

MEETING OF THE  
NOAA HYDROGRAPHIC SERVICES REVIEW PANEL

Thursday, March 22, 2007

ORIGINAL

J.W. Marriott Hotel  
Salon 2  
1331 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004

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J. Scott Rainey, Chair, Consultant

Tom Skinner, Vice Chair

Durant & Anastas Environmental Strategies, Inc.

Jonathan Dasler, David Evans and Associates, Inc.

Elaine Dickinson, Boat Owners Association of  
the U.S. (BoatU.S.)

William Gray, Gray Maritime Company, Maritime  
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Richard W. Harkins, Consultant

Captain Sherri Hickman, Houston Pilots  
Association

Dr. Lewis Lapine, South Carolina Geodetic Survey  
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Admiral Richard West, Consortium for  
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Larry Whiting, TerraSond Ltd.

Reported by: Richard D. Baker, Jr.

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

1  
2 CAPT BARNUM: I'd like to welcome  
3 everyone to the Hydrographic Services Review Panel.  
4 This is a Federal Advisory Committee that advises  
5 the administration on hydrographic services. I'd  
6 like to point out in the event of an emergency,  
7 fire, that there are two exits located in the back  
8 of this room and also the front of the room. The  
9 shortest distance out is the back of the room that  
10 leads into the kitchen. You go to the left about  
11 20 feet and there's a stairway that goes right up  
12 to the street. There are bathrooms located back in  
13 the foyer just behind the elevators. I would also  
14 ask that the public that's attending today to  
15 please sign in. There is a sign-in sheet back on  
16 the table and also I would like to ask that folks  
17 when they speak that they announce themselves and  
18 that you speak slowly and you enunciate so that the  
19 court reporter can capture your words. Appreciate  
20 that.

21 And with that I'll turn it over to Mr.

1 Rainey.

2 CHAIRMAN RAINEY: Thanks very much. The  
3 one piece of administrative business I think is  
4 approving our meeting summary from Anchorage. I  
5 just want to get it right in to General Kelly and  
6 Admiral Lautenbacher. So if we could -- it's tab  
7 M, Mike, in your notebooks. If I could get a  
8 motion to approve the minutes.

9 A PARTICIPANT: So moved.

10 A PARTICIPANT: Second.

11 CHAIRMAN RAINEY: Is there any  
12 discussion on the minutes? All right. All in  
13 favor of approving the meeting summary. Opposed?  
14 Okay. Thank you.

15 I'd like to go ahead and start our  
16 business for today. Captain Barnum is going to  
17 talk to us about the budget overview for fiscal  
18 year '07-'08.

19 CAPT BARNUM: I'm just going to do it  
20 from the table here.

21 (Pause in the proceedings.)

1           CAPT BARNUM: I'll do it up here. Make  
2 sure I'm qualified to operate this equipment.

3           Jack, as I mentioned earlier, was called  
4 away on a family emergency and could not be here  
5 today so I'll be presenting the NOS budget  
6 briefing.

7           First off I'd just like to point out  
8 that, if you haven't seen it, the NOAA blue book,  
9 this is a bound copy. You can also access this off  
10 the NOAA web page, the front page at [www.noaa.gov](http://www.noaa.gov).  
11 There's a link straight to it that has the FY 2008  
12 budget summary.

13           So NOS is all about America's oceans and  
14 coasts for a safe, healthy and productive  
15 environment. The pictures here are a ship and  
16 beaches and certainly the subsurface marine life  
17 and the importance that is to our planet and our  
18 community. All three are important and all three  
19 are critical in striking a balance in managing  
20 these for the economic prosperity and the enjoyment  
21 of our coasts.

1 I want to talk about some  
2 accomplishments for NOS this past year. One is the  
3 establishment of a new IOOS office in February of  
4 2007. I'm not going to go into much detail here.  
5 The program director, Zdenka Willis, will be with  
6 us later today and give us much more detail on that  
7 item.

8 NGS completed a major readjustment to  
9 the nation's positioning infrastructure. This took  
10 two years to complete. The national readjustment  
11 provides our nation's positional infrastructure for  
12 transportation, mapping, charting and a multitude  
13 of scientific and engineering applications, and it  
14 updates all the GPS control points in North  
15 America. So this was done using a subset of 70,000  
16 control points versus the half million that was  
17 required for previous adjustments.

18 So as you heard yesterday from Dave  
19 Zilkoski, NOAA is now number one in computing the  
20 satellite orbits, this is where we're going to be  
21 number one in accuracy.

1 Office of Response and Restoration,  
2 Mexico Marine Debris received \$20 million last year  
3 in the supplemental. This is some examples of some  
4 of the debris they pulled out. They've completed  
5 about 60 percent of that effort. When receiving  
6 the funds we quickly got that out the door to start  
7 relief efforts.

8 CO-OPS is growing. There was also money  
9 in the supplemental for four more PORTS systems for  
10 Mobile, Pascagoula, New Orleans and Gulfport, and  
11 we are beginning to work on the hardened NWLON  
12 stations along the Gulf Coast critical to both  
13 emergency managers and also to the post hurricane  
14 surveys which need to be conducted to get the  
15 shipping moving again.

16 This is a slide on contracts. NOS  
17 contracts for FY06 totaled \$75.1 million, ranged  
18 all the way from NGS \$8.7 million for shoreline  
19 mapping, FNA surveys, height modernization, Coast  
20 Survey 20.7 for survey backlog, \$20 million in  
21 supplemental for marine remapping, which I just

1 mentioned, and also 10.6 for the vessel time  
2 charter. And in addition, we talked about ISCM,  
3 that's \$2 million for tsunami supplemental. That  
4 money was used to map the southwest coast of Puerto  
5 Rico, a very successful project where the data that  
6 was collected for updating the inundation model and  
7 also the chart. And lastly, CO-OPS \$7.8 million,  
8 \$4 million for maintenance installation and  
9 equipment to support field operations.

10           Here's the budget trend. Requested \$3.8  
11 million, which is \$131 million, 3.4 percent above  
12 the president's budget. The request is \$96 million  
13 below the FY 2006 enacted. It reflects the  
14 administration's guidance on discretionary  
15 spending. Certainly we're at war, trying to pay  
16 for Katrina and Rita, but as you heard yesterday  
17 from the admiral, we did successfully get some  
18 increases. Includes 51 and a half million dollars  
19 for adjustments in pay and 79.5 million for other  
20 program increases. It supports the president's  
21 Ocean Action Plan and the satellite continuity.

1           Here's a breakout of the individual line  
2 offices and the percentage increases. So for NOS  
3 it was 13.3 percent, reflecting a net increase of  
4 \$55.3 million. NOAA's requesting \$143.8 million  
5 for navigational service, \$1.7 million above the FY  
6 '07 request.

7           This budget request supports NOAA's  
8 efforts to improve navigational advice and  
9 services, which will promote safe transportation.

10           Broken down by goal, you heard a lot  
11 about the program planning budgeting execution  
12 system in Alaska. This is how we look at it  
13 internally in Commerce and Transportation and this  
14 represents a net change of \$6 million or 3.8  
15 percent. So the FY 2008 budget request for  
16 Commerce and Transportation, which is a decrease  
17 from \$17.6 million in the inactive targets  
18 resources again for safe and efficient  
19 transportation, also included in Commerce and  
20 Transportation is the programs aviation weather,  
21 surface weather and marine weather, similar to

1 where the Marine Transportation System is trying to  
2 target and support the next generation air  
3 transportation system and aerospace. The increases  
4 for Marine Transportation System will include \$.7  
5 million for AUV research to push ahead with AUV  
6 implementation to be a force multiplier for  
7 in-house ships and also to set a model for working  
8 with hydrographic partners. The \$1 million upgrade  
9 for 45 priority National Water Level Observation  
10 Systems will include meteorological sensors so many  
11 of these NWLON stations also include meteorological  
12 sensors to refine the data points we have for our  
13 modems.

14           This graph shows the increasing trend of  
15 the MTS budget, again \$1.7 million. And it also  
16 goes into supporting the IOOS plan, which I  
17 mentioned earlier, a \$16.4 million request amount,  
18 which is a 16.4 percent change, and also \$8 million  
19 for extended continental shelf mapping. That is  
20 money to map the outer continental shelf margins  
21 for Article 76 of the UN law to see each, UN law to

1 see each nation is able to submit a, make a  
2 submission to extend their continental -- not to  
3 extend the shelf, extend the boundaries of the  
4 limits of the continental shelf. This is only for  
5 the subsurface. That doesn't include the water  
6 column, but it includes the sea floor, which is  
7 valued at \$1.2 trillion. So this money will be  
8 used to map those areas and also conducts tidal  
9 surveys and also do a data management effort. It's  
10 going to be a multiyear effort.

11           Integrated Ocean Coastal Mapping is  
12 highlighted in the NOAA planning and budget  
13 formulation. We're looking to move towards a  
14 multi-mission fleet and aircraft platforms,  
15 maximize the use of our fleet. There's an  
16 interagency working group on ocean and coastal  
17 mapping, of which I'm co-chair. We will be meeting  
18 this spring to look at a data inventory and how do  
19 we reduce duplicate work. So working together with  
20 the Corps of Engineers on their LIDAR projects, on  
21 their center of transport projects along the coast

1 so that we can collect a set of transport data and  
2 also collect data for the shoreline mapping.

3 Also the Senate has introduced Senate  
4 Bill 39, Title 3, Ocean Coastal Mapping Integration  
5 Act, to coordinate the federal ocean and coastal  
6 mapping efforts to decrease duplication and  
7 increase efficiency.

8 Interagency partnerships, we heard some  
9 yesterday about our partnerships with the Army U.S.  
10 Corps of Engineers and the ISCM efforts continue,  
11 NOAA has been meeting with Army Corps of Engineers  
12 to notify areas of partnership. Jack Dunnigan and  
13 General Riley have met in the past and created  
14 subtask groups. So we're looking at again working  
15 together for shoreline mapping, channel mapping  
16 management and joint technology research.

17 So finally wrapping up, we're working  
18 towards, again, balancing the act of our services  
19 for transportation and also management of our  
20 coasts, so this is the objective of the National  
21 Ocean Survey to America's ocean safety, health and

1 productivity.

2 Any questions? I know I went a little  
3 quick, I was trying to buy us a little bit of time  
4 for later so you'll have time to deliberate.

5 DR. LAPINE: Captain Barnum, I'd like to  
6 go back to one of the previous overheads, the  
7 summary by line office, about the sixth one back.  
8 One more. That one there. I'm not so interested  
9 in how well NOAA is doing in '08 compared to '07,  
10 I'm concerned about how poorly they're doing from  
11 '06 to '08. This shows a \$122 million decrease for  
12 NOAA between '06 and '08.

13 CAPT BARNUM: That's correct. What's  
14 reflected in there is earmarks. So that's a  
15 reflection of the administration's view of earmarks  
16 that they feel they may not want.

17 DR. LAPINE: I looked through your  
18 budget and I couldn't come up with \$122 million  
19 worth of earmarks. I'm wondering what programs are  
20 enacted, particularly since you look at the  
21 National Weather Service, who's doing better in '08

1 than they did in '06, NESDID is doing better in '08  
2 than in '06, I'm wondering if the 122 million wound  
3 up going into some other line item. Don't mean to  
4 put you on the spot, but I want to put it on the  
5 record.

6 CAPT BARNUM: That's fine.

7 DR. LAPINE: I don't like the fact that  
8 the NOAA's budget has been decreased by \$122  
9 million.

10 CAPT BARNUM: That's fine. Certainly  
11 the input of this panel helps to adjust the  
12 priorities of the budget also.

13 DR. LAPINE: Captain Barnum, did you  
14 happen to see the Washington Post this morning,  
15 page 2?

16 CAPT BARNUM: I did.

17 DR. LAPINE: The reporter says U.S. Army  
18 Corps of Engineers miscalculated on levies. Now,  
19 I'm paraphrasing of course here to make a point.  
20 One of the items says because of a basic data  
21 discrepancy regarding sea level, canal walls and

1 levies were built one or two feet lower than they  
2 should have been. That sounds like a data issue to  
3 me. Sounds like something tide water levels or  
4 National Geodetic Survey should have been involved  
5 in. I don't think they have the resources to help  
6 issues like this. How much damage did Katrina  
7 cause because the levies weren't tall enough?

8 MR. ZIKLOSKI: I can't speak for the  
9 Corps of Engineers, but I can tell you that after  
10 Katrina and Rita they set up a task force  
11 interagency program evaluation team, we were part  
12 of it. So what you're reading from is what they,  
13 their report came up with. We've been working with  
14 it since the hurricanes so part of their strategy  
15 is to be able to make sure that doesn't happen  
16 again, so they're working with NOAA and FEMA and  
17 the rest of us to be able to make sure that that  
18 doesn't occur. But you're absolutely correct, it  
19 was data, it's a data issue between local mean sea  
20 level and vertical data and what they did and  
21 subsidence occurring. So it was a little bit more

1 complicated than just saying that the change in  
2 that area is due to subsidence. There were some  
3 changes, but the point being is that they're  
4 working and trying to prove that and they are  
5 involving NOAA in that process.

6 MR. SZABADOS: Mike Szabados. The Army  
7 Corps is working very closely right now with NOAA  
8 and actually has given guidance to its organization  
9 to follow NOAA's standards for geodetic and water  
10 levels. By the way, it was 1.58.

11 DR. LAPINE: Lou Lapine. I'm not  
12 throwing stones at either one of you, I'm concerned  
13 that you're not given enough resources to prevent  
14 something like this from happening in the future.

15 MR. ZIKLOSKI: And you have the right to  
16 say that.

17 CAPT BARNUM: And that's certainly what  
18 we talked about yesterday in taking a regional  
19 approach to a height modernization. Any other  
20 questions?

21 MS. DICKINSON: Elaine Dickinson.

1 What's going on with '07? I understand -- I mean  
2 is that impacting your operations since the '07  
3 budget has not actually ever been passed?

4 CAPT BARNUM: Well, we got final CR for  
5 the year and it was a very interesting year in how  
6 the funding came to NOAA. Basically it was '06  
7 enacted without earmarks. So internally the NOAA  
8 money was appropriated and that money was divided  
9 up if you will and is being vetted with the  
10 department and I believe also the Hill. I have yet  
11 to see any final numbers. It's going to be a  
12 challenge to get the money out to spend the money  
13 in the next six months or less.

14 RADM WEST: Let me spend a couple  
15 minutes on NOAA's budget. I think it's very  
16 important to understand the dynamics of NOAA's  
17 budget because it flows down to what we're  
18 concerned with here. Lou brings up a very good  
19 point, you have to remember this is the difference  
20 between what the president submits and what  
21 Congress gives him. That's a huge difference.

1 When you have about a quarter to a third of your  
2 budget earmarked historically, if you don't have a  
3 champion on the Hill to protect that it goes away.  
4 Two years ago we found that out in spades when all  
5 of a sudden we had a huge cut to NOAA's budget  
6 because there was no protection for the earmark  
7 process affecting NOAA's budget. That's when  
8 Senator Hollins retired. The last two years there  
9 has been a discrepancy of even a billion dollars  
10 between the House and the Senate marked on NOAA's  
11 budget. I mean I think you've heard me say this  
12 before, that's alarming, absolutely alarming for a  
13 mission central agency like NOAA.

14           So what you're seeing is the difference  
15 between what the president thinks they ought to get  
16 and what Congress says you ought to get, and  
17 intermixed in all this is the earmark process. And  
18 now there's a lot of things going on on the Hill,  
19 but these earmarks are going to be severely  
20 restricted from now on. They will never go away,  
21 but they're going to be severely restricted and

1 there will be some rules for how you get earmarks  
2 from now on. With the CR OMB told everybody,  
3 including NOAA, not to include earmarks. Well,  
4 that's easier said than done. If you send it over  
5 without it in your budget you're liable to be over  
6 there in front of somebody very important. So some  
7 of them will survive and that will be in the '07  
8 spending plan. Is it on the Hill now? Did  
9 somebody tell me that, NOAA's budget? All right.  
10 So there will be some earmarks but a lot of them  
11 will be gone. And in the future a lot of them will  
12 be gone.

13           So this huge thing between what Congress  
14 says NOAA will have and what the present  
15 administration thinks they ought to have is  
16 certainly going to be a problem for us.

17           If you go back a couple of columns,  
18 let's talk specifically about your NAV services for  
19 example. Can you go back to that one?

20           CAPT BARNUM: Sure.

21           RADM WEST: The columns there, this is a

1 problem. You can see the difference between what's  
2 been submitted and what's enacted. So a lot of  
3 that has been the earmark process and a lot of  
4 mission-essential stuff done by NOAA has been in  
5 the earmarked, which is absolutely amazing. Some  
6 of the hydro services stuff is in there. So we've  
7 gotta do something to get rid of all that.

8           The CR is an opportunity for NOAA to  
9 submit a spend plan this year to roll up some of  
10 these earmarks into large important national  
11 programs, not individual earmarks. And I'm not  
12 going to get into it because it's a talk later but  
13 I do want to talk to you about the initiative of  
14 the Ocean Observing System, which for the very  
15 first time we have a line in the budget, I think  
16 Roger pointed it out, of \$16 million to start to  
17 roll up all these earmarks into something that's  
18 important. That should be of concern to us here in  
19 the hydro services because hydro services are in  
20 fact supporting the Ocean Observing System.

21           At some point this nation will invest a

1 billion to a billion and a half a year to observe  
2 the ocean and report the data forecasts, et cetera,  
3 et cetera. Right now they spend a billion dollars  
4 on the Weather Service. As Connie said yesterday,  
5 people will be up in arms if they didn't see their  
6 weather report in the morning. They don't quite  
7 know where it comes from. It does come from NOAA.  
8 You brought up the weather service, everybody loves  
9 it. Not everybody loves the ocean stuff, they  
10 don't know anything about it. That's why I said  
11 yesterday NOAA has to, and Commerce too, get the  
12 words out how important NOAA is so that will help  
13 the other pieces of NOAA.

14           Anyway, that the kind of differences in  
15 the budget, we've got a huge problem. We've got to  
16 resolve it together. It flows all the way down to  
17 every part of NOAA, what the president submits and  
18 what Congress eventually gives you. The whole  
19 dynamics of earmarks now as a result of the  
20 scandals over the last couple of years is going to  
21 play another part in all this stuff. So that's

1 kind of the budget dilemma that NOAA has.

2 I'll keep my comments on IOOS until  
3 Zdenka gets here because I think that is really  
4 fundamental to hydro services too because it's  
5 clearly part of it. I want to see -- they put  
6 money in, and maybe Andy will talk about what's  
7 involved in mapping, I was absolutely amazed when I  
8 was up to his place how sophisticated -- well, we  
9 were all there a couple years ago. That was  
10 amazing. It's going to be a huge amount of money  
11 and effort. But why map it? Because we can't take  
12 our data to the UN and say this is our area because  
13 we haven't acceded to Law of the Sea. So where is  
14 your money on mapping it? It's going to take a  
15 long time. We should get started on it. But we  
16 have not acceded to Law of the Sea. We're the last  
17 nation in the world that has not acceded to Law of  
18 the Sea, which I find amazing. Another issue  
19 that's very, very important to NOAA and where they  
20 go.

21 Anyways, some comments on the budget.

1                   CHAIRMAN RAINEY: I have a question.  
2 Given everything you laid out and Admiral West  
3 talked about, what's happening internally within  
4 NOAA at the program, the line office level as far  
5 as being able to try to look at, I don't know if  
6 you call it contingency planning, but we had a  
7 number of briefings on the PPB process. Within  
8 that system or process is there a way to manage  
9 your programs when you have this kind of disruption  
10 sort of in the expectation or the timing and flow  
11 of the budget? Is there a way you can look at your  
12 operational programs to kind of optimize and  
13 prioritize? I guess I'm interested in how you  
14 manage it.

15                   It strikes me that all the briefings we  
16 had over the years, there's a tremendous amount of  
17 high priority missions going on, but we're always  
18 coming under where we would like to be to get to  
19 the hundred percent requirements. I'm wondering  
20 how you kind of suboptimize on a recurring basis or  
21 when you have an acute situation like this and how

1 those decisions are made in the NOAA structure.

2 CAPT BARNUM: Certainly it was a setback  
3 for us because '06 enacted versus what we were  
4 requesting, we were requesting additional monies  
5 for additional NRTs and that wasn't in the '06  
6 budget, so. But using our model for pushing  
7 forward we have a plan, we're trying to push the  
8 money the best we can to continue to try to push  
9 forward. Certainly for this year there will not be  
10 NRTs 7 and 8. So we'll try again for '08.

11 CHAIRMAN RAINEY: Well, there are so  
12 many different ways to slice it I guess. But is  
13 there an emphasis to balance across the cross-  
14 cutting or the mission goals? In other words, I  
15 saw the ecosystem plus Commerce/Transportation. Is  
16 there a multi-balancing going on or is it  
17 programmatic or does it just kind to go up to a  
18 certain person and they sort it out? I'm wondering  
19 how, what the balancing and judgment, how you kind  
20 of -- on a little bit bigger scale than the NRT, is  
21 there a sort of a system in place to kind of

1 evaluate I guess various priorities?

2 CAPT BARNUM: Well, certainly in the  
3 chief financial office of NOAA they look at current  
4 events, current bills, some things may have popped  
5 up in the past year that we didn't expect.  
6 Satellites for one. They're certainly a big ticket  
7 item and compared certainly to what is spent for  
8 Marine Navigation Services.

9 But yes, there is a process that they  
10 attempt to work with OMB and the department and  
11 others that have a stake in the process of what the  
12 final spending plan is.

13 Certainly in the priority-setting  
14 process, we go through stakeholder input and  
15 certainly the report you delivered yesterday would  
16 be a factor in how we set those priorities.

17 CHAIRMAN RAINEY: Thank you. If I could  
18 ask you one other question. The evolution of the  
19 IOOS project -- the other thing I'm interested in  
20 understanding a little more about is the Integrated  
21 Ocean and Coastal Mapping. I've taken a look at

1 the bills and such. Is that going to be funded or  
2 what's the scale, what's the expected or  
3 anticipated impact to your programs with that  
4 initiative as it rolls out? Is that additional  
5 responsibilities or is it just another way to look  
6 at what you already are doing?

7 CAPT BARNUM: Well, it's certainly, as I  
8 mentioned earlier, cooperating with other mapping  
9 entities, whether it be private, collecting data  
10 that we could take and apply to the charts, or even  
11 with NOAA within other agencies. So it's trying to  
12 make use of -- the term map one is used many times.  
13 Certainly the standards we have for nautical  
14 charting are set because of the liability issues  
15 and making sure that we don't discriminate between  
16 noise, what's a danger of navigation, which may not  
17 be important to somebody doing habitat mapping, but  
18 it will be a resource issue. It's not that we can  
19 take the data and be able to put it in our existing  
20 process, we need the capability to adjust the data  
21 into our system, so yes, it will require resources.

1 CHAIRMAN RAINEY: And that is separate  
2 from the IOOS or that would be part of?

3 CAPT BARNUM: It's really kind of a  
4 separate issue.

5 CHAIRMAN RAINEY: Thanks very much.

6 MS. DICKINSON: Elaine Dickinson. In  
7 one of the '07 budget versions ENC conversion I  
8 think was essentially zeroed out. Is that work  
9 still going forward regardless?

10 CAPT BARNUM: It is. We had requested 6  
11 million in '06 and got 4, so it slowed or impeded  
12 our progress for moving forward with the ENC's, it  
13 was certainly a disappointment. Again as was  
14 mentioned yesterday, by 2010 our goal is to get  
15 these ENC's in place because the Coast Guard is  
16 getting ready to promulgate regulations for the  
17 territory on ENC's, so we're still fighting an  
18 uphill battle to try to get that done. It slowed  
19 our progress.

20 Any other questions? Okay. Well, I  
21 certainly will be here. Thank you very much.

1 CHAIRMAN RAINEY: Thanks, Steve. Next  
2 briefing is Richard Edwing to talk us about the  
3 Hydrography Major Project. Richard Edwing is  
4 deputy director for CO-OPS, the Center for  
5 Operational Oceanographic Products and Services of  
6 NOAA and the project manager for the Hydrographic  
7 Major Project.

8 MR. EDWING: Thank you, Scott. Good  
9 morning, everyone. The presentation today is  
10 basically in three parts, a few slides on what this  
11 major project process is so you understand that and  
12 talk about where we are and the status of where we  
13 are in hydrography through this major project  
14 process and a last slide on some possible roles for  
15 this panel to participate in this process.

16 In late 2005 NOAA issued a new, what  
17 they call NOAA Administrative Order that kind of  
18 retooled their requirements and management process  
19 and as part of that process they established this  
20 major projects process. That process they had had  
21 in the past they put aside in the early 2000s and

1 as part of the retooling requirements process they  
2 brought it back and some of this has to do with  
3 bringing things up to date as well as helping them  
4 integrate better with the PBS process in recent  
5 years. So again, in late 2005 they established a  
6 process and at the same time identified 13  
7 different major projects to start running through  
8 the process, which hydrography was one of them.  
9 That's a little table at the bottom cut out from  
10 the memorandum that was issued. And as a part of  
11 that process the NOAA councils have oversight of  
12 these projects and they have to appoint a project  
13 manager and I was asked to head this up.

14           So what makes a major project a major  
15 project? Well, it's high priority for NOAA, it's  
16 high profile, it's high visibility, it's important  
17 for many reasons and requires significant  
18 resources. The bottom line is they're making a  
19 major investment and want to make sure it's well-  
20 planned, well-executed and well-communicated  
21 throughout the organization. Of course it has to

1 follow all applicable government guidelines. Major  
2 projects should only be stood up by a deputy  
3 undersecretary and gets assigned to a council for  
4 review. Something called key decision points, and  
5 I'll explain those in another minute here.

6           Hydrography is assigned to the NOAA  
7 Ocean Council. Jack Dunnigan and Jim Bolsinger of  
8 the Fishery Service are the co-chairs of that, as  
9 well as they share oversight of the IOOS project.  
10 IOOS is also a major project.

11           So what are my responsibilities? I have  
12 to get a project team together, which cuts across a  
13 couple of different programs as well as four  
14 different line offices. NOAA Marine and Aviation  
15 Operations is the key player in our team obviously,  
16 they supply the vessels we use and some of the  
17 other assets. I have to be sure that we're  
18 addressing all the functional and operational  
19 requirements over the life cycle of this project.  
20 I have to be sure it satisfies the customer and  
21 NOAA, make sure I'm communicating the status of

1 this project to everyone that needs to know about,  
2 and schedule these key decision point reviews.

3 All right. The process itself is  
4 divided up into four steps called key decision  
5 points. At the end of each one of these I have to  
6 do briefings and get approval, which each KDP gets  
7 endorsed by the council, they can't approve it,  
8 they endorse it, and then I have to take that  
9 endorsed briefing to the NOAA executive panel,  
10 which is made up of the DAAs, the line office DAAs,  
11 and some other people, and they make a decision on  
12 whether to approve it or they may decide to send it  
13 up to the next, which is the DAA level panel for  
14 final approval.

15 So KDP 1 is a means of identification  
16 and definition, it's all about providing the  
17 context and the background. What is hydrography?  
18 Do we have good legislative mandates or some good  
19 requirements we can point to with confidence and  
20 say this is why we're doing it, this is why NOAA's  
21 doing it and not somebody else. These are our

1 chief customers, you know, the stakeholders, how  
2 does this fit into our strategic plan, what are the  
3 benefits of doing this.

4           A key element of this is identifying --  
5 there's an assumption here in all of these that  
6 there's some sort of shortfall. Whatever level you  
7 resource now, you're trying to get to some other,  
8 you know, the full requirement. And there's a big  
9 gap there, a shortfall, so you have to identify  
10 that. You do a rough order of magnitude plus to  
11 get some sense of the scale of the cost you're  
12 looking at to get to this full requirement.  
13 Identify constraints, and you can see this is a  
14 very nice actual summary of the whole process, the  
15 road map I followed to deliver these KDPs.

16           The next one, KDP 2, is the real meat of  
17 this process. This is where you say okay, we've  
18 got a shortfall, how are we going to get from here  
19 to there, how are we going to get to be able to do  
20 all the hydrographic data acquisition that we need  
21 to do. That may be different paths to get there;

1 first we need to figure out what are the different  
2 paths, go through and do rigorous detailed cost  
3 schedule performance analyses, go through other  
4 steps here, but the key thing, the very bottom  
5 bullet here is called investment strategy. At the  
6 end of this we'll put forward to the council and up  
7 the chain the preferred path, what do we think is  
8 the best way to get from here to there. And it may  
9 get tweaked or changed or it may get sent back to  
10 the drawing board or whatever, but at the end of  
11 this process we're going to have an investment  
12 strategy which lays out the plan to get to the full  
13 requirement for hydrographic survey. And really  
14 the good thing about that is as we go through the  
15 budget processes that people were just talking  
16 about, everybody is going to be on the same page  
17 for how we get from here to there. Nobody can say  
18 any longer that gee, we're not going to give you  
19 funding for this because you're going about it the  
20 wrong way. The only reason they can help support  
21 this with some funding or resourcing is the high

1 priorities in the process. So at the end of KDP 2  
2 we come up with this investment strategy and it  
3 gets approved hopefully, or it will at some point.

4 KDP 3 is just going back and doing some  
5 additional work on that, doing some further  
6 analyses just to make sure we got it all straight  
7 and forward just the execution. Each year we say  
8 we're going to do a certain level of activity, do  
9 we achieve that? Do we achieve it with the budget?  
10 This is the execution traffic for each year.

11 So that's really the process. Let me  
12 stop right there and ask you if there's any  
13 questions about the process. One thing that's a  
14 little unusual about hydrography in this process is  
15 that this process is mainly used for kind of new  
16 starts, big acquisition projects. You decide you  
17 need a new satellite or a new vessel or building or  
18 something like that, you're going to have discrete  
19 starts or stops. Hydrography, we've been doing for  
20 200 years, so that's why a lot of this at the  
21 bottom, we've already been doing a lot of this

1 stuff at the bottom. That's to me, the KDP 2 is  
2 getting everybody to agree on that path forward.  
3 Let me stop and ask if there are any questions.

4           RADM WEST: Yeah, thanks. Most  
5 fundamentals of program management people's eyes  
6 glaze over. I think what would be better for the  
7 panel is if you could give us real world examples  
8 of how you use this to develop a hydro services  
9 contract program or however.

10           More important is how do you get  
11 external buy-in to these important programs? You  
12 mentioned that, but I can't figure out how you do  
13 that. You have a public session, whatever?

14           MR. EDWING: Well, that's part of why  
15 I'm here today, is to ask for your assistance.

16           RADM WEST: Okay, that's good. My next  
17 question is where does the FAC fit in, at what  
18 point do you bring it to the FAC, your hydro  
19 services Federal Advisory Committee, to take a look  
20 at what you're doing and get some expert advice?  
21 That should be probably in 2, right?

1 MR. EDWING: I agree. The last slide,  
2 let's talk and figure out how you guys --

3 RADM WEST: I suggest you do that. I  
4 haven't seen that since I've been here, I've been  
5 here for three years now. My recommendation to you  
6 is use the expertise this panel can provide as you  
7 develop these KDPs. That's my recommendation to  
8 you.

9 MR. EDWING: I fully agree with that.  
10 Any other questions on the process?

11 CHAIRMAN RAINEY: Could I ask a quick  
12 one? This looks to me like it's kind of answering  
13 my last question of how -- it seems to me if you go  
14 through this process at the end of the day and  
15 you're designated by the board or however you're  
16 explaining it there and you've got major project  
17 status, that seems to me you're first among equals  
18 in initiatives and I was wondering how many major  
19 projects are in NOS of the 13 that are existing  
20 right now? You mentioned IOOS and this one, which  
21 I assume is -- have you gone through the process,

1 is it designated or --

2 MR. EDWING: This has been designated as  
3 a major process.

4 CHAIRMAN RAINEY: This one is IOOS  
5 within -- you said --

6 MR. EDWING: IOOS is cross-cutting.  
7 We're working with them on a PBS system here, so I  
8 wouldn't say they're located in line offices.

9 CHAIRMAN RAINEY: Is there a possible  
10 answer? Are NOS-related like CO-OPS, Coast Survey  
11 folks involved?

12 MR. EDWING: I don't think there are any  
13 other NOS. There are no other NOS-centric major  
14 projects other than hydrography. IOOS cuts across  
15 all the line offices.

16 CHAIRMAN RAINEY: So like height mod or  
17 VDatum or NWLON and all the things we're talking  
18 about have not risen to, this is the one --

19 MR. EDWING: That's correct, but that  
20 does not mean that they won't be selected in the  
21 future. This is the first year standing this up

1 and we have 13 to run through and they're test  
2 driving the system this past year and there will be  
3 additional ones in the future.

4 CHAIRMAN RAINEY: Thanks a lot.

5 MR. EDWING: Any other questions on the  
6 process?

7 RADM WEST: I'd like to see the next  
8 time we get together you walk us through a specific  
9 project and how you did it particularly.

10 MR. EDWING: Sure, sure.

11 Okay. So this next part of the  
12 presentation is about where we're at in executing  
13 the hydrography major project.

14 We have completed key decision point 1,  
15 which again is all about establishing your  
16 requirements, make sure they're validated, scoping  
17 the project context, things I just spoke about. I  
18 did the briefing to the Ocean Council. It was  
19 endorsed. As part of that process they decided to  
20 establish a technical working group to provide some  
21 oversight for them, recognizing they didn't

1 necessarily have all the expertise around the table  
2 as well as the time to devote to this that really  
3 needed to be devoted. So Zdenka Willis is the  
4 chair of that technical oversight group. And KDP 1  
5 has been presented to NOAA executive panel, at the  
6 time I submitted this presentation the approval was  
7 pending but they have since approved KDP 1, which  
8 authorized me in the process to move on to KDP 2.

9           At the end of this presentation, I  
10 believe it's in your books, I attached the KDP 1  
11 briefing to the NOAA Ocean Council so you do have  
12 that for your reference. I'm not going to go  
13 through it.

14           RADM WEST: Sorry, I've been drinking  
15 coffee too long I guess. What I think would be  
16 more important to this panel is if you split the  
17 slide in half and actually follow through on the  
18 right what did you validate, et cetera, to walk us  
19 through to understand how you do your program  
20 management. Because this is kind of boilerplate  
21 stuff.

1 MR. EDWING: Yeah. In a half hour  
2 trying to cover what I'm trying to cover --

3 RADM WEST: My suggestion is get off the  
4 general regulations and walk us through how you do  
5 a decision process for a program. Something that's  
6 familiar to us and important to the Hydro Services  
7 Committee.

8 MR. EDWING: I'm going to get to that in  
9 KDP 2 and walk you through that in a more detailed  
10 level, because that's a key point where the FAC  
11 committee can step in and help provide input  
12 review.

13 RADM WEST: That's a good point. Your  
14 slide ought to say FAC committee, read the  
15 following and get back to me in 30 days what your  
16 recommendation is. Is that fair?

17 MR. EDWING: That's fair. At the end,  
18 the very end slide I wanted to have a discussion  
19 about how did you want to have interaction, so we  
20 can table that for a couple minutes, we'll get to  
21 that.

1           Just a few of the key things for KDP 1.  
2 This is a brand new project, we have to agree on  
3 these things up here such as the scope of the  
4 project, which is the 3.4 million square miles. We  
5 set an operational target of 510,000 square  
6 nautical miles, which falls at an annual target for  
7 10,000 and we've got a major shortfall of 7,000  
8 square nautical miles on an annual basis because  
9 we're only doing about 3,000 with the current  
10 resources. Part of that KDP was what's the scale  
11 of the dollars we're talking about here. We used  
12 kind of a mixed asset approach, we scaled up or  
13 ramped up I should say, contracts as well as some  
14 additional in-house capacity. And I think those  
15 numbers are in your presentation at the end. I'll  
16 just note that that's a generalized process, it's  
17 not in the president's budget or anything of that  
18 nature.

19           So how are we approaching KDP 2? The  
20 first thing to do is identify the alternatives,  
21 what are the paths that we're going work through to

1 get to the 10,000 square nautical miles? To do  
2 that we're going to take things that we do and  
3 break them down to the most basic building blocks.  
4 We acquire data through contracts, through in-house  
5 vessels, we manage data, we do tidal zoning. We've  
6 broken out what it takes to do hydrography down to  
7 these building blocks. And we're going to run  
8 those through some economic analysis and, after  
9 looking at that, try to put this back together and  
10 come up with this investment strategy. Pick the  
11 best one that's going to get us to the 10,000 for  
12 the agency.

13           So what are the alternatives? Kind of a  
14 foundational assumption here, this is something the  
15 FAC has already weighed in on, we need to maintain  
16 core expertise to provide proper oversight, so any  
17 alternative is going to start off with that basic  
18 assumption. One way to get from 3,000 to 10,000 is  
19 just ramp up contracts, do nothing else but ramp up  
20 contracts, that's one way to get there. Another  
21 way is do some sort of mix, ramp of contracts and

1 have some in-house capacity, that's another thing.  
2 And really something that we're going to overlay on  
3 top both those are technology infusion, a lot of  
4 potential efficiencies both in terms of just  
5 reducing costs and/or ending up with a better  
6 product by infusing technology. Our basic  
7 assumption is that will help move our in-house  
8 capacities as well as the private sector capacities  
9 forward in the same way. So we're going to look at  
10 that differently and overlay on top of those first  
11 two alternatives.

12           So those are the main three paths we're  
13 going look at to get to the 10,000 square nautical  
14 miles.

15           I talked about these building blocks.  
16 For each one of these things, such as acquiring  
17 hydrographic data with a contractor, in-house  
18 vessel or managing data, infusing technology, you  
19 have to say okay, for each one these things how  
20 much does it cost us to do that thing? When we do  
21 that thing, how many square nautical miles does

1 that produce? Because that's the unit that we're  
2 going to have to use to tie all this stuff  
3 together. Is there a schedule associated with how  
4 you roll something, how you project something  
5 forward like that? For all those building blocks  
6 we're going to have to document all the assumptions  
7 we're making, because nobody has crystal balls into  
8 the future, so we're going to have to make certain  
9 assumptions about providing the basis upon which  
10 we're making some of these projections.

11 I'll give you some more detail on the  
12 building blocks after I walk through the next  
13 couple of steps of the KDP process. Our guidelines  
14 for doing this is the economic analysis of using  
15 the U.S. Navy handbook, which has a lot of good  
16 information on major acquisitions. Circular A-76  
17 provides all the guidance for direct costs,  
18 indirect costs. Looking at a five-year window,  
19 2010 to 2014. Operational cost projections. NOAA  
20 is just starting its 2010 budget planning at this  
21 point in time. We're going to look at a longer

1 time window for the capital costs of any new vessel  
2 or major technology and things like that.

3           Again, technology infusion, there's lots  
4 of different technologies and different kinds of  
5 technology, sensor technology, positioning  
6 technology, data management technology, there's all  
7 sorts of technology we would have to look at, but  
8 we decided the way to handle all that and make it  
9 manageable is if there are things we see as being  
10 infused within that 2010 to 2014 time frame, we  
11 were fairly comfortable with the good cost numbers  
12 and good production numbers from those, we're going  
13 to include that in our building blocks. If there  
14 are things just over that horizon that are showing  
15 promise but we don't have really good costs on,  
16 really good production estimates on, we're going to  
17 identify those and use risk mitigation.

18           The same thing goes for IOCM, you heard  
19 from Steve's presentation, there's a lot going on  
20 there. How it all plays out is not real clear at  
21 this point. It's clearly going to have an impact

1 on what we're doing with hydrography but we can't  
2 quantify that, so again we're going to do some risk  
3 mitigation on our project plan and investment  
4 strategy to deal with that. And at the higher  
5 level, as Steve talked about, NOAA is looking at  
6 multi-mission vessels which go beyond a mapping  
7 mission, which also plays into that. Risk  
8 mitigation is associated with that.

9           So when we get through all that analysis  
10 and come up with a, come up with what we need to  
11 try to pick our investment strategy, some of the  
12 criteria we're going to use, it's got to be a cost  
13 effective strategy. It may not be the lowest cost  
14 one because there's other things to consider but  
15 it's got to be cost effective, it's got to be  
16 executable obviously. We can't ask for everything  
17 in the first year or there's no way it's  
18 executable. We have to minimize the risk of  
19 things. Things in the world are always changing,  
20 how do we mitigate some of those risks,  
21 technologies, that sort of thing, and of course we

1 have to maximize the support we are going to get  
2 for this from both internally and  
3 administratively. How's Congress going to  
4 receive this? And the stakeholder support, which  
5 is again is where you play a key role as you  
6 represent that community.

7           That's kind of the four subcategories  
8 that I've broken down KDP 2 and that's how we're  
9 approaching to answer your question.

10           I'm going to back up a little bit and  
11 talk more in detail about the building blocks.  
12 Some of these we're calling direct data acquisition  
13 building blocks where we use contract services to  
14 acquire hydrographic data. Of course that can vary  
15 by survey type, survey location, depth, bottom  
16 type, those sorts of things, including sidescan,  
17 multibeam, LIDAR technologies and things like that.  
18 In acquisition we're including in-house data  
19 acquisition, the existing four vessels that we've  
20 dedicated to hydrology right now. Those have  
21 variable costs as well, different sizes vessels

1 have different costs. We need to maintain some  
2 level to maintain expertise. And we're looking at  
3 new vessels. Again, all sizes of new vessels that  
4 could be built to handle different complements of  
5 launches. Different variable costs of production.  
6 Right now NOAA is considering NOAA survey vessels,  
7 which are these multi-mission type vessels which we  
8 may get away from dedicated vessels. It's not  
9 clear how that's going to move forward at this  
10 point, so I have to do risk mitigation.

11 Technology infusion, another direct data  
12 acquisition. Some of the things we're looking at  
13 within that five-year window where you have some  
14 fairly good costs and scheduled performance  
15 estimates or AUVs and there's different flavors of  
16 those, there's salinity, multibeam, moving vessel  
17 profilers you can put on the main vessels that are  
18 continuously looking at the salinity and density of  
19 the water column that's needed to adjust soundings.  
20 Those are just some examples of things within the  
21 2010 to 2014 time frame.

1           There's data acquisition support  
2 building blocks. There's the human capital that  
3 does all the survey planning, all the contract  
4 management, all the data management, as well as ITS  
5 has to go along with that. There's tide control  
6 process when you're doing tidal zoning or when you  
7 do a new data acquisition you need short-term tide  
8 gauging quite often. So you need to take a look at  
9 performance for all of those.

10           And of course human capital is always a  
11 large part of any project. We're doing kind of one  
12 main piece, which is what's the human capital  
13 component we need to really maintain core expertise  
14 as well as ramp up, whatever way we ramp up, how do  
15 we have to increase that. Of course each one of  
16 these building blocks may have a small human  
17 capital piece developed along with it because  
18 that's part of the cost of doing that piece. If  
19 you're going to be integrating AUVs you may have to  
20 ask people with special skills to maintain those,  
21 maintain and deploy the assets.

1           So that was a little bit more detailed  
2 look at KDP 2. Right now we're just at the  
3 building block stage, still gathering a lot of  
4 information. In some cases even at a building  
5 block level we have to look at some alternatives on  
6 how to project costs forward. There are different  
7 ways to go forward. As we drill down into some of  
8 these things we're finding some complexities we  
9 have to deal with. So we're really pretty early in  
10 the KDP 2 process.

11           As I pointed out in a couple places in  
12 this, the process requires external review for this  
13 to be communicated across all venues. HSRP has  
14 already done some work, we pulled up some of the  
15 recommendations and documents that HSRP's already  
16 generated and used that as some of our guidance for  
17 starting to stand this up.

18           I'm here to ask that you work with me on  
19 KDP 2 and I guess we can do it a couple of  
20 different ways depending on timing. When I'm ready  
21 to come back with a draft KDP 2 I can come to

1 another meeting like this or you guys can do a  
2 virtual review. Do you want to participate, how do  
3 you want to participate?

4 CHAIRMAN RAINEY: Maybe this is a good  
5 time to ask a question. At first I think I  
6 misunderstood. So you don't have to go to be --  
7 you've achieved you said the designation for a  
8 major project.

9 MR. EDWING: That's correct.

10 CHAIRMAN RAINEY: I thought that meant  
11 that you've gone through the whole process. So to  
12 be designated you only have to show sort of the  
13 steps, you have to kind of commit and persuade  
14 folks up the chain that you're going to complete  
15 the process, you've completed KDP 1 and then that  
16 was enough to say okay, that looks like a  
17 meritorious project, we're going to designate it  
18 and go forward?

19 MR. EDWING: It's designated up front by  
20 virtue of NOAA's making a significant investment.

21 CHAIRMAN RAINEY: You must have, I'm

1 going to call it a business plan, but you must have  
2 to submit something to persuade the panel that  
3 this -- there's only 13 in all NOAA. There's got  
4 to be something, there have been some answers to  
5 all these questions up front, otherwise how are you  
6 going to persuade somebody they want to give it the  
7 designation.

8           For example, one of the first things is  
9 define the need. What is the problem statement or  
10 what's the gap or the need, is that something you  
11 could share with us or how you define that? I'm  
12 kind of wondering where the answers are in the  
13 process. I'm understanding you're now in KDP 2,  
14 but I really would be interested in kind of what  
15 the main answers or assumptions are that got the  
16 project designated, that approved it through the  
17 board and then where we are, where we can help.  
18 Does that make sense?

19           MR. ZIKLOSKI: Rich, why don't you  
20 explain the process, in terms of how the 13 were  
21 established, because -- in the future what you're

1 saying is exactly what would happen. Somebody  
2 would have to convince NOAA. They look through  
3 what we've done in the history and say this is a  
4 major project because of how much effort we're  
5 putting into it. It's already established that  
6 we're doing it, so we're trying to fit some  
7 existing programs we're doing into this system so  
8 that in the future new programs would do that, but  
9 these are existing. Rich didn't go and ask -- they  
10 said we have these 13 major projects.

11 CAPT BARNUM: Ultimately the dollars put  
12 it in the category of a major project. So when  
13 they looked at these initial projects, 13 qualified  
14 for lack of a better word to be hydrographic major  
15 projects because of the dollar value associated  
16 with it. So NOAA is looking at these high dollar  
17 projects and wants to make sure they're executed  
18 properly so basically giving hydrography high  
19 visibility within the organization?

20 MR. EDWING: Right. These are all  
21 existing projects that we're kind of circling back

1 and filling in some of the paperwork now if you  
2 will for those. In the future if they would  
3 consider a major new project, a new satellite, some  
4 new building, then you have to establish what are  
5 the requirements. You'd have to go through this  
6 KDP 1. If you don't pass that you're not going to  
7 move forward with that project.

8 CHAIRMAN RAINEY: Adam.

9 MR. MCBRIDE: Is there some question of  
10 whether hydrography is a major project and are we  
11 in fact taking a project or an actual process, a  
12 core process that we've been doing for hundreds of  
13 years and backing it into some new process and what  
14 effect is that going to have in terms of what you  
15 actually do, what consequences, are we changing  
16 hydrography by telling some ocean panel what that  
17 involves? I have no idea why we're doing this.  
18 Basic question.

19 MR. EDWING: It puts this project under  
20 a high level of review. I mean at the end of this  
21 we have approved all the way up to the vice admiral

1 level an investment strategy. Right now across  
2 NOAA you can put forward projects and pitch them  
3 through the PBS process, but those aren't bought  
4 into across the board. Through the major project  
5 process, this gets flying across the board, all the  
6 NOAA line offices from NOAA budget office, from all  
7 of the different elements --

8 MR. MCBRIDE: Is NOAA not already  
9 committed to hydrography?

10 MR. EDWING: It is. But they're  
11 spending a lot of money on this and they want to  
12 make sure it's planned and executed to the highest  
13 degree available. And it's a process that helps  
14 ensure it and document it. So it may be we might  
15 change how we do business or it may be we're just  
16 going to validate that the way we are doing it and  
17 have been doing is the best way possible forward.  
18 I don't know the answer to that right now until we  
19 get through this process.

20 RADM WEST: Probably should have started  
21 the whole lecture, I'm sorry, presentation by what

1 you just said, you are trying to put some structure  
2 into where there wasn't structure before. The PBS  
3 system, you don't want to go there. It's a DOD  
4 thing where you actually go to school before you  
5 take a staff position, so it's that complicated,  
6 they're trying to put some program management  
7 structure into NOAA, which is important, because,  
8 quite frankly, in the past programs have been done,  
9 stovepipe, in places around, they're trying to put  
10 this across the budget process and get involved and  
11 I totally support what you're doing.

12           The problem is you're confusing the  
13 advisory committee. We're there to help you with  
14 hydrography and hydro services and we're getting  
15 confused. What you've just said is they're trying  
16 to put some management structure into regional  
17 programs. Most federal agencies have requirements  
18 for designation of major programs, usually it's  
19 cost, the number of public money put into it, could  
20 be life support systems or public interest or  
21 whatever, but we should see from you what your

1 criteria is in NOAA for a major program and then  
2 show what you're trying to put hydrography into  
3 that, but more important take advantage of the  
4 expertise that you have in this committee that's  
5 called an advisory committee for a good reason, to  
6 advise you. KP whatever it was, 2, you were trying  
7 to look at the technologies for the five year,  
8 whatever it was, from '10 to '14. Bring it to this  
9 group. I know there's a lot of expertise here in  
10 this. At what time do you bring that to this  
11 group? That's what we want to hear. Anyway --

12 MR. EDWING: I'm here to work with you  
13 on how you want to interact in this process.

14 RADM WEST: I'm on a roll. Don't just  
15 say what can you do for me, tell us what you want.  
16 In 60 days, 90 days or my next milestone is  
17 November, I need the input on this. Mr. Chairman,  
18 co-chair, can I get a subcommittee to work with me,  
19 whatever you want. This goes for some of the  
20 questions from yesterday. I mean I got glazed over  
21 and they said we need you to help us. Help you do

1 what? Let us know. Everybody's busy, they're all  
2 going to leave and go back to their job. We've got  
3 a lot of expertise in this committee and you're not  
4 using it. Didn't mean to stop. I'm running on  
5 empty, appropriation letters are due tomorrow  
6 morning.

7 MR. EDWING: I'll be glad to come back.  
8 I can look and see what steps would be appropriate  
9 to send material to the committee for you. Sending  
10 stuff sometimes doesn't work very well for virtual  
11 reviews.

12 RADM WEST: I think what you should do  
13 is give it to our chairman and the co-chairman and  
14 we'll decide how to best get that back to you.  
15 Give us some time lines and questions related to  
16 it, we'll either do it or won't do it, one of the  
17 two.

18 CHAIRMAN RAINEY: I guess that's where I  
19 was kind of going. It had gone through the first  
20 step, so there has been a problem statement or the  
21 need that's been defined and I think that would be

1 a great place to start if we knew what NOAA  
2 thought. We presented our report. I guess, you  
3 know, I've had a lot a talk with the members and  
4 things and I think we've come a long way, in some  
5 cases just speaking generally I think our  
6 experience is we're running on parallel tracks and  
7 trying to stay relevant but it's taken a lot of  
8 effort sometimes to try to get our phasing right or  
9 whatever. So the more kind of focused, if  
10 everybody knows what we can do and the timing of  
11 it, that will help us tremendously and be on point.  
12 I think our report is good that we delivered  
13 yesterday. If we kind of know where you guys are,  
14 I realize you're doing a million different things,  
15 but if we can focus our problem statement down to  
16 something we can get our hands on and get back to  
17 you it would be a good idea. I guess if we knew  
18 what NOAA thinks the need is and the requirements  
19 and then where the different, you know, where we  
20 would be useful to provide some input or validation  
21 or comment on the submissions of the different way

1 points as you go through the process with some lead  
2 times so we can respond. We can't turn it around  
3 in a day. It's been a difficult thing, the HSIA,  
4 it was too early to comment and then too late to  
5 comment. We're getting caught between the switches  
6 continuously. So maybe with the major projects as  
7 that process ramps up might be another process --

8 MR. ARMSTRONG: Andy Armstrong. Rich, I  
9 think what you're seeing here is a little  
10 indication of the fact that the panel's a bit  
11 stunned that this is going on. We're already  
12 through the first step. The panel has been working  
13 on lots of advice and it's just now hearing about  
14 this project.

15 MR. DASLER: Jon Dasler. I guess I want  
16 to get some clarification. It sound likes we're  
17 talking about reestablishing the basic groundwork  
18 for why NOAA is doing hydrography and we're seeing  
19 a lot of good budget issues, as Lou pointed out,  
20 NOS dropped 122 million from '06 and the National  
21 Weather Service is up 82 million, and this seems

1 like a real opportunity -- I'm assuming once you  
2 get buy-in, the jump to 10,000 square nautical  
3 miles per year and what is all put into this, that  
4 that could increase the base. Is that just a  
5 logical follow-on? This then is a pretty major  
6 component of the existence of Coast Surveying and  
7 those operations, yeah, I guess I'm surprised we're  
8 just hearing about this now. It seems like a  
9 pretty involved effort that really hinges on a lot  
10 of the core hydrographic components and what NOAA  
11 is doing.

12 MR. EDWING: Point taken, Andy. There's  
13 a couple of reasons. Again, this is a brand new  
14 process. There have been some pickups this past  
15 year, we're really reluctant to kind of take it out  
16 on the road yet. For all these projects I think  
17 the satellite, one of the satellites, it's not that  
18 NOAA is going to decide not to go forward with  
19 satellites, but what they're saying is just want to  
20 be sure we've crossed all the Ts and dotted all the  
21 Is as far as filing the paperwork if you will to

1 make sure we've documented the requirements  
2 properly. This is -- I see KDP 1 as catching us up  
3 to where we are today. A lot of this is a look at  
4 work that this group had done and put up on its  
5 website as far as looking at hydrography and the  
6 core expertise and things of that nature. So yes,  
7 we're coming to you for that direct, I guess oral  
8 interaction, but we were using the work that you've  
9 done to get to this point, but this is the point  
10 that's really important, is now how do we move  
11 forward. That's where I think you play a very  
12 valuable role. I'll work with Scott and whoever  
13 else you'd like to designate to look at our varying  
14 schedules and other things and just try to see how  
15 to mesh, how both of these, your process and my  
16 process are working so that you can play a role in  
17 this and decide if you want to play a role in this.

18 MR. ZIKLOSKI: What Dick said is what I  
19 tried to document in your Tab L in the very back  
20 after my presentation. I had an issue that I got  
21 tasked on, what I wanted you to do from that

1 standpoint, I'm curious if that's what you're  
2 talking about, a date specific like that. I don't  
3 know if it's clear or not, but in the very back of  
4 my presentation, this is something that if this is  
5 what we ought to start -- we don't need to talk  
6 about it now, but from the committee, the group, if  
7 this is enough guidance, then this is good. If not  
8 then we kind of tweak how we do this task so that  
9 we give you enough information and maybe go back  
10 and forth. But then someone like Rich could come  
11 in and say yeah, here's what it is and I'll follow  
12 this format.

13           RADM WEST: There's lots of specifics, I  
14 think you want the Federal Advisory Committee to  
15 endorse your major program structure. In order to  
16 do that or get me to sign up, I'll sign up on the  
17 oversight, but as far as the ten-year survey and  
18 square miles, I know Jon and Andy can give you that  
19 expertise, but we've got to have something to go  
20 by.

21           CHAIRMAN RAINEY: I don't know, maybe

1 you can answer this either way, but do you have or  
2 could you paraphrase how NOAA came out on the need,  
3 the statement of need or purpose, or if you don't  
4 have that, I don't know if you had a chance to see  
5 our preliminary final report, was that consistent  
6 with NOAA's statement or purpose of need for this  
7 major project? I just would love to know how you  
8 framed it because that really drives what, you  
9 know, to me, everything else and what that sort of  
10 proposition is at the outset. KDP 1, what is the  
11 need description?

12 MR. EDWING: Well, that's what's at the  
13 back here with a description of what is hydrography  
14 so people have an understanding, and there's a  
15 description of why you need to know what the depth  
16 is, because otherwise ships will hit that bottom  
17 and bad things will happen.

18 CHAIRMAN RAINEY: I mean to the extent  
19 of what's the shortfall, right?

20 MR. EDWING: There's the need and  
21 there's the requirement. Steps through some other

1 things. Here's where we get into the 3.4 million  
2 square nautical miles, we set an operational target  
3 of approximately 500,000, out of that falls the  
4 10,000 annual requirement. That's all covered in  
5 this, this was the presentation.

6 CHAIRMAN RAINEY: Was it refined to the  
7 point where you had a projected timetable, at some  
8 point you want to get to there? I'm just kind of  
9 wondering how defined this thing is. I know the  
10 problem is you're not controlling the resources you  
11 have to put into it and just maybe project some  
12 technological efficiencies and some other things.  
13 I just kind of --

14 MR. EDWING: Some of what you're saying  
15 is what we're trying to figure out in KDP 2; how  
16 are you going to get there and how much of that  
17 cost are you resourced at that level, so we're  
18 trying to figure out what's the best how, you know,  
19 how that will fall into some of those other  
20 answers.

21 RADM WEST: I guess the question I have

1 for NOAA, I think it's good it's been designated a  
2 program of significance, but I don't know what that  
3 means, does that mean when the money goes down that  
4 they're the first to be fed or what does it mean?

5 MR. EDWING: It means -- you asked what  
6 are the criteria --

7 RADM WEST: It's important but what does  
8 important mean? Is it 12 or 13?

9 MR. EDWING: There's 13.

10 RADM WEST: 13. Well, that's good, I  
11 think hydrography ought to be a major project, but  
12 what does that mean, more oversight, does it get  
13 more money, when money goes down is it first to be  
14 upheld and the minor programs get it next? What  
15 does that mean?

16 MR. EDWING: It's going to improve its  
17 chances to get more funding, not to be a  
18 bulletproof vest against cuts, those are happening  
19 for whatever reason, but it's going improve its  
20 chances to get funding. We now have an investment  
21 strategy right up to the highest level of NOAA

1 endorsed by the vice admiral himself through the  
2 process. Nobody can throw rocks at it and say  
3 you're going about it the wrong way because NOAA  
4 has decided we're going to do it. I can also tell  
5 you the OMB examiner is very interested in this.  
6 So this will pay dividends not just within NOAA but  
7 pay dividends to DOC and this is a hammer we can  
8 use.

9           RADM WEST: Absolutely correct, and  
10 that's why you put good program management in  
11 place, so you get credibility up the line. In  
12 order to keep it, sustain it, you've got to be able  
13 to show that it is a major program and you're  
14 supporting it that way. That's the key. Next year  
15 it falls down and loses money, you lose all your  
16 credibility.

17           MR. DASLER: Along those lines, my  
18 question back to you, to me it seems like a pretty  
19 key process, are you getting the resources to do  
20 this? Seems like this really could drive the  
21 future of hydrography.

1 MR. EDWING: You're right. This is an  
2 in-house effort. I'm gotten very good cooperation,  
3 collaboration from across different NOS programs  
4 that are on the team as well as OMAO. It's not  
5 going as fast as I'd like. This is a fairly select  
6 group of people who have the skills to do this and  
7 they're tasked with other things, this isn't the  
8 only thing we're all doing, so it's not going as  
9 quickly as we'd like, but it's moving forward.

10 CHAIRMAN RAINEY: Thanks for all this  
11 interaction, this really helps us catch up with the  
12 focus. One of the things I wanted to ask you when  
13 you were showing through the different slides, what  
14 we have up there is the area of course. I want to  
15 ask just one other thing. In the scope of this  
16 then, when you were looking at the various  
17 alternatives and such, you looked at the in-house  
18 and contracting and the combination. What my  
19 question is is under this umbrella of this major  
20 project status, would this subsume or would this  
21 include the fleet recapitalization, would this

1 include not only the surveying side but through the  
2 pipeline to, you know, mapping and charting and  
3 then dissemination of the project? Would the ENC  
4 project fall under the umbrella of the  
5 hydrographic, this major project or is this simply  
6 on the survey side?

7 MR. EDWING: It's mainly on the  
8 acquisition side. There had to be some bounds  
9 drawn someplace, this is mainly on the acquisition  
10 side. All the data management is in there, which  
11 is a big part of it.

12 CHAIRMAN RAINEY: To me that, the  
13 immediate flag I would see with that is if we keep  
14 putting on that side of the equation, on the  
15 acquisition side, and say we're successful, which  
16 would be a good thing, but at the end of the day  
17 you want to get it out of the can, process it into  
18 your end user, and if there isn't some balancing,  
19 if we super prioritize the acquisition side I think  
20 we're already in a state where we've got to  
21 equalize a little bit across that whole process

1 because you want to have a place for that data to  
2 go. So I don't know whether there's a scoping  
3 adjustment or if that's been thought through. Is  
4 that a concern?

5 MR. EDWING: Yes. I appreciate your  
6 concerns and in some respects I don't disagree with  
7 them, but we did think that through and drew the  
8 lines with care. We did not include production of  
9 the nautical chart for a couple of reasons. One is  
10 there's a lot of other things going into making a  
11 nautical chart, there's shoreline and things of  
12 that. Do we start including that? And for tide  
13 support --

14 CHAIRMAN RAINEY: It seems it would be  
15 ironic to go through all this and put a huge effort  
16 in it and have the ENC just crash, just be stuck.  
17 It wouldn't include the rationalization of the  
18 processes and the one digital process, this is  
19 really focused then on just the surveying side of  
20 this.

21 MR. EDWING: And that's why we

1 purposefully included the data management processes  
2 between the hydro acquisition and the nautical  
3 charts so that's where the major ramp-up is. As  
4 you know, multibeam use such huge amounts of data,  
5 so we are capturing the requirements to manage  
6 processed quality control, those data before they  
7 get to the nautical charts, so we believe we've  
8 dealt with that problem.

9           RADM WEST: I think you're getting good  
10 advice from the committee already. Can you back up  
11 one slide please? Which one defines what  
12 hydrography is? Okay. I read this as hydrography  
13 is a major project in NOAA, covers everything, but  
14 what you just said in response to Scott was it does  
15 not. And that's a problem I think because, like I  
16 said, some of it, not all of it, then it's not  
17 successful. So I think you've got a little bit of  
18 a problem here in how you defined hydrography as a  
19 major project.

20           MR. EDWING: Some of it goes back to the  
21 DUS designation where there's a dollar amount there

1 that includes certain things and I was bound by  
2 those. And we looked at that. We didn't say yeah,  
3 we're going to just blindly accept that and again  
4 for some of the reasons I just went through we took  
5 the balance.

6 MR. ZIKLOSKI: Wouldn't that be part of  
7 the function of this panel? To me that's part of  
8 what --

9 CHAIRMAN RAINEY: We think so, but we've  
10 got to know what's going on. We're smart but --

11 MR. ZIKLOSKI: I understand. Just a  
12 little bit. One of the many processes in NOAA  
13 we're trying to improve. Part of what I would say  
14 when we come here and Rich does something like  
15 this, we'll get better as we move on. But for now  
16 what you just said is an important aspect, we need  
17 to make sure it comes back to us, we should take  
18 that message back, do we change this major project  
19 or look and see how this major project should be  
20 linked to other ones so there's some way of making  
21 sure there is one, and I think there would be-- my

1 point is it gives credibility to Rich. If it comes  
2 from this board saying hey, we heard about your  
3 major project, here's your KDP 1, should it come  
4 here prior to going to the council and so forth to  
5 get some advice, that's true, but that's already  
6 passed. But still, taking that back is some good  
7 message he can use to think how it incorporates it.  
8 From now on we figure KDP 2 as he's gone through,  
9 he ought to have some sub working group here as  
10 he's putting the material together that he runs it  
11 back and forth, not the whole committee but a  
12 working group to say here, I'm going to get these  
13 ideas to you and get your comments as I'm building  
14 it and come to you prior to doing it. So that's  
15 what I would say the role of the panel would be.

16 DR. LAPINE: Rich, I have a problem with  
17 that definition of hydrography. You can't do  
18 hydrograph without tide and you really can't define  
19 the zero fathom curve without shoreline. So I  
20 don't think that is a good definition of  
21 hydrography.

1 MR. EDWING: The shoreline goes on the  
2 chart.

3 DR. LAPINE: And while we're talking  
4 about that, the need isn't to make a nautical  
5 chart. If that's our need, we're going to go from  
6 number 13 to zero. Our need is to prevent ships  
7 from running aground. The need isn't to feed data  
8 to a piece of paper or electronic chart.

9 MR. EDWING: I think you're getting to  
10 this.

11 DR. LAPINE: It's not compelling. I  
12 wouldn't buy it. You need to go out there and  
13 collect some soundings so you can make a chart? So  
14 what if I don't make a chart? What's the  
15 consequences of not having a chart? I think that's  
16 the need, not to fill a database full of numbers.  
17 So that worries me. And if I'm going to be under  
18 the scrutiny of the administrator, I'm going to  
19 want to have a more compelling case for why I need  
20 to do hydrography and I think it's a serious  
21 mistake to leave out tide and shoreline.

1 MR. EDWING: Tides was not left out,  
2 that's in there. The shoreline was left out. It  
3 was outside the bounds because it feeds into the  
4 chart in parallel with the hydrographic data  
5 acquisition.

6 DR. LAPINE: If we form a subcommittee  
7 and I'm on that subcommittee I guarantee you we're  
8 going to recommend that shoreline be part of the  
9 definition of hydrography.

10 MR. SKINNER: Tom Skinner. I just  
11 wanted to make sort of a general comment. This is  
12 directed more to Captain Barnum. Something that  
13 Admiral West mentioned was very important for  
14 future briefings, we've had a lot of very good  
15 briefings from NOAA folks to bring us up to speed  
16 but I think it's important in the future to frame  
17 all the future briefings with what does NOAA  
18 recommend we do with the information we're about to  
19 receive and be able to start by saying, you know,  
20 there is a role that the FAC can play on this  
21 particular issue, here's what we think the role is,

1 let us give you some background on where we are or  
2 what the issues are and then sort of frame the  
3 issue for us to then do something with the  
4 information. I think we're at the point where we  
5 have the background information, the general good  
6 knowledge of what hydrographic services are, but in  
7 the future it would really help to focus on what we  
8 do with that information, to have that up front.

9 CHAIRMAN RAINEY: Would it be acceptable  
10 if we get a group -- we've got some time this  
11 afternoon where we're going to be looking at going  
12 ahead. This is certainly something of huge  
13 interest to us and it sounds like it's a positive  
14 step in getting the management and oversight in  
15 there. If we get a working group or some folks  
16 that are interested, we have a couple things, fleet  
17 recapitalization and there may be a couple others  
18 that come out of the meeting, but this one will  
19 sure be a high priority for us. It seems to me  
20 it's exactly what we're stood up to help with. If  
21 we can get a working group together and work

1 closely on where you are in that process and then  
2 how to best gauge moving forward. Like you said, I  
3 hope that the work we've been doing, you've been  
4 able to benefit from that or use that from the  
5 recommendations and I hope our report's helpful as  
6 well. Would that be an acceptable way? We'll get  
7 a group of folks who'd be willing to work with us  
8 on that and kind of be our team on that and we can  
9 kind of work with you to help frame it where you  
10 think we can put to best effect.

11 MR. EDWING: Certainly, I'll be glad to  
12 work with you on that. If that approach doesn't  
13 work we'll find a different approach. The key  
14 group has to weigh in on this, we have to find a  
15 way.

16 CHAIRMAN RAINEY: Again kind of in the  
17 fog of working with the budget this year, once you  
18 get this designation, does it last on and on and  
19 the agency commits to it or do you have checkpoints  
20 where you can lose the designation? Is there  
21 anything between now and the end of the fiscal year

1 that you would see you'd need from the panel? Is  
2 there any near term input or interaction?

3 MR. EDWING: The first chance of this to  
4 have any impact is going to be 2010, because that's  
5 where we're starting to plan this investment  
6 strategy. That's where NOAA is in its current  
7 planning process. This fiscal year is not  
8 particularly relevant to this. It's more just  
9 what's the schedule we're going to try to move  
10 forward on and how does that match up with your  
11 request.

12 MR. ZIKLOSKI: One thing, Rich, what's  
13 your best guess that you're going to try to have  
14 your KDP 2 done?

15 MR. EDWING: I want to have it done  
16 hopefully by the end of this fiscal year.

17 MR. ZIKLOSKI: To me that's what he's  
18 asking, what can they do and what can you do to get  
19 some of the information from the committee so they  
20 have input into your KDP 2, which is what you want,  
21 and it should go through the NOAA process much

1 better if you get the input of these experts.

2 Clearly you can turn around and say they had input  
3 into it when you get pushed back to some of your  
4 things back at the office, so that's what I would  
5 look at. I think that's what you were trying to  
6 get at.

7 MR. EDWING: We're trying to, shooting  
8 to get KDP 2 at least ready for presentation before  
9 the end of this fiscal year.

10 CHAIRMAN RAINEY: Well, I would suggest  
11 maybe if we could then, maybe we can get together  
12 and get a group of volunteers here, maybe everybody  
13 will want to be on it, this afternoon. Maybe our  
14 first step would be to look at where you are on how  
15 to deliver that and give us some specific focus  
16 questions or help frame it and we'll get that to  
17 the group and see if we can get back to you on that  
18 in a time frame.

19 MR. EDWING: Thank you. Anything  
20 further?

21 CHAIRMAN RAINEY: Thanks a lot.

1           Okay, we'll do one more presentation and  
2 then we'll take a break. It's a pleasure to have  
3 Captain Parsons back with us and we sure appreciate  
4 all his help and leadership as our designated  
5 federal officer and he's going to talk with us  
6 about the fleet recapitalization study with the  
7 Office of Marine and Aviation Operations.

8           CAPT PARSONS: Good morning. Again my  
9 name is Roger Parsons. It's good to see a lot of  
10 you -- all of you.

11           CHAIRMAN RAINEY: Appreciate your  
12 honesty, sir.

13           CAPT PARSONS: I know the hardest job in  
14 this room is the gentleman trying to keep track of  
15 what everybody's saying, so let me know if I'm  
16 speaking a little too fast.

17           I'm with a company called BMT Designers  
18 and Planners under contract to the Office of Marine  
19 and Aviation Operations. What I have been asked to  
20 do is to develop a ship recapitalization plan, and  
21 this is an important issue. It follows fairly

1 closely with what Rich and others are doing in  
2 major projects in NOAA. Although we're answering  
3 the mail from the Hill, back in 2005 the  
4 Appropriations Conference Report requested that  
5 NOAA develop a ship and aircraft modernization  
6 plan. It was realized that NOAA ships and contract  
7 vessels were important to meeting the data  
8 acquisition needs of NOAA. But truth be known,  
9 NOAA has never had a comprehensive investment  
10 strategy for maintaining a fleet. NOAA has a fleet  
11 of 19 ships, average age of about 28 years. That's  
12 down considerably from where it was a couple years  
13 ago. But the Hill realized that the maintenance of  
14 a fleet and the acquisition of ships was not due,  
15 over the last five or seven years due to some  
16 comprehensive strategy that NOAA had. We, NOAA had  
17 acquired T-AGOS vessels, seven of them right now,  
18 because these vessels became available, and it was  
19 fortunate that they had, to replace aging ships.  
20 NOAA built the RONALD H. BROWN by coming onto the  
21 end of the Navy contract, reeled in three previous

1 ones. The old GUYANA 64 (phonetic), another T-AGOS  
2 vessel, was acquired and funded for conversion  
3 because of an earmark. The SWATH vessel will be  
4 under construction soon because of an earmark. So  
5 the Hill was concerned that the method that NOAA  
6 was going about to maintaining a fleet was not  
7 comprehensive enough or was not a smart business  
8 practice and they needed to develop a comprehensive  
9 investment strategy. Certainly nobody can argue  
10 with that.

11           NOAA over the years has developed a  
12 number of port modernization plans, a number of  
13 requirement documents that attempted to define the  
14 needs of the organization and the needs of  
15 supporting them with infrastructure in terms of  
16 ships, satellite, aircraft and so forth. Only a  
17 very few of these plans, if you will, have made it  
18 through the organization and have gone to the Hill.  
19 So there is not something to educate the  
20 authorizers, to educate the appropriators as to why  
21 there's a need for aircraft, a need for ships to

1 satisfy at-sea data acquisition. It's more than  
2 just ships are getting old, it's more than just  
3 NOAA has requested nearly 20,000 operating days to  
4 satisfy their missions. It's got to be something  
5 more than that, it's got to be a process that lays  
6 out why we do, why what NOAA does is important,  
7 what the impacts of not doing it are and how we can  
8 meet those needs.

9           So back in early 2006 NOAA submitted a  
10 plan, it did not make it through the organization.  
11 NOAA came to BMT and asked if we could take a look  
12 at the best way to go about developing this  
13 comprehensive plan.

14           NOAA is late on answering mail. I'll  
15 talk to you a little bit about the schedule that  
16 was set out. We're going to approach this in two  
17 parts. One is a ship capitalization plan, the  
18 other is an aircraft recapitalization plan. And  
19 I'll describe the ship plan in terms of three major  
20 parts. The recapitalization plan, an interim study  
21 to address fishery surveys vessels 5 and 6 and then

1 the eventual report to Congress. What I will be  
2 asking the Federal Advisory Committee to do is two  
3 things; one, take a look at the approach we're  
4 taking, does it make sense as I was describing.  
5 Two, the draft recapitalization plan, our goal is  
6 to have it completed in September. We want this  
7 committee to take a look at it. Again, as you see  
8 what I described, this is not a plan for building  
9 ships. This is plan for describing the needs and  
10 requirements and the optimization of some mixture  
11 of governmental assets and contractor assets, and  
12 we need your feedback because you are a diverse  
13 group, we have hydrographers, we have coastal zone  
14 managers, we have vessel operators. It's important  
15 to get that feedback and get your perspective on  
16 what we're doing.

17           So there are primarily four major  
18 components of the recapitalization plan  
19 development. One is the mission needs assessment,  
20 the next is requirements development, then an  
21 analysis of alternatives, then an optimization

1 analysis. While we're developing these, what is  
2 not being developed is standalone documents,  
3 they're components of the overall capitalization  
4 plan. I'll discuss each one of those as we go  
5 through it. We started this process in January.  
6 The end goal is in October to report to Congress  
7 and in October the recapitalization plan and its  
8 completion.

9           So what do we mean by a mission needs  
10 assessment? We need to define NOAA's missions in  
11 terms of those programs that have a requirement for  
12 at-sea data. We're asking the programs -- and of  
13 the 46 NOAA programs there are roughly 17 of them  
14 that have current at-sea data requirements and an  
15 additional three or four that will have future  
16 requirements. We're looking at the period from FY  
17 '09 to FY '24, a 15-year period. What are the  
18 needs, what are the future needs of NOAA and how do  
19 we satisfy those. We're not defining the mission  
20 needs in terms of ships, we're asking programs  
21 forget about ships, forget about aircraft, forget

1 about satellites, what is it that you do, what are  
2 the requirements of your program, what are the  
3 shortfalls, and I think Lou had a good point there.  
4 What we're asking, we'll be describing the  
5 shortfalls in capability, not in terms of we don't  
6 have enough days, we don't have enough plane hours,  
7 but what are the socioeconomic impacts of not being  
8 able to satisfy each mission. Hydrography, MTS, a  
9 10,000 square nautical mile goal currently  
10 acquiring 3,000 square nautical miles a year with a  
11 7,000-mile gap, what does that mean? What are the  
12 socioeconomic impacts of not closing that gap?  
13 What are the benefits of closing that gap? As easy  
14 as that sounds, it is difficult for NOAA, many of  
15 the programs, to define it, and that's what we're  
16 working with them to define.

17           Marine echo systems has a hundred  
18 percent capability or requirement to assess X  
19 number of fishery stocks, they're only being able  
20 to assess a small percent of them. What is the  
21 impact of not collecting the data needed to meet

1 their hundred percent capability? So we're  
2 defining those currently.

3           The justifications important to tie in  
4 to the socioeconomic impacts is important. This  
5 organization has for too long just equated  
6 requirements with days, and we want to get away  
7 with that. So we're not looking at the mission  
8 needs in any way shape or form in terms of the  
9 system that is needed to satisfy those needs.

10           The next step will be in the  
11 requirements development. We will translate  
12 missions into high level operational requirements.  
13 A number of the modernization plans and other  
14 requirement studies that have been done over the  
15 past in NOAA drilled down too low in terms of we  
16 need a ship with this many square feet putting out  
17 this much horsepower. We're staying away from that  
18 in here. We want to take a look at a higher level,  
19 a broader perspective on what the operational  
20 requirements are, what the mission profiles are,  
21 where do you need to operate, what time of year do

1 you need to operate. I think what we will find,  
2 without jumping to any conclusions yet because this  
3 is early in the process, we're going to find that  
4 many programs have similar mission needs and can be  
5 satisfied -- or similar requirements for at-sea  
6 data acquisition. We want to define those in terms  
7 of goals and thresholds, optimization of generally  
8 what type of system is needed to satisfy your  
9 mission needs. And this is the process by which we  
10 will say can we satisfy them with aircraft assets,  
11 can we satisfy them with space-based assets or do  
12 they need to be satisfied with ship-based assets?  
13 So we're drilling down as we go.

14           Perhaps the next two steps are the most  
15 important part of this recapitalization study. The  
16 first is an analysis of alternatives, what are the  
17 potential solutions for satisfying these data  
18 acquisition needs. If we determine that ships, and  
19 most people suspect that a majority of the data  
20 acquisition needs will for the long or short term,  
21 I should say for the next 10 to 15 years, most will

1 continue to need to be satisfied with a ship  
2 platform capability. So we'll look at the various  
3 alternatives. Marine and Aviation Operations  
4 currently has a contract with the Centers For Naval  
5 Analyses to take a look at some life cycle costs  
6 for various ways of operating ships, either  
7 government owned and government operated,  
8 government owned and contractor operated,  
9 contractor owned and operated or contractor owned  
10 and government operated. There's a number of  
11 models and they're looking at rough orders of  
12 magnitude over the life cycle of a ship. We're not  
13 talking about who's going to own, but just general  
14 orders of magnitude of what it might cost if in  
15 fact we're going to satisfy most of these  
16 requirements with ship documents.

17           The other big component on this is  
18 optimization, how best, once we determine the types  
19 of systems that are going to be required NOAA's  
20 at-sea data acquisition needs, what is the mix of  
21 government owned vessels and government operated

1 vessels and contractor owned and operated vessels  
2 or any derivative of those. There is no answer.  
3 We have 19 ships now, we will go up momentarily to  
4 21 over the next couple years and then back down to  
5 18 under the current ship replacement plan. But  
6 we're trying to do something broader than that.  
7 The plan right now or timelines or ships on those  
8 timelines say this vessel will be 40 years old, 50  
9 years old, but the appropriators and the  
10 authorizers need to bit more about that why is it  
11 important that NOAA either lease vessels or build  
12 vessels or invest in their current assets and how  
13 is the best way to go about that, what is the best  
14 investment strategy for meeting the data  
15 acquisition requirements.

16 Part of this process will also be to  
17 look at the current and emerging technologies, how  
18 with AUVs or unmanned aerial systems or the  
19 development of imaging systems, how will those  
20 impact NOAA's ability to require needed data.  
21 We'll certainly be working on the hydrography

1 component closely with Captain Barnum and Rich  
2 Edwing on the major hydrography project to ensure  
3 that what we are recommending in terms of  
4 investment strategy is sort of on the same page if  
5 you will with these various major projects. We  
6 certainly don't want to do these independently, we  
7 have no desire to do so.

8           So taking these components we will  
9 develop what we're calling the comprehensive  
10 recapitalization plan, a series of recommendations  
11 to NOAA for maintaining its ability to acquire,  
12 observe and monitor data needed to satisfy the  
13 mission needs that have been established by NOAA.  
14 Again, I mentioned it's going to be a 15-year plan.

15           In the material I gave you there was a  
16 rather bold-looking schematic that lays out  
17 generally the process in terms of establishing  
18 mission needs and requirements and then drilling  
19 down and taking a look at whether air, sea or  
20 space-based assets are going to satisfy the  
21 requirements. And just follow the dark blue, this

1 follows the path of a ship-based system where we'll  
2 evaluate each of these components.

3           This next one maybe described as a  
4 little bit better if you will. You can't have a  
5 lot of coffee to watch this, Admiral. But if you  
6 follow the center line, assuming that  
7 recommendations follow the ship-based path, what  
8 size vessel, once you determine what size vessels  
9 will generally meet your requirements, then you  
10 start looking at the contractor owned ships or  
11 government owned ships. If you go down to the  
12 government operated ship spectrum you need to look  
13 at what is the condition of the existing fleet.  
14 Marine and Aviation Operations has totally gone  
15 through a material conditions assessment on each  
16 and every one of these ships. The fact that a  
17 vessel is 30 years old does not necessarily make it  
18 obsolete. The fact that a vessel is 30 years old  
19 and only has a life expectancy of three more years  
20 is something we ought to know. What is the need or  
21 what is the level of a vessel required to keep that

1 asset moving whatever recommendations follow are  
2 important.

3           The same issue on the contractor owned  
4 ships. We can look at the contractor role in UNOLS  
5 vessels and then sort of a subset of that, the  
6 contractor data where NOAA is not involved in the  
7 leasing or operation of vessel but what they're  
8 interested in is the data that comes from those  
9 platforms. There will be a set of recommendations  
10 that will recommend an ideal mix, a smart business  
11 mix of assets to continue to meet NOAA's at-sea  
12 requirements. And again, I think perhaps the  
13 biggest challenge is to get NOAA, the programs of  
14 NOAA to stop thinking in terms of your requirements  
15 strictly in terms of dates. Hopefully the amount  
16 of data, the capability of collecting data at sea  
17 in 2007 is different than it will be in 2014. New  
18 technologies develop, efficiencies are realized,  
19 we're talking about in NOAA ISCM, the ability to  
20 optimize and maximize data collection for a whole  
21 host of programs, not just MTS or not just fish

1 habitats, but the ability to require data to be  
2 used by similar, diverse numbers of users. So the  
3 ability to require data one day today, hopefully we  
4 will double or triple that ability on that same day  
5 years from now.

6 I mentioned a FSV 5, Fishery Survey  
7 Vessel 5 and 6 interim report that is being done  
8 parallel to this process but under a separate  
9 contract. Fishery Survey Vessels 1 through 4 have  
10 all been authorized and appropriated, FSV 5 and 6,  
11 the fifth and sixth in the class, there's  
12 authorization for them but the background material  
13 as far as needs or requirements and analysis of  
14 alternatives is just being completed. That will  
15 help to justify the investments in new Fishery  
16 Survey Vessels 5 and 6.

17 Rich talked about multimission and  
18 certainly multimission capability with the  
19 importance of this process, the entire ship  
20 capitalization process, and perhaps one of the most  
21 important things is defining what we mean by

1 multimission. There will not be a single platform  
2 capability of satisfying all of those mission  
3 needs. I mean that's just, it would be  
4 impractical. There's a lot of core capabilities  
5 that should be able to satisfy most if not all of  
6 our vessels. It's a matter of defining those and  
7 making sure that that capability is present in  
8 government vessels and in contract vessels in the  
9 future.

10           A report to Congress will be a summary,  
11 executive summary of the comprehensive plan. The  
12 target is to get through NOAA and to the Hill in  
13 October. So our draft for a capitalization plan  
14 that follows these procedures, the goal is to have  
15 that ready for a number of independent reviews in  
16 September. One of the reviews we would like to get  
17 is from this Federal Advisory Committee. OMAO is  
18 looking at other groups and individuals and they  
19 will want to get this plan and the ultimate  
20 recommendations as well. So there probably will be  
21 a half dozen independent looks at the plan before

1 this thing is run down the chain and through NOAA  
2 and Congress and OMB.

3           Questions on the process I described,  
4 again, there's two pieces; one, we ask that you to  
5 a look at the process that we're going to use, and  
6 again, this is not a plan that will drill down to  
7 we need vessels with this kind of space, 400 meters  
8 of wire, we're looking at big picture stuff.  
9 Hopefully as the recommendations are accepted and  
10 if some of those recommendations involve investment  
11 in the current fleet or the need for funds to  
12 design and build vessels or the need to require  
13 additional contract capabilities, those  
14 recommendations have the documentation behind it to  
15 justify it. So NOAA sees this plan, sort of two  
16 processes. One, it's smart business. Even if  
17 Congress had not asked for this, this is something  
18 that needs to be completed and needs to be  
19 refreshed every couple years. It doesn't do any  
20 good to continue to point back to a 1990 plan and  
21 say why wasn't that updated. This is something we

1 continually have to update, keeping it current as  
2 new programs come on-line and have needs, some  
3 programs fall off-line and lose those requirements.  
4 So it is the goal of NOAA and OMAO to keep this  
5 plan current, keep it refreshed and use it as an  
6 education tool as well.

7           Comments on the FAC's role and what can  
8 provide to us.

9           CHAIRMAN RAINEY: Roger, thanks. My  
10 initial impression in looking at the extent of  
11 this, it certainly seems like a good approach to me  
12 personally. One of the things I was wondering or a  
13 couple comments. It seems like a lot of the  
14 ultimate answers are going to hinge upon the answer  
15 you'll get from NOAA on what the requirements are,  
16 and you mentioned to try to get them away from just  
17 sort of focusing on it. Again, my observation is  
18 that it seems like we talk a lot about the effort  
19 we're going to bring to the endeavor rather than  
20 the results we're going to achieve. I think that's  
21 out of the necessity because you're not in control

1 of the resources you're going to get to pursue it  
2 and all the things we talked a little bit about  
3 with Rich. But one of the things I thought was  
4 helpful or maybe compelling is the extent you can  
5 sort of set out, even if they're goals or whatever,  
6 the extent NOAA can maybe identify not only are we  
7 going to just try to do the best we can with  
8 whatever we get, but to set, I don't want to say  
9 benchmarks, but for example to be able to say okay,  
10 we're going to focus on this navigationally  
11 significant area and we want to get to the point  
12 where we can do a resurvey cycle, our goal's to do  
13 that every 50 years, and try to come up with sort  
14 of those results, requirements-based results with  
15 the shorelines. Similar thing, to say we want to  
16 get the priority of the port area charts done in a  
17 five-year turnaround cycle and the rest of the open  
18 shoreline in a ten-year, try to couple up with a  
19 sort of level of achievement.

20 In Anchorage we talked a little bit, we  
21 had our annual briefing on the hydro surveys

1 priorities document, one of the things I was trying  
2 to ask or comment, I was suggesting, and I think  
3 others on the panel agree with me, was part of the  
4 message that's compelling here is we split it into  
5 critical areas. That's kind of the benchmark,  
6 survey back, then merging critical priority one,  
7 two and down to -- the one really compelling point  
8 of that is I don't think anybody ever -- you're  
9 never going to get to those priority twos, threes,  
10 fours, fives in the effort we have. I think if  
11 NOAA can focus on that and kind of be able to say  
12 this is really what we're trying to accomplish, be  
13 as definitive as they can on there is a need and  
14 therefore we have to get this work done. Seems  
15 like we never quite get there. We talk about how  
16 much there is to do but I don't know if we ever  
17 really make a compelling case for so, what if we  
18 never get it done.

19           So in the front end of this, if they can  
20 really give, you know, a range, but to really  
21 define the problem and level of work, I think that

1 will really help drive the mix and be able to  
2 justify down the road, you know, this is the  
3 capacity we need to achieve this level or this  
4 level or this level. That's maybe a little bit  
5 tangential, but it seems like the front end  
6 assumptions are just kind of -- otherwise we just  
7 have this sort of well, we're going to put in  
8 whatever effort we get resources to do subject to  
9 funding and all that. Even if the agency can  
10 answer those goals and make them more public and  
11 solid, I think it would help a lot.

12 CAPT PARSONS: You're right. We need to  
13 present a compelling argument, and your term and we  
14 use it often, so what. If you've identified a  
15 shortfall, what is the impact of not closing that  
16 shortfall, not closing that gap, and NOAA needs to  
17 do a better job of defining that in terms of all of  
18 the programs, particularly when we're talking about  
19 a major investment in fleet and contractor  
20 resources. If we, if NOAA can't describe the  
21 impact of not being able to close that gap, we

1 don't stand much of a chance of making an argument  
2 for investing \$80 to \$100 million in each major  
3 asset.

4           MR. DASLER: Following on, I guess it's  
5 a questions to Captain Barnum and Roger's efforts  
6 on the recapitalization plan and Richard's efforts  
7 on the hydrography major project, they appear to be  
8 pretty closely linked, being able to articulate  
9 those needs, is there cross correlation going on?  
10 It seems to be it could be a unified effort. Is  
11 that happening?

12           CAPT BARNUM: Yes, it is. Out of the  
13 hydro major project will come the identifying need  
14 and then comes the how, the how of what investment  
15 we make either in-house or to contract out the  
16 alternatives that Rich talked about, the  
17 approaches.

18           CHAIRMAN RAINEY: Could I ask one other  
19 thing? You mentioned there were 17 direct programs  
20 and a direct need for hydrography and three or four  
21 additional.

1 CAPT PARSONS: Need for at-sea data.

2 CHAIRMAN RAINEY: Okay. Do you have an  
3 opportunity to also try to take a look, I know it's  
4 very difficult, but to look at -- I know the NOAA  
5 fleet has helped out for some Homeland Security  
6 surveys, we talked about the emergency response and  
7 recovery capabilities. Is there a chance in the  
8 scope of your work to also focus of course on  
9 NOAA's requirements but to look at where NOAA kind  
10 of bumps up against Corps of Engineers, NGS, kind  
11 of the other -- just not just NOAA but they're  
12 talking so much about integrating the effort and  
13 coordinating and all that, do you have an  
14 opportunity to at least include some thought about  
15 how NOAA also is called upon very frequently to  
16 help some of these other agencies, the national  
17 needs and capabilities here? Is that something you  
18 can look at a little bit as well?

19 CAPT PARSONS: Yeah, and while there are  
20 not year-to-year requirements by the Homeland  
21 Security Program Office, that is one of the

1 programs that has an implied need for data  
2 acquisition if you will. We look at emergency  
3 response as needing data, that will be part of the  
4 process, and we'll look at interoperative ability  
5 and the ability in a fleet to communicate and  
6 support federal, state and local agencies as well.  
7 I can't tell you how that will fit into it but  
8 that's certainly a small component.

9           CHAIRMAN RAINEY: Can you also look at  
10 NOAA's need, we talked a lot about inherent  
11 government -- one of the huge purposes I think or  
12 services that the NOAA fleet is providing is also  
13 training platforms for NOAA in-house. Is that  
14 something that you're looking at as well, are you  
15 working with Steve looking at the -- as you look  
16 ahead, continue that component in the mix?

17           CAPT PARSONS: Yeah, and certainly we've  
18 begun discussions the last several months with all  
19 these 16 programs, including MTS, and the ability  
20 to maintain a core capability in hydrography is  
21 certainly one of those mission needs.

1 CHAIRMAN RAINEY: Thanks.

2 RADM WEST: Just a follow-up on Scott's  
3 question. There is a federal -- I think you're  
4 familiar with FACSI, the federal agencies are  
5 looking at the total federal investment in the  
6 ocean infrastructure, mostly ships, so you need to  
7 be part of that. That's where the homeland  
8 defense, the Coast Guard is part of that. The  
9 problem you have with any recapitalization of fleet  
10 ships is time and money. It takes about ten years  
11 from the time you decide to build a ship like that,  
12 they're very, very expensive, and the important  
13 part of all that, they learned that in FACSI, it  
14 kind of goes back to Rich's, the reason I point out  
15 Rich is the technology in 10 to 14 years, of the  
16 things you will be asked on the Hill, we're going  
17 to be taking the new technology to replace ships.  
18 Just because you had 50 ships ten years ago, that  
19 doesn't mean you need 50 ships ten years from now  
20 because you haven't looked at the technology of how  
21 many vehicles, all that stuff, so when you do these

1 ship recapitalization plans you've got to make sure  
2 you get at the right people to look at that  
3 technology for you. That's the first question you  
4 will be asked. That's why I brought it up in  
5 Rich's presentation, you ought to take advantage of  
6 that and go through it.

7 DR. LAPINE: Roger, that was an  
8 excellent briefing. I thank you for defining what  
9 we need to do to help you. I don't see there's  
10 going to be a problem with us reviewing this and  
11 providing you feedback.

12 Again, going back to the previous  
13 presentation, since you're looking at ships and  
14 aircraft, I think it's important that the  
15 hydrographic major project specify that shoreline  
16 be included and so in your report you'll have the  
17 requirements both for the ships and the aircraft.  
18 I don't know how you do that. That's worked out  
19 between --

20 CAPT PARSONS: Right, as I indicated, in  
21 order to move the process along we're first taking

1 a look at ships with a close follow-up on the  
2 aircraft.

3 DR. LAPINE: I think you did an  
4 excellent job but I would like you to go back to  
5 one of the flow diagrams. This is only -- that one  
6 right there -- only a suggestion. It seems to me  
7 before you decide whether you want a contractor  
8 owned ship or government owned ship you ought to  
9 look at the existing ships.

10 CAPT PARSONS: Good point.

11 DR. LAPINE: That's just a suggestion.

12 CAPT PARSONS: Other comments? What  
13 Captain Barnum also asked me to do very briefly is  
14 give you a couple of quick updates on the status of  
15 the Swath vessel and the status of the assessment  
16 of aircraft acquisition. These are milestones with  
17 the comprehensive plan, it's not in there, but the  
18 draft plan by September.

19 SWATH Coastal Mapping Vessel update.  
20 I'm not sure if you've been briefed on this in the  
21 past. This is a two-phase fixed price contract.

1 Phase one was a design competition, which was  
2 awarded to VT Halter Marine in September 2004.

3 Phase two was an award for contract design, excuse  
4 me, detail design, and that was exercised by Halter  
5 in September of this past year, in 2006. Keel  
6 laying is scheduled for the 15th of June which I  
7 believe may coincide with your prospective meeting  
8 date next time, contract delivery date 12 months  
9 later. It will take a year to build and deliver to  
10 NOAA.

11               FY '02 to '06 appropriations is a little  
12 over \$19 million, there were 18 million additional  
13 funds that have been rescinded over the last four  
14 years. There is \$19 million available to the SWATH  
15 program. What does that mean in terms of eventual  
16 ship and delivery? NOAA is not able to fund  
17 everything it would like to fund on this vessel.  
18 They would certainly like additional management  
19 reserves, some additional improvements such as  
20 dynamic positioning, integrated bridge system,  
21 increased A-frame capability in addition to crane

1 loads, and there is not sufficient funding at least  
2 on the ship acquisition side of the House, for  
3 complete spare parts and outfitting. So NOAA is  
4 going to get a capable vessel. Would they like to  
5 see a more capable vessel with additional  
6 improvements? Right now there's sufficient funding  
7 to develop and deliver a vessel to NOAA in June,  
8 probably June of '08. This vessel is one that's  
9 going to be replacing the RUDE, which will come  
10 off-line about the same time.

11           Quick look, I think you may have seen  
12 this before, this is what the designers envision  
13 the vessel will look like. Certainly a little  
14 larger than perhaps four years ago as we envisioned  
15 it, but certainly looking forward to a very capable  
16 platform.

17           The second update real quick on the  
18 damage assessment aircraft. This is funding that  
19 was made available through the Hurricane  
20 Supplemental Bill, \$12 million to acquire an  
21 aviation to replace the Citation II jet. The NOS

1 mission particularly for damage assessment, the new  
2 profiles that require a lower, slower aircraft than  
3 what the Citation II can provide, sources were  
4 sought in January of this year. The RFP will go  
5 out this week I believe, Mike is here, but sometime  
6 in March the RFP will go out to request proposals  
7 for aircraft that will meet the needs. Contract  
8 award in June. The delivery of the aircraft and  
9 the aircraft that will be able to meet these needs  
10 can be either previously owned or a new aircraft.  
11 Either way an aircraft needs to be delivered to  
12 NOAA June of '08 and the aircraft will be  
13 operational by the beginning of the FY '09  
14 hurricane season.

15           Instrumentation, NOS is considering a  
16 large format digital camera and topo lidar to be  
17 put aboard the aircraft. Total aircraft  
18 acquisition costs, i.e., the \$12 million that have  
19 been appropriated will determine exactly what exact  
20 package and when will go aboard that aircraft.

21           This will give you a quick look at some

1 of the potential aircraft that could be meet the  
2 minimum requirements set forth for this damage  
3 assessment aircraft. So again, that RFP goes on  
4 the street I believe this week for June of '08.

5           Comments on either the schedule of SWATH  
6 or damage assessment aircraft?

7           RADM WEST: Can you go back to the ship  
8 for a second? What's the total cost?

9           CAPT PARSONS: Total available funds are  
10 \$19 million.

11           RADM WEST: You're going to build that  
12 ship for 19 million?

13           CAPT PARSONS: Yes, sir.

14           RADM WEST: Okay. But there's no spare  
15 parts.

16           CAPT PARSONS: Minimal spare parts.

17           RADM WEST: No management reserve, no --  
18 where are you going to pay for the spare parts?

19           CAPT BARNUM: I believe in the '07  
20 spending plan, that has not been decided yet, I  
21 think there's consideration for these.

1           RADM WEST: One of the challenges of the  
2 FACSI said is to justify building new ships you're  
3 going to be operating them, so if you build them  
4 and can't operate them, that's not good. So just a  
5 heads up.

6           CAPT PARSONS: Again another example of  
7 why a comprehensive plan is required. Keep in mind  
8 SWATH is acquired through --

9           MR. MCBRIDE: Can you define management  
10 reserves on the other side?

11          CAPT PARSONS: Management reserves are  
12 those funds required for the level of oversight  
13 that you would optimally need to assure that this  
14 vessel is built and delivered as needed and you  
15 have to build that into the cost. Certainly there  
16 are various levels, various thresholds --

17          MR. MCBRIDE: Project management  
18 services.

19          CAPT PARSONS: That's correct.

20          RADM WEST: There's the first indication  
21 there are plenty of problems when you take away the

1 management reserve.

2 DR. LAPINE: Roger, you mentioned the  
3 RUDE was coming off-line there. Has there been a  
4 look at what operating costs are currently for the  
5 RUDE and how that's going to compare to operating  
6 this vessel?

7 CAPT PARSONS: Steve, can you address  
8 that?

9 CAPT BARNUM: There is an operational  
10 differential and that is being put into the budget  
11 request to make up the difference.

12 MR. OSWALD: John Oswald. That was a  
13 real good presentation. We had a briefing either  
14 the first or second meeting, I think it was Captain  
15 Manzo, he came and gave a briefing on the thing at  
16 the time, and I see it in this one, the use of  
17 charter vessels, contractor owned, government  
18 operated, et cetera. He made a comment at the end  
19 which caused a spirited debate for a while on the  
20 vessel time charter, which had not been -- it had  
21 been agreed to I think but it hadn't been an

1 operation thing. There had been theoretical  
2 studies on it. The comment was made that that was  
3 going to be one of the ways to go. NOAA's had  
4 about two and a half years starting in the fall of  
5 2004 with the Alaska season and then most of 2005,  
6 NOAA did this vessel time charter, so it's a  
7 contractor owned vessel, another contractor  
8 operated it, and NOAA, I'm not sure, three or four  
9 officers were sort of a management team on board.  
10 Then going forward again this season in Alaska with  
11 the same vessel, different contractor. So could  
12 you comment -- it's one of the mixes there. Was  
13 that, can you comment was that a good thing, was  
14 that the way to go as Manzo said?

15 CAPT PARSONS: With my current hat on I  
16 can't comment.

17 CAPT BARNUM: We didn't have government  
18 personnel, we had some observers aboard, but SAIC  
19 was the, actually collected the data processing  
20 data. We have asked in the '08 request to provide  
21 the time charter and address the backlog and leave

1 that flexibility up to the contractors to offer up  
2 the best way to acquire the data. We put the  
3 requirement out and then if the contractors so  
4 chose to use a vessel, the best way to acquire the  
5 data, we agreed with that and that's how we  
6 proceeded.

7           RADM WEST: Do I read this profile as it  
8 was originally appropriated at 27 million?

9           CAPT PARSONS: Yes, sir.

10          RADM WEST: So that's that you thought  
11 it was going to cost to build this thing?

12          MR. ARMSTRONG: It was funded step-wise  
13 and it was two steps forward, one step back.  
14 Several times.

15          RADM WEST: You're confident you can go  
16 from 19.1? That was the original design cost.  
17 Minus the last paragraph.

18          CAPT PARSONS: Minus, yes.

19          CAPT BARNUM: Again, we still have not  
20 seen the final 2007 spending plan. Those  
21 requirements will be addressed in that. We do

1 understand there are shortfalls and things we'd  
2 definitely but we certainly don't cut off our nose  
3 to spite ourself.

4 CHAIRMAN RAINEY: Questions for the  
5 budget. We've got the tasking -- if we can get a  
6 group together and have some input by September  
7 that would be timely for your purposes?

8 CAPT PARSONS: Well, the first piece as  
9 soon as you can get me -- this is an ongoing  
10 process. Any input as to the process we're  
11 following, certainly we'd like that at the earliest  
12 opportunity. We'd like to deliver the draft  
13 comprehensive plan to the committee in the  
14 September time frame.

15 CHAIRMAN RAINEY: All right.

16 CAPT PARSONS: When we find out what  
17 your meeting schedule looks like, maybe coordinate  
18 that towards the form.

19 CHAIRMAN RAINEY: Thanks very much.  
20 Let's take a ten-minute break here.

21 (Brief recess.)

1 CHAIRMAN RAINEY: Thanks very much. Our  
2 next presentation is Mr. Darren Wright, the PORTS  
3 manager for CO-OPS. Let me yield the floor to Mike  
4 Szabados to introduce Darren.

5 MR. SZABADOS: Thanks. One thing I want  
6 to highlight is that you heard from Helen Brohl  
7 yesterday about the CMTS and some of the  
8 activities, and included in that was some of the  
9 IATs that are going on, specifically Navigation  
10 Technology Integration, which is being led by NOAA,  
11 but there are many federal agencies participating,  
12 including the Coast Guard. The presentation that  
13 Darren Wright, PORTS program manager, is going to  
14 overview and actually ask for some guidance and  
15 direction on is in collaboration under that  
16 activity. But I also want to recognize the  
17 collaboration going on between federal agencies  
18 like the Coast Guard on this activity. With that,  
19 Darren.

20 MR. WRIGHT: First off I'd like to say a  
21 little about myself. I'm the PORTS program manager

1 for a little under a year, replacing Dave  
2 McFarland. My presentation today is a brief one,  
3 which I'm sure will be appreciated on day two of  
4 your meeting here. It's brief because I believe  
5 most of the people in the room are familiar with  
6 the PORTS program and the Coast Guard's AIS  
7 program. I will explain about each of those  
8 programs and how we're going to integrate the two.

9 First I'd like to acknowledge the  
10 presence of Commander Brian Tetreault. He's the  
11 Chief of Vessel Traffic Services in the Coast  
12 Guard. He's also going to be the project manager  
13 for the Coast Guard part of this program.

14 First I want to start off with the NOAA  
15 PORTS program is Physical Oceanographic Real-Time  
16 System. Basically a network of sensors that we  
17 installed by the request of the users in the area.  
18 They let us know where they would like the sensors  
19 installed and we install the different types of  
20 sensors at the locations that they request. We  
21 have three different types of current meters, a

1 side-looking one that can shoot a beam across a  
2 channel so you can see what current's going across  
3 the channel. We also have a buoy-mounted system  
4 that can measure the currents going down, and a  
5 bottom-mounted system that can give a profile of  
6 the currents going up. Of course we have water  
7 level, we have an air gap sensor you can install at  
8 the bottom of a bridge and measure the distance  
9 between the surface of the water and the bridge.  
10 We also provide individual meteorological sensors.

11           At the moment we have 13 of these PORTS  
12 systems installed around the country that service  
13 39 different seaports. This coming year we have a  
14 very busy schedule for installing five new PORTS  
15 systems down in the gulf, four of which were  
16 mentioned by Steve as part of the Hurricane Katrina  
17 supplemental in Mobile, Pascagoula, Gulfport and  
18 New Orleans, and we also have one in Port Arthur,  
19 Texas, that has been waiting a little while to have  
20 the system installed, we'll have this one installed  
21 this year. And in '08 currently we have two more

1 scheduled, one up in Cherry Point, Washington and  
2 the other one down here in Lake Charles.

3           This is a graphic kind of describing the  
4 Coast Guard's AIS or Automatic Identification  
5 System. At present the AIS system works where  
6 there's a transceiver aboard a vessel and their  
7 position is transmitted out and shared with other  
8 vessels in the area and shared with the Coast Guard  
9 so everybody knows where everybody is. It's a  
10 safety precaution. And at the moment we have  
11 coverage in critical areas in various ports. The  
12 Coast Guard is now involved in a national program  
13 where they're going to have coverage across all the  
14 coastlines around the U.S. Increment 1, which they  
15 have now begun, they're going to be adding more  
16 receiving stations, which will give them greater  
17 coverage in the critical port areas and also  
18 critical coastline areas. They have two more  
19 increments, increment 2 and increment 3, which will  
20 expand that coverage. Increment 2 will go out to  
21 about 50 nautical miles and cover the whole

1 coastline and then increment 3 will incorporate  
2 satellites and it's more of a worldwide type  
3 sharing of information.

4           Increment 1 here is still, it's one way  
5 where even though they're adding more reception  
6 stations, it's still a one-way system where data is  
7 transmitted from ships to each other and back to  
8 the U.S. and shared with the Coast Guard.

9           I'll get into increment 2 in a minute  
10 because that's where our program is going to be  
11 incorporated. This is just a sample display of a  
12 third-party vendor who takes the AIS message from  
13 the AIS receiver that's aboard most of the  
14 commercial vessels and displays on top of the GIS  
15 and shows you -- these little triangles here are  
16 the different vessels that are, this is New Orleans  
17 on here, you can see where the different vessels  
18 are and you know what's coming around the bend  
19 before you can see it.

20           Now to the project that I'd like to talk  
21 about today is integrating PORTS data into the AIS

1 system. The AIS message has 22 different message  
2 types. The one we're going to be focusing on here  
3 is binary message where we can broadcast, we can  
4 assemble a message from PORTS and transmit it  
5 through this binary part of the AIS message. This  
6 is a slide I borrowed from the Coast Guard. I'm  
7 not going into all of these details but basically  
8 it's saying that we can compose a message and  
9 broadcast it off of the AIS message, but it's for  
10 external applications outside of the AIS to be sent  
11 to the Coast Guard, they will compose the message  
12 and then send it to the AIS box on board the  
13 vessels and then a message can be created by the  
14 third-party vendor. That's what this is  
15 describing.

16           The part we're going to be working with  
17 the Coast Guard now is taking the PORTS data and  
18 getting it to them in real time, creating a binary  
19 message, and then the Coast Guard will get that  
20 right here, they'll transmit it out to the vessels.  
21 This is an AIS box that receives all the messages,

1 that binary message will be accepted by that and  
2 passed through to third-party vendor software which  
3 will take that message and display it on some sort  
4 of GIS or display. We'll also be working with  
5 third-party vendors on taking that information and  
6 displaying it in a meaningful fashion.

7           This is step 2. The difference between  
8 this and step 1 is that there are a few more  
9 receiving stations but in step 2 is where you get  
10 two-way communication. Up until now it's only been  
11 one way; these guys can share their position with  
12 each other but not really any sort of data  
13 messages. Increment 2 of the national network you  
14 will be able to transmit data, the Coast Guard will  
15 be able to transmit data back and forth. This is  
16 where we will be sending the data to the Coast  
17 Guard and will be able to send it to all the  
18 vessels also within the window.

19           This display here is showing, where we  
20 have the red circles are where we have PORTS  
21 locations and the stars are where we have VTS

1 centers and these blue ones are the Corps of  
2 Engineers have a few projects going to the VTS  
3 centers and they're also doing the project as well.  
4 Our first projects we're going to be doing are  
5 going to be in New York and Houston where we have  
6 coexisting VTS centers and PORTS, they will be our  
7 test beds for this project and once we have that  
8 established at those two centers we'll be moving to  
9 the rest of the PORTS centers where we have VTS  
10 centers and PORTS data in the same locations.

11           Then as the project evolves and the  
12 Coast Guard's coverage expands to cover the rest of  
13 the coastline, then we'll start working on  
14 integrating data from the National Water Level  
15 Observation Network. At the moment a lot -- all  
16 these in the Great Lakes and many of these along  
17 the coastline are transmitting data real time or  
18 every six minutes is what we consider real time, in  
19 real time, but as the Coast Guard's project in  
20 increment 2, that time line will kind of flesh out  
21 with the time line that we have, all of our data

1 being transmitted in six minutes real time. And  
2 we'll work to incorporate all this data into  
3 getting that data into AIS as well.

4           So the reason I'm here this morning is,  
5 one, we're at the very early stages of this. We  
6 met with the Coast Guard in January to discuss this  
7 and I just wanted to present this to the committee  
8 and just to get your approval on yeah, this is the  
9 right way to go and start spending some time to  
10 invest in this project. And again, step 1, is to  
11 get the PORTS data integrated with the AIS at  
12 coexisting VTS centers. Then as the project goes  
13 on and we get all the PORTS stations integrated  
14 we'll start working on the Water Level Observation  
15 Network and getting all that data into the national  
16 network. That's basically all I have. Any  
17 questions?

18           MR. DASLER: Jon Dasler. What is the  
19 data that's being transmitted, it's water level  
20 data or --

21           MR. WRIGHT: Actually we'll be able to

1 transmit all the different types of data. The only  
2 one that there's not a set format for right now is  
3 that air gap sensors I mentioned earlier. But the  
4 rest of them, the water level, meteorological data  
5 and the current data, we will be transmitting all  
6 of that data.

7 MR. DASLER: This could also be a  
8 tremendous benefit in terms of hydrography. I mean  
9 the survey vessels you have out there, most of them  
10 have AIS, we can get realtime transmissions, it  
11 goes back to a question that was raised several  
12 meetings ago, right now there's kind of this  
13 backlog of preliminary tide versus verified tide,  
14 but if that can become more of a realtime effort  
15 and broadcast over AIS, that can tremendously  
16 improve the production efforts in applying realtime  
17 tide directly to hydrographic survey.

18 MR. WRIGHT: I think this will be really  
19 big in the way of getting the data out to the ships  
20 way before they can get them now. Right now we  
21 provide Internet access and phone capability and

1 you have to be within coverage. Once increment 2  
2 is established they will be able to receive these  
3 transmissions 24 nautical miles before they get to  
4 the coastline. They'll know what's going on before  
5 they're even close to the ports.

6 MR. DASLER: Again backing up to the,  
7 the ships are navigating on these tides. I mean it  
8 seems that's the logical step, would be to increase  
9 that turnaround time to verified tides.

10 MR. WRIGHT: I think for this community,  
11 I don't know that we'll ever be able to verify the  
12 data in a realtime setting quick enough for this  
13 sort of, for the people using this data to bring  
14 the ships off the channel. I don't know if we'd be  
15 able to verify something in real time and turn it  
16 around quickly enough for them to use like that.  
17 However, we do have a realtime monitoring group  
18 that monitors these data 24/7 around the clock and  
19 they're looking at data and making sure the data is  
20 good. If they see bad data they shut it off right  
21 away. That capability we have now.

1           RADM WEST: Could you update us on what  
2 requirements there are going to be for a lot of  
3 folks out there who won't have AIS updates?

4           MR. WRIGHT: I'll defer to Commander  
5 Tetreault in the back here. You want to come up  
6 here, Brian?

7           CDR TETREAULT: Yeah. I'm Brian  
8 Tetreault for the record. The current regulations,  
9 there's international requirements under the Safety  
10 Life at Sea Convention for vessels, I'm going to  
11 simplify here, roughly over 300 gross tons on an  
12 international voyage. Those have been in existence  
13 for almost two and a half years now. So that's the  
14 current international requirements. There's  
15 domestic carriage requirements, United States law,  
16 currently within the VTS areas where we have Vessel  
17 Traffic Services, vessels, again I'm simplifying a  
18 little bit, roughly over 65 feet commercial vessels  
19 operating in a VTS area. Under the Maritime  
20 Security Transportation Act of 2002 Congress gave  
21 us authority to expand that nationwide to all

1 commercial vessels over 65 feet in all U.S.  
2 navigable waters. We currently have a draft  
3 regulation that is hopefully going to be published  
4 within the next six months to a year that will  
5 implement those. So speaking to time line, roughly  
6 the nationwide carriage requirement for AIS for the  
7 commercial vessels over 65 feet hopefully will be  
8 in the next year to year and a half.

9           RADM WEST: No requirement for if  
10 they're uncommercial?

11           CDR TETREAULT: Correct, correct.  
12 However, there has been a development of what they  
13 call a Class B AIS device, which is a lower  
14 capability and lower cost AIS box intended for  
15 voluntary carriage. So the hope is that smaller  
16 vessels, fishing vessels that may not be required  
17 will want to carry this as a navigation safety  
18 tool.

19           MR. MCBRIDE: Commander, my name's Adam  
20 McBride, I work in a port where we have a great  
21 deal of ITB and tug tow crossing traffic throughout

1 the main channel. Is the 65-foot requirement  
2 applied to the entire tug and tow or just the tug  
3 itself?

4 CDR TETREAULT: Actually, I just said I  
5 simplified, there are actually more requirements  
6 for towing vessels based on whether they're towing  
7 and the horsepower, so it's likely that most  
8 commercial towing vessels will be required.

9 MR. MCBRIDE: We're seeing on our own  
10 AIS pretty consistent that most tugs and tows are  
11 carrying -- many of them do not do anything other  
12 than turn it on, they're not including of the  
13 useful information. Is that a requirement as well,  
14 do they have more than just the off/on switch?

15 CDR TETREAULT: The law says if you're  
16 operating AIS you have to operate it completely.  
17 Enforcement, which we're responsible for, is  
18 another matter. So yes, they're supposed to be  
19 filling in that information and keeping it updated.  
20 We haven't really had the resources or the effort  
21 to enforce that to the extent we'd like to.

1           Another thing that's comes to mind is  
2 that is part of this project and the work we're  
3 doing with the Army Corps of Engineers, there is a  
4 lag obviously between the requirements for vessels  
5 to carry AIS and what we'd like. We'd love all  
6 these vessels to have AIS now for navigation safety  
7 so we can keep tabs on them, but it's only in  
8 certain areas that it's required. For example on  
9 the western rivers there's no requirement for AIS  
10 carriage. With the corps we're working on  
11 providing realtime current information near locks  
12 and dams with the hope that, one, it will certainly  
13 improve navigation safety, but also encourage  
14 vessels to voluntarily carry AIS because there's a  
15 definite benefit for them.

16           MR. MCBRIDE: Thank you. I have a  
17 question for Darren as well. Darren, you mentioned  
18 that the integration with the VTS will start with  
19 the PORTS systems and then move secondly to the  
20 NWLON systems. Given that your NWLON systems are  
21 much more extensive already, tell me why that

1 particular phasing -- PORTS systems are, ought to  
2 be much more extensively located, but we're not  
3 there now, the NWLON systems are much better  
4 coverage nationwide, why didn't you go there first?

5 MR. WRIGHT: Well, because we thought  
6 the PORTS data is the realtime data that for safety  
7 reasons we wanted to get that out there first. The  
8 format of the data is going to be identical. Once  
9 we get it done for PORTS, integrating water levels,  
10 it's pretty much done. Trying to figure out how to  
11 get all that data to the Coast Guard in some sort  
12 of timely manner, but the reason we started with  
13 PORTS is for the realtime aspect.

14 MR. MCBRIDE: I missed the first part.  
15 What's your time frame on this integration?

16 MR. WRIGHT: I didn't give one.

17 MR. MCBRIDE: I'm asking for one.

18 MR. WRIGHT: Okay. A time line I just  
19 kind of threw out there and I included as part of  
20 the pack was we hope to by next spring have worked  
21 enough that we have the binary format all worked

1 out and are able to patch the data and get it to  
2 the Coast Guard by then. So we're hoping by early  
3 spring next year for New York and Houston to have  
4 something worked out.

5 CDR TETREAULT: If I can add to that,  
6 there's some parts on our side with the technology  
7 where we have a refresh update to our existing  
8 systems where we think we may have to do some work  
9 there, so it will be tied to our capability to  
10 modify our systems, but that sounds about right.

11 MR. MCBRIDE: SO that falls in the  
12 fiscal, and are you confident you have the  
13 resources, budgetary requests to accomplish this?  
14 I'm asking either one of you.

15 CDR TETREAULT: I am.

16 MR. SZABADOS: I'll answer for the NOAA  
17 side, we're ready to move, we're probably a little  
18 bit ahead of the curve with our centralized data  
19 processing especially with our work values. We  
20 prepositioned ourselves to acquire this information  
21 from the Coast Guard and actually one of the things

1 we're doing hopefully early April is to have a  
2 meeting of all the key players and then have a  
3 agenda and time lines come. I think we can have  
4 Darren come back when we do have that schedule to  
5 give you an update.

6 CAPT MYRTIDIS: Minas Myrtidis. Let me  
7 ask you something, I wasn't sure I understand,  
8 right now on worker ships they have the ability of  
9 transmitting and receiving certain set of data.  
10 How do you anticipate to integrate the additional  
11 data? Do you know where that system itself would  
12 have to be modified or this is something, a  
13 function that is readily available? I'm not aware  
14 because we haven't done that before.

15 MR. WRIGHT: The third-party vendor who  
16 takes the message from the AIS box, that has not  
17 been created yet to receive any sort of data. So  
18 we're going have to work with them to, one, get a  
19 format of that binary message and do something with  
20 it. The AIS message has a part in it, a binary  
21 area that can accept these messages. It's just a

1 matter of getting formats nailed down and  
2 transmitting information in that area, that binary  
3 area. So as far as the AIS box, it's just going to  
4 be receiving that, passing it through to the third  
5 party.

6 CAPT MYRTIDIS: The reason I'm asking,  
7 in my company, that's Norwegian Cruise line and  
8 Sail America, I was wondering if -- we're going to  
9 want to have some deadlines and understand when  
10 these things are going to be in place in order to  
11 then push manufacturers to get the equipment. You  
12 know, it's not as easy as it used to be. You take  
13 something out, you're just replacing these things,  
14 they cost a lot of money. I want to make sure we  
15 understand everything that goes behind it.

16 CDR TETREAULT: Yes, sir, we definitely  
17 appreciate that. And that's one thing that the --  
18 in the creation of the binary messages, it's an  
19 approval process. And the idea is so that once we  
20 approve a binary message, this format would have to  
21 be changed on the on-board equipment, the

1 manufacturers can get to know that, it should just  
2 be, I know I'm making a lot of assumptions when I  
3 start talking about computer equipment, but it  
4 should just be a fairly simple upgrade to existing  
5 programs, especially on a vessel that has a fairly  
6 sophisticated system. We are working with some of  
7 the vendors. There's international and national  
8 forums that we're going to be engaging on this to  
9 make sure we get those formats out. There's also  
10 an existing meteorological and hydrological binary  
11 that has been published for several years now  
12 that's in a testing format. I believe we're going  
13 to try to stick with that for the initial testing.  
14 Several manufacturers are already deploying and  
15 selling systems that can handle that, so we're  
16 hoping to use the existing binary so that existing  
17 systems can use it.

18 CAPT MYRTIDIS: Thank you very much. I  
19 think that's an excellent idea. I want to make  
20 sure suppliers, you know, sometimes we forget to  
21 look at what's behind it. Another question I have

1 is, I'm not sure it was clear how you selected the  
2 size that you intend to first implement the system.

3 MR. WRIGHT: The red circles are  
4 locations where we already have PORTS systems  
5 installed and the stars are locations where there  
6 are VTS centers already in place. Actually at a  
7 pilots conference several months ago folks in  
8 Houston, pilots in Houston and New York at a  
9 technical advisory committee stood up and said,  
10 one, we want to do this, and two, we would be happy  
11 to volunteer. So that's how we got those two  
12 picked out to start with, and then naturally the  
13 next thing to do would be put it in place where we  
14 have coexisting locations.

15 CAPT MYRTIDIS: If the stars are VTS  
16 site, the red circles are the PORTS sites --

17 MR. WRIGHT: Again, I borrowed this  
18 slide from Brian here. This is the Corps of  
19 Engineers, they have a couple of systems co-located  
20 with --

21 CAPT MYRTIDIS: Actually you're planning

1 to try to implement this system in New York for  
2 example, right?

3 MR. WRIGHT: Yes. Right here and down  
4 here in Houston.

5 CAPT MYRTIDIS: Okay. How about up in  
6 the west?

7 MR. WRIGHT: They're going to be our  
8 test beds. Once we get a format worked out, stuff  
9 gets working there, we'll move to the rest of them,  
10 probably all at once.

11 CAPT MYRTIDIS: I don't want to sound  
12 selfish, but with all due respect to the rest of  
13 the industry, there is very large traffic of  
14 passenger vessels. Probably this is one area you  
15 need to focus, who could definitely use this data.

16 MR. MCBRIDE: To focus with the pilots.  
17 Andrew McGovern. There's two key parts of this  
18 project. First is integrating the data and working  
19 with the Coast Guard to get the data on board the  
20 ship using the AIS. I look at that as an  
21 integrator. And the second part is working with

1 the different partners and customers in using that  
2 information. In this case one of the customers is  
3 the pilots working with their third-party vendor  
4 and what do you do with this information, how is it  
5 best displayed. That's where the test beds are  
6 here to take that information, how best to display  
7 it. And we're going to be working with the pilots  
8 and their vendor to do that. I think you just  
9 raised an important point and if you could identify  
10 it, what other groups we should be working with to  
11 help to integrate this information and work so this  
12 information can be useful with other applications.  
13 Your onboard systems on your cruise ships would be  
14 another good partner in this.

15 CAPT MYRTIDIS: Of course, because we  
16 don't always trust the pilots. No, I'm just  
17 kidding.

18 MR. DASLER: Not to beat a dead horse,  
19 but I think this is a real opportunity for  
20 implementation of realtime verified tide and I'd  
21 for us to just think outside the box, because that

1 is still going to be a huge benefit. If ships are  
2 navigating and tankers are approaching based on  
3 these tides but we're still getting lag times and  
4 meaningful processed surveys, just that whole  
5 effort, we hope NGS can do it on the core side and  
6 provide realtime verification of data. I mean they  
7 really need to start taking a close look at that to  
8 make that a realtime availability and think outside  
9 the box.

10 MR. SZABADOS: I see this as one of the  
11 first steps in doing that, but also I mentioned  
12 working with the, you indicated the Army Corps  
13 information as well as the National Data Buoy  
14 Center, the buoy data so that ships in the region  
15 get that information also. That is the direction  
16 we're going. It's not just PORTS but PORTS was the  
17 first step to help integrate that information. I  
18 also wanted to mention there's work being done  
19 under the CMTS where Coast Survey and working with  
20 CO-OPS on how to use this technology. And one of  
21 the things they do is taking the PORTS data through

1 the AIS, I believe it's the Norfolk area test bed,  
2 this early summer or late spring where they're  
3 going to take the information and have dynamic  
4 charts. Again, it's a demonstration project. I  
5 just wanted to mention that, shows great potential  
6 for this.

7 DR. LAPINE: I would just like to say  
8 that I am really proud to see how the Coast Guard  
9 and NOAA are working hand in hand. Reminds me of  
10 the days when you started your DGPS network and you  
11 worked with NOAA to build a slightly better, more  
12 accurate system and I commend this process. This  
13 is really great stuff. I look forwards to seeing  
14 some sort of chart in the future that has all of  
15 this information on it for the navigator, so a  
16 great job, guys.

17 MS. DICKINSON: Elaine Dickinson. Quick  
18 question for the commander. Under the current  
19 rules who is required to have an MMSI among the  
20 commercial ships?

21 CDR TETREAULT: I think I can only speak

1 for as it relates to AIS, which is easy. If you  
2 have AIS you're going to have MMSI because the  
3 system won't work without it. I imagine you're  
4 also talking for VHF radios and that sort of thing  
5 and that's outside my area of experience.

6 MS. DICKINSON: The reason I ask, for  
7 the Rescue 21 system we're providing MMSIs only to  
8 recreational boaters. I noticed a flurry of  
9 activity among tug and barge companies coming to us  
10 saying we need an MMSI and we want you to register  
11 us. We're not set up for that. They said well, we  
12 have to have it because of AIS, but I never knew if  
13 it was an actual requirement for them or not.

14 CDR TETREAULT: For AIS, speaking  
15 technically, it is an MMSI and has to be unique,  
16 which MMSI is, for the system to operate. We've  
17 already seen some problems. The gentleman earlier  
18 asked about what related to enforcement. That's  
19 one we are enforcing because that can really hurt  
20 the system. That's an interesting observation, I  
21 hadn't heard that. I do know folks back at the

1 Coast Guard that are working on that would be  
2 interested in that and I can get an answer back to  
3 you.

4 CAPT MYRTIDIS: Actually for the MMSI,  
5 if you do have a radio station on board now that's  
6 VHG, you are required, there's no doubt about it.  
7 The same goes with the AIS system. So if you have  
8 an authorized licensed station aboard then you  
9 include MMSI.

10 MS. DICKINSON: Surprisingly a lot of  
11 these companies are saying they're not required to  
12 have an FCC license so that's why they didn't get  
13 an MMSI, which was surprising to me but apparently  
14 it's true for some of them.

15 MR. SKINNER: Tom Skinner. I want to  
16 make a couple of general comments that I think both  
17 apply to PORTS and IOOS for the next presentation.  
18 We always come back to funding, how to do you fund  
19 all of this stuff. I think there's an opportunity,  
20 may have been overlooked, I'm not sure how involved  
21 NOAA has been on this. Today's Boston Globe talked

1 about a \$27 million fine against an oil company for  
2 some spills. And I'm pretty sure a lot of other  
3 federal agencies like EPA and Fish and Wildlife  
4 Service, just guessing here, will be in the U.S.  
5 Attorney's Office trying to see if they can get  
6 some of that money for their programs. I think  
7 there's a potential here and it makes a very good  
8 link, at least a good attorney could, to have some  
9 of those monies go to PORTS programs and this type  
10 of innovations for funding. Another opportunity,  
11 we did this in the project I'm working on up in  
12 Massachusetts, is for mitigation funds from  
13 offshore projects. And originally we had proposed  
14 several millions of dollars for offshore buoys, and  
15 that's another potential opportunity to get some  
16 funding.

17 MR. WRIGHT: Thank you.

18 MR. OSWALD: I would like to make a --

19 MR. SKINNER: There's also state funds.

20 I don't expect NOAA to keep track of every state  
21 and all the particular funds, but having a cadre of

1 people out there watching some functions could  
2 possibly be used for this type of thing is also  
3 very advantageous.

4 MR. OSWALD: I'd like to make a comment,  
5 follow-up to Jon Dasler, folks need to think  
6 outside the box a little bit. You've got a great  
7 piece happening right here, but I guess I was  
8 always under the impression that the PORTS system,  
9 Sherri's taking these ships and Adam's taking the  
10 QUEEN ELIZABETH and all these ships through the  
11 harbors, it's pretty much verified data. So I  
12 guess the official thing it is not verified data;  
13 is that correct? The PORTS data that the captains  
14 have on these ships?

15 MR. SZABADOS: It's quality controlled  
16 data. The verifying process is a none realtime  
17 process. That's something which we have to move  
18 towards.

19 MR. OSWALD: We're sort of exploring  
20 this in support of hydrographic contracts. You  
21 typically have redundant sensors to this PORTS,

1 this can be highly automated and it would  
2 definitely help the hydrographic NOAA assets, the  
3 contractors, because currently we get verified data  
4 on Sunday night, it's about a week delay. NOAA has  
5 requested money in previous budgets to streamline  
6 the processing. There is a big processing backlog,  
7 but by contracting in-house on this -- so this is  
8 the first step that I think this could be automated  
9 where you have verified tides on both basically.  
10 Then you've got to talk about the zoning model,  
11 that's another issue. Any encouragement on that?  
12 It's a great start. Just take it a little further.

13 MR. SZABADOS: John, I don't disagree.

14 CAPT BARNUM: It was mentioned earlier  
15 that this is just the start of what we hope to go  
16 into realtime integrated charts and realtime  
17 positioning of ships. This is all tied into the,  
18 again that integrated action that Helen talked  
19 about yesterday on demonstrating the possibilities  
20 of what we can do with the technology we have now.

21 RADM WEST: Tom brought up an

1 interesting thing about funding, concern about  
2 funding. The U.S. Ocean Commission recommended  
3 taking \$4 billion from the general treasury, which  
4 part of that comes from offshore royalties on gas.  
5 Where do the fines go that Tom just mentioned? Do  
6 they go in the general treasury?

7 CAPT BARNUM: We were just talking about  
8 that, I may have been mistaken. My point was I  
9 know there have been some meetings set up with some  
10 of the U.S. Attorneys in Portland and Boston, and  
11 for whatever reason, maybe if they can't get the  
12 money, I still think NOAA should be there if the  
13 other agencies are. But again, that's something  
14 that was just raised as a possibility. But the  
15 mitigation angle is definitely a possibility. And  
16 that was done under the state review, not federal.

17 CHAIRMAN RAINEY: Thank you very much.

18 Our next presentation, Ms. Zdenka  
19 Willis, the director of the NOAA Integrated Ocean  
20 Observing System program office, she's going to  
21 address an informational briefing on the evolution

1 of the IOOS program.

2 MS. WILLIS: Good morning and thank you  
3 for giving me this opportunity to brief you here  
4 today. And I do come as an information brief and I  
5 will start by telling you that I also have what we  
6 call in NOAA major project designation and that  
7 occurred on, by memorandum in 2005. But I'll start  
8 up front by saying we are pre-KDP 1 so the train  
9 has not left the station on IOOS and we welcome all  
10 help that we can get on IOOS. This is the outline  
11 I'm going to use for the briefing this morning, and  
12 so I'll start.

13 So in November 2006 Admiral Lautenbacher  
14 requested NOAA take a fresh look at our IOOS  
15 efforts and provide recommendations on how NOAA  
16 could exert greater leadership and make measurable  
17 progress in the advancement of IOOS, and I was part  
18 of the team that was formed to do this and we  
19 wanted to review lessons from existing NOAA  
20 efforts. It's not like NOAA has not been involved  
21 in IOOS for quite a while, and we focused on three

1 questions when we put this team together: What can  
2 NOAA do that would fundamentally contribute to the  
3 United States of the America IOOS effort? What is  
4 feasible for NOAA to implement? And what can be  
5 accomplished in the next 36 months?

6           What the team concluded was that NOAA  
7 IOOS efforts would not be successful with part-time  
8 leadership, no strategic goals and no authorized  
9 central programming management. So in December of  
10 2006 we briefed Admiral Lautenbacher, Mr. Jack  
11 Dunnigan provided the briefing, and we offered two  
12 recommendations. The first is that we should  
13 establish a program office dedicated to the  
14 administration of NOAA IOOS activities, which  
15 included collaboration with our federal and  
16 nonfederal partners, and that NOAA should implement  
17 an initial operating capability for data  
18 integration and we looked at that as a data  
19 integration framework.

20           This was accepted in December of 2006  
21 within NOAA and we began the process of starting

1 the program office within NOAA.

2           This is a high level schematic of the  
3 organizational relationships, and I always tell  
4 people that you must live two places in NOAA; you  
5 have to live someplace in the actual organizational  
6 structure, and so the NOAA IOOS program office does  
7 live under NOS and the administrator there, Jack  
8 Dunnigan, but we do represent all of NOAA. We have  
9 to do this, as we said, in concert with our federal  
10 and nonfederal partners, and so Dr. Rick Spinrad,  
11 who is our assistant administrator for Oceanic and  
12 Atmospheric Research, still has that interagency  
13 and international tie. When we look at the program  
14 office and we look at IOOS project management in  
15 the terms that we're using here it's twofold.  
16 First are major project designation, which is  
17 system acquisition. We're also using this title  
18 because within NOAA's budgeting system, which we  
19 call PPBES, we are also a program within the  
20 budgeting system, so we're able to develop our  
21 requirements, compete for funding if you will, as

1 well as developing a major acquisition program.

2           Similar to hydrography, since we have  
3 been working in the capacity of integrated ocean  
4 observing, there is capacity that exists out there  
5 both within NOAA at the federal level and at the  
6 regional level. We've got to be able to understand  
7 what that capacity is and bring that together. So  
8 my program office, which by the way I have to tell  
9 you we're doing the paperwork to do the program  
10 office because NOAA can't do that without  
11 permission, so we are setting up the program  
12 office, but we did not subsume existing capability  
13 within NOAA. But the philosophy behind this  
14 program office is we cannot create new within the  
15 program office. For example, if that capability  
16 exists, then we guide and buy if you will if we  
17 need to requirements. So for example we're working  
18 with Mike Szabados, in fact we're meeting next week  
19 for a session to determine requirements back and  
20 forth. The National Data Buoy Center provides  
21 capabilities. We have archive centers within NOAA,

1 so you don't see them coming underneath me as a  
2 program office because the philosophy is we have to  
3 engage in leverage capabilities.

4           We do have an interagency structure  
5 under which we work within to ensure that what NOAA  
6 is doing is contributing to what the United States  
7 is doing. And what is depicted on, as I look at  
8 the right-hand side of the slide, we are working  
9 with an office called Ocean.US and in fact over the  
10 next two months we're in the process of moving the  
11 IOOS office to a building in Silver Spring, happens  
12 to be located on Wayne Avenue so we call it the  
13 Wayne Avenue Building, and co-located with us will  
14 be the office of Ocean.US, which is currently in  
15 Claredon but is losing their lease, and also within  
16 NOAA Mike Johnson's Office of Global Observations,  
17 if I said that correctly, so that because IOOS has  
18 both a coastal and a global component, we think  
19 that that synergy will allow us to better work  
20 together in both within NOAA and in this  
21 interagency process.

1           Okay, so this is what we've done. I  
2 became official in February. So we've actually  
3 basically just stood the office up. And we expect  
4 official program office, we're physically located  
5 in the AA's front office and it will take us about  
6 six to nine months optimistically to get the  
7 designation, but that's part of what we need to do  
8 to bring that forward.

9           So let me now focus on what it is when  
10 we talk about this data integration framework and  
11 the assumptions that went forward in putting this  
12 together and the way we pitched this. We went back  
13 and we talked about requirements earlier when you  
14 heard from hydrography, so what are the  
15 requirements to have this thing called IOOS? And  
16 so we've had a lot of briefings, I'm sure you've  
17 seen a lot of briefings that talked about various  
18 programs and plans and action plans that talked  
19 about the need to do this, but we have to be able  
20 to answer a question. And while these are broad  
21 questions they are questions that we can answer,

1 and that is ensuring that global climate, the  
2 problem that we see as global climate is not well  
3 understood, coastal populations and coastal  
4 ecosystems at risk. And so as you start to develop  
5 your requirement to develop a system that's going  
6 to do that, what's the kind of information that you  
7 need to be able to answer those questions?

8           We certainly need the data, we certainly  
9 need improved models, we need improved government,  
10 we need improvement access to information so we can  
11 start to develop the requirements to be able to do  
12 major systems acquisition in an enterprise-wide  
13 fashion from a NOAA perspective that, again, works  
14 in concert with what we're doing in the United  
15 States. These IOOS core variables, they come from  
16 the documents put out by Ocean.US, the IOOS  
17 Development Plan. This is not to say that these  
18 are the only variables that are needed in the  
19 oceanographic realm. It is to say these are the 24  
20 variables that have at least been identified and  
21 agreed to through the interagency process, and we

1 determined that we could not certainly integrate in  
2 a short time frame all 20 variables, so we're going  
3 to concentrate on five, and the five we're  
4 concentrating on in this first 12 months are that  
5 which you see in bold.

6           Certainly temperature and salinity are  
7 key and sea level are certainly key for making a  
8 climate perspective. Surface currents are very key  
9 to our harmful algal blooms and surface currents in  
10 the models that you see here.

11           So then the next question was integrate  
12 so what to do what. So when we put this briefing  
13 together we focused on four theme areas that work  
14 has ongoing within NOAA, and those four theme areas  
15 you can see. There's a couple things about these  
16 theme areas and in the interest of getting through  
17 the briefing here, let me go over a couple things.  
18 One, if we deliver just those five variables, you  
19 should not assume that we have solved integrated  
20 ecosystem assessment. Four of the fifth are  
21 considered critical variables for integrated

1 ecosystem assessments, but we certainly need to  
2 have more from that perspective. The other ability  
3 here when we looked at these four theme areas, it  
4 does run the gamut in time from near real time  
5 through to long-range climatological databases. So  
6 we're able to look at it from those perspectives in  
7 the models and certainly in the models and the  
8 theme areas that are up here, it's not just a NOAA  
9 effort, there's significant coordination on some of  
10 these theme areas certainly outside NOAA down to  
11 the state level. And one of the things we have to  
12 be careful is what's the definition of integration,  
13 and that's always, we use that word, we use the  
14 word interoperable and we use the word integration,  
15 so the terminology we're talking about here is  
16 integrating long-term data series and time and  
17 space.

18           Now, to anybody who, in this audience  
19 here, that's a very broad definition because time  
20 and space will be defined differently based on  
21 where it's going. It's going to be defined

1 differently for hurricane intensity than it will  
2 for coastal inundation, whether it's a near  
3 realtime event or looking at planning processes for  
4 coastal inundation. So that's our key, is to  
5 figure that out. We have done some initial  
6 meetings within the NOAA offices and their contacts  
7 to define what the time and space programmatic are  
8 for these four areas and we're just now assessing  
9 information.

10           Another thing we have to make sure is  
11 when we look at the integration of these variables  
12 under these models, not only are they ready  
13 mathematically and scientifically, but we have  
14 funding profiles and products to go with that.  
15 We're in the process of doing that now. This is  
16 how we portray, again call it a data framework of  
17 how we will start to do that requirements  
18 assessment that allows us to start with the first  
19 five variables and then to continue to expand into  
20 20 variables. And when we determined that  
21 temperature for example integrated is a product

1 that requires us to do a number of things before we  
2 deliver that product, and that is the integration  
3 of the many platforms, and we have about 12 within  
4 NOAA, that actually collect temperature. They come  
5 in via various communications lines. They arrive  
6 at different offices within NOAA, different things  
7 happen to them and most of it gets to one of the  
8 archive centers, but some of it doesn't get to the  
9 archive center. So by focusing on that we have to  
10 do the real hard science and systems engineering  
11 that's going to get us to the delivery and the  
12 integration, which is where we're focused on with  
13 IOOS here of those data. We also understand we're  
14 not the only ones collecting that, both at the  
15 federal and at the regional level. So we are  
16 working through Ocean.US and the DMAC team, Data  
17 Management and Communications team over the next  
18 several months to develop the standards that are  
19 required for both a data transport and a data  
20 format and QA and QC so we can make this data  
21 interoperable.

1           Then as we said, we take it to these  
2 theme areas and we build the framework and build  
3 the process both from a requirements and an  
4 execution perspective to get this delivered to  
5 these models. Then we have to understand do we get  
6 any better. You know, it's all about you need to  
7 be able to provide better services, so in addition  
8 to asking scientifically and programmatically can  
9 we get there, we need to understand the test  
10 criteria that allow us to know that we got there.  
11 We have to develop the test bed, whether it's  
12 within NOAA or within our national framework, to be  
13 able to understand that, and then we would expect  
14 at the other end that we have better models and  
15 theme areas and then we can extend that out further  
16 as we put the framework together.

17           So when we look at this, now, this is a  
18 framework of running the data through. To be able  
19 to get through this, this is also implicit, that we  
20 have to identify the blueprint for what we call our  
21 initial operating capability, because we all know

1 that platforms collect the data that come through  
2 communications lines, they go into computer systems  
3 at various places and people do things with that.  
4 So we're not in this initial operating capability  
5 in the first 12 months as worried about putting  
6 more platforms in the water. We will indicate all  
7 of those platforms are contributing the data as we  
8 look at it by variable and then understanding what  
9 I like to call now supply chain management of  
10 oceanographic data of various variables and moving  
11 that through. So we will have, at the end of the  
12 first 12 months, our aim is to have the framework  
13 and the processes there that we have for delivering  
14 variables and we've got five of them that we need  
15 to integrate as well as identifying what is an  
16 initial operational capability for this enterprise  
17 we call IOOS and therefore you can now develop what  
18 are the costs and what are the requirements to move  
19 forward. So at the end of 36 months you will  
20 understand where your gaps are in observations as  
21 well as data management as well as delivering that

1 to users.

2           This may not be quite as applicable as I  
3 listened to the conversation this morning to you  
4 here, but I will go through it for you in looking  
5 at our regional IOOS activities. As we all, I  
6 think you know that NOAA in FY '08 has IOOS budget  
7 lines in addition to the regional component that  
8 you see here is 2.5 million for the DMAC and then  
9 another couple, about 2 million for work with NWLON  
10 and MDBC, so it's about \$16.5 million in FY '08  
11 that's concentrated on the regional piece and we  
12 have begun a competitive process. The binary  
13 announcement went out in December for the  
14 transition of previously Congressional earmarked  
15 coastal ocean technology systems that comes into a  
16 competitive process. That is underway. We  
17 received 128 letters of intent. A panel, an  
18 interagency panel reviewed those and 42 of those  
19 proposals have been asked to do a full proposal.

20           The idea is that we do want to  
21 understand the capacity and the observing capacity

1 that's out there in the regions. There's some  
2 phenomenal capacity out there in the regions. We  
3 want to be able to capitalize on that, we want to  
4 be able to understand how to take that from the --  
5 into an operational IOOS system that does  
6 contribute additional data from the, to the  
7 national perspective at the regional perspective,  
8 and we do intend to do this in a competitive  
9 process as we move forward.

10 I'll just put this up. This is -- you  
11 all are familiar with NOAA's outreach in regions.  
12 Within IOOS there are regional associations. There  
13 are 11 regional associations in different levels of  
14 maturity that we are working with to establish,  
15 when I say we, it is we in the larger interagency  
16 process to get them established as the regional  
17 governance for the Coastal Ocean Observing Systems  
18 and they're labeled here by region and what you're  
19 seeing up here with the various dots are previously  
20 earmarked projects. Some of them involve observing  
21 systems such as in the Gulf of Maine and the Gulf

1 of Mexico. Some of them are other capabilities  
2 like ACT, which are national capabilities to look  
3 at sensor technology, so it is a mix of actually  
4 systems. This is basically going through the  
5 various years that have been funded so there's a  
6 mix up there of observing systems and modeling  
7 capabilities.

8           This is various-- so I was asked to come  
9 here. I think what we find very positive is that  
10 within NOAA we have now centralized and designated  
11 IOOS versus a major project, a program in the  
12 budgeting system and a central office to guide all  
13 of NOAA's IOOS efforts in a single way forward that  
14 is hopefully understandable as we move through  
15 this. We are in the very beginning stages of that.  
16 I have six people on staff. We are in the middle  
17 of trying to stand the office up and move to a new  
18 location, meet the new requirements for the  
19 budgeting program process for '10 to '14 and begin  
20 the requirements developments. So all of those  
21 right now are parallel on any given day. I think

1 I'm working five different fiscal years. So I just  
2 leave with you that, but the positive, two most  
3 positive certainly, for the first time in the  
4 president's budget we have an IOOS line for DMAC  
5 and regional, and secondly, NOAA has determined  
6 that this is important to have a guided effort. My  
7 job is really to represent NOAA, it really is to  
8 bring NOAA's efforts together in collaboration with  
9 our federal and nonfederal partners so we can  
10 realize IOOS as it was envisioned over seven years  
11 ago now. I think that concludes my brief.

12           RADM WEST: I think it's important for  
13 the panel to understand that this is the first time  
14 that there's a line for IOOS in NOAA's budget.  
15 There's been a lot of folks doing a lot of work to  
16 get that to happen. There's a lot of angst to  
17 that. It all goes back to the earmarking process  
18 that's systemic in NOAA's budget. All those  
19 regional systems you saw up there were started in  
20 earmarks, so you can say had it not been for  
21 earmarks you wouldn't have had that capability, so

1 that's an argument for it. The arguments against  
2 it is when earmarks go away they go away. They're  
3 extremely important to the future of ocean  
4 observing. The first thing you want to do for an  
5 Integrated Ocean Observing System is to figure out  
6 what the hell's going on out there. The president  
7 said go ahead and proceed with that. We are at a  
8 stage literally, why I haven't been able to have  
9 dinner with you the last couple nights, is  
10 happening right now with the Hill, that they'll  
11 take this budget line and take these earmarks that  
12 are almost literally all that I represent in the  
13 academic and private ocean research community, I'm  
14 trying to convince them to send a letter to the  
15 Hill by Monday that says we'll give up all these  
16 earmarks if in fact there will be a competitive pot  
17 that we can work with and expand and grow into an  
18 Integrated Ocean Observing System. For you that  
19 have gotten the earmarks before, you know how hard  
20 that is to do because of the angst, can NOAA do it,  
21 can NOAA get the money out the door, can we get the

1 money from the Hill, et cetera, et cetera, but I  
2 think right now if we don't make this happen this  
3 year, then we've lost the opportunity for several  
4 years just by the political process. I think she's  
5 explained what they're trying to do very, very  
6 succinctly. We have a golden opportunity in this  
7 budget cycle to make this all happen. It's an  
8 example of the problem that you brought up earlier  
9 about NOAA's budget where there's such a  
10 discrepancy because it's earmarks versus a rolled  
11 up important national program that should be funded  
12 for the long haul. Hydrographic service,  
13 absolutely fundamental to any ocean observing  
14 system. We've got to push for NOAA. That's not a  
15 sermon, just a thought.

16 CHAIRMAN RAINEY: John.

17 MR. OSWALD: John Oswald. As a  
18 follow-up to Dick's comment, the \$11.5 million  
19 that's in the budget this year to fund regionals,  
20 how does that compare with, I guess '06 was the  
21 last official budget, all the earmarks for the

1 regionals, is it in the same range or is that 50  
2 million or --

3 MS. WILLIS: In the FY '06, 26 million  
4 in the earmarks for the various grants. When you  
5 look at the FY '08 process, which is the 11.5,  
6 which is the number, again we are running a process  
7 here within '07, and as Steve said, none of us have  
8 our actual spend plans yet, but we can tell you  
9 that we're not up to the 26 million in what we're  
10 looking at in '07, which is the budget as worked  
11 out, but the number you saw there, the 11.5, is FY  
12 '08.

13 RADM WEST: That's separate from these  
14 earmarks. What you want to do is roll up earmarks  
15 into a larger pot and grow on it. Of course the  
16 climate right now for earmarks in this town is not  
17 good. In fact the '07 spend plan will show some  
18 fallout of that. So it's going to be hard to have  
19 earmarks for the future. Unless you've got a very  
20 powerful source of earmarking you may not get it.  
21 It's certainly not something we can build a future

1 ocean observing program on, so it's important to  
2 take those earmarks, roll them up, it's important  
3 for NOAA to do that and then let Congress, who  
4 think it's important to do it, add the proper  
5 amount of money to it so we can get on with this.

6 CHAIRMAN RAINEY: Okay. Captain  
7 McGovern.

8 CAPT MCGOVERN: I just have a question  
9 on, well, go back to the sixth slide, the first of  
10 the -- keep going, I'll tell you. That's it.

11 Okay. One of the problems that I think  
12 the industry has had with IOOS since the beginning  
13 is being basically blocked out, and if you look up  
14 here, you've got your global climate, coastal  
15 populations, ocean and coastal ecosystem, Commerce  
16 and Transportation is nowhere on that slide.  
17 There's nothing to do with Commerce and  
18 Transportation anywhere on that slide and that's  
19 one of the problems we've had. Even in the  
20 regional meetings, when you go there it's all  
21 academics and we feel like the amount of money

1 they're talking eventually about going to IOOS and  
2 all the monies going to PORTS, we're not getting it  
3 yet. We feel like if this takes off and it's not  
4 brought up that Commerce or Transportation is part  
5 of this, then eventually we'll get blocked out  
6 completely. That's a problem. You can see right  
7 here, it's not included.

8 MS. WILLIS: I will take that back and  
9 as we will note down as we develop level 1  
10 requirements, and it is certainly -- you know,  
11 certainly I agree in the first four that you see  
12 there that Commerce and Transportation as we look  
13 at it here, it is not there, but I will take that  
14 back and make sure that we have the requirements  
15 written that we can articulate it from that  
16 perspective as well.

17 MR. MCBRIDE: Using the PORTS systems  
18 are not one of the inputs?

19 MS. WILLIS: The difference I think here  
20 is that we didn't focus on the PORTS system or  
21 NWLON or cruise buoys. We have 12 different

1 systems that do temperature, and so one of the  
2 differences instead of focusing on the integration  
3 of a specific system, we're looking at the  
4 integration of the variables, which are not trying  
5 to distinguish just in semantics but allows us to  
6 bring that framework. If the right and the best  
7 system is PORTS, which we haven't done that  
8 walk-through with Mike, and please don't take that  
9 to say I'm changing everything and PORTS is not  
10 important, then that is the feed for that variable,  
11 but this is really looking at how we integrate the  
12 data regardless of which platform it comes from, so  
13 it's a slightly different way of developing those  
14 requirements.

15 MR. MCBRIDE: You're looking at  
16 integrating that platforms but you have not  
17 included PORTS systems --

18 MS. WILLIS: It's one of the platforms,  
19 so we will integrate the temperature from that  
20 platform that we get from PORTS as well from the  
21 other 12 platforms that are in the water.

1 CHAIRMAN RAINEY: I don't know if it's  
2 the immediately previous slide. Three folks asking  
3 the same question. It was the time line slide that  
4 shows the first 12 months and all. Yes, yes.

5 Has that clock started? I know we've  
6 had a couple of -- Ocean.US has run with this and  
7 we've had a couple rounds of the implementation or  
8 development plan, so are you in -- you mentioned  
9 you stood up officially in February, so in this  
10 36-month outlook, in 36 months then your plan is to  
11 have an initial operating capability and so for the  
12 next three years you will be developing and will  
13 deliver the four ones that you outlined?

14 MS. WILLIS: Actually we've got a bumper  
15 sticker and all my office gets very nervous when I  
16 said 5, 4, 12. The first 12 months was to deliver  
17 the five integrated variables to the four theme  
18 areas in 12 months and our clock started the 1st of  
19 February 2007, so that we actually have the ability  
20 to integrate, which means setting national  
21 standards for those five variables so we can

1 integrate them and know that we've got the  
2 programmatic there for the catcher's mitts as I  
3 call them on the theme areas. So my clock started  
4 on the 1st of February of 2007.

5 CHAIRMAN RAINEY: Then I guess will Tom  
6 pick up on the thread the folks had mentioned, we  
7 gotta float all boats, but when would you see an  
8 opportunity in the process to or do you see an  
9 opportunity to bring in deliverables that would  
10 facilitate NOAA's Commerce and Transportation  
11 strategic goals? Will you go all the way to the  
12 end with these four before you could pick up things  
13 that might -- I realize there will be some  
14 synergies here, but I was kind of told and I know  
15 this is a way oversimplification, somebody told me  
16 that the National Science Foundation, that's more  
17 research science focused and then IOOS, the thing  
18 that differentiated these two big -- this was going  
19 to be an operational one. I'm wondering how  
20 this --

21 MS. WILLIS: Let me answer that in two

1 ways. Right now we're writing level 1 requirements  
2 and I've seen the first two drafts. And so the  
3 first thing we can do is effect the level 1  
4 requirements that ensures that we work across -- we  
5 need to work across all goal leads. We haven't  
6 seen it yet. We're starting to socialize this  
7 level 1 requirements across all the goal leads  
8 within NOAA. So ecosystem, Commerce and  
9 Transportation, climate, weather and water. And  
10 that's really who we need to make sure we're  
11 supporting because we're supporting NOAA in their  
12 mission. So that's the first way.

13 I don't have a real good answer on how  
14 quickly we can establish the process to get to  
15 variable 6 and theme area; our sixth variable and  
16 our fifth theme area, I don't have a good feel for  
17 that. We are right now taking a look at defining  
18 that and the process in the blueprint of what we  
19 consider initial operating capability, but in all  
20 of this as we define our initial operating  
21 capability, while we're focused on the variables

1 here, we have to still stay looking down line, so  
2 we put that blueprint together of what's the  
3 capacity across the United States of America right  
4 now. Because while I certainly agree with the  
5 competitive process and moving things forward in a  
6 competitive nature, we have to understand how much  
7 it's going to cost us to operate this. We talked  
8 about earmarks, they've gone in large part to  
9 academic institutions and other institutions, and  
10 that's great, but how do we make that -- what's the  
11 cost to operate it and where are those lines of who  
12 pays for what part of the operation? All of that  
13 has to be taken into account as we begin to really  
14 develop full requirements. So I know it's a  
15 little, not as succinct as I'd like to be right  
16 now, and we're about six weeks into actually  
17 defining that, but I can tell you for sure as we  
18 move this level 1 requirements document through, it  
19 has to be concurred with on the goal leads. So  
20 that I think is the first opportunity to make sure  
21 that we at least get that articulated correctly.

1 MR. ARMSTRONG: Andy Armstrong. Zdenka,  
2 I'm looking up there and I see temperature,  
3 salinity, sea level currents, that those come from  
4 a variety of NOAA platforms, maybe a dozen you  
5 said. All of those things come from the PORTS  
6 system and those are going to get, those variables  
7 from a variety of sources are going to go into an  
8 integrated data framework for delivery of products  
9 downstream someplace as I understand. So what's  
10 going to happen as that evolves with the 12  
11 platforms that may be delivering the same things  
12 through other processes to other users? Are those  
13 going to be subsumed, are they going to continue?  
14 What's going to happen there?

15 MS. WILLIS: The short answer is that's  
16 what we need to assess, whether those particular  
17 platforms get subsumed. This is not a drill about  
18 getting to a single platform or a single location  
19 to deliver data. There are capacities out there  
20 that will help us deliver a, if you will, common  
21 operational picture from an oceanographic, and that

1 includes biology, chemistry and physics, and it  
2 might still need to come from multiple platforms  
3 and still be processed at different places. The  
4 intent here is to integrate that data so that the  
5 sum is greater than each of the parts. So this  
6 isn't a let's go from 12 systems down to two  
7 systems. If some systems don't make sense, then at  
8 the end of 36 months maybe there will be, there  
9 should be an investment decision made and that's  
10 part of the outcome of why we did it in a  
11 framework. I know it's hard to read, but it's  
12 basically an inventory to identify both the  
13 observation gaps and inventory assessment if you  
14 will of what's out there.

15 CAPT MCGOVERN: I guess two things. One  
16 just to follow up on that. I thought that was  
17 going to be one of the positive aspects of IOOS, is  
18 that we've only got so much money to spend and to  
19 have redundant sensors, obviously if they're not in  
20 the same place they're not in the same place, but  
21 redundant sensors in the same place is a waste of

1 money. So get the information, we don't need it  
2 six different ways. Anyone can use it the way they  
3 need to use it.

4 I guess the other -- I don't know what  
5 the other - oh, when you have all this come out the  
6 other end, let's say one of the things the industry  
7 needs with PORTS is the fact that it is quality  
8 controlled. If we have -- I guess my issue is if  
9 all these sensors are coming in, is there going to  
10 be a way when people look at this data for  
11 operational use that they know whether it's then  
12 quality controlled or not? So there has to be some  
13 indication.

14 MS. WILLIS: And when we briefed this  
15 and focused that the output was a temperature  
16 product or an integrated salinity, the only way you  
17 can get to that to make it useful is to make sure  
18 it's in a format that could be used, whether  
19 there's the automated QC and then -- you know, the  
20 quality assurance. And so by focusing within NOAA  
21 on delivering a variable as a product, we have to

1 do that. In fact, what we're looking at doing in  
2 the next three months, and actually I'll go back  
3 and start the briefings this afternoon as my team's  
4 been putting this together, is what's the right  
5 process whereby we get to national standards.  
6 Because it's more than QC and QA. There's the  
7 transport standards, there's things like  
8 vocabulary, how do we know as we tag the data, you  
9 know, is that that same data that gets all the way  
10 through the supply chain management, and those are  
11 some huge issues not only in the United States but  
12 nationally, and to bring it home when we -- data is  
13 not always tagged. In fact it's not tagged in many  
14 cases. Just think about vocabulary, how many  
15 different ways that you are referred to in your  
16 professional organization. I'm a retired Navy  
17 captain, so you will see my name as Captain Zdenka  
18 Willis or Captain Z.S. Willis. And so that's the  
19 same person but it's got a different identifier and  
20 our computers don't know that. That's some of the  
21 really hard work that we need to do to actually

1 integrate that. And that's not sexy, it's not fun  
2 and it's hard and labor intensive and it costs  
3 money. And why we briefed it this way is to be  
4 able to actually focus on that so we can get those  
5 standards published. There's been a tremendous  
6 amount of work to do that in all of those areas  
7 because what you want as a user is to know you have  
8 the right quality data from whatever sensor it  
9 comes from in a usable format, and what you really  
10 need is the information and the tactical decision  
11 made. I'm just trying to in the first part of the  
12 Integrated Ocean Observing System to be able to  
13 flow the information, so what the real product is,  
14 whether it's go, no go or stoplight or whatever,  
15 makes sense for your individual user.

16           This framework does depend on our folks  
17 within NOAA that as we develop that integration of  
18 those, that raw information data into quality  
19 assured and assessed information that they are  
20 extending out to the users, and you don't see that  
21 reflected on the framework and that's another, as

1 we start briefing this around, that's another  
2 comment that's been made on this framework, that we  
3 don't actually get to the users. That's part of my  
4 office's job, to make sure we use it in the  
5 capacity at NOAA. Those who are out here with the  
6 users to make sure we're bringing that through.

7 MR. DASLER: Jon Dasler. Just a  
8 follow-up comment to what Andy was talking about.  
9 We have been around a lot of sites where there are  
10 sensors that are all co-located and I guess as a  
11 taxpayer I have concern that there's a lot of  
12 funding going to National Weather Service will have  
13 a gauge co-located with a gauge with USGS, there  
14 maybe academic programs that have gauges, we've  
15 seen sites where there's been three or four gauges  
16 all co-located. If nothing else coming out of this  
17 process too is an evaluation of that. Do you see  
18 that?

19 MS. WILLIS: Absolutely. Certainly  
20 first within NOAA, keep hammering that message home  
21 within the interagency and we're working through

1 the interagency working group for ocean observation  
2 and I would encourage folks to continue to bring  
3 that issue up. Yes, that is an output of this  
4 framework so we do proper investment management on  
5 sensors regardless of where they come from in NOAA.  
6 And I should also say that not only is IOOS doing  
7 this, there's another acronym, GOIDE, and again  
8 it's also a, not competing with IOOS but trying to  
9 make sure from an architecture standpoint that not  
10 only for the ocean sensors but for the remainder of  
11 the sensors within NOAA that we get to this right  
12 inventory assessment. And that's one of the things  
13 from IOOS, is that we represent NOAA and we're  
14 supposed to represent making sure that we have that  
15 investment, but I just want to make sure you know  
16 that we're not doing it just the ocean, that's  
17 where my office is, but it's also on the remainder  
18 of the sensors, and then through the IWGOO and the  
19 remainder of the interagency processes we're trying  
20 to also make sure we work that. But I encourage  
21 you to continue to voice that concern.

1 MR. DASLER: I think you just answered  
2 my second -- just even beyond, though, but other  
3 agency gauges, hopefully that framework can address  
4 that as well.

5 CHAIRMAN RAINEY: Thanks very much. It  
6 sounds like if I understood then our avenue to  
7 interact with you would be through our goal lead  
8 and our representation we have through our program  
9 offices. And we will be able to communicate with  
10 you.

11 MS. WILLIS: Oh, absolutely. And you  
12 can communicate directly to us. Our intention is  
13 to make the process as transparent as possible and  
14 more than happy to share the level 1 requirements.  
15 The first two versions were unreadable in my  
16 perspective, so we want to get to a level where  
17 it's readable and the KDP process within NOAA is  
18 what we determine it to be. We want to make sure  
19 that we do it right. As I said, the train has not  
20 left the station on this. We have some near term  
21 deliverables that we want to make sure we're

1 showing success, but if we don't put in a good  
2 baseline requirements and acquisition strategy,  
3 then we're really not going to get there in the end  
4 and the end is to have a functional IOOS system  
5 within the United States.

6 CHAIRMAN RAINEY: Thanks very much.  
7 We're going to go ahead and take a break for lunch.  
8 We have a few folks that need to --

9 (Pause in the proceedings.)

10 CHAIRMAN RAINEY: All right. I know  
11 there's some folks that need to check out, we're  
12 running a little bit late. We had public comment  
13 on the agenda. I guess if individual members need  
14 to check out, are there some more public comments  
15 this morning? Folks will have another opportunity  
16 at the end. Seeing none, let me give you a quick  
17 what we've got lined up.

18 I would like to spend this afternoon  
19 going over a couple of things when we come back. I  
20 think there's no problem at all in adjourning on  
21 schedule. I think I'd like to get as many comments

1 from the members while we're here on our report so  
2 we can get that finalized very quickly. I have  
3 drafted a recommendation that I'd like to propose  
4 and see if we can approve just an initial  
5 recommendation on the fleet recapitalization plan.  
6 I'd like to solicit volunteers of interested  
7 members that will work with me on the fleet recap  
8 and the hydrographic project, and then I'd like to  
9 have some discussion about how we, kind of the  
10 mechanics for our meeting and what we can do to  
11 work with NOAA to shape our agenda and tailor our  
12 work going ahead. So those are the things I'd like  
13 to cover this afternoon. I'd like to adjourn then  
14 until, we do have lunch rolling in but we are  
15 running a little late, let's give folks until 1  
16 o'clock.

17 (Luncheon recess.)

18 CHAIRMAN RAINEY: It's 1 o'clock. I'd  
19 like to go ahead and let's start and run through  
20 the things I mentioned before we broke for lunch.  
21 If people have to come and go, you know, checking

1 out or, you know, let's keep the lunch rolling.  
2 But let me recap what I thought we could handle and  
3 see if there's new business and all. Our main  
4 objective or one of our main objectives for the  
5 meeting was to present our report, special report.  
6 I talked with a lot of you and you all kind of said  
7 you want to get this wrapped up, so I'd like to  
8 spend some time while we're here to take on board  
9 the comments you have, you know, as we finalize the  
10 draft.

11 I prepared a very brief but hopefully  
12 helpful recommendation on the fleet, just an  
13 initial recommendation on the fleet  
14 recapitalization plan, and I'd like to have a look  
15 at that and then I'd like to talk about how we can  
16 move ahead on our interaction with NOAA on the  
17 hydro major project and fleet recapitalization  
18 project and then discuss maybe some mechanics  
19 moving forward on how we set our agenda. There's  
20 been lots of questions about the next meeting.  
21 Like I said, the main effort will be on the report

1 but let me say -- we have this up on the screen.  
2 Gebhard Veeley (phonetic) had prepared some  
3 materials for us and we tasked them and indicated  
4 it would be helpful to have some initial comments  
5 from the panel with the anticipation of us being  
6 able to take another look at the draft approach or  
7 study when it comes out in September. I think I  
8 can read it from here. The HSRP supports NOAA's  
9 proposed approach to the NOAA fleet  
10 recapitalization study. The HSRP recommends that  
11 the study's missions needs assessment is consistent  
12 with NOAA's hydrographic hydrography major project.  
13 The HSRP recommends that the recapitalization study  
14 consider and where appropriate incorporate  
15 requirements identified by the FOFC process, which  
16 is the interagency process Admiral West was  
17 informing us about, which is looking at the overall  
18 serving capability. My thinking with this is it  
19 acknowledges that this is ongoing, includes a  
20 couple of comments we made in our discussion. If I  
21 could get a motion on that and a second if there's

1 any further discussion.

2 CAPT MCGOVERN: I move.

3 CHAIRMAN RAINEY: A motion on that and a  
4 second. All right. Open it up for discussion or  
5 comment. All right. Well, I'd like to move--

6 MR. SKINNER: Maybe someone can answer  
7 this. Would it help to have something in there  
8 that recognizes that this is part of the dual  
9 approach of an in-house capability of the fleet and  
10 also, but the other side is also recognizing the  
11 private contractors? Or you want just to focus on  
12 the fleet? Thinking of in terms of if it's used on  
13 the Hill, just recognizing this is not the only  
14 component of NOAA's hydrographic service.

15 CHAIRMAN RAINEY: My thinking on that as  
16 it was presented, I think they were looking at the  
17 approach, I'll go to the tab here, but my  
18 recollection was -- I think that's an excellent  
19 point, but it looked to me like the approach as  
20 outlined and proposed was, I think they called it  
21 the AOA alternate, the alternatives anyway, and

1 they were looking at that, not only just in-house  
2 and the contract support but also the UNOLS  
3 vessels, those are the vessels that are either  
4 owner operated, like many of them are the academic  
5 institutions, oceanographic research, but I think  
6 that was in the scope, is to look at the needs and  
7 then look at the various alternatives to meeting  
8 those which would encompass much more than just the  
9 NOAA organic requirement. I think that would be  
10 okay.

11 MR. SKINNER: I mentioned it more as a,  
12 if our recommendation is going to be used for  
13 somebody who doesn't have the full context of it,  
14 it might help avoid having questions asked about  
15 the other side, but I fully support it as it is.  
16 It's just a question of whether that helps answer  
17 some anticipated questions.

18 CAPT MCGOVERN: Can you repeat for me  
19 what FOFC stands for? I guess this doesn't deal  
20 with the SWATH portion of the presentation. Is  
21 there an opportunity to deal with funding estimated

1 costs for that vessel? Another shortfall, it  
2 suggests to me that we're building a vessel which  
3 is not what NOAA wants and which they may not be  
4 able to operate. Is this the right place to do it?

5 CHAIRMAN RAINEY: My personal feeling  
6 would be that might be important but maybe  
7 separate. This would deal with it in that the  
8 study would anticipate and I think would consider  
9 how the SWATH is coming, that's projected to be  
10 online and the study is going to incorporate it  
11 from a -- that will be one piece of the mission,  
12 the mission needs requirement. But I think you do  
13 raise another point and it may be an opportunity to  
14 have a separate recommendation specifically on the  
15 SWATH if we have a focused enough understanding of  
16 the issue. Other than we obviously are going to  
17 make a general statement of concern on that, but I  
18 don't know -- what would your feeling be?

19 CAPT BARNUM: I was just going to say on  
20 the SWATH, again, we don't have our '07 spending  
21 plan so we owe you a get-back on that. But

1 certainly if there's concern, we can certainly  
2 express that, put that in the recommendation, but  
3 again, this was an earmark that was over several  
4 years and had some rescissions, and we'll move  
5 forward to build this vessel and there was  
6 additional money I believe in the Senate marked '07  
7 and of course that all changed in the way money was  
8 appropriated. Again, we don't have an '07 spend  
9 plan yet. That's been delivered for execution. I  
10 don't know whether money is there or not at this  
11 point.

12 CHAIRMAN RAINEY: How about FOFC?

13 RADM WEST: In 1996 legislation was  
14 passed to set up all the federal agencies, 15 of  
15 them, that have a piece of the ocean issues, and  
16 one of the requirements was to set up a committee  
17 to look at the infrastructure, it's called Federal  
18 Ocean Facilities Committee. FACSI 1 came out in  
19 '02, that report just was concentrating on the  
20 UNOLS, the government built and owned fleet  
21 operated by the academic research community. FACSI

1 2, which is ongoing right now, has expanded to  
2 include, may or may not be icebreakers, just about  
3 everything that's not DOD or Homeland Security  
4 vessels also. It does include NOAA, so they  
5 should, this is a good recommendation to coordinate  
6 that. That's a federal committee looking at  
7 infrastructure. They wanted to look at satellites  
8 and airplanes and all that stuff, but it got too  
9 hard.

10 MR. DASLER: Just to follow up on Tom's  
11 comment and kind of cut off the questions, it makes  
12 sense to have a preamble if maybe we can do that  
13 now.

14 CHAIRMAN RAINEY: Would it be acceptable  
15 to just say the HSRP supports NOAA's proposed  
16 approach for the NOAA fleet recapitalization study,  
17 including in-house and outsourced capability?

18 MR. SKINNER: Jon and I are shrugging  
19 shoulders at each other so I assume that means yes.

20 CAPT BARNUM: I was going to add look at  
21 the second paragraph, should it be assessment be

1 consistent?

2 CHAIRMAN RAINEY: No objection. Instead  
3 of is. There's no reason why we couldn't add  
4 another sentence that says that the HSRP is  
5 concerned with the current status of the SWATH. I  
6 don't want to say contract and advise, update us  
7 on --

8  
9 CAPT MCGOVERN: In order to help them  
10 maybe chase the money, we recommend that NOAA  
11 pursue funding to restore the, and we can list the  
12 bullets there.

13 CHAIRMAN RAINEY: Yeah.

14 MR. ARMSTRONG: Management versus spare  
15 parts.

16 CHAIRMAN RAINEY: What I would like to  
17 do is Captain Parsons said in his presentation, I  
18 believe the last paragraph there on the page with  
19 the SWATH, that we can just incorporate,  
20 essentially that NOAA pursue the shortfall so that  
21 we get a whole vessel.

1           CAPT BARNUM: If I could add in the very  
2 last statement instead of contract we should say  
3 concerned with the funding for completion,  
4 outfitting and operation and maintenance.

5           MR. ARMSTRONG: I think the way you  
6 started -- I agree the way this one started is  
7 liable to create some concern.

8           CAPT BARNUM: Yes. Funds for  
9 completion, outfitting and operations and  
10 maintenance. And then strike contract.

11          CAPT MCGOVERN: Maintenance of the SWATH  
12 CMV.

13                   (Discussion held off the record.)

14          CHAIRMAN RAINEY: Maintenance of the  
15 SWATH, get rid of the contract.

16          CAPT MCGOVERN: You want to put CMV or  
17 the name of it? Will they know what we're talking  
18 about? CMV, coastal mapping vessel, or even the  
19 name, is it going to be --

20          CAPT BARNUM: No, the name hasn't been  
21 selected yet. It's pretty much known internally as

1 a SWATH.

2 CAPT MCGOVERN: The HSRP recommends that  
3 NOAA pursue funding to recoup management reserves,  
4 vessel capacity improvements, spare parts and  
5 outfitting, that's what you're missing. It's  
6 actually right out of one of the slides in the  
7 book.

8 CAPT BARNUM: Okay. Probably want to  
9 add the operations and maintenance too in addition  
10 to the slide, looking at the longer term picture.

11 RADM WEST: That's the problem with  
12 earmarks, they don't come with longer funding, they  
13 come one at a time.

14 CAPT MCGOVERN: Pursue funding -- that  
15 NOAA pursue funding. Is this going to restore this  
16 or these call for in-flights at one time, right?

17 MR. SKINNER: This is going to cover the  
18 cost.

19 CAPT MCGOVERN: Pursue funding to cover  
20 the cost of.

21 CHAIRMAN RAINEY: Vessel completion.

1           CAPT MCGOVERN: Management reserves,  
2 vessel capacity improvements, spare parts and  
3 outfitting and then operation and maintenance.

4           RADM WEST: Do we need recommendations  
5 for that?

6           MR. SKINNER: We actually have one  
7 recommendation but if we have the recommendation  
8 that Andy just did, do we need the first one? We  
9 just add the SWATH somewhere in there?

10          CHAIRMAN RAINEY: Right.

11          CAPT MCGOVERN: They're really two  
12 different programs, recapitalization and building  
13 the SWATH.

14          CHAIRMAN RAINEY: What Tom is pointing  
15 out, the second to the last ultimate paragraph  
16 there is now superseded by the last one, so it's a  
17 restatement that instead of saying we're concerned  
18 about it we're going to a recommendation and that's  
19 implicit that we're concerned about it. We just  
20 add for the SWATH vessel at the end of the last  
21 one.

1           CAPT BARNUM:   If I could add one  
2 correction, instead of vessel capacity it should be  
3 vessel capability.

4           CAPT MCGOVERN:   The slide was wrong.

5           CHAIRMAN RAINEY:   So with permission for  
6 technical grammatical corrections, any further  
7 discussion on the proposed recommendations here?  
8 All in favor?   Opposed.   Okay.   Thank you.

9                   Is there -- let's talk about the two  
10 tasks we have, since we're on the recap.   Are there  
11 folks, is there somebody that would be interested  
12 in working on a working group on the fleet  
13 recapitalization study?   Maybe that's -- we made  
14 initial comment there.   Let me back that up.   I  
15 think then let's look at that and if you have  
16 further initial comments we can take a break and  
17 take those on board and in September when we have  
18 the draft we can deal with that one.   And I'll  
19 double-check, but if he has a need that arises  
20 before then and it's specific, we can stand  
21 something up to respond to that when that comes in,

1 anything they particularly need our help on,  
2 otherwise we'll leave that open to receive members'  
3 input on that.

4           On the major project for the  
5 hydrography, is there somebody, a group of folks  
6 who would be willing to work on that? I will be  
7 happy to help out. I was wondering if there were  
8 some folks that could help me frame the issue for  
9 the committee and do kind of an initial scope of  
10 work on that and --

11           MR. WHITING: I'll help you out on that.

12           MR. ARMSTRONG: You can probably add Lou  
13 to that too.

14           CHAIRMAN RAINEY: Okay. And Adam?  
15 Okay. All right. Thanks.

16           The other two things that I had in my  
17 mind to take a look at, to discuss the mechanics  
18 but also the report. So I think I'd like to get  
19 into the report. Very quickly let me say we have  
20 not locked in any future meeting dates. A couple  
21 of members, I got this through NOAA, we looked at

1 the budgets and heard a lot about the CR and such,  
2 but there were several folks that were wondering if  
3 there might be an opportunity to do a meeting in  
4 conjunction with the Hydrographic Conference and  
5 also there was a possibility that you might try to  
6 do something in conjunction with the SWATH keel  
7 laying we talked about, which is June 15th. The  
8 hydro conference will be too close on the heels of  
9 this and with the current state of the budget we're  
10 not certain but it's not likely we'd have a full  
11 meeting at the SWATH. There was -- I will continue  
12 to talk with the folks, but right now there's no  
13 time set. We've looked at what the budget can do  
14 in the time to turn it around, so we don't have a  
15 date in focus yet. As soon as we can start to get  
16 that, see some opportunities there, what's going to  
17 be financially doable and staff-wise doable, we'll  
18 get word out to the panel. So we're looking for  
19 opportunities to go with that. Admiral.

20               RADM WEST: Are you going to talk any  
21 more about future meetings?

1           CHAIRMAN RAINEY: I'd like to pick up  
2 kind of the mechanics, how to work with NOAA and  
3 get some things we talked about and noted on the  
4 agenda, how we get that set, so yes, I'd like to do  
5 that and I guess go ahead do that now.

6           RADM WEST: You've got to make progress  
7 or it will go away. Keep that in mind. If there  
8 is a budget issue I think NOAA has a lot of  
9 facilities around, if they can use their own  
10 facility to host this thing, it will save a lot of  
11 money and let the group see things. Going into the  
12 field you gotta see things. Consider using one of  
13 your labs as a place to hold this in the future and  
14 stuff like that, and for you to pick up things that  
15 are important to you for us to look at. Here  
16 again, go back to using us as your expert group,  
17 it's free other than paying a rate to and from  
18 there. On that subject, if you take back to your  
19 folks that we really are special government  
20 employees in support of you. Even though it might  
21 not sound like it at times, we're not the enemy and

1 we're here to really help. Kind of take that  
2 approach.

3 MR. ZILKOSKI: I think we can find NOAA  
4 facilities around the country. When you talk about  
5 work groups, I would like the group to set up a  
6 small work group to look at the ten-year plan. I  
7 realize there are a lot of folks around the table  
8 that don't clearly understand it, but clearly Lou  
9 and Jon and John are the three could give me some  
10 good input into it and vet it through the rest of  
11 the group. So that's work group I want you to --

12 CHAIRMAN RAINEY: Thanks, Dave, and I  
13 apologize, I did want to do that as well, that's  
14 the other task we have, and the last page of Dave's  
15 presentation kind of lined that out and we can get  
16 a group of folks to flesh that out and see exactly  
17 what you need. I'll check with Lou, he had to  
18 leave. Are there other folks? Okay, John Oswald.  
19 And Jon Dasler. And I'll try to help out and work  
20 with the group as well. Okay. Thanks.

21 Mike.

1 MR. SZABADOS: I'd also like to have a  
2 working group work with us on a couple of items on  
3 the integration of PORTS and AIS.

4 CHAIRMAN RAINEY: So you anticipate  
5 having -- I'm not sure what -- you just want to  
6 have a group to just check in on --

7 MR. SZABADOS: Actually Andy -- do you  
8 want to respond?

9 CHAIRMAN RAINEY: We can set something  
10 up. I just wasn't sure if you had a task that you  
11 wanted to get something on right now or --

12 MR. SZABADOS: Part of the tasking would  
13 be once we get the information integrated to AIS,  
14 the second phase of how the information should be  
15 displayed. And I think there's some corporate  
16 knowledge here which can help us work with the  
17 community.

18 CHAIRMAN RAINEY: Surely.

19 CAPT MYRTIDIS: I would like to help.  
20 They said I'm not allowed to.

21 CAPT MCGOVERN: Sherri and myself and

1 Minas.

2 CHAIRMAN RAINEY: Okay. Anything  
3 further them on the task mechanics? I think that's  
4 a good exchange. Okay. All right.

5 CAPT BARNUM: On the future meeting, I  
6 know we haven't got our spend plan yet, but I would  
7 be cautiously optimistic to use that word. I think  
8 we could probably arrange something at the end of  
9 our FY. Certainly one of the thoughts with the  
10 slide was to see some real event for the membership  
11 for the year and also give them the gulf, maybe  
12 some of the marine mapping work that's going on as  
13 well and some of the height issues that folks are  
14 dealing with.

15 CHAIRMAN RAINEY: All right. The other,  
16 the main thing I'd like to do is take a look at our  
17 report. Unless, again let me ask members if they  
18 have any other comments you want to make before  
19 that or you want to dedicate time to getting our  
20 report in? I know that a couple of folks were able  
21 to get some comments in and we saved those, we have

1 those on file, and you sent in the e-mail when you  
2 first received the report back. One of the things,  
3 just in talking to our, to Barbara and others that  
4 have helped us put this together is their view is  
5 if you have a copy of the document and you can make  
6 written comments in that document, that will help  
7 them the mechanics of making those edits. If you  
8 have comments on what you've seen or found, if you  
9 can leave them before you go today we can get those  
10 picked up.

11 I can tell you a couple of just sort of  
12 generic or global comments that I have. Clearly  
13 there's typographical errors. We're going to get  
14 those cleaned up. You've seen those. We can  
15 always double-check each other on those. One of  
16 the things as a general comment, we provided a  
17 considerable number of photographs and graphics and  
18 we did not see which ones were selected until the  
19 draft. Many were selected that were credited to  
20 the Corps of Engineers, and while the photographs  
21 were no problem with them, I'd like to use NOAA

1 graphics to represent the NOAA program and so one  
2 suggestion I would have is take a look at the body  
3 of photographs we have to illustrate our points and  
4 see if we can do that. There was also inconsistent  
5 crediting. Some credits were put in for a certain  
6 photographs and others were not, so I think we need  
7 to be consistent in how we handle that. These are  
8 kind of minor sort of proofreading things. Does  
9 anybody have any objection to those kind of global  
10 things, for fixing that? Okay.

11           There were several individuals, please  
12 look at the way that your name and affiliation is  
13 represented in the masthead if you will. We need  
14 to get Tom, Tom's in there as the vice chair, a  
15 quick comment we picked up right away. Some folks  
16 that sent us e-mails saying their organization or  
17 title may have been incorrectly listed, so please  
18 get those in to us.

19           I guess I'll quit talking and open it  
20 up. Tom Skinner had a good idea about the front  
21 cover. I'll let you explain that.

1           MR. SKINNER: Thanks, Scott. Just  
2 looking at the cover here, and you got these the  
3 last three or four years, I thought this was -- I  
4 always associate this is with our group, whether  
5 intended or not it's sort of become our logo. Why  
6 not just have something that looks like this with  
7 the title of the report here so you're in some  
8 respects branding the group? Seems pretty simple,  
9 it doesn't have to be a loose-leaf thing bound, but  
10 is we want to get recognized over the years I think  
11 it helps to have a consistent look, and then on the  
12 inside just follow the same thought.

13           CAPT MYRTIDIS: I agree.

14           CAPT MCGOVERN: Just a couple small  
15 edits. Based on what Admiral Lautenbacher said  
16 yesterday, on your letter to the chair, I thought  
17 it would be to remove, you know, his name, well,  
18 the address from the top and just start with  
19 basically an open letter. This way it could be  
20 used to anybody if it's dropped on the Hill. And  
21 the other is some of these pictures, I like them

1 but I think to a lot of people that may not  
2 understand what they are, maybe a small caption. I  
3 mean if you look on page 5, I assume that's a  
4 sensor on the top, most people are not going know  
5 what that is.

6 CHAIRMAN RAINEY: I agree with that.

7 CAPT MCGOVERN: For instance on page 5  
8 up in the corner, that little picture, any idea?  
9 Most people -- just small captions on a lot of  
10 these pictures would probably help a lot to explain  
11 what they are. Especially if you're going to take  
12 it to the non --

13 CHAIRMAN RAINEY: I agree. I would like  
14 just for the record to acknowledge, to pass on I  
15 guess or talk just a minute about the suggestion of  
16 an open letter. I agree with that and I was  
17 delighted that Admiral Lautenbacher's sort of  
18 immediate reaction to this was, we did have a  
19 prebriefing but very quickly he wanted to have this  
20 widely disseminated, which is I think reflects very  
21 favorably on our work. So if it's not, this is

1 what I don't know, we have been constantly,  
2 consistently advised of capabilities but more of  
3 our limitations, so as long as NOAA has no problem  
4 with that I'm fine with it. The one opportunity I  
5 was hoping to have come in was a substantive  
6 addition to the report for going from our  
7 preliminary finding to our final. I was hoping  
8 that we could get kind of an official letter back  
9 from Admiral Lautenbacher to include in the report  
10 and simply sort of what he -- the comments that he  
11 gave to us yesterday would be terrific, acknowledge  
12 receipt of it and it went through the importance of  
13 hydro services and some of the important  
14 recommendations, something that basically just  
15 grabs the talking points he had yesterday and puts  
16 it in there, I think that would be nice to have in  
17 the report. However we can marry those up.

18           RADM WEST: I was thinking about the  
19 open letter, I'm not sure we can. I think what  
20 Connie meant yesterday was get it to my boss. I  
21 think we are a Commerce backup. So send it to

1 Gutierrez, send it to both quite frankly, send it  
2 to Gutierrez and send it to Oceans and Atmosphere  
3 and then it becomes a public document. I think  
4 we're going to have to do it that way. It would be  
5 nice to have Connie's endorsement but I wouldn't  
6 want to wait because you want this out quickly, the  
7 Hill is working on the '08 budget, NOAA is working  
8 on the '09 budget.

9 MR. DASLER: What about just taking  
10 Andrew's comment about not addressing the letter  
11 that's incorporated but as we send those on there'd  
12 be a cover letter to go with it so then it can be  
13 used for line distribution.

14 CHAIRMAN RAINEY: Basically I delete the  
15 top three lines.

16 MR. DASLER: Right, and it makes it more  
17 generic for general distribution, but you can still  
18 have a company letter when it gets distributed.

19 CAPT MCGOVERN: The letter would come  
20 from the chair to the Secretary, please find the  
21 attached report and then you can -- technically we

1 have reported to the Secretary. But he takes the  
2 attachment separately, which is this. I don't  
3 know. I guess the lawyers could fool around with  
4 that.

5 CHAIRMAN RAINEY: I take your point. I  
6 think we could just delete the header and just  
7 start with the body of the letter.

8 CAPT BARNUM: Remember that the FACA  
9 works for the administration, as the admiral  
10 pointed out to Commerce. So I think Admiral  
11 Lautenbacher was saying yesterday it's good telling  
12 me but also tell my boss. So I also agree with  
13 Admiral West, I think you need settle it here  
14 because time is fleeting for this report and it's  
15 critical.

16 CHAIRMAN RAINEY: Then I would suggest  
17 that we simply delete the first four lines and  
18 leave the date. We have the date on the document  
19 somewhere. And just basically start out this  
20 special report. It goes on in the text to explain  
21 who we are and who we report to and as Captain

1 McGovern suggested, we can also submit, put a  
2 transmittal letter on it and sent it up and the  
3 administrator and staff on his behalf can also  
4 disseminate it through the chain. I don't see how  
5 that can run afoul -- is that acceptable to the  
6 panel? Does that accomplish the intent? Okay.

7 MR. DASLER: I have had some comments on  
8 what we talking about on some of the graphics.  
9 Page 13, I sent an e-mail, it just seemed odd when  
10 we were talking about what we can't see, there's a  
11 picture of the satellites up there and there's no  
12 representation of a side scan image, so there's  
13 different methods and possibly just replacing that  
14 with a side scan on that page. And then on Lou's,  
15 the graphic on page 8 where it says estimated  
16 population of 80,500. That's actually an  
17 uninhabited island.

18 CHAIRMAN RAINEY: So that estimation is  
19 a little off.

20 CAPT MCGOVERN: It didn't say people. I  
21 don't know if NOAA has it, does NOAA have the side

1 scan of this anchor before they found it?

2 CHAIRMAN RAINEY: What page?

3 CAPT MCGOVERN: 13. It would helpful to  
4 tie in the two.

5 MR. SKINNER: That would be a really  
6 good representation, particularly for the  
7 description so people knew before and after.

8 CAPT MCGOVERN: I don't know if you have  
9 them or not, but if you do it would be good.

10 CAPT BARNUM: The surveys that were done  
11 postaccident, there were several folks out of there  
12 and the contractor wasn't hired to do this. So  
13 again, this is an area of the channel that was not  
14 surveys done after the fact.

15 CHAIRMAN RAINEY: The answer is I don't  
16 know if we can get it but we'll try. I can tell  
17 you that we had photos previous that we were not  
18 able to use, so this is not an easy thing. Time is  
19 of the essence here clearly, but we can certainly  
20 see if we can get that.

21 CAPT MCGOVERN: Don't let it slow you

1 down.

2           CHAIRMAN RAINEY: Again, similar to the  
3 inconsistency and the accrediting, adding a caption  
4 to explain a picture that's not self-evident, I  
5 don't know to the extent we can mess with the  
6 layout, but obviously you got pictures of one thing  
7 and the discussion on it on different pages. To  
8 the extent we can quickly put a picture of what  
9 we're talking about, we can maybe take a look at  
10 that. We have to do what we can. That's as  
11 important as some of these minor --

12           CHAIRMAN RAINEY: Any members that  
13 reviewed, this one of the things most important to  
14 me and took some time, we went diligently through a  
15 program analysis to work with -- this is an  
16 acknowledgment up front. Rich and Barbara and all  
17 of our folks that work regularly, those offices  
18 really made this possible. We had some difficulty  
19 with challenging issues. Does any of the members  
20 see any technically inaccurate statements other  
21 than the population on this island? I want this to

1 be as bulletproof as possible.

2 MR. DASLER: There was a statement in  
3 there about one and a half obstruction per survey  
4 but then when you look at --

5 CHAIRMAN RAINEY: Two and a half, right?

6 MR. DASLER: I think it says one and a  
7 half. If you look at the '05-'06 field season  
8 you've got 800 and some detons. On page 14 in the  
9 first paragraph it says NOAA finds new hazards at  
10 the rate of about 2.5 per day, see Table 1, so  
11 there was a discrepancy on that one.

12 MS. DICKINSON: I think, Scott, you said  
13 one and a half yesterday when you were presenting  
14 it to the admiral and it's two and a half.

15 CHAIRMAN RAINEY: So it's twice as bad  
16 as I said yesterday.

17 MR. DASLER: Even at two and a half, in  
18 the '05-'06 field season it was 800 and some, I  
19 think that now is probably more accurate, there's  
20 more been effort than in '05 and '06. And you  
21 wouldn't really want to look at it as -- I don't

1 know if you want to break that down into data  
2 acquisition, but it seems even two and a half is an  
3 underestimate.

4 CHAIRMAN RAINEY: We'll take it for  
5 action and come out with our most accurate number  
6 and stick to it.

7 MR. SKINNER: Looking at some of the  
8 images that represent the growth of vessels over  
9 time, it seems to me that some of the images that  
10 we saw yesterday at the first presentation were a  
11 lot more, conveyed the information a lot better  
12 than some of the illustrations here. I hope we can  
13 get those and plug them in. Or just go with these,  
14 but I thought they did a much better job providing  
15 the wow factor in terms of the vessel size.

16 CHAIRMAN RAINEY: Okay, if you have a  
17 specific one, you can identify specific ones we can  
18 certainly see about using those I guess. Again, we  
19 probably have to do that pretty quickly. If you  
20 have a particular one in mind we can check.

21 MR. SKINNER: Okay.

1 MR. DASLER: Just to expedite it, in  
2 terms of the side scan sonar image replacing it  
3 with one of Iraq, replacing the satellite imagery  
4 on 13 that was submitted before, if people feel  
5 that's okay --

6 CHAIRMAN RAINEY: Are you referring to  
7 the one that you had?

8 MR. DASLER: In an e-mail I sent earlier  
9 when we addressed this I sent several side scan  
10 images, we have one of Iraq that could go in there.

11 CHAIRMAN RAINEY: All right. I had  
12 mentioned we received everyone's e-mails, we have  
13 those, but Elaine and John both talked about the  
14 recreational boater representation. As you see it  
15 now in the document, is that page sufficient or if  
16 you had some specific changes that you wanted to  
17 make? I'm not sure where --

18 MS. DICKINSON: Page 25.

19 CHAIRMAN RAINEY: And I guess  
20 throughout, is that satisfactory?

21 MS. DICKINSON: I think that page is

1 good.

2 MR. ARMSTRONG: On page 4, I think I  
3 sent a comment in earlier, the second paragraph  
4 there, the lower paragraph just doesn't make sense  
5 to me. I don't know what we're trying to say  
6 there. The one talking about the earmarks and  
7 percentages. I can't follow any logic in that  
8 paragraph. Maybe it's just me.

9 CHAIRMAN RAINEY: Okay. I'll give that  
10 one to the Secretary and see what happens. I think  
11 if everybody's had a chance to take a look at what  
12 he's asking about, the point I think that's trying  
13 to be made there is the impact of the earmarks,  
14 it's a large percentage. So when you look at the  
15 trend for the programs budget, you can consider the  
16 amount of percentage that's derived from earmark  
17 rather than base budget. Do you have a better way  
18 of presenting it? How do you think makes that  
19 point maybe more clear or to clear that up? I  
20 think what we're trying to get at there is the  
21 budget trend is low and what happens is the

1 president's request comes in and I think what's  
2 trying to be said there is that then you get the  
3 earmarks and it pluses it up, which appears it's  
4 not so bad, but really the trend is downward in the  
5 administration. So how would you make that more  
6 clear?

7 MR. SZABADOS: Maybe with the  
8 president's request and inactive as opposed to  
9 using the term earmarked? I don't know if that  
10 would be a better way.

11 MR. DASLER: Like some of Lou's  
12 comments, the president's request for '07 and '08  
13 compared to the '06, \$122 million shortfall in the  
14 NOS budget.

15 CHAIRMAN RAINEY: How about if we take  
16 that for action, look at that paragraph, I'll work  
17 with the programs and try to take another stab at  
18 that and put that out very quickly.

19 MR. ARMSTRONG: The reason I make this  
20 point, we're asking for more money, this is a key  
21 paragraph in the request for additional funding.

1 And I don't think -- it doesn't make sense to me as  
2 it's written.

3 CHAIRMAN RAINEY: All right. I have  
4 that. We'll respond to that. I was asked, I don't  
5 know the source, somebody here let me know, one  
6 just came to me for consideration, we have included  
7 in the draft the letter that we sent up on the  
8 Ocean Action Plan. It was asked do we also want to  
9 include the letter that was drafted on the Division  
10 for Coastal Management. I only have one copy of  
11 that and I realize I can read it, but it was I  
12 think in a previous meeting, so I need a sense of  
13 do we want to get that also included.

14 (The chairman read the aforementioned letter.)

15 That was a letter that was drafted at  
16 the previous meeting and forwarded. I guess I'm  
17 offering -- there was a suggestion just made to me,  
18 I just need to get the committee's sense of do you  
19 want to add that into the report as we did with the  
20 Ocean Action Plan or do you think that sentiment is  
21 incorporated in the body sufficiently? Does this

1 add value as a separate inclusion?

2 MR. SKINNER: Actually I'm not sure that  
3 I think that the Ocean Action Plan letter adds to  
4 the report. It seems to be -- I mean it was a  
5 statement and I think it was a good one, but it  
6 seems to be just sort of tagged on at the end. So  
7 I guess I'd suggest we take that out and leave this  
8 out. We really want it to be the most wanted, not  
9 a compendium of everything we've done on the panel.

10 CHAIRMAN RAINEY: Other thoughts? Let  
11 me just open the floor for -- that's a good point.  
12 Go ahead. I don't want to go through all the  
13 motions, let's talk about it please.

14 CAPT MCGOVERN: I agree with Tom. Even  
15 though there are other worthy things we  
16 accomplished, a straightforward message is best  
17 left alone.

18 MR. DASLER: I would agree with that.

19 CHAIRMAN RAINEY: Just so we're clear  
20 then, we should make the decision to strike the  
21 letter that was in there in light of that that was

1 all part of our deliberations and sort of an  
2 interim step to the report that we have. Let's get  
3 a motion on that. Tom made the motion, Jon  
4 seconded it. Everybody in favor of striking the  
5 letter in the preliminary draft. All aye.  
6 Opposed? Okay.

7 CAPT MCGOVERN: On that, because all  
8 these letters are like on the website, I don't see  
9 the website addressed in here. Maybe that could be  
10 added somewhere on the front. When it talks about  
11 the charter, it gives you all of those. To review  
12 the current charter please go to.

13 CHAIRMAN RAINEY: Thanks for that.  
14 That's something we had planned to do, is get the  
15 website. We're going to do some work on the  
16 website, have this available and go back and  
17 organize the references. We'll have a website in  
18 there.

19 MR. SKINNER: Instead of an appendix, to  
20 have further information and have each document  
21 listed. Can we get a U2 version of this?

1                   CHAIRMAN RAINEY: Who was responsible  
2 for the jingle? Barbara from the -- our  
3 secretarial supporter on this and program offices  
4 as well, you know, as we've gone through the  
5 process and taken it back down in-house, are there  
6 needs you have that you're not getting answers to  
7 here while I have everyone here as far as the  
8 mechanics of how we can make these changes? Are  
9 you sensing any gaps here we haven't talked about?  
10 What can we go? The bottom line is we want to turn  
11 to on this, wrap it up and get it so that the vice  
12 admiral has it and we will be final with it in time  
13 for him to be able to take it to the Hill and the  
14 Committee on Marine Transportation. Do you see any  
15 mechanical steps we need to address?

16                   MS. HESS: Nothing except Captain  
17 McGovern, we talked the other day about trying to  
18 make sure we get the right pictures and some of the  
19 needs he had, he was going to let us know. So if  
20 anybody is in that same boat as Captain McGovern,  
21 make sure -- we receive thousands of pictures, and

1 in Ann's defense, had a lot to go through.

2 CHAIRMAN RAINEY: Kind of a situation  
3 where it was difficult to pick, so if you have  
4 specific pictures, maybe even if you sent it to us  
5 before, it might help us a lot. This is what I'm  
6 talking about. That will really speed things up.

7 Okay. Any other, anybody else, any  
8 other changes? Barbara, for the final, the final  
9 final, we'll be able to send out a PDF for people  
10 to say yep, it's there and we can get a response  
11 back we're good to go to production. All right.

12 MS. DICKINSON: This is more of a  
13 cosmetic question, but your highlight color that  
14 you picked is sort of this mud brown. I don't find  
15 it very attractive I gist. Is this like the final  
16 format? Where you have highlighted sections and  
17 it's reversed out all it's all this kind of brown  
18 thing.

19 CHAIRMAN RAINEY: That was the selection  
20 made by our contract person. What I don't know,  
21 again it's just my ignorance of the printing

1 production process, but I know we had some  
2 challenge getting it back, but I believe we've got  
3 our content back and the fonts and such. I think  
4 the answer is we'll check, but we're going to get  
5 some help now with production to finish the  
6 printing with NOAA, so we'll have to go with what  
7 their capabilities are I believe in the short term.  
8 I'll look into that, I don't know if we have the  
9 capability of changing that, the print. I assume  
10 we would.

11 MS. DICKINSON: Who's going to do the  
12 printing, NOAA?

13 MS. HESS: We have the paperwork in  
14 place to have GPO do a major print job but it's  
15 going to take a while, we're talking about whether  
16 to do it in-house.

17 CHAIRMAN RAINEY: First what's happened  
18 is that we had a very -- the process was very  
19 complicated with the government printing. So our  
20 mission here is to finalize it. When we get that  
21 done we're done, then it's just a matter of

1 production. What I envision may happen is,  
2 depending on the lead times and requirements with  
3 GPO on the big volume of it, we may be able to do a  
4 short run of the final document in-house at NOAA  
5 and maybe -- that's what we're looking at now. We  
6 contracted out to do much of this, we recently  
7 concluded that relationship, and we're getting our  
8 hands back on a document so we have a little bit  
9 more control and agility in our production process.  
10 So that's where we are and it's happening kind of  
11 real time. We're going to make the deadline for  
12 NOAA's purposes to have this thing. I think we'll  
13 make our final edits to this and then I'll apprise  
14 you of what we've been able to work out on the  
15 actual process of that, but just to pick up on  
16 Elaine's comment, do you have a suggestion, a  
17 color? I certainly agree with you. If we can  
18 change that, what do you think would be  
19 particularly, what would be better?

20 MR. SKINNER: Can I jump in? I think  
21 one of the ideas we mentioned briefly when talking

1 about the outside design was also have that carried  
2 over on the inside. The primary colors are sort of  
3 black and blue, black for the print and blue I  
4 guess for water, hydro. And I don't know if we  
5 need to spend a lot of time on it here, but I would  
6 be willing to work with whoever NOAA is going to be  
7 overseeing. Just sort of pull that from what we've  
8 been using right along as the easiest way to do it  
9 and maybe try and clean up some of the graphics and  
10 layout on the inside if that's possible. So I  
11 agree with you.

12 MS. DICKINSON: I would just say on some  
13 of the type where you really are trying to  
14 highlight something, you want it to stand out a  
15 little more, just a slightly brighter color,  
16 whether red or something like that. I mean brown  
17 behind some of the pictures is fine. I was  
18 thinking more about some of the headlines. Just  
19 kind of a little blah to me. Some people scan  
20 documents; if I can't read the whole thing, I'm  
21 going to flip through pages, read the headlines.

1 MR. ARMSTRONG: On page 8 in the first  
2 paragraph -- before I say this, are you looking to,  
3 for direct suggestions now or do you want me to,  
4 did you want us to just mark this up to hand in?

5 CHAIRMAN RAINEY: I guess it would  
6 depend on the complexity of it. Is it something --

7 MR. ARMSTRONG: I'm just going through  
8 now.

9 CHAIRMAN RAINEY: Go ahead.

10 MR. ARMSTRONG: You say NOAA's capacity  
11 to survey and process a hundred thousand, maybe we  
12 should say survey and chart. Then we say in the  
13 last sentence an objective that NOAA believes  
14 achievable, maybe we should change that to the HSRP  
15 believes achievable.

16 CHAIRMAN RAINEY: Okay. Any objection  
17 to those two changes? Okay.

18 MR. SKINNER: Scott, maybe we could set  
19 a time frame next Monday or something to get all  
20 the comments in so that people have time, on the  
21 flight back or whenever, to take a look at it, get

1 everything in, if it's not in by noon on Monday,  
2 then catch the next, the supplemental report. So I  
3 don't know, is that acceptable to everyone? That  
4 way we can have a little bit of time to go through  
5 it one last time.

6 MR. ARMSTRONG: I think we should give  
7 the chairman the authority and our approval to make  
8 such changes as he deems appropriate from our  
9 suggestions.

10 CHAIRMAN RAINEY: One thing I will owe  
11 you, when we get everything, we'll get a quick  
12 rewrite about the section talking about the  
13 earmarks and get that to you. I'll see if I can  
14 get that out in the street Monday. We can play  
15 around with that and get that clarified. Is there  
16 any other further comments while we're here on the  
17 report? Again, I really appreciate everybody, this  
18 has been a big project for us. I think we'll get  
19 it out in a timely way. Hopefully it can help  
20 these programs have something for third-party  
21 validation of the programs and all these different

1 processes they have going.

2 All right, seeing nothing further, is  
3 there new business?

4 CAPT MCGOVERN: I want to discuss times  
5 on future meetings.

6 CHAIRMAN RAINEY: I don't know if I  
7 might -- well, what we talked about before if is we  
8 got -- we talked a little bit about it, which is  
9 kind of the limit of what I know. To kind of say  
10 it again, we have no dates selected because,  
11 primarily because of the budget issue and timing  
12 after this meeting. We're looking at possibly --  
13 go ahead.

14 CAPT BARNUM: I was going to suggest,  
15 again I was being cautiously optimistic, but it  
16 might be best to pick a date now and maybe back off  
17 of that, but again, I'm cautiously optimistic. I  
18 think we're okay to have another meeting before the  
19 end of the fiscal year. My suggestion would be to  
20 pick a date and location again for the next date  
21 before the end of the fiscal year.

1           CHAIRMAN RAINEY: We have time. I would  
2 certainly want the panel to get these -- if folks  
3 have a preference for time or location we can  
4 certainly discuss it in a few minutes here and see  
5 if we can make that work.

6           MR. WHITING: I have a preference for  
7 the Norfolk Hydrographic Conference. In June is a  
8 bad time to leave Alaska even for a retired  
9 individual. I would appreciate it being earlier  
10 than June or later.

11          CHAIRMAN RAINEY: They just said we  
12 can't, that's next month or the month after.

13          MR. WHITING: We have two things we need  
14 to continue working on from my understanding from  
15 Captain Parsons and Rich, that these things are  
16 priority to be done by September. You put things  
17 off until June again, I think you keep trying to  
18 compress things into a time period that's busy for  
19 everybody. I would go quickly personally. But I  
20 guess I should say I'll probably attend either one.

21          MR. DASLER: Sounds like June is off the

1 table so we're talking about September.

2 CAPT BARNUM: I think what Scott was  
3 saying is our concern is we're talking about two  
4 months away for organizing another meeting, for  
5 procurement of the room and all the logistics would  
6 be tough for us. I would think realistically  
7 summer all the way up through September, not  
8 September 30th, that has its own implications.

9 MS. DICKINSON: I'll throw in my vote  
10 for August because that's a really slow month for  
11 me. In September things start getting really  
12 really hectic again. August is always good as far  
13 as I'm concerned.

14 CHAIRMAN RAINEY: My problem is I want  
15 to hear views. It's always very, very difficult,  
16 scheduling is always hard for me. Everybody has  
17 different seasonal issues and such. I can't  
18 obviously commit now because I've got to get back  
19 with NOAA and see what's doable. We can find  
20 something to shoot for and try to make that work.  
21 My early indications were that trying to do it in

1 conjunction with the hydro conference is just --  
2 but we can contract in the future on that. I do  
3 appreciate what Larry is saying, we'll keep working  
4 on. Adam, did you have any comments you want to  
5 make?

6 MR. MCBRIDE: July or August is fine  
7 with me.

8 CHAIRMAN RAINEY: I don't want to keep  
9 drawing this out. If there is no other business I  
10 would like to go ahead and -- Admiral.

11 RADM WEST: The more I think about it  
12 the more I think we ought to put something on the  
13 record as far as the ocean observing not addressing  
14 the transportation part of this. However, you want  
15 to word it. I think we ought to just from us to  
16 NOAA to make sure that -- I'm just thinking we need  
17 to go on record saying -- because historically some  
18 of the push-back on the ocean observing has been  
19 initially it was designed by the academics, there  
20 was a push-back on data management, we got over  
21 that, now as we put the architecture together the

1 regional associations popped their head up and  
2 there's push-back from them. I think there has --  
3 I'm thinking out loud. I think before we lose you  
4 all we should go on record today to say don't  
5 forget that part of it. I'm not sure how you want  
6 to do that.

7 CHAIRMAN RAINEY: Do you think you could  
8 draft something, do you want to take a ten-minute  
9 recess, draft it and I can talk with the program  
10 folks or see if we can clean up that earmark  
11 paragraph and come back in 15 minutes and see if we  
12 can get an agreement on those and have those  
13 wrapped up?

14 CAPT MCGOVERN: I think we go on the  
15 record every meeting with this IOOS issue and then  
16 by the next meeting they forget again.

17 RADM WEST: We need to document, the  
18 program manager for it, she needs to -- you tell  
19 her to include it in her brief. Whatever that  
20 takes. We can give you a couple sentences.

21 MR. SKINNER: There was a side bar at

1 the very beginning of lunch, I think Bruce may have  
2 been --

3 MR. VOTE: Bruce Vote (phonetic), I work  
4 with National Ocean Services and I work on IOOS  
5 issues as well as marine transportation. I talked  
6 with Zdenka, and we are going to include the marine  
7 transportation system as one of the societal  
8 challenges on that slide. So when this goes out it  
9 should be more comprehensive in terms of what the  
10 societal challenges s are and not just some  
11 related --

12 MR. ARMSTRONG: I hope it will also be  
13 on the back end, not just the challenges but the  
14 output end.

15 MR. VOTE: Outputs and deliverables.

16 CAPT MCGOVERN: It probably still would  
17 be good to get it on the record. I'll try to  
18 figure out something. Maybe in the next five  
19 minutes.

20 CHAIRMAN RAINEY: We had on the agenda  
21 to go to 3 and open for public comments if there

1 are any. I know folks have flights. I would  
2 certainly like to beg the panel's indulgence and  
3 take a ten-minute recess and try to attack those  
4 two issues, the IOOS one he's talking about and the  
5 earmark answer, have an agreement on those before  
6 we left if we could do that, would that be  
7 acceptable?

8 MR. SKINNER: Can we go back to the  
9 recommendations slide or screen that we already had  
10 so we have them all listed there, the fleet  
11 recapitalization? And then just below that just  
12 put another subtitle, NOAA recapitalization and put  
13 NOAA, what is it, IOOS structure. And HSRP  
14 recommends that NOAA include a fifth --

15 MS. DICKINSON: If you look in the book  
16 there's three on that slide when we're looking at  
17 societal challenges.

18 CAPT MCGOVERN: There's only three  
19 there, it would be on the other end and your  
20 decision tools would be --

21 MS. DICKINSON: It's under K.

1 MR. SKINNER: As a maritime  
2 transportation component, or navigation, I don't  
3 know what the right terminology is, the societal  
4 challenges, the decision tools.

5 (Pause in the proceedings.)

6 MR. SKINNER: I think what we're trying  
7 to do, Scott, is pointing out a box that we have in  
8 the HSRP report. I think what we want to do is  
9 make some additions to the current NOAA IOOS model  
10 that was presented today. Right? Okay, so adding,  
11 on this recommendation the component I think would  
12 be the societal, you want something added in there  
13 on societal challenges, you want something there on  
14 decision tools, and is there a third or fourth  
15 place where you want it at? Is this making sense  
16 to anyone?

17 MR. ARMSTRONG: I think what you just  
18 said makes a lot of sense, if you understand what  
19 they're trying to do, trying to focus on the core  
20 variables and the core variables that fit your  
21 societal challenge and your decision tool is what

1 they can focus on in the 12 months without  
2 disrupting the process she's already undertaken. I  
3 think you should probably think of what is that  
4 societal challenge. I would not leave that up to  
5 her to decide it. I think get just a bullet, a few  
6 words that you say this is our basic societal  
7 challenge and here is our basic decisional tool you  
8 want to see in there and then work with her on what  
9 that means.

10 CAPT MCGOVERN: I guess societal  
11 challenge could be a safe and efficient marine  
12 transportation system, there's your challenge.

13 MR. SKINNER: Okay.

14 CAPT MCGOVERN: The go/no-go is, gotta  
15 think about that for a minute.

16 MR. SKINNER: What if we just add HSRP  
17 recommends that NOAA have a safe and efficient  
18 marine transportation system component, the  
19 societal tools--

20 CAPT MCGOVERN: Societal challenges.

21 MR. SKINNER: And acknowledge the role

1 hydro services provides. And acknowledge, and  
2 acknowledge the role of hydrographic services in  
3 the IOOS structure. Come on. I'm almost finished  
4 here. In the IOOS system. How's that? Do you  
5 guys know what that means? I think the idea was in  
6 the early stage of the flow chart or model that  
7 there be the safe marine transportation system  
8 there and then corresponding outputs throughout the  
9 model that incorporates it into the IOOS system.

10 CAPT MYRTIDIS: I think you want to say  
11 societal challenges, not societal tools.

12 MR. SKINNER: Oh, sorry.

13 (Discussion held off the record.)

14 MR. SKINNER: Motion to accept this  
15 amendment.

16 MS. DICKINSON: Second.

17 CHAIRMAN RAINEY: All in favor? Okay,  
18 accepted, thank you. Is the other one ready to go?  
19 Let me yield the floor to the --

20 MR. SKINNER: I've never seen anyone  
21 distance themselves so quickly. This one we're

1 trying to capture the full, both the inputs and  
2 outputs in the model that was gone over this  
3 morning but still keep it open enough, so we came  
4 in, came up with this language. The societal  
5 challenges were, they were sort of the input side  
6 and the decision tools were the other end of the  
7 model.

8 MR. DASLER: Do we want to say should or  
9 could improve -- actually down the last sentence.  
10 Yeah.

11 MR. SKINNER: That's fine by me. And  
12 maybe also change the or on the last line to and.

13 CAPT MCGOVERN: I think just get rid of  
14 the the in front of dynamic and make chart plural.

15 MR. SKINNER: Mike.

16 MR. SZABADOS: This was for the  
17 accomplishments for the next 12 months and I  
18 believe they were looking for not demonstration but  
19 actually execution. Are we prepared to go  
20 operationally with integrated dynamic charts in 12  
21 months?

1 MR. ARMSTRONG: That was 36 months.

2 MR. ZIKLOSKI: It was three years.

3 MR. SZABADOS: Oh, okay.

4 MR. SKINNER: Do people want time to  
5 digest this?

6 RADM WEST: Second.

7 MR. SKINNER: All in favor. Opposed.  
8 Ayes have it.

9 CHAIRMAN RAINEY: All right, that was  
10 easy. Thanks very much, that helps a lot because  
11 now we can get those out of the way. The other  
12 things I think are cut and paste and identifying  
13 photos and we've gone through the typos. Last call  
14 for any other business before we go to public  
15 comment.

16 RADM WEST: Just another comment about  
17 the next meeting. I think we ought to keep the  
18 momentum going. We have two or three things we can  
19 review with NOAA in the next few months. Roger  
20 said he wanted to have something to the Hill in  
21 October, which means going through NOAA will take a

1 while, so we ought to see that and with our support  
2 I think we're going to do some things. Zdenka will  
3 have her budget, she'll have our recommendations,  
4 we'd like to see where they are with that, I  
5 suggest we have this at one of your facilities,  
6 which will cut down the cost significantly. My  
7 suggestion is, I mentioned to some folks, Great  
8 Lakes observing system has been there quite a while  
9 and it's kind of a neat little thing to look at or  
10 the Northwest, just to keep the momentum going, my  
11 suggestion.

12 CAPT MCGOVERN: I'd like to second that.  
13 I'd be very interested as well to see an update on  
14 the FY '08 budget process, see where that's going  
15 to end up. I'm concerned if we fall back to two  
16 meetings per year we certainly won't be able to  
17 maintain any headway.

18 MR. DASLER: I heard that the 200th  
19 anniversary exhibit is on display in Seattle, I'm  
20 not sure when that will be -- Northwest or Seattle  
21 location.

1 MR. SKINNER: I don't know if this is  
2 appropriate for a full meeting, but Oceans Week is  
3 in June I think. I don't know if there's ever much  
4 of a presence or it's much on the agenda for that  
5 week in terms of this type of stuff, but we have a  
6 report, we should probably be trying to use that as  
7 an opportunity to promote what we're recommending.

8 CHAIRMAN RAINEY: One of the things I  
9 certainly would like to do, I think we can set it  
10 up is that if -- June sounds like it's going to be  
11 tight, but if there's members at the hydro  
12 conference at the Ocean Week, at the next meeting  
13 we can report out the significant events that  
14 relate to what we're doing there and maybe also  
15 individuals can carry on, pass the information at  
16 those conferences as well. So we'll try to keep  
17 track of those events that are significant and  
18 areas we're dealing with for sure. I'll pursue  
19 them further with Steve and take those suggestions  
20 and see what we can do on those suggested sites and  
21 times and get back to you as soon as we can.

1           CAPT BARNUM: I'd be glad to work with  
2 you on that. I don't know when the Seattle exhibit  
3 closes, I think close to December, but I have to  
4 check on that. Another opportunity is certainly  
5 back here in D.C. in July. I guess that's a bad  
6 time.

7           RADM WEST: It's not the timing, it's  
8 the location.

9           CHAIRMAN RAINEY: All right. Let's open  
10 the floor here, last call for any --

11          MR. ARMSTRONG: This is going to be a  
12 new subject. Although it doesn't look like we'll  
13 be able to get a meeting for the Hydrographic  
14 Conference, I'd like to encourage all the members  
15 of the board that can to attend the U.S.  
16 Hydrographic Conference in Norfolk, Virginia May  
17 14th through 17th, it would be a great opportunity  
18 to get some additional education and exposure to  
19 the entire hydrographic community and profession in  
20 the U.S.

21          CHAIRMAN RAINEY: Thanks, Andy. We did

1 that in San Diego, it was definitely good. All  
2 right, seeing no further business can I open it up  
3 if we have any public that managed to hang in. A  
4 couple and I'll recognize you for any comments.  
5 All right. The door closes quickly. All right,  
6 well, again thanks very much. I think it was a  
7 good meeting and a lot of work went through this.  
8 It was an opportunity for us to meet again with the  
9 administrator and everybody. I really appreciate  
10 the comments. I think the delivery of our report  
11 was well presented and well received and gives us a  
12 lot to follow up on.

13 MR. WHITING: I have one question about  
14 the Hydrographic Services Improvement Act. Are we  
15 going to have input into that wording or is it just  
16 going to come off the Hill someday and that's going  
17 to be it?

18 CAPT BARNUM: The Hydrographic Services  
19 Improvement Act, we're expecting to have some time  
20 to review that as we talked about at the August  
21 meeting in Alaska. However, in the meantime this

1 past fall we had, it was picked up by the  
2 department and it is now moving through the system.  
3 My understanding now is we will see what it comes  
4 out to.

5 MR. WHITING: Thank you.

6 RADM WEST: In a request on your next  
7 meeting, as soon as you can let us know so we don't  
8 juggle the books like we did the last time and  
9 cause a lot of angst. It doesn't cost any money to  
10 put a date in a book, you can always cross it out.  
11 As soon as you come to some resolution as to where  
12 and when, let us all know.

13 MS. DICKINSON: What were the dates,  
14 Andy, May 14 what?

15 MR. ARMSTRONG: May 14th through 17th.  
16 15th is the formal start, 14th is the exhibit setup  
17 and those kinds of things.

18 CAPT BARNUM: Just talking about dates  
19 here, I heard a raspberry on July in D.C. certainly  
20 and am I hearing consensus, you see something in  
21 June or something in August? I'm hearing two

1 different things. Want to meet sooner to keep the  
2 momentum going. Looking for general consensus on a  
3 date.

4 CAPT MCGOVERN: July and August are  
5 obviously real big vacation months, the last two  
6 weeks of August about half the workforce takes off.  
7 June's not bad or I know Elaine suggested  
8 September, but how early, right after Labor Day?

9 MR. MCBRIDE: Somebody mentioned  
10 Seattle.

11 CHAIRMAN RAINEY: The 200th anniversary  
12 NOAA has, I don't know if traveling is the right  
13 word, it's temporary, there's a very big outreach  
14 looking at the history of NOAA. They're staged  
15 throughout the country, 200 years, the maritime  
16 museum, I believe it's housed in Seattle, it's an  
17 exhibit running for a certain amount of time and  
18 the question was we don't know when the curtain  
19 call is on that but possibly we could do something  
20 in conjunction when that exhibit is there.

21 MR. DASLER: I heard it's supposed to be

1 there at least another six months I think down at  
2 the Seattle Center.

3 CHAIRMAN RAINEY: All right. We'll take  
4 that for action absolutely and put out the  
5 alternative as quickly as we can and we'll get  
6 the -- if you have specific recommendations please  
7 get them to Barbara and myself I guess as soon as  
8 you can. I guess we agreed on Monday, next Monday  
9 by noon, and then we're going to pack this thing  
10 up. I think it's really kind of in the  
11 proofreading stage. Unless there's other business  
12 I would like to accept a motion to adjourn with  
13 many thanks.

14 CAPT MYRTIDIS: I'd like to make a  
15 motion of acknowledgment of your good work, thank  
16 you very much.

17 CHAIRMAN RAINEY: We'll see you to be  
18 determined.

19 (Hearing concluded at 3:10 p.m.)

20 \*\*\*\*\*

21

1 STATE OF MARYLAND

COUNTY OF BALTIMORE

2  
3 I, Richard D. Baker, Jr., a Notary  
4 Public in and for the State of Maryland, County of  
5 Baltimore, do hereby certify that the foregoing is  
6 a true and accurate transcript of the proceedings  
7 indicated.

8  
9 The image shows a handwritten signature in blue ink that reads "Richard D Baker Jr am". The signature is written in a cursive style and is positioned above a horizontal line.

10 Richard D. Baker, Jr., Notary Public  
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