:6 120:12
 133:12
vulnerability 4:13

W

W 1:16
wait 86:16 219:11
 220:13
walk 23:17 67:18
 150:11 226:16
want 4:15 22:19 26:20
 30:17 36:4 37:18 39:6
 56:17,17 59:17 60:16
 66:8 68:17 70:14,14
 77:9 83:8,18 86:3,19
 88:1 90:18 93:16

96:10,21 129:16
 150:4 153:12 154:6
 154:12 158:12 163:1
 169:6,7,11 178:1,5
 179:1,2 182:4 193:7
 197:7 200:12 206:15
 207:10,11,14,17
 208:13 215:6,14
 216:12 218:9,10
 223:16 224:10 225:4
 226:11 229:1,11
wanted 12:18 27:9
 40:16 52:18 97:20
 102:21 132:17 133:5
 150:18 163:18 173:21
 224:13 228:17 230:10
wanting 52:22
wants 16:10 202:3
 225:11 227:16
warning 5:22
washed 7:22
Washington 209:18
 228:2
wasn't 7:3 26:11 33:13
 97:20 130:4 143:11
 143:12 191:18 225:1
watch 80:18 96:9,11
water 92:1 114:5 115:8
 115:14 117:2 127:5
 127:17 138:7 139:12
 139:19 143:1 184:9
 208:13
waters 115:6
waterways 66:14 67:8
 115:8
wave 132:8
waves 134:11 139:3
way 7:21 21:18 31:9
 36:2 39:19 71:11,19
 74:7,18 82:21 87:5
 112:21 119:10 121:8
 125:9 128:13 130:1
 131:8 134:18 135:10
 135:11 142:7 143:10
 164:17 189:21 192:4
 209:3 210:1,7 228:1
ways 145:12 164:17
we'll 5:17 30:21 43:22
 46:13 51:4 58:2,8
 74:11 80:7,13 90:14
 104:15 134:1 181:16
 183:17 184:16,16
 186:5 199:7,9 214:9
 214:10 225:9
we're 5:8 6:2,13,21 9:18
 17:2 23:19 24:8 25:4
 25:13 29:13,21 30:22
 31:2 32:20 35:14 36:1

36:6 37:15 50:6 52:20
 54:5 55:2 58:17 59:11
 59:11 60:12 66:7 68:9
 69:3 72:11,18 75:14
 75:20,22 80:18 81:12
 85:1 86:8 88:3 89:19
 92:6 101:16,21
 103:14 107:1,17,18
 108:1,2,3,7,22 109:1
 111:1 112:5 113:16
 122:17 124:9 136:14
 138:11 139:5,10,21
 143:19 144:21 148:2
 150:3,10,15 157:15
 165:17 168:17 171:22
 174:3 178:1 181:6
 182:6 183:3,4 185:5
 187:13 189:16,18,20
 190:19 195:18 196:12
 196:18 199:4 200:22
 201:6,16 202:13
 203:9,19 207:15
 209:20 210:3 211:10
 213:19 214:2,6,7,22
 217:3,5,8 218:2
 221:22 226:12 227:21
 228:7 230:1,4
we've 7:6 19:14 23:9
 24:16 29:6 34:15
 35:17 36:7,18 40:13
 42:5 44:14 49:8 53:13
 61:19 63:5 65:3 68:19
 70:10 75:11,12 79:18
 103:16 108:17 122:6
 130:17 137:17 144:7
 148:10 156:9 163:11
 164:15,16 170:12
 175:1 176:20 179:20
 182:12 186:14 187:18
 189:1,5 190:21
 197:22 200:11 205:18
 205:21 206:2 209:13
 212:12 215:3 216:6
 218:1 226:8,9 229:13
 229:13,20,22
weaken 220:7
Weakley's 179:5
weather 117:19,22
 118:1 150:7
web 24:11 55:21 134:20
 134:22,22 164:13
 172:21 191:21 220:14
webinar 17:15 159:11
Wednesday 176:8
 177:18,20 183:21
week 6:4 114:21 125:13
 152:4 176:13 179:17
 186:14 218:18 219:21

219:21
weekend 177:22
weekly 160:13
weeks 125:18 127:17
 218:7,13,14,18 219:2
 219:8,11,11,22
welcome 8:20 30:15
 49:1 50:21 188:19
 225:12
wellsmen 116:14
went 6:5 16:22 80:10
 97:3 139:15 181:16
 181:17 185:13 230:16
weren't 28:5 40:2 177:8
 181:2
West 108:18 180:1
 210:17,20 211:5
westernmost 29:4
WESTON 2:14
whack 201:11
whammos 214:8
whine 163:8
whistles 169:12
white 147:17 151:20
who've 229:14
wide 102:3
widely 142:5
wider 107:22
widths 107:6
wildlife 29:5
WILLIAM 1:15
willing 65:16 66:19
 160:15
willingness 50:15
win 28:9 73:13
wind 29:14,18 107:9
 116:6 117:8,8,9,12
 118:22 119:2,8,12,12
 119:15,18,20
window 189:22 207:8
winds 105:14,14 123:17
wing 191:19
winnowing 14:11
wisdom 193:6
withdraw 47:22 170:20
wonder 73:1 208:12
 216:22
wondered 92:6
wonderful 103:22
wonky 62:7
word 13:21 89:4 99:3
 112:18 145:10 149:21
 167:4,7 209:21 229:5
 229:8
wording 221:7
words 32:11 190:1
 192:17 196:9 229:2
wordsmith 82:11 207:6

221:6
wordsmithing 81:20
 85:7 186:7
work 10:19 11:5 24:15
 25:9,11 29:22 40:17
 50:22 51:15 81:12
 83:3 103:7 108:22
 109:1,5 110:19
 114:12 123:2 124:20
 126:18 131:12 142:16
 150:14 152:11,22
 153:10 155:12 156:15
 160:11,12 161:11,15
 163:8 164:21 173:2
 176:5 181:1 182:16
 185:10,18 189:21
 201:2 214:22 216:4,9
 229:21
work's 144:10
worked 69:18 73:11
 102:16 161:13 198:11
workforce 186:15 187:6
 208:16
working 3:5,8,9,14 5:13
 5:16 7:7 9:18 23:10
 29:13 30:4 42:8,10
 45:4,10,12,22 46:14
 46:22 47:12,20 49:13
 50:22 69:3 80:3 88:12
 131:7 153:15,17
 154:2,6,13,19,22
 156:10 161:6,8,22
 162:7 163:10,13,15
 163:16 164:4,19
 165:14,18,19 166:3,9
 173:2 174:12 175:1
 182:3 184:10 196:6
 206:15 209:9,13
 214:3 215:3 218:1
 223:21 224:7 225:7
 225:14,19,20 226:2
works 9:8 18:11 140:2
workshop 6:21 16:19
 16:19 18:11
Workshop/IOCM 3:4
world 8:22 9:1 210:4
worry 207:13
worrying 168:2
worth 184:3 192:3
wouldn't 89:20 103:12
 103:13 142:16 205:6
 205:7 221:21
wow 9:10
Wozencraft 29:2
wrestled 230:8
wrestling 44:2
write 26:5 216:19
written 16:14 218:13

wrong 59:16 110:14

X

X 14:4 151:12

Y

year 15:9,9 16:22 17:6
 30:15 32:6 38:17
 76:20 125:10 146:8
 155:5,7 163:22
year's 71:2,15
year-and-a-half 152:20
years 15:5,7 19:4,10,12
 23:10 33:12 40:12
 48:3 58:3,14 65:4
 73:7 168:3,3 176:22
 202:8 211:21 229:12
yesterday 4:12 5:4 11:1
 16:4 31:17 41:2 59:8
 60:15 61:12 70:21
 85:1 88:9 89:18 146:7
 154:2 220:20,22
yesterday's 51:11
yield 64:2
York 107:17

Z

zinger 84:3
Zone 120:21 121:2,8
zones 107:11
zoom 14:18 149:18

0

073 115:9
078 115:9

1

1 154:20 163:11
1,310 91:20
1,750 110:3
1:22 230:16
1:30 150:10 185:16
1:45 227:3
10 60:17 116:16 117:16
 123:20 127:1 149:16
 168:3
10,000 116:5
100 17:13 98:19 149:9
 155:17
100- 148:8
100,000 91:19
11:53 185:13
1100 133:3
112 3:11
12 92:19 112:7 115:4
 226:9
12:30 185:15
12:31 185:14

120 181:3
13 107:18
133 3:12
14,000 92:17 107:18
14th 93:2
15 77:19 116:6 137:21
 155:16 216:15
150,000 92:17
153 3:14
15th 133:22 151:2
16 72:4
17 1:9
177- 91:20
178,000 91:20
17th 152:10
18,000 91:21
19 30:14
197 92:1 94:14
199.8 94:15
1st 177:21

2

2 154:20
2,000 110:8
20 117:12 123:21
2009 19:3
2013 22:20
2015 3:4 6:20 16:18
2016 1:9 4:7 30:9
 152:10 185:8
2017 169:10
2022 4:18 212:5
206 3:17
21 30:14
221 3:19
228 3:22
2300 1:12
25 117:12 123:21
29 6:5 175:18
29th 175:6,20 177:17

3

3 6:5
30 175:6,18 206:11
30th 177:18 185:7
31 175:18
31st 175:6 177:18,20
 185:7
320 117:15
3D 13:6 14:8 31:8 42:9
 42:13,13,18,19,21
 43:10

4

4 3:2 6:9 116:17 163:16
4-foot 137:20
4,400 110:8
4.7 89:11

44 3:6
48 3:6
49 67:19

5

5 168:3
50 57:5 117:15
50-foot 92:18 93:9
 107:20
51 3:8 117:17
55-year 59:4
59 185:17

6

6 112:7 116:17
60 17:14
60K 24:18
64 3:9
67 76:21
68 76:21

7

7 3:3
72 80:1

8

8 3:4
8.5 115:4
8:00 1:12
8:14 4:2
80 3:10 52:13
85 139:6

9

9:33 80:10
9:52 80:11

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In the matter of: Hydrographic Services Review Panel

Before: DOC/NOOA

Date: 03-17-16

Place: Galveston, TX

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.



Court Reporter

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